The Boeing Company
Santa Susana Field Laboratory
5800 Woolsey Canyon Road
Canoga Park, CA 91304-1148

Via E-Mail to losangeles@waterboards.ca.gov

November 15, 2014
In reply refer to SHEA-115028

Information Technology Unit
Regional Water Quality Control Board, Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

Attention: Information Technology Unit

Gentlemen:

Subject: Third Quarter 2014 NPDES Discharge Monitoring Report
Compliance File CI-6027 and NPDES No. CA0001309
Santa Susana Field Laboratory
Ventura County, California

The Boeing Company (Boeing) hereby submits this Discharge Monitoring Report (DMR) for the Santa Susana Field Laboratory (Santa Susana Site) for the period of 1 July through 30 September 2014 (Third Quarter 2014). This DMR was prepared as required by and in accordance with National Pollutant Discharge Elimination System (NPDES) Permit No. CA0001309 (Permit) and under regulatory oversight of the Los Angeles Regional Water Quality Control Board (Regional Board). Included are summary tables of best management practices (BMPs), stormwater sample analytical results, rainfall quantities, liquid waste shipments, and laboratory analytical reports for stormwater samples.

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:

http://www.boeing.com/aboutus/environment/santa_susana/ents/monitoring_reports.html

THIRD QUARTER 2014 DMR CONTENTS

This DMR includes the following sections and appendices:

- **Discharge Summary:** This section describes the number of rain events, the number of samples collected, the sample dates, and the sample locations during Third Quarter 2014. Table I summarizes the Third Quarter 2014 sampling record by outfall, location, and sample type collected per the requirements of the NPDES Permit.
- **Third Quarter 2014 Summary of Compliance:** This section summarizes the sample results that exceeded NPDES Permit limits in Third Quarter 2014.

- **Third Quarter 2014 Santa Susana Site-wide Stormwater Pollution Prevention Plan (SWPPP)/BMP Activities:** This section presents the Santa Susana Site SWPPP activities and BMPs related to demolition, Interim Source Removal Actions (ISRA), the BMP Plan, Northern Drainage, and other activities implemented in Third Quarter 2014. Table II summarizes specific BMP activities by outfall location.
- **Data Validation and Quality Control:** This section discusses data validation results and any laboratory or field corrective actions.
- **Appendix A** summarizes measured Third Quarter 2014 precipitation at the Santa Susana Site.
- **Appendix B** tabulates liquid waste shipment details.
- **Appendix C** presents chemical analytical results of Third Quarter 2014 stormwater and/or receiving water samples in tabular form by outfall location, constituents evaluated (analytes), sample dates, and data validation qualifiers.
- **Appendix D** contains copies of laboratory analytical reports, chains of custody, and data validation reports.

DISCHARGE SUMMARY

The Santa Susana Site did not experience a rain event that produced greater than 0.1 inches of rainfall within a 24-hour period during Third Quarter 2014 (see Appendix A). No discharge occurred at any of the outfalls; therefore, no samples were collected. One offsite surface water sample was collected at the Arroyo Simi – Frontier Park location in Simi Valley (RSW-002). Table I summarizes the Third Quarter 2014 sampling record by outfall, location and sample type collected, per NPDES Permit requirements.

TABLE I: Sampling Record During Third Quarter 2014

Date	Outfall/Location	Sample Frequency	Sample Type
08/12/2014	Arroyo Simi Frontier Park – (RSW-002)	Quarterly	Grab

The sample was submitted to and analyzed by TestAmerica Laboratories, Inc., a California-certified analytical laboratory in Irvine, per the NPDES Permit requirements.

THIRD QUARTER 2014 SUMMARY OF COMPLIANCE

No surface water discharges occurred from the Santa Susana Site during Third Quarter 2014. As such, there are no onsite compliance issues to report for this period. Additionally, in the quarterly sample collected at Arroyo Simi sample location RSW-002 in Simi Valley, no constituents exceeded receiving water limits. All Third Quarter 2014 samples were therefore in full compliance.

THIRD QUARTER 2014 SANTA SUSANA SITE SWPPP/BMP ACTIVITIES

Boeing implemented significant SWPPP- and BMP-related activities to assist in improving stormwater quality and compliance at the Santa Susana Site. Table II summarizes the activities that were completed in Third Quarter 2014 by outfall number. In addition to SWPPP-related activities, specific BMP projects included: demolition-related BMPs; Outfall 008/009 ISRA BMPs; BMP Plan-related BMPs; and Northern Drainage BMPs.

TABLE II: Boeing's Third Quarter 2014 BMP Activities

OUTFALL (Location)	BMP ACTIVITIES DURING THIRD QUARTER 2014
001 (South Slope below Perimeter Pond)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis.
002 (South Slope below R-2 Ponds)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. *Monitoring Well RS-40 Access Road BMPs*: Monitoring well RS-40 is within the watershed for Outfall 002. During Third Quarter 2014 began placing gravel and installing rolling dips, water bars and a riprap apron/berm along the access road. Work will be completed during the Fourth Quarter 2014.
003 (Radioactive Material Handling Facility)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of structural BMPs, including the flow-through structure and stormwater conveyance and retention systems.

OUTFALL (Location)	BMP ACTIVITIES DURING THIRD QUARTER 2014
004 (Sodium Reactor Experiment)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of the structural BMPs, including the flow-through structure and stormwater conveyance system.
005 (Former Sodium Disposal Facility - 1)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall for sediment/debris. Checked sample box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Conducted maintenance inspections of the stormwater conveyance and retention systems. Checked high level float switch in sedimentation basin.
006 (Former Sodium Disposal Facility - 2)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of the structural BMPs, including the flow-through structure and stormwater and conveyance systems.
007 (Building 100)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall for sediment/debris. Checked sample box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Conducted maintenance inspections of the stormwater conveyance and retention systems. Checked high level float switch in sedimentation basin.
008 (Happy Valley)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis.

OUTFALL (Location)	BMP ACTIVITIES DURING THIRD QUARTER 2014
009 (WS-13 Drainage)	*Outfall BMPs:* Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. *Restoration, Monitoring and Mitigation Plan (RMMP) BMPs:* Inspected plantings and pole cuttings in the Northern Drainage. Inspected structural BMPs and continued watering up to twice weekly. Implemented stabilization measures along the Northern Drainage, including maintenance of check structures (replacement, lowering the height, and keying in) as well as installation and replacement of vegetated rip rap reinforcement. *Lower Parking Lot BMP:* Inspected sedimentation basin, biofilter, and cistern.
010 (Building 203)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of structural BMPs, including the flow-through structure and stormwater conveyance and retention systems.
011 (Perimeter Pond)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and weir for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of structural BMPs, including the flow-through structure and stormwater conveyance system.

OUTFALL (Location)	BMP ACTIVITIES DURING THIRD QUARTER 2014
012 (Alfa Test Stand)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall for sediment/debris. Checked sample box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Conducted maintenance inspections of the structural BMPs, including the flow-through structure and stormwater conveyance and retention systems. Observed condition of the sand bag berm and replaced worn sandbags.
013 (Bravo Test Stand)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall for sediment/debris. Checked sample box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Conducted maintenance inspections of the structural BMPs, including the flow-through structure and stormwater conveyance and retention systems. Observed condition of the sand bag berm.
014 (Advanced Propulsion Test Facility)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected the outfall for sediment/debris. Checked sample box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Conducted maintenance inspections of the liner and berm.
018 (R-2 Spillway)	Conducted erosion and sediment control inspections and performed maintenance around the perimeter of the outfall, the drainage/watershed, and areas of disturbance or sparse vegetation. Inspected outfall and flume for sediment/debris. Checked sample box and flow meter control box for the presence of debris and/or animals. Cleaned sample box and the outfall area and performed weed abatement as needed. Reset flow meter and replaced tape on a monthly basis. Conducted maintenance inspections of the structural BMPs, including the flow-through structure and conveyance system.
019 (Area I Groundwater Extraction [GET] System)	The GET system has been off since April 2013 and no pumping or discharge has occurred. Therefore, no NPDES sampling was performed in Third Quarter 2014 at the Area I GET System. Conducted maintenance inspections of the structural BMPs. Cleaned dissipater screen as needed.
RSW-002 (Arroyo Simi – Frontier Park)	Collected quarterly receiving water sample at the Arroyo Simi – Frontier Park location. Conducted monthly receiving water inspections.

BMP inspections were completed in accordance with State of California Construction General Permit requirements. Monthly inspections of the Northern Drainage were discontinued in Second Quarter 2014 following the Regional Water Quality Control Board (RWQCB) April 2014 approval to terminate coverage under

the Construction General Permit. SWPPP inspections of ISRA areas were also discontinued in Second Quarter 2014 following the RWQCB April 2014 approval to terminate coverage under the Construction General Permit.

Demolition projects comprise areas of disturbed soil from recent demolition and post-demolition restoration. Demolition activities in Third Quarter 2014 included the removal of Building 1436 and the foundation in Area I during July 2014. Post-demolition BMPs including fiber rolls and application of hydroseed were implemented following demolition activities.

Outfall 008/009 ISRA and BMP Plan-Related Activities

ISRA soil removal within the Outfall 008 watershed was completed in 2009, and ISRA soil removal conducted within the Outfall 009 watershed was completed in Fourth Quarter 2013. In January 2014, the Phase III ISRA Implementation Report for 2011 to 2013 Activities was submitted to the Regional Board (MWH, 2014)[1]. Performance monitoring is being conducted at Phase III ISRA areas and the results and recommendations presented in annual rainy season summary reports. Since ISRA remedial activities are complete, progress reports are provided quarterly.

The Expert Panel prepared BMP plans and submittals on behalf of NASA and Boeing to meet Outfall 008/009 permit limits/benchmarks established in the NPDES Permit (Order No. R4-2004-0090)[2]. These plans are considered conceptual designs and recommendations for BMPs identified based on an evaluation of NPDES Permit compliance and ISRA/BMP stormwater monitoring results. The following BMP plans were submitted to the Regional Board and are located on Boeing's Santa Susana Site web page under Outfall 008/009 ISRA- and BMP-related activities[3]:

- 2010 BMP Plan Outfalls 008 and 009 BMP Watersheds (MWH et al., 2010);
- 2011 BMP Plan Addendum (Geosyntec and the Expert Panel, 2011);
- 2012 BMP Plan Addendum (Geosyntec and the Expert Panel, 2012);
- 2013 BMP Plan Addendum (Geosyntec and the Expert Panel, 2013); and
- 2014 BMP Plan Addendum (Geosyntec and the Expert Panel, 2014b).

Completed Expert Panel-recommended BMPs are discussed in the ISRA Performance Monitoring and BMP Monitoring Report for Outfalls 008 and 009 Watersheds submitted to the Regional Board for each rainy season (MWH, 2010; MWH *et al.*, 2011; MWH *et al.*, 2012; and MWH *et al.*, 2013).

The BMP activities discussed below were performed, commenced, or completed during Third Quarter 2014 in coordination with the Expert Panel. These activities are summarized in the Third Quarter 2014 Progress Report for June 21, 2014 – September 26, 2014 Activity, Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan (Boeing, 2014c).

Building 1436 Detention Bioswales

Continued planning activities for the detention bioswales near Building 1436 and approval was received from Ventura County for the grading permit application during September 2014. Construction is scheduled to begin October 2014 with a tentative completion date in December 2014.

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[1] Available at: http://www.boeing.com/boeing/aboutus/environment/santa_susana/isra.page
[2] Available at: http://www.boeing.com/boeing/aboutus/environment/santa_susana/permits.page
[3] Available at: http://www.boeing.com/boeing/aboutus/environment/santa_susana/isra.page

Lower Parking Lot BMP

The Lower Parking Lot BMP is a stormwater treatment BMP designed and built to capture, convey, and treat stormwater runoff from the lower parking lot and former Instrument and Equipment Laboratories (IEL) watersheds. A treatment BMP at the Lower Parking Lot BMP was first proposed in the 2010 BMP Plan (MWH et al., 2010). The Lower Parking Lot BMP consists of a 30,000-gallon cistern, a stormwater conveyance line, a sedimentation basin, and a media biofilter. Construction activities were completed on 15 March 2013; a Regional Board and public tour of the completed Lower Parking Lot BMP was conducted on 20 March 2013.

Third Quarter 2014 activities included inspections to verify that the sedimentation basin and biofilter were free of sediment and debris, checks of the cistern area and pump, and inspections of surrounding BMPs.

Third Quarter 2014 NASA and Boeing ISRA Activities

In addition to activities performed in coordination with the Expert Panel, the following ISRA activities were performed for Outfalls 008/009 during Third Quarter 2014:

- The Surface Water Expert Panel conducted a site visit on August 14, 2014 to inspect BMPs within the Outfalls 008 and 009 watersheds. Based on these observations, the expert panel provided recommendations included in the 2013/2014 Rainy Season ISRA Performance Monitoring and BMP Monitoring Summary Report (MWH *et al.*, 2014);

- Submitted the ISRA Performance Monitoring and BMP Monitoring for the Outfalls 008 and 009 Watersheds, 2013/2014 Rainy Season to the Regional Board on August 29, 2014 (MWH *et al.*, 2014); and

- Received Notice of Completion letter from Ventura County for the ISRA 2010 Grading Permit on September 4, 2014.

Boeing continues to submit quarterly progress reports to Regional Board staff on the progress of ISRA performance monitoring and BMP monitoring[4]. Boeing is committed to restoring the ISRA areas immediately following cleanup activities, and works closely with the Regional Board, California Department of Toxic Substances Control (DTSC), and the Expert Panel to ensure that restoration is comprehensive.

[4] Available at: http://www.boeing.com/boeing/aboutus/environment/santa_susana/isra.page

Northern Drainage BMPs

Boeing has actively worked to restore the Northern Drainage following cleanup activities performed under the oversight of the DTSC and in accordance with the requirements of Regional Board Cleanup and Abatement Order No. R4-2007-0054 (RWQCB, 2007). The restoration and mitigation activities proposed in the Northern Drainage Restoration, Mitigation, and Monitoring Plan (RMMP) plan[5] were implemented in 2012.

Annual survey activities were conducted in the Northern Drainage during Second Quarter 2014. The activities included a botanical survey in April, and in accordance with the Regional Board's Clean Water Act Section 401 Water Quality Certification issued to Boeing in 2012, a California Rapid Assessment Method (CRAM) survey in May. The CRAM survey results will be included in the annual report to be submitted to the Regional Board in December 2014. Plant and pole cutting monitoring and maintenance were continued in Third Quarter 2014. Water replenishment cartons were previously replaced periodically to provide plants with a water source for three months, but the watering process changed to manual during First Quarter 2014, and based on outside temperatures, plantings were watered up to twice weekly as necessary during Second and Third Quarter 2014. In accordance with the RMMP, plant monitoring will continue for a minimum of five years from the 2012 planting depending on attaining the success criteria (i.e., performance standards) specified in the California Department of Fish & Wildlife Streambed Alteration Agreement number 1600-2003-5052-R5 and incorporated into the RMMP (California Department of Fish and Game, 2003). Manual watering will be performed on a weekly basis or as needed until the plants are well established.

In accordance with the RMMP, an annual inspection of stabilization measures was conducted in the Northern Drainage during the First Quarter 2014 and a technical memorandum recommending maintenance activities was submitted to Boeing in July 2014 (Geosyntec and the Expert Panel, 2014a). Recommendations made in the technical memorandum were implemented during Third Quarter 2014. The technical memorandum and documentation of maintenance activities performed will be included in the Northern Drainage 2014 annual report in December.

REASONABLE POTENTIAL ANALYSIS

No surface water discharges occurred from the Santa Susana Site and no new surface water discharge data became available during Third Quarter 2014. A reasonable potential analysis was therefore not triggered and reasonable potential analysis tables are not included in this report.

DATA VALIDATION AND QUALITY CONTROL

In accordance with current federal and state Environmental Protection Agency guidelines and procedures, or as specified in the NPDES Monitoring and Reporting Program, chemical and radiological analyses of water samples were completed at a State of California-certified laboratory. Data validation was performed on 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. Measures were implemented by the analytical laboratory to monitor and/or evaluate low level detections, analyze for interferences, and ensure that cross-contamination did not occur. Laboratory analytical reports, including validation reports and notes, are included in Appendix D.

[5] Available at: http://www.boeing.com/aboutus/environment/santa_susana/tech_reports.html

Attachment H of the NPDES Permit presents the State Board's minimum levels (MLs) for use in reporting and determining compliance with NPDES Permit limits. The analytical laboratory achieved these MLs in the Third Quarter 2014 when technically possible. In cases where the NPDES Permit limit is less than the reporting limit (RL) and ML, the RL was used to determine compliance.

The laboratory RL for each constituent in the permit was less than the lowest applicable permit requirement with the following exceptions: 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, polychlorinated biphenyls (PCBs) [Aroclor congeners], bis(2-ethylhexyl)phthalate, chlordane, chlorpyrifos, cyanide, diazinon, dieldrin, mercury, silver, and toxaphene. The laboratory RL for these exceptions met their respective MLs. These compounds were not detected at concentrations equal to or greater than their RL in samples collected and analyzed during the Third Quarter 2014 or were not analyzed at Arroyo Simi sample location RSW-002 per the requirements of the NPDES Permit.

CONCLUSIONS

Boeing continues to improve water quality at stormwater discharge locations at the Santa Susana Site through methods designed to preserve the natural conditions in the watershed to the maximum extent feasible by implementing sustainable erosion control/restoration measures and continuing with planned ISRA and BMP activities as detailed above.

FACILITY CONTACT

If there are any questions regarding this report or its enclosures, you may contact Mr. Paul Costa of Boeing at (818) 466-8778.

CERTIFICATION

I certify under penalty of law that this document and all attachments 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 15th of November 2014 at The Boeing Company, Santa Susana Site.

Sincerely,

Paul J. Costa
Environmental Operations and Compliance Manager
Santa Susana Field Laboratory

Enclosures:

References
Figure 1 - Site Map with Drainages, Outfall Locations and SWTS Conveyance Piping
Appendix A - Third Quarter 2014 Rainfall Data Summary
Appendix B - Third Quarter 2014 Liquid Waste Shipment Summary Table
Appendix C - Third Quarter 2014 Discharge Monitoring Data Summary Tables
Appendix D - Third Quarter 2014 Analytical Laboratory Report, Chain of Custody, and Validation Report

cc: Ms. Cassandra Owens, RWQCB
Mr. Mark Malinowski, DTSC
California State University – Northridge, Library
Simi Valley Library
Los Angeles Library, Platt Branch

REFERENCES

1. Boeing, 2014c. Third Quarter 2014 Progress Report for June 21, 2014 – September 26, 2014 Activity, Interim Source Removal Action (ISRA) and Best Management Practices (BMP) Plan, The Boeing Company, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027). October 1.

2. California Department of Fish and Game, 2003. Streambed Alteration Agreement 1600-2003-5052-R5. September 26.

3. California Regional Water Quality Control Board, 2007. Cleanup and Abatement Order No. R4-2007-0054. November 6.

4. Geosyntec and the Expert Panel, 2011. 2011 BMP Plan Addendum, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027). September 28.

5. Geosyntec and the Expert Panel, 2012. 2012 BMP Plan Addendum, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No.6027). September 28.

6. Geosyntec and the Expert Panel, 2013. 2013 BMP Plan Addendum, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No.6027). September 30.

7. Geosyntec and the Expert Panel, 2014a. Northern Drainage Stabilization Measure Maintenance Geosyntec Project Number: SB0363U, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No.6027). July.

8. Geosyntec and the Expert Panel, 2014b. 2014 BMP Plan Addendum, The Boeing Company, Santa Susana Site, Ventura County, California. September 30.

9. MWH, 2010. ISRA Performance Monitoring for Outfalls 008 and 009 Watersheds, 2009-2010 Rainy Season, Santa Susana Field Laboratory, Ventura County, California (NPDES No. CA0001309; CI No. 6027; SCP No. 1111; Site ID No. 2040109; and California Water Code §13304 Order). June 30.

10. MWH, 2014. Interim Source Removal Action (ISRA) Phase III Implementation Report – 2011-2013 Activities, The Boeing Company, Santa Susana Field Laboratory, Ventura County, California (California Water Code §13304, Order No. CA0001309, CI No. 6027, SCP No. 1111, Site ID No. 2040109) January 14.

11. MWH Americas, Inc., Santa Susana Field Laboratory Stormwater Expert Panel, Geosyntec Consultants, Haley and Aldrich, Inc., and CH2M Hill, 2010. Best Management Practices (BMP) Plan, Outfalls 008 and 009 Watersheds, The Boeing Company, Santa Susana Field Laboratory, Canoga Park, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027). October 14.

12. MWH Americas, Inc., Santa Susana Site Surface Water Expert Panel, Geosyntec Consultants, and Haley and Aldrich, Inc., 2011. ISRA Performance Monitoring and Potential BMP Subarea Monitoring for the Outfalls 008 and 009 Watersheds, 2010/2011 Rainy Season, The Boeing Company, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027; and California Water Code §13304 Order; No. CA0001309, CI No. 1111, Site ID No. 2040109). July 29.

13. MWH Americas, Inc., Santa Susana Site Surface Water Expert Panel, and Geosyntec Consultants, 2012. ISRA Performance Monitoring and Potential BMP Subarea Monitoring for the Outfalls 008 and 009 Watersheds, 2011/2012 Rainy Season, The Boeing Company, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027; and California Water Code §13304 Order; No. CA0001309, CI No. 1111, Site ID No. 2040109). August 31.

14. MWH Americas, Inc., Santa Susana Site Surface Water Expert Panel, and Geosyntec Consultants, 2013. ISRA Performance Monitoring and BMP Monitoring for the Outfalls 008 and 009 Watersheds, 2012/2013 Rainy Season, The Boeing Company, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027; and California Water Code §13304 Order; No. CA0001309, CI No. 1111, Site ID No. 2040109). August 30.

15. MWH Americas, Inc., Santa Susana Site Surface Water Expert Panel, and Geosyntec Consultants, 2014. ISRA Performance Monitoring and BMP Monitoring for the Outfalls 008 and 009 Watersheds, 2013/2014 Rainy Season, Santa Susana Field Laboratory, Ventura County, California (Order No. R4-2010-0090; NPDES No. CA0001309, CI No. 6027; and California Water Code Section 13304 Order; NPDES No. CA0001309, CI No. 1111, Site ID No. 2040109). August 29.

DRAINAGE TO MEIER CANYON

DRAINAGE TO ARROYO SIMI

AREA I (NASA)

AREA I

AREA II (NASA)

AREA III

AREA IV

Silvernale Pond

Outfall 018 Water Treatment System

Outfall 011 Water Treatment System

R-2A Pond

R-2B Pond

Perimeter Pond

GET

DRAINAGE TO DAYTON CANYON

UNDEVELOPED LAND

DRAINAGE TO BELL CANYON

DESCRIPTIONS OF DISCHARGE OUTFALL LOCATIONS

NPDES OUTFALL	DESCRIPTION	PRIMARY OVERSIGHT AGENCY
001	Stormwater, South Slope	RWQCB
002	Stormwater, South Slope	RWQCB
003	Stormwater, Radioactive Material Handling Facility	RWQCB
004	Stormwater, Sodium Reactor Experiment Area	RWQCB
005	Stormwater, Sodium Burn Pit 1	RWQCB
006	Stormwater, Sodium Burn Pit 2	RWQCB
007	Stormwater, Building 100	RWQCB
008	Stormwater, Happy Valley	RWQCB
009	Stormwater, WS-13 Drainage (Northern Drainage)	RWQCB
010	Stormwater, Building 203	RWQCB
011	Stormwater, Perimeter Pond (Treated at SWTS)	RWQCB
012	Stormwater, Alfa Test Stand	RWQCB
013	Stormwater, Bravo Test Stand	RWQCB
014	Stormwater, Advanced Propulsion Test Facility	RWQCB
015	STP-1 (Removed from permit)	--
016	STP-2 (Removed from permit)	--
017	STP-3 (Removed from permit)	--
018	Stormwater, R-2 Pond Spillway (Treated at SWTS)	RWQCB
019	Treated Groundwater (GET System)	RWQCB

LEGEND

- NPDES OUTFALL LOCATION
- FORMER NPDES OUTFALL LOCATION
- GROUNDWATER EXTRACTION TREATMENT (GET) SYSTEM
- DRAINAGE
- DIRT ROAD
- PAVED ROAD
- STORMWATER CONVEYANCE PIPELINE WITH FLOW DIRECTION
- WATER TREATMENT SYSTEM
- ELEVATION CONTOUR
- SURFACE WATER POND
- SSFL PROPERTY BOUNDARY
- ADMINISTRATIVE AREA BOUNDARY
- EXISTING BIULDING/STRUCTURE

NOTES:

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE
2. SWTS = STORM WATER TREATMENT SYSTEM.

N W E S

0 1,200 2,400

SCALE IN FEET

HALEY & ALDRICH

NPDES PERMIT COMPLIANCE THIRD QUARTER 2014
DISCHARGE MONITORING REPORT
THE BOING COMPANY
VENTURA COUNTY, CALIFORNIA

SITE MAP WITH DRAINAGES, OUTFALL LOCATIONS AND SWTS CONVEYANCE PIPING

SCALE: AS SHOWN
NOVEMBER 2014

FIGURE 1

G:\40458_SSFL\Global\GIS\MapProjects\2014-07\40458-051-0001-Outfall_Locations.mxd

APPENDIX A

Third Quarter 2014 Rainfall Data Summary

TABLE A
DAILY RAINFALL SUMMARY

THE BOEING COMPANY
NPDES PERMIT CA0001309

Station: AREA 1
Parameter: Rain
Month/Year: July 2014

HOUR OF THE DAY

DAY OF THE MONTH	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A
DAILY RAINFALL SUMMARY

THE BOEING COMPANY
NPDES PERMIT CA0001309

Station: AREA 1
Parameter: Rain
Month/Year: August 2014

HOUR OF THE DAY

DAY OF THE MONTH	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03
3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE A
DAILY RAINFALL SUMMARY

THE BOEING COMPANY
NPDES PERMIT CA0001309

Station: AREA 1
Parameter: Rain
Month/Year: September 2014

HOUR OF THE DAY

DAY OF THE MONTH	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

APPENDIX B

Third Quarter 2014 Liquid Waste Shipment Summary Table

TABLE B
LIQUID WASTE SHIPMENTS

THIRD QUARTER 2014 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

DATE SHIPPED	MANIFEST TRACKING NUMBER	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
7/3/2014	010392725JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	1764	G	Clean Harbors Environmental Services Inc.	Evoqua Water Technologies LLC 5375 South Boyle Avenue, Los Angeles, CA 90058
7/9/2014	007764942FLE	WASTE FLAMMABLE LIQUIDS (BENZENE, OIL)	32	P		Clean Harbors - Aragonite LLC 11600 North Aptus Road, Grantsville, UT 34029
		WASTE SODIUM HYDROXIDE SOLUTION	13	P		
		NON RCRA HAZARDOUS WASTE LIQUIDS (WATER, HYDROCHLORIC ACID)	10	P		
7/11/2014	7081440	NON HAZARDOUS (WATER)	20	G	Environmental Recovery Services, Inc	Demenno Kerdoon 2000 N. Alameda Street, Compton, CA 90222
7/11/2014	013190888 JJK	PURGE WATER FROM WS-09A SEEP CLEANOUT	60	G		
7/30/2014	007765076FLE	WASTE FLAMMABLE LIQUIDS (METHANOL)	118	P	Clean Harbors Environmental Services Inc.	Clean Harbors - Aragonite LLC 11600 North Aptus Road, Grantsville, UT 34029
		WASTE SILVER NITRATE SOLUTION	6	P		
		HAZARDOUS WASTE, LIQUID (TRICHLOROETHYLENE)	3338	P		
		NON RCRA HAZARDOUS WASTE LIQUIDS (HYDRAZINE SULFATE SOLUTION)	45	P		
		NON RCRA HAZARDOUS WASTE LIQUIDS (POTASSIUM HYDROGEN PHTHALATE)	26	P		
7/30/2014	Y2555	NON HAZARDOUS (WATER)	114	P		Clean Harbors - Grassey Mountain LLC 3 Miles East 7 Miles North of Knolls, Grantsville, UT 84029
8/13/2014	006751835FLE	HAZARDOUS WASTE, LIQUID (TRICHLOROETHYLENE)	4580	P		Clean Harbors - Aragonite LLC 11600 North Aptus Road, Grantsville, UT 34029
9/9/2014	006752093FLE	WASTE FLAMMABLE LIQUIDS (METHANOL)	117	P		
		HAZARDOUS WASTE, LIQUID (TRICHLOROETHYLENE)	4586	P		
		NON RCRA HAZARDOUS WASTE LIQUIDS (POTASSIUM BROMIDE)	49	P		
9/9/2014	Y2971	NON HAZARDOUS (WATER)	5410	P		Clean Harbors - Grassey Mountain LLC 3 Miles East 7 Miles North of Knolls, Grantsville, UT 84029
		NON HAZARDOUS (WATER)	59	P		
9/9/2014	Y2972	NON HAZARDOUS (WATER)	867	P		
9/24/2014	008070125FLE	WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCES (TRICHLOROETHENE)	15	P		Clean Harbors - Aragonite LLC 11600 North Aptus Road, Grantsville, UT 34029
9/29/2014	010392729JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	4700	G		Evoqua Water Technologies LLC 5375 South Boyle Avenue, Los Angeles, CA 90058
9/29/2014	010392731JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	3700	G		
9/30/2014	010392732JJK	HAZARDOUS WASTE LIQUID (TRICHLOROETHYLENE)	4600	G		

TABLE B
LIQUID WASTE SHIPMENTS

THIRD QUARTER 2014 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

DATE SHIPPED	MANIFEST TRACKING NUMBER	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
7/1/2014	35072	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G	Southwest Processors Inc. 4120 Bandini Blvd. Vernon, CA 90058	LACSD
7/1/2014	35074	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/9/2014	35113	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/9/2014	35114	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/9/2014	35815	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/15/2014	35839	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/15/2014	35841	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/22/2014	35871	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/22/2014	35872	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/22/2014	35873	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/29/2014	35902	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
7/29/2014	35903	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
8/5/2014	21953	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
8/5/2014	35139	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
8/5/2014	35140	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
8/12/2014	35170	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
8/12/2014	35171	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
8/19/2014	35212	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
8/19/2014	35213	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
8/19/2014	35915	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
9/2/2014	35970	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
9/2/2014	35971	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
9/15/2014	36038	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
9/15/2014	36039	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
9/23/2014	36071	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
9/23/2014	36073	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
9/30/2014	36072	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
9/30/2014	36111	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		
9/30/2014	36112	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT (STP #1)	5000	G		

APPENDIX C

Third Quarter 2014 Discharge Monitoring Data Summary Tables

THIRD QUARTER 2014
REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

Notes:

1. 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 toxicity equivalency factor (TEF) and bioaccumulation equivalency factor (BEF). The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 37 of the NPDES permit.

2. Field measurements are not subject to third party validation.

3. All of the following abbreviations and/or notes may not occur on every table.

4. J(DNQ) flagged results are included in the data charts; however, these results are considered to be estimated values and as such are not used to quantify the chemical concentration for compliance purposes

5. pH and temperature are identified on the table as daily maximum discharge limits. The NPDES permit limit has an instantaneous minimum (6.5) and maximum (8.5) for pH and an instantaneous maximum of 86^{o}F for temperature.

-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of the sample was less than the background condition. Radiological results are presented as activity plus or minus counting uncertainty.
$	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 what laboratory reported for specific details)
*	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

THIRD QUARTER 2014
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)
* II *III	Unusual problems found with the data that have been described in Section II, “sample management”, or Section III, “method analysis”. The number following the asterisk (*) will indicated the validation report section where a description of the problem can be found.
ANR	analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed over the reporting period (annual, semi-annual, etc.)
B	laboratory method blank contamination
BA	relative percent difference out of control
BEF	bioaccumulation equivalency factor
BU	analyzed out of holding time
BV	sample received after holding time expired
C	calibration %RSD or %D were noncompliant
Comp	Composite sample type
C5	Calibration verification %R was outside method control limits
CEs/100 ml	cell equivalents per 100 ml
D	The analysis with this flag should not be used because another more technically sound analysis is available
%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
ft/sec	feet per second
H	holding time was exceeded
I	ICP interference check solution results were unsatisfactory
ICP	inductively coupled plasma
J	estimated value, result lower than the detection limit

THIRD QUARTER 2014
REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

J+	estimated value with a potential high bias
J, DX	estimated value, value < lowest standard (MQL), but > than MDL
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
lbs/day	Pounds per day
LOD	limit of detection
LQ	LCS/LCSD recovery above method control limits
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/MDC	minimum detectable activity/ minimum detectable concentration
MDL	method detection limit
Meas	Measure sample type
MFL	million fibers per liter
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
mg/kg	milligrams per kilogram
ml/L/hr	milliliters per liter per hour
MPN/100 ml	most probable number per 100 ml
MQL	method quantitation limit
MS/MSD	matrix spike/matrix spike duplicate
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	picocurries per liter
Q	matrix spike recovery outside of control limits

THIRD QUARTER 2014
REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

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
%R	percent recovery
%RSD	percent relative standard deviation
% survival	percent survival
S	surrogate recovery was outside control limits
TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
TEQ	toxic equivalent
T	presumed contamination, as indicated by a detect in the trip blank
TIC	tentatively identified compound
TU_c	toxicity units (chronic)
U	result not detected
ug/L	micrograms per liter
ug/kg	micrograms per kilogram
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
#	Per ORDER NO. R4-2010-0090 page 23 Footnote 1. The effluent limitations for total suspended solids and settable solids are not applicable for discharges during wet weather. During wet weather flow, a discharge event is greater than 0.1 inches of rainfall in a 24-hour period. No more than one sample per week need be obtained during extended periods of rainfall or the discharge of collected stormwater. A storm event must be preceded by at least 72 hours of dry weather.
(4.0)3.1/-	Represents (Dry Weather Limit) Wet Weather Limit / Monthly Average Limit.

ARROYO SIMI (FRONTIER PARK RECEIVING WATER)

THIRD QUARTER 2014 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

July 1 through September 30, 2014

				8/12/2014		
ANALYTE	**UNITS**	**Permit Limit Daily Max/Monthly Avg**	**SAMPLE FREQUENCY**	**SAMPLE TYPE**	**RESULT**	**VALIDATION QUALIFIER**
POLLUTANTS WITH LIMITS						
4,4'-DDD	ug/L	0.0014/-	1/Quarter	Grab	ND < 0.0038	*
4,4'-DDE	ug/L	0.001/-	1/Quarter	Grab	ND < 0.0028	*
4,4'-DDT	ug/L	0.001/-	1/Quarter	Grab	ND < 0.0038	*
Aroclor 1016	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.24	*
Aroclor 1221	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.24	*
Aroclor 1232	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.24	*
Aroclor 1242	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.24	*
Aroclor 1248	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.24	*
Aroclor 1254	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.24	*
Aroclor 1260	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.24	*
Chlordane	ug/L	0.001/-	1/Quarter	Grab	ND < 0.076	*
Chlorpyrifos	ug/L	0.02/-	1/Quarter	Grab	ND < 0.47	*
Diazinon	ug/L	0.16/-	1/Quarter	Grab	ND < 0.11	*
Dieldrin	ug/L	0.0002/-	1/Quarter	Grab	ND < 0.0019	*
pH (Field)	pH Units	6.5-8.5/-	1/Quarter	Grab	6.61	*
Toxaphene	ug/L	0.0003/-	1/Quarter	Grab	ND < 0.24	*
POLLUTANTS WITHOUT LIMITS						
Hardness	mg/L	-/-	1/Quarter	Grab	740	--
Temperature (Field)	deg F	-/-	1/Quarter	Grab	73.69	*
Water Velocity	ft/sec	-/-	1/Quarter	Meas	0.0	*

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

APPENDIX D

Third Quarter 2014 Analytical Laboratory Report, Chain of Custody, and Validation Report

APPENDIX D

TABLE OF CONTENTS

Section No.

DATA VALIDATION REPORT

Haley & Aldrich Boeing SSFL Stormwater

SAMPLE DELIVERY GROUP: 440-85405-1

Prepared by

MEC^X
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title:	Haley & Aldrich Boeing SSFL Stormwater
Contract Task Order:	1272.003H.01 001
Sample Delivery Group:	440-85405-1
Project Manager:	K. Miller
Matrix:	Water
QC Level:	IV
No. of Samples:	1
No. of Reanalyses/Dilutions:	0
Laboratory:	TestAmerica Irvine

Table 1. Sample Identification

Sample Name	*Lab Sample Name*	*Sub-Lab Sample Name*	*Matrix*	*Collection*	*Method*
ArroyoSimi-20140812	440-85405-1	N/A	Water	8/12/2014 9:14:00 AM	SM2340

II. Sample Management

No anomalies were observed regarding sample management. The sample in this SDG was received at the laboratory on ice and within the temperature limits of 4°C ±2°C. According to the laboratory sample receipt log for this SDG, the sample container was received intact and properly preserved. The COC was appropriately signed and dated by field and laboratory personnel. Custody seals were intact.

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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 analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential positive bias.
J-	Not applicable	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, and may have a potential negative bias.
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.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.

Qualifier	Organics	Inorganics
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.
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.
L1	LCS/LCSD RPD was outside control limits.	LSC/LSCD RPD was outside control limits.
Q	MS/MSD recovery was poor.	MS recovery was poor.
Q1	MS/MSD RPD was outside control limits.	MS/MSD RPD was outside control limits.
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.

Qualifier	Organics	Inorganics
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 SM2340B—Hardness

Reviewed By: P. Meeks
Date Reviewed: September 11, 2014

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0), EPA Method 200.7, Standard Method for the Examination of Water and Wastewater Method 2340B,* and the *National Functional Guidelines for Inorganic Data Review* (1/10).

- Holding Times: The analytical holding time, six months, was met.

- Calibration: The ICV and CCV recoveries appeared to be within 90-110%. The CRI recoveries appeared were within the control limits of 70-130%.

- Blanks: Method blank and CCBs had no detects affecting sample results.

- Interference Check Samples: Calcium and magnesium recoveries were within 80-120%.

- Blank Spikes and Laboratory Control Samples: The recoveries were within the laboratory control limits of 85-115%.

- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.

- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not 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.

- 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.

Validated Sample Result Forms: 440854051

Analysis Method SM2340

Sample Name ArroyoSimi-20140812 **Matrix Type:** WS **Result Type:** TRG

Sample Date: 8/12/2014 9:14:00 AM **Validation Level:** 3

Lab Sample Name: 440-85405-1

Analyte	Fraction	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hardness as CaCO3	T	HARDNESSCACO3	740	0.33	0.17	mg/L			

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-85405-1
Client Project/Site: Quarterly Arroyo Simi-Frontier Park

For:
Haley & Aldrich, Inc.
9040 Friars Rd.
San Diego, California 92108

Attn: Nancy Gardiner

Debby Wilson

Authorized for release by:
8/26/2014 3:26:14 PM

Debby Wilson, Manager of Project Management
(949)261-1022
debby.wilson@testamericainc.com

I certify under penalty of perjury that the information contained in this report and all attachments was produced in accordance with the indicated methods and laboratory standard operating procedures, except as noted, and are complete and accurate to the best of my knowledge and belief. Subcontract laboratory reports that are attached have been evaluated for completeness and quality control acceptability.

Debby Wilson

Debby Wilson
Manager of Project Management
8/26/2014 3:26:14 PM

Table of Contents

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Quarterly Arroyo Simi-Frontier Park

TestAmerica Job ID: 440-85405-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-85405-1	ArroyoSimi_20140812	Water	08/12/14 09:14	08/12/14 15:36

Job ID: 440-85405-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-85405-1

Comments
No additional comments.

Receipt
The sample was received on 8/12/2014 3:36 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

GC/MS Semi VOA
Method(s) 525.2: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 199331. The LCS was performed in duplicate to provide precision for the batch.

Method(s) 525.2: Surrogate (perylene-d12) recovery for the following sample(s) was outside control limits: ArroyoSimi_20140812 (440-85405-1). The two surrogates associated with (bracketing) the target analytes, 2-nitro-m-xylene (4.5min) and triphenylphosphate (12.4min), both passed, therefore data was reported. The affected samples were ND.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
Method(s) 608: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 199553. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch. (LCS 440-199553/4-A)

Method(s) 608: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 199719.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: ArroyoSimi_20140812
Date Collected: 08/12/14 09:14
Date Received: 08/12/14 15:36

Lab Sample ID: 440-85405-1
Matrix: Water

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorpyrifos	ND		0.95	0.47	ug/L		08/12/14 16:46	08/13/14 07:50	1
Diazinon	ND		0.24	0.11	ug/L		08/12/14 16:46	08/13/14 07:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,3-Dimethyl-2-nitrobenzene	*98*		*70 - 130*	*08/12/14 16:46*	*08/13/14 07:50*	*1*
Perylene-d12	*40*	*LG*	*70 - 130*	*08/12/14 16:46*	*08/13/14 07:50*	*1*
Triphenylphosphate	*127*		*70 - 130*	*08/12/14 16:46*	*08/13/14 07:50*	*1*

Method: 608 - Organochlorine Pesticides in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.095	0.076	ug/L		08/13/14 16:50	08/14/14 17:34	1
Dieldrin	ND		0.0047	0.0019	ug/L		08/13/14 16:50	08/14/14 17:34	1
Toxaphene	ND		0.47	0.24	ug/L		08/13/14 16:50	08/14/14 17:34	1
4,4'-DDD	ND		0.0047	0.0038	ug/L		08/13/14 16:50	08/14/14 17:34	1
4,4'-DDE	ND		0.0047	0.0028	ug/L		08/13/14 16:50	08/14/14 17:34	1
4,4'-DDT	ND		0.0095	0.0038	ug/L		08/13/14 16:50	08/14/14 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*35 - 115*	*08/13/14 16:50*	*08/14/14 17:34*	*1*

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.47	0.24	ug/L		08/13/14 16:50	08/15/14 00:00	1
Aroclor 1221	ND		0.47	0.24	ug/L		08/13/14 16:50	08/15/14 00:00	1
Aroclor 1232	ND		0.47	0.24	ug/L		08/13/14 16:50	08/15/14 00:00	1
Aroclor 1242	ND		0.47	0.24	ug/L		08/13/14 16:50	08/15/14 00:00	1
Aroclor 1248	ND		0.47	0.24	ug/L		08/13/14 16:50	08/15/14 00:00	1
Aroclor 1254	ND		0.47	0.24	ug/L		08/13/14 16:50	08/15/14 00:00	1
Aroclor 1260	ND		0.47	0.24	ug/L		08/13/14 16:50	08/15/14 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*78*		*45 - 120*	*08/13/14 16:50*	*08/15/14 00:00*	*1*

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness, as CaCO3	**740**		0.33	0.17	mg/L			08/22/14 12:10	1

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Quarterly Arroyo Simi-Frontier Park

TestAmerica Job ID: 440-85405-1

Method	Method Description	Protocol	Laboratory
525.2	Semivolatile Organic Compounds (GC/MS)	EPA	TAL IRV
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL IRV
608	Organochlorine Pesticides in Water	40CFR136A	TAL IRV
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	TAL IRV

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Quarterly Arroyo Simi-Frontier Park

TestAmerica Job ID: 440-85405-1

Client Sample ID: ArroyoSimi_20140812
Date Collected: 08/12/14 09:14
Date Received: 08/12/14 15:36

Lab Sample ID: 440-85405-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	525.2			1055 mL	1 mL	199162	08/12/14 16:46	EE	TAL IRV
Total/NA	Analysis	525.2		1	1055 mL	1 mL	199331	08/13/14 07:50	CN	TAL IRV
Total/NA	Prep	608			1055 mL	2 mL	199553	08/13/14 16:50	AB	TAL IRV
Total/NA	Analysis	608		1	1055 mL	2 mL	199751	08/15/14 00:00	CN	TAL IRV
Total/NA	Prep	608			1055 mL	2 mL	199553	08/13/14 16:50	AB	TAL IRV
Total/NA	Analysis	608		1	1055 mL	2 mL	199719	08/14/14 17:34	KS	TAL IRV
Total Recoverable	Analysis	SM 2340B		1			199094	08/22/14 12:10	NH	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-199162/1-A
Matrix: Water
Analysis Batch: 199331

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 199162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorpyrifos	ND		1.0	0.50	ug/L		08/12/14 10:04	08/12/14 21:45	1
Diazinon	ND		0.25	0.12	ug/L		08/12/14 10:04	08/12/14 21:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,3-Dimethyl-2-nitrobenzene	*90*		*70 - 130*	*08/12/14 10:04*	*08/12/14 21:45*	*1*
Perylene-d12	*80*		*70 - 130*	*08/12/14 10:04*	*08/12/14 21:45*	*1*
Triphenylphosphate	*107*		*70 - 130*	*08/12/14 10:04*	*08/12/14 21:45*	*1*

Lab Sample ID: LCS 440-199162/2-A
Matrix: Water
Analysis Batch: 199331

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 199162

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chlorpyrifos			5.00	5.54		ug/L		111	70 - 130		
Diazinon			5.00	5.11		ug/L		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,3-Dimethyl-2-nitrobenzene	*97*		*70 - 130*
Perylene-d12	*94*		*70 - 130*
Triphenylphosphate	*115*		*70 - 130*

Lab Sample ID: LCSD 440-199162/3-A
Matrix: Water
Analysis Batch: 199331

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 199162

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorpyrifos			5.00	5.61		ug/L		112	70 - 130	1	30
Diazinon			5.00	5.03		ug/L		101	70 - 130	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,3-Dimethyl-2-nitrobenzene	*103*		*70 - 130*
Perylene-d12	*96*		*70 - 130*
Triphenylphosphate	*111*		*70 - 130*

Method: 608 - Organochlorine Pesticides in Water

Lab Sample ID: MB 440-199553/1-A
Matrix: Water
Analysis Batch: 199719

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 199553

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.10	0.080	ug/L		08/13/14 16:50	08/14/14 16:21	1
Dieldrin	ND		0.0050	0.0020	ug/L		08/13/14 16:50	08/14/14 16:21	1
Toxaphene	ND		0.50	0.25	ug/L		08/13/14 16:50	08/14/14 16:21	1
4,4'-DDD	ND		0.0050	0.0040	ug/L		08/13/14 16:50	08/14/14 16:21	1
4,4'-DDE	ND		0.0050	0.0030	ug/L		08/13/14 16:50	08/14/14 16:21	1
4,4'-DDT	ND		0.010	0.0040	ug/L		08/13/14 16:50	08/14/14 16:21	1

Method: 608 - Organochlorine Pesticides in Water (Continued)

Lab Sample ID: MB 440-199553/1-A
Matrix: Water
Analysis Batch: 199719

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 199553

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	61		35 - 115	08/13/14 16:50	08/14/14 16:21	1

Lab Sample ID: LCS 440-199553/2-A
Matrix: Water
Analysis Batch: 199719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 199553

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	0.500	0.387		ug/L		77	55 - 115
4,4'-DDD	0.500	0.387		ug/L		77	55 - 120
4,4'-DDE	0.500	0.385		ug/L		77	50 - 120
4,4'-DDT	0.500	0.423		ug/L		85	55 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	67		35 - 115

Lab Sample ID: LCSD 440-199553/3-A
Matrix: Water
Analysis Batch: 199719

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 199553

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dieldrin	0.500	0.403		ug/L		81	55 - 115	4	30
4,4'-DDD	0.500	0.406		ug/L		81	55 - 120	5	30
4,4'-DDE	0.500	0.395		ug/L		79	50 - 120	3	30
4,4'-DDT	0.500	0.438		ug/L		88	55 - 120	4	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	67		35 - 115

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 440-199553/1-A
Matrix: Water
Analysis Batch: 199751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 199553

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor 1016	ND		0.50	0.25	ug/L		08/13/14 16:50	08/14/14 22:51	1
Aroclor 1221	ND		0.50	0.25	ug/L		08/13/14 16:50	08/14/14 22:51	1
Aroclor 1232	ND		0.50	0.25	ug/L		08/13/14 16:50	08/14/14 22:51	1
Aroclor 1242	ND		0.50	0.25	ug/L		08/13/14 16:50	08/14/14 22:51	1
Aroclor 1248	ND		0.50	0.25	ug/L		08/13/14 16:50	08/14/14 22:51	1
Aroclor 1254	ND		0.50	0.25	ug/L		08/13/14 16:50	08/14/14 22:51	1
Aroclor 1260	ND		0.50	0.25	ug/L		08/13/14 16:50	08/14/14 22:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	85		45 - 120	08/13/14 16:50	08/14/14 22:51	1

Client: Haley & Aldrich, Inc.
Project/Site: Quarterly Arroyo Simi-Frontier Park

TestAmerica Job ID: 440-85405-1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 440-199553/4-A
Matrix: Water
Analysis Batch: 199751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 199553

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor 1016			4.00	3.27		ug/L		82	50 - 115		
Aroclor 1260			4.00	3.34		ug/L		84	60 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*86*		*45 - 120*

Lab Sample ID: LCSD 440-199553/5-A
Matrix: Water
Analysis Batch: 199751

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 199553

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor 1016			4.00	3.40		ug/L		85	50 - 115	1	30
Aroclor 1260			4.00	3.22		ug/L		81	60 - 120	4	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*84*		*45 - 120*

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: Quarterly Arroyo Simi-Frontier Park

TestAmerica Job ID: 440-85405-1

GC/MS Semi VOA

Prep Batch: 199162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-85405-1	ArroyoSimi_20140812	Total/NA	Water	525.2	
LCS 440-199162/2-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 440-199162/3-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MB 440-199162/1-A	Method Blank	Total/NA	Water	525.2	

Analysis Batch: 199331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-85405-1	ArroyoSimi_20140812	Total/NA	Water	525.2	199162
LCS 440-199162/2-A	Lab Control Sample	Total/NA	Water	525.2	199162
LCSD 440-199162/3-A	Lab Control Sample Dup	Total/NA	Water	525.2	199162
MB 440-199162/1-A	Method Blank	Total/NA	Water	525.2	199162

GC Semi VOA

Prep Batch: 199553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-85405-1	ArroyoSimi_20140812	Total/NA	Water	608	
LCS 440-199553/2-A	Lab Control Sample	Total/NA	Water	608	
LCS 440-199553/4-A	Lab Control Sample	Total/NA	Water	608	
LCSD 440-199553/3-A	Lab Control Sample Dup	Total/NA	Water	608	
LCSD 440-199553/5-A	Lab Control Sample Dup	Total/NA	Water	608	
MB 440-199553/1-A	Method Blank	Total/NA	Water	608	

Analysis Batch: 199719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-85405-1	ArroyoSimi_20140812	Total/NA	Water	608	199553
LCS 440-199553/2-A	Lab Control Sample	Total/NA	Water	608	199553
LCSD 440-199553/3-A	Lab Control Sample Dup	Total/NA	Water	608	199553
MB 440-199553/1-A	Method Blank	Total/NA	Water	608	199553

Analysis Batch: 199751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-85405-1	ArroyoSimi_20140812	Total/NA	Water	608	199553
LCS 440-199553/4-A	Lab Control Sample	Total/NA	Water	608	199553
LCSD 440-199553/5-A	Lab Control Sample Dup	Total/NA	Water	608	199553
MB 440-199553/1-A	Method Blank	Total/NA	Water	608	199553

Metals

Analysis Batch: 199094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-85405-1	ArroyoSimi_20140812	Total Recoverable	Water	SM 2340B	

Client: Haley & Aldrich, Inc.
Project/Site: Quarterly Arroyo Simi-Frontier Park

TestAmerica Job ID: 440-85405-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
LG	LG=Surrogate recovery below the acceptance limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: Quarterly Arroyo Simi-Frontier Park

TestAmerica Job ID: 440-85405-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-15
Arizona	State Program	9	AZ0671	10-13-14 *
California	LA Cty Sanitation Districts	9	10256	01-31-15
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-15
Hawaii	State Program	9	N/A	01-29-15 *
Nevada	State Program	9	CA015312007A	07-31-15
New Mexico	State Program	6	N/A	01-29-15
Northern Mariana Islands	State Program	9	MP0002	01-29-15
Oregon	NELAP	10	4005	01-29-15
USDA	Federal		P330-09-00080	06-06-15
USEPA UCMR	Federal	1	CA01531	01-31-15

* Certification renewal pending - certification considered valid.

Test America Version 7/19/2010

CHAIN OF CUSTODY FORM

Client Name/Address:
Haley & Aldrich, Inc.
9040 Friars Road
Suite 220
San Diego, CA 92108-5860

Test America Contact:
Debby Wilson

Project Manager:
Nancy Gardiner

Project:
Boeing-SSFL NPDES
Quarterly Arroyo Simi-Frontier Park

Phone Number:
619.285.7132, 858.337.4061(cell)
Field Manager: Jeff Bannon
818.350.7340, 818.414.5608(cell)

ANALYSIS REQUIRED

Sampler DS / DE
Field readings:
(Include units)
Time of readings 0857
pH 6.61 pH unit
Temp 23.16 °C/°F
Velocity 0.0 ft/sec
Field readings QC Checked by:
Date/Time 8/12/14 0857

Sample Description	Sample Matrix	Container Type	# of Cont.	Sample I.D.	Sampling Date	Sampling Time	Preservative	Bottle #	Hardness as $CaCO_3$	PCBs (608)	Chlorpyrifos, Diazinon (525.2)	Chlordane, Dieldrin, Toxaphene (608), 4,4-DDD, 4,4-DDE, 4,4-DDT	Comments
Arroyo Simi	W	1L Poly	1	ArroyoSimi-2014	8/12/14	0914	HNO_3	1	X				
Arroyo Simi	W	1L Amber	2	ArroyoSimi-2014	8/12/14	0907	None	2A, 2B		X			
Arroyo Simi	W	1L Amber	2	ArroyoSimi-2014	8/12/14	0911	HCl	3A, 3B			X		Extract within 36-Hours of sampling
Arroyo Simi	W	1L Amber	2	ArroyoSimi-2014	8/12/14	0904	None	4A, 4B				X	

440-85405 Chain of Custody

Relinquished By	Date/Time	Relinquished By	Date/Time
A Goldenberg	8/12/14 1145	Shafi Ansari	8/12/14 1145
Shafi Ansari	8/12/14 1536	Vu Bandi	8/12/14 15:36
Relinquished By	Date/Time:	Relinquished By	Date/Time:

Turn around Time (check)
24 Hours ____ 5 Days ____
48 Hours ____ 10 Days ____
72 Hours ____ Normal ____

Sample Integrity: (check)
Intact ✓ On Ice. ✓ 3.2/3.1

Data Requirements (check)
No Level IV ____ All Level IV ____

NPDES Level IV

IR-63

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 440-85405-1

Login Number: 85405

List Source: TestAmerica Irvine

List Number: 1

Creator: Gonzales, Steve

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	