

# Storm Water Individual Permit Annual Report

Reporting Period:  
January 1–December 31, 2013

NPDES Permit No. NM0030759



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**Prepared by the Environmental Programs Directorate**

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CERTIFICATION

LOS ALAMOS NATIONAL LABORATORY  
NPDES Permit No. NM0030759

ANNUAL REPORT  
REPORTING PERIOD: January 1, 2013–December 31, 2013

CERTIFICATION STATEMENT OF AUTHORIZATION

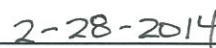
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"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. 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 knowing violations."

Handwritten signature of Dave McInroy, consisting of the letters 'D', 'M', 'I', 'R', 'O', 'Y' in a stylized cursive script.

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Dave McInroy, Program Director  
Corrective Actions Program  
Environmental Programs  
Los Alamos National Security, LLC

Handwritten date '2-28-2014' in a simple, legible font.

Date





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David S. Rhodes, Supervisory Federal Project Director  
Environmental Projects Office  
Los Alamos Field Office  
National Nuclear Security Administration

2-27-2014

Date



## EXECUTIVE SUMMARY

Los Alamos National Security, LLC, under the direction of the U.S. Department of Energy (collectively, the Permittees), has prepared this Annual Report for the Individual Storm Water Permit pursuant to the requirements of the National Pollutant Discharge Elimination System (NPDES) Permit No. NM0030759 (hereafter, the Individual Permit or Permit). The Individual Permit authorizes the discharge of storm water associated with historical industrial activities at the Los Alamos National Laboratory from specified solid waste management units and areas of concern, collectively referred to as Sites. The Permit, incorporating the latest modifications, became effective on November 1, 2010.

This Annual Report presents activities and milestones accomplished during the period from January 1 to December 31, 2013. Highlights of work performed under the compliance requirements specified in the Permit during the 2013 annual reporting period include the following:

### Baseline activities

- 93 “additional” control measures installed at 37 SMAs
- Baseline confirmation monitoring samples collected at 55 SMAs
- No further monitoring based on no target action level (TAL) exceedances during baseline monitoring at 7 SMAs
- Replacement of 37 retired control measures

### Corrective action activities

- Corrective action enhanced control confirmation monitoring samples collected at 26 SMAs
- Corrective action initiated based on TAL exceedances at 48 SMAs
- 46 enhanced control measures installed and implemented at 10 SMAs
- Completion of corrective action at 10 Sites

### Alternative compliance activities

- Alternative compliance requests for 5 Sites in 2 site monitoring areas (SMAs)

### Inspection activities

- 1474 Permit-required inspections
- 1935 sampling equipment inspections

### Compliance activities

- Recovery activities from the flood of September 13, 2013, are ongoing
- Force majeure requests for extension of completion of corrective action at 6 High Priority Sites
- Website updates and public notifications
- 1 public and 2 technical meetings
- Updates to Revision 1 of the 5-volume Site Discharge Pollution Prevention Plan



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Attachment 1	Supporting Documentation for Permitted Sites with Certificates of Completion under the New Mexico Environment Department Compliance Order on Consent
Attachment 2	Supporting Documentation for Analysis of Polychlorinated Biphenyl Congeners Using U.S. Environmental Protection Agency Method 1668



## 1.0 INTRODUCTION

Los Alamos National Laboratory (LANL or the Laboratory) is a multidisciplinary research facility owned by the U.S. Department of Energy (DOE) and managed by Los Alamos National Security, LLC (LANS), collectively, the Permittees. The Laboratory, located in Los Alamos County in northern New Mexico, covers approximately 36 mi<sup>2</sup>. It is situated on the Pajarito Plateau, which is made up of a series of finger-like mesas separated by deep, west-to-east-oriented canyons cut by predominantly ephemeral and intermittent streams. Many of the Sites covered by National Pollutant Discharge Elimination System (NPDES) Permit No. NM0030759 (hereafter, the Individual Permit or Permit) are remotely located and are not associated with current industrial activities.

LANS has prepared this Annual Report for the Individual Permit pursuant to the requirements of the Permit as authorized by the U.S. Environmental Protection Agency (EPA) to discharge storm water associated with historical industrial activities at the Laboratory from specified solid waste management units (SWMUs) and areas of concern (AOCs), collectively referred to as Sites. The Individual Permit does not regulate storm water discharges associated with current conventional industrial activities at the Laboratory regulated under NPDES Permit No. NMR05GB21. The Permit incorporating the latest modifications became effective on November 1, 2010 (EPA 2010, 213450).

The Sites regulated under this Permit are a subset of the SWMUs and AOCs that are being addressed under the March 2005 Compliance Order on Consent (Consent Order). The Consent Order fulfills the corrective action requirements in §3004(u) and §3008(h) of the Resource Conservation and Recovery Act (RCRA). A SWMU is a discernible unit at which solid wastes may have been “routinely and systematically released” and could result in a release of hazardous constituents. A Site that met the definition of a SWMU or AOC was evaluated for inclusion in the Permit based on the following criteria: (1) the SWMU/AOC is exposed to storm water (e.g., not capped or subsurface); (2) the SWMU/AOC contains “significant industrial material” (e.g., not cleaned up or has contamination in place); and (3) the SWMU/AOC potentially impacts surface water.

The selection of SWMUs and AOCs for inclusion in the Permit was based on storm water, sediment, and soil data available at the time the Permit application was submitted. The investigation and remediation of SWMUs and AOCs under the Consent Order began before the effective date of the Individual Permit and continues concurrently with implementation of the Individual Permit.

The Individual Permit treats a Site as an “industrial activity” that creates a “point source discharge” and directs the Permittees to monitor storm water discharges from Sites at specified sampling points known as site monitoring areas (SMAs). An SMA is a single drainage area within a subwatershed and can include more than one Site. Storm water from a Site may drain to multiple subwatersheds and may be associated with multiple SMAs.

The Permit contains nonnumeric technology-based effluent limitations, coupled with a comprehensive, coordinated inspection and monitoring program, to minimize pollutants in the Permittees’ storm water discharges associated with historical industrial activities from specified SWMUs and AOCs. The Permittees are required to implement site-specific control measures (including best management practices [BMPs]) to address the nonnumeric technology-based effluent limits, as necessary, to minimize pollutants in their storm water discharges.

The Permit establishes target action levels (TALs) that are equivalent to New Mexico State water-quality criteria. These TALs are used as benchmarks to determine the effectiveness of control measures implemented under the Permit. That is, confirmation monitoring sample results for an SMA are compared with applicable TALs. If one or more confirmation monitoring result exceeds a TAL, the Permittees must

take corrective action. The Permit requires that the Permittees either certify to EPA completion of corrective action at each Site by a specific deadline or seek to place individual Sites into alternative compliance, whereby completion of corrective action will be accomplished on a case-by-case basis pursuant to an individually tailored compliance schedule determined by EPA. Figure 1-1 is a “road map” illustrating key activities in the Individual Permit and shows the steps involved in the corrective action process.

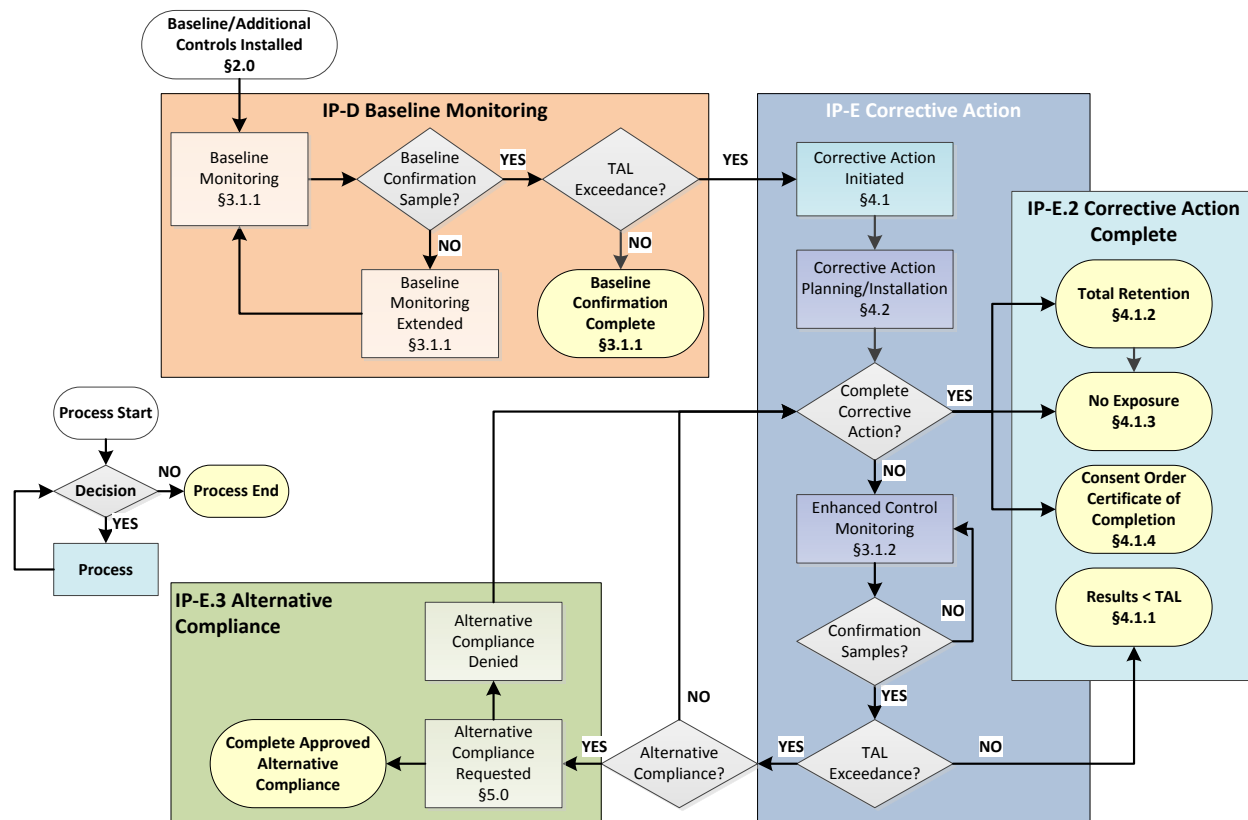


Figure 1-1 Permit compliance roadmap

This annual status report was prepared to meet the requirements of Part I.H.2(a) through (k) of the Individual Permit. Each requirement is addressed separately in this report and includes for each SMA (or Site) a summary of Site-specific status during the reporting period, as described in Table 1-1.

As of December 31, 2013, 405 Sites assigned to 250 Permitted Features/SMAs are included in the Permit. Assignment of SMAs to Sites is provided in Appendix A of the Permit. Assignment of SMAs to Permitted Features (i.e., outfall numbers) is provided in Appendix D of the Permit. Site, SMA, and Permitted Features allowed to discharge storm water as of December 31, 2013, are summarized in Table 1-2. For administrative convenience, Table 1-2 of this Annual Report is organized from north to south according to the seven major watersheds on the Pajarito Plateau.

Part I.H.2(b) of the Permit requires that the Annual Report include the SMA and associated Outfall (Permitted Feature) and Site(s) numbers/identifications.

On December 20, 2012, the New Mexico Environment Department (NMED) approved the Permittees' request to split one of the 405 Sites [32-002(b)] into two Sites [32-002(b1) and 32-002(b2)] for the purpose of expediting corrective actions under the Consent Order. The SMA, LA-SMA-5.361, associated with this Site change was unaffected.



Further work in 2013 identified three other Site-related administrative changes. Site 22-010(b) was identified as existing within PJ-SMA-5.1, and Site 14-002(c) was identified as existing within CDV-SMA-6.02. Site 16-026(h2) was removed and replaced by Site 16-029(e) within W-SMA-7. The drainages of the SMAs associated with these Sites were unaffected by these administrative changes. These changes are reflected in Tables 1-2 and 1–3, which list and summarize the Permitted Features, SMAs, and Sites associated with each of the major watersheds. These administrative Site changes are described more fully in Section 10 of this report.

## **2.0 BASELINE CONTROL MEASURES ACTIVITIES**

The Laboratory completed baseline control measure (BCM) installation and certification activities in 2010 and 2011 and successfully met the Part I.B.1 requirements within the Permit deadlines as detailed in Appendix E of the Individual Permit. Following the installation and certification of the BCMS, the Laboratory continued field efforts in 2012 and 2013 to install additional controls. All controls installed were maintained in effective operating condition per Part I.B.2 of the Permit. Controls were repaired or replaced when any inspection, event, or observation identified that it was not operating effectively.

### **2.1 Description of Baseline Control Measures**

A detailed list of all BCMS installed and operating on December 31, 2013, at each SMA is provided in Appendix C of this Annual Report. The general types and intended purposes of BCMS include the following:

- Erosion control (EC) and sediment control (SC) measures: These BCMS are intended to minimize the potential for erosion when storm water runoff flows across an area, to minimize sediment transport and to retain transported sediment on-site.
- Run-on control (RON) and runoff control (ROFF): These BCMS are intended to divert, infiltrate, reuse, contain, or otherwise reduce storm water run-on and/or runoff.
- The Permit specifies the types of BCMS installed by SMA and the purpose of each type of control measure in Appendix E, Table E-1. Additional baseline controls installed and enhanced controls are also assigned EC, SC, RON, and ROFF functionality as described in Appendix C of this Annual Report.

### **2.2 Additional Control Measures**

The Laboratory continued a field effort during 2013 to supplement certified BCMS with additional control measures at some SMAs. These supplemental control measures consisted of berms, caps, channel/swales, check dams, gabions, sediment traps and basins, and seed and mulch.

Table 2-1 summarizes the 93 additional controls installed at 37 SMAs during 2013 and the 37 controls installed to replace retired controls at 19 SMAs during 2013.

## **3.0 MONITORING RESULTS**

Section 3 of this Annual Report presents the analytical monitoring results for storm water runoff samples collected at SMAs during the 2013 reporting period. The confirmation sampling conducted after BCMS have been installed and implemented, but before any subsequent corrective actions have been conducted, is described in Section 3.1.1, Baseline Monitoring. Monitoring conducted after enhanced control measures have been installed and implemented is described in Section 3.1.2, Enhanced Control Monitoring.

All analytical results for the Individual Permit storm water monitoring samples are available electronically from the Intellus NM database, available at <http://intellusnm.com/>. All Individual Permit data from Intellus can be retrieved using the Primary Filter where “Location Group” is equal to “Individual Permit,” providing access to data that is within the date range of November 1, 2010, to present, and where “Parameter Groups” include GEN\_CHEM, for cyanide (weak acid dissociable); METALS, for total and dissolved metals; PCB\_CONG, for Total PCBs; PEST, for pesticides; RAD, for radioactivity; SVOC, for semivolatiles organic compounds; DIOX/FUR, for dioxins; and HEXP, for high explosives.

### 3.1 Confirmation Monitoring

The requirements for collecting confirmation monitoring samples following installation of control measures are described in Part I.D of the Permit. Any sampling performed for purposes of confirmation monitoring at a particular SMA must be collected during at least two (2) separate “measurable storm events” occurring at least fifteen (15) days apart. A measurable storm event is defined as a storm that results in an actual discharge from the Site or Sites and that produces sufficient volume to perform the required analyses. Minimum and suggested sample volumes required to perform each specific analysis are presented in Table 3-1. Snow melt samples cannot be used for purposes of confirmation monitoring. Grab samples must be collected within the first thirty (30) minutes of, but no later than one (1) hour after, a measurable storm event. Samples are not used for purposes of confirmation monitoring if samples collected meet any of the following conditions:

- non–storm water discharge was collected,
- storm water was collected after the first hour of discharge,
- storm water discharge was collected but was not storm water discharge from the Site(s), and
- storm water discharge was collected and analyzed but did not meet the minimum quality requirements of 40 Code of Federal Regulations (CFR) Part 136.

The pollutants of concern to be monitored during baseline confirmation monitoring for each SMA are specified in Appendix B of the Permit. At a minimum, all SMAs are initially monitored for metals, gross-alpha radiation, radium-226 + radium-228, and cyanide (weak acid dissociable). Monitoring for polychlorinated biphenyl (PCB) compounds, high explosives, or other organic compounds is also required at some SMAs based on initial evaluations of stormwater data and preliminary information on potential pollutant sources at the Sites within the subwatershed.

Part I.H.2(c) of the Permit requires that the Annual Report include monitoring results available during the reporting period.

Monitoring must be conducted according to test procedures approved under Title 40 CFR Part 136, with the exception of the other test procedures specified in Part I.C of the Permit. Table 3-2 summarizes the analytical suites of concern for each baseline confirmation monitoring sample collected in 2013.

Pollutants of concern monitored during corrective action monitoring can be reduced if previous confirmation monitoring results are below applicable TALs. A minimum of two confirmation samples with results below TALs must be collected and analyzed before a particular pollutant of concern at an SMA can be removed from monitoring requirements, except as provided in Part I.E.5(d) and (e) of the Permit:

- Storm water discharge monitoring results based on validated analytical data showing pollutant concentrations above applicable TALs at any Site indicate corrective action is required as provided in Part I.E of the Permit.

- As provided in Part I.I.6 of the Permit, a TAL exceedance is not a noncompliance with the requirements of the Permit provided that the Permittees take the required corrective action within the relevant deadlines.

SMA storm water runoff samplers were installed and activated at SMAs beginning in March 2013 for the 2013 calendar year. Baseline confirmation monitoring was conducted at 55 SMAs where storm water runoff samples with sufficient volume were collected and complete analyses performed. Additionally, 34 storm water runoff samples with sufficient volume to perform the required enhanced control confirmation monitoring analyses were collected at 26 SMAs as shown in Table 3-3.

### 3.1.1 Baseline Monitoring

The initial monitoring requirements and frequency of sampling for each pollutant of concern following installation and implementation of BCMs vary on a site-by-site basis, as specified in Part I.D.1 of the Permit.

If no confirmation sample could be collected by October 31, 2011, or April 30, 2012, from a measurable storm event, Part I.E.5(e) of the Permit requires that confirmation sampling shall continue until at least 1 sample is collected. As of January 1, 2013, a baseline confirmation monitoring sample had not been collected at 166 SMAs. During 2013 baseline confirmation monitoring, samples were collected from measurable storm events at 55 SMAs. As of December 31, 2013, a baseline confirmation monitoring sample had not been collected at 111 SMAs associated with 162 Sites.

Part I.H.2(d) of the Permit requires that the Annual Report identify the pollutants that exceed applicable MTALs or ATALs.

- TAL exceedances at 72 SMAs
- MTAL exceedances include aluminum, copper, cyanide, mercury, silver, zinc
- ATAL exceedances include cyanide, gross alpha, mercury, Ra-226+Ra-228, RDX, selenium, total PCBs

Baseline confirmation monitoring samples collected during 2013 are summarized in Table 3-2. This table summarizes the analytical suites and analytes and pertinent information for the storm event that resulted in an actual discharge from the Sites as required by Part I.D.3 of the Permit. The meteorological data are taken from the rain gage assigned to each SMA, as discussed in Section 6.1, Post-Storm Inspections, of this Annual Report. Samples collected at PT-SMA-0.5 on September 13, 2013, and PJ-SMA-4.05 on July 12, 2013, and submitted for analysis were subsequently determined not to meet the criteria for confirmation monitoring, as summarized in Table 3-4, and are not used to assess the effectiveness of the implemented control measures.

Since the initiation of the Permit baseline confirmation monitoring was completed and a TAL exceedance was not observed at 10 SMAs: 2M-SMA-2.5, A-SMA-3.5, ACID-SMA-1.05, CDV-SMA-1.2, CDV-SMA-2.5, M-SMA-13, PJ-SMA-14.8, PJ-SMA-16, R-SMA-2.3 and W-SMA-9.05. Accordingly, the 13 Sites associated with these SMAs have not been advanced to corrective action and storm water monitoring has ended. No further confirmation sampling is required, except as directed by Part I.E.5(c) of the Permit.

### 3.1.2 Enhanced Control Monitoring

Enhanced control measures were installed and implemented at 42 SMAs in 2012 and at 10 SMAs in 2013. Monitoring of storm water associated with these enhanced controls was complete at 13 of these SMAs on December 31, 2013, with the collection of 2 confirmation monitoring samples or certification of completion of corrective action under Part I Section E.2 of the Permit. Corrective action monitoring is continuing at 39 SMAs. Enhanced control confirmation monitoring samples collected during 2013 are presented in Table 3-5. This table summarizes the analytical suites and analytes and pertinent

information for the storm event that resulted in an actual discharge from the Sites, as required by Part I Section D.3 of the Permit. The meteorological data are collected from the rain gage assigned to each SMA, as discussed in Section 6.1, Post-Storm Inspections, of this Annual Report.

The validated analytical monitoring results for confirmation samples are compared with the applicable TALs established in Part I.C of the Permit. Table 3-6 summarizes the applicable maximum TAL (MTAL) and average TAL (ATAL) exceedances for the confirmation monitoring samples collected in 2013. Section 4 of this report discusses the identification of Sites associated with 13 SMAs advanced to the corrective action phase of the Permit based on TAL exceedances observed during baseline confirmation monitoring during 2013.

### **3.2 Confirmation Monitoring Analytical Data**

The 2013 confirmation monitoring analytical results for metals, general inorganics, radioactivity, total PCBs, and other detected organics are presented in separate tables in Appendix B. Analytical data are qualitatively discussed in the Site Discharge Pollution Prevention Plan (SDPPP).

## **4.0 CORRECTIVE ACTION ACTIVITIES**

If confirmation monitoring sample results demonstrate that one or more TALs are exceeded at a Site, Part I.E, requires the Permittees to initiate corrective action. Corrective action consists of one of the following: (i) enhance control measures to meet the TAL, (ii) total retention of storm water discharges from the Site, (iii) total elimination of exposure of pollutants to storm water at the Site, or (iv) receipt of an NMED-issued certificate of completion under the RCRA Consent Order.

Part I.E.4 of the Permit categorizes the Sites into “High Priority Sites” and “Moderate Priority Sites” and establishes deadlines for corrective action based on this prioritization.

- If TALs are exceeded from a baseline confirmation monitoring sample collected before September 30, 2012, the Permittees are required to certify completion of corrective action at “High Priority Sites” within three (3) years of the effective date of the Permit (October 31, 2013).
- If a baseline confirmation monitoring sample was not collected by September 30, 2012, the Permittees are required to certify completion of corrective action at “High Priority Sites” within one (1) year following the first successful confirmation sampling event.
- Permittees are required to certify completion of corrective action at “Moderate Priority Sites” within five (5) years of the effective date of the Permit (October 31, 2015).

As of September 30, 2012, baseline confirmation monitoring samples had not been collected at 21 SMAs associated with 46 unique High Priority Sites. For these Sites, the compliance deadline to complete corrective action is extended from October 31, 2013, to 1 yr following receipt of analytical results with a TAL exceedance from the first successful confirmation sample. Baseline confirmation monitoring was completed at 10 SMAs associated with High Priority Sites during 2013. Deadlines for completion of corrective action for High Priority Sites are presented in Table 4-1. Counts of the Permit phase of SMAs associated with High Priority Sites and Moderate Priority Sites as of December 31, 2013, are provided in Table 4-2.

#### 4.1 Corrective Actions Required

Since the beginning of the Permit, corrective action has been initiated at 129 SMAs associated with 245 Sites because TAL exceedances were observed during baseline confirmation monitoring.

- Corrective action is being planned at 150 Sites in 69 SMAs.
- Enhanced control measures have been designed and installed at 52 SMAs associated with 89 Sites.
- Corrective action has been completed at 21 Sites in 15 SMAs through demonstration that the Site has achieved RCRA “Corrective Action Complete without Controls/Corrective Action Complete with Controls” status or a certificate of completion under the Consent Order. Corrective action is complete at 8 of these SMAs.
- Corrective action has been completed at 2 Sites in 2 SMAs through a demonstration that controls are in place to totally eliminate exposure of pollutants to storm water. Corrective action is complete at PJ-SMA-20. Corrective action is complete at 1 of 2 Sites in T-SMA-1.
- As of December 31, 2013, no Sites have been certified to be complete through all pollutants of concern being less than the TAL or through total retention of storm water discharges from the Site.

Part I.H.2(f) of the Permit requires that the Annual Report provide a description of corrective actions required under Section E of the Permit to be taken or having been taken, including completion date or targeted completion date, and progress update.

Individual Permit Corrective Action Options:

- Enhanced Control Measures
- No Exposure
- Total Retention
- NMED Certificate of Completion

##### 4.1.1 Enhanced Control Measures

Part I.E.2(a) of the Permit specifies that completion of corrective action may entail the design and installation of enhanced (additional, expanded, or better tailored) control measures reasonably expected to achieve compliance with TALs for all Sites within an SMA drainage area. After certification of installation of enhanced controls, the Permittees must attempt to collect at least two (2) confirmation monitoring samples (one [1] confirmation sample shall be collected during each of at least two [2] separate measurable storm events occurring at least fifteen [15] days apart). If either validated confirmation analytical result for any specific pollutant of concern exceeds applicable TALs, the Permittees shall conduct visual inspections for all Sites within the SMA drainage area, reevaluate the existing control measures, and initiate further measures to achieve completion of corrective action as soon as practicable. Table 4-3 summarizes the 67 enhanced controls installed at 12 SMAs in 2013.

There are no Sites where corrective action has been completed under Part I.E.2(a) of the Permit.

##### 4.1.2 Total Retention

Part I.E.2(b) of the Permit specifies that completion of corrective action may also be achieved through installation of control measures that “totally retain and prevent the discharge of storm water” from a Site. No further confirmation sampling is required under this option, unless required by Part I.E.5(c) of the Permit.

Design of a storm water management system to complete corrective action using the total retention alternative requires determining a specific storm water volume for which retention is to be provided. This storm water volume is calculated uniquely based on precipitation depth over a specified area and the



unique conditions of each SMA. No requests for EPA to approve corrective action complete via total retention were submitted in 2013. There are no Sites where corrective action has been completed under Part I.E.2(b) of the Permit.

#### 4.1.3 No Exposure

Part I.E.2(c) of the Permit specifies that completion of corrective action may be accomplished through the installation of control measures to totally eliminate exposure of pollutants to storm water at a Site. Once the control measures have been certified and submitted to EPA, no further confirmation sampling is required, unless required by Part I.E.5(c) of the Permit.

Part I.H.2(g) of the Permit requires that the Annual Report identify Sites which meet No Exposure status.

Thereafter, the Permittees shall collect one (1) sample and make the analytical results available via email notification and on the public website pursuant to Part I. 1.7 of the Permit.

Corrective action was completed at two SMAs through certification of control measures to totally eliminate exposure of pollutants to storm water under Part I.E.2(c) of the Permit. On October 25, 2013, completion of corrective action was submitted for Site 54-017 associated with PJ-SMA-20 (LANL 2013, 250402). On October 31, 2013, completion of corrective action was submitted for Site 50-009 associated with T-SMA-1 (LANL 2013, 250960)

#### 4.1.4 Certificate of Completion under NMED's Consent Order

Part I.E.2(d) of the Permit specifies a fourth option for completing corrective action through demonstration that the Site has achieved RCRA "corrective action complete without controls/corrective action complete with controls" status or a Certificate of Completion under NMED's Consent Order. Once completion of corrective action has been certified and submitted to EPA, no further confirmation sampling is required except as provided by Part I.E.5(c) and I.2(b) of the Permit.

Part I.H.2(h) of the Permit requires that the Annual Report identify Sites that meet "corrective action complete without controls/corrective action complete with controls" under RCRA or that have been issued a certificate of completion under the NMED Consent Order.

The Consent Order requires the Laboratory to remediate a SWMU or AOC when site investigations identify conditions that are potentially adverse to human health and the environment. The Consent Order remediation process is complete at a SWMU or AOC when the Laboratory has demonstrated and documented to the NMED's satisfaction that the Site poses no unacceptable risk to humans and ecological resources, such as plants and animals.

Two potential outcomes are possible when a remedial action is performed under the Consent Order to address a release from a SWMU or AOC. The first outcome is that no hazardous constituents from the release are present at concentrations above the risk-based levels specified in the Consent Order. This type of remediation results in a certificate of completion without controls. That is, no restrictions on land use are required.

If the current and foreseeable future use of a SWMU or AOC is other than residential (e.g., industrial), the Permittees have the option to request a certificate of completion with controls. The controls (e.g., land use restrictions) ensure the cleanup is protective of human and health and the environment based upon site use.

As of December 31, 2013, 37 Sites have been issued certificates of completion under the Consent Order, as listed in Table 4-4. At twenty-one (21) Sites listed in Table 4-5, corrective action is complete under Part I.E.2(d) of the Permit. The remaining 14 Sites with certificates of completion under the Consent Order are not in corrective action under Part I.E of the Permit.

#### **4.2 Description of Corrective Actions Planned**

Corrective action has been initiated but a method to achieve completion of corrective action has not been implemented at 150 Sites in 69 SMAs, as summarized in Table 4-6. Included in this summary are Sites C-43-001, LA-SMA-1.25, and Site 03-010(a), 2M-SMA-1, where TAL exceedances were observed following the installation of enhanced controls in two confirmation monitoring samples.

#### **4.3 Additional Sampling Requirements**

Part I.E.1(b) of the Permit requires that the Permittees collect one sample for informational purposes following installation of control measures to totally eliminate exposure of pollutants to storm water at a Site. Completion of corrective action with a certification of no exposure was submitted for Site 50-009 in T-SMA-1 on October 31, 2013, and at Site 54-017 in PJ-SMA-20 on October 25, 2013. The Permittees will collect one sample at each SMA and make the analytical results available via e-mail notification and on the public website pursuant to Section I.7 of the Permit.

#### **4.4 Evidence of Runoff Where Monitoring Has Ceased**

Part I.E.5(c) of the Permit requires that if Site(s) where monitoring has ceased to exhibit any of the following conditions,

- evidence of discharge of contaminated runoff, or
- conditions that could lead to a discharge of contaminated runoff, or
- other monitoring data shows an exceedance of applicable target action levels,

the Permittees shall initiate appropriate actions to correct the identified problems within thirty (30) days of becoming aware of the situation. As of December 31, 2013, these conditions have not been identified at any Site where monitoring has ceased.

#### **4.5 Force Majeure Requests and Notifications**

The Permittees may seek EPA approval for an extension to a deadline when a force majeure event causes a delay in meeting the obligation to confirm completion of corrective action by a specified deadline. The Permittees submitted two requests to extend deadlines for completion of corrective action because necessary approvals could not be obtained resulting from the inaction of another governmental authority. The Permittees notified EPA of two force majeure events: a flood event in September 2013 and the lapse in federal appropriations in October 2013, both of which have the potential to impact completion of corrective action activities.

##### **4.5.1 Request for Extension at Sites within Upper Sandia Canyon**

On September 23, 2013, the Permittees submitted a request to EPA (LANL 2013, 250039) to extend the deadline to complete corrective action as a result of force majeure under Part I.E.4(c) of the Individual Permit. The request was necessary for five High Priority Sites where completion of corrective action was

required before November 1, 2013. The Sites listed in the force majeure requests are Site 03-029 in S-SMA-1.1, Site 03-012(b) in S-SMA-2, Site 03-052(b) in S-SMA-2.01, Site 03-014(b2) in S-SMA-3.53, and Site 60-007(b) in S-SMA-3.6.

On August 27, 2013, the Permittees submitted to NMED the Supplemental Investigation Report for Upper Sandia Canyon Aggregate Area. This supplemental investigation report concludes that the above-listed five Sites, located within the aggregate area, are eligible to receive certificates of completion under the Consent Order. Upon receiving NMED's approval of the conclusions in the supplemental investigation report, the Permittees will certify completion of corrective action. Until that time, the Permittees will continue all permit-required inspections and maintain all baseline and enhanced control measures at these Sites to ensure they are in effective operating condition.

#### **4.5.2 Request for Extension at a Site in Upper Mortandad Canyon**

On September 23, 2013, the Permittees submitted a request to EPA (LANL 2013, 250038) to extend the deadline for completion of corrective action as a result of force majeure under Part I.E.4(c) of the Individual Permit. The request was necessary for the High Priority Site 50-006(a) in T-SMA-1 where completion of corrective action was required before November 1, 2013.

During the second quarter of calendar year 2014, the Permittees will submit to NMED the Supplemental Investigation Report for the Upper Mortandad Canyon Aggregate Area. This report will conclude that Site 50-006(a) is eligible to receive a certificate of completion under the Consent Order. Upon receiving NMED's approval of the conclusion in the supplemental investigation report, the Permittees will certify completion of corrective action. Until that time, the Permittees will continue all permit-required inspections and maintain all baseline and enhanced control measures at the Site to ensure they are in effective operating condition.

#### **4.5.3 Notification of Flood Event of September 2013**

On September 25, 2013, the Permittees submitted a notification to NMED (LANL 2013, 250037) of a force majeure event of unprecedented rainfall during the week of September 10, 2013. The rainfall and subsequent flooding limited access to Sites and SMAs. Because of the event, 12 post-storm inspections initiated by rainfall on September 1, 2013, were completed in more than 15 days, as required by Part I, Section G.2 of the Permit. The 12 affected sites were inspected immediately after Site access was restored on September 17, 2013.

#### **4.5.4 Notification of Lapse of Appropriations for Activities under the Individual Permit**

On October 11, 2013, The Permittees notified EPA (LANL 2013, 250178) of a force majeure event potentially impacting compliance activities under the Individual Permit. At the start of the fiscal year 2014, Congress had not passed an appropriations bill or a Continuing Resolution to fund DOE. As a result, from October 1 to October 18, 2013, the Laboratory suspended most of the activities implemented under the Permit. Following the pause, an additional 5 working days were necessary to safely restart field activities and allow subcontractors to return to work. Normal operations resumed on October 28, 2013. Because of the pause, 13 post-storm inspections initiated by rainfall on September 22, 2013, were completed in more than 15 days, as required by Part I, Section G.2 of the Permit.

## 5.0 ALTERNATIVE COMPLIANCE

On April 30, 2013, requests for alternative compliance were made to EPA for Sites 03-013(a) and 03-052(f), monitored at S-SMA-0.25, and Site 03-056(c), monitored at S-SMA-2. A response to written public comments on the alternative compliance request was completed on October 1, 2013. The response included a revision to the alternative compliance proposal to include Sites 03-045(b) and 03-045(c), monitored at S-SMA-2.

## 6.0 SUMMARY OF INSPECTIONS

This section summarizes activities undertaken by the Permittees during the 2013 annual reporting period to meet the requirements for five types of inspections specified in Part I.

Post-Storm Inspection—Part I.G.2: Inspections of control measures at any Site affected by a “storm rain event” are reported in Section 6.1 of this report.

Annual Erosion Evaluation Inspection—Part I.G.1: Annual Site-specific inspection for changes of conditions affecting erosion or after notice of a significant event that could impact the control measures are reported in Section 6.2 of this report.

Significant Event Inspection—Part I.G.1: Site-specific inspection after notice of a significant event that could impact the control measures are reported in Section 6.3 of this report.

Visual Inspection for TAL Exceedances—Part I.E.1: Visual inspections for all Sites at SMAs where TAL exceedances are observed are reported in Section 6.4 of this report.

Remediation Construction Activity Inspections—Part I.I.1: Weekly inspections to ensure sediment and runoff control measures are maintained in good order at Sites where remediation construction activities, such as control measure installation, cause soil disturbance are reported in Section 6.5 of this report.

Sampler Inspections—Part I.D.3: Inspections of sampling equipment performed to collect water and to maintain samplers in operating condition are reported in Section 6.6 of this report.

Part I.H.2(k) of the Permit requires that the Annual Report summarize inspections performed in accordance with Sections G.1 (Erosion Inspections and Reevaluation) and G.2 (Post-Storm Inspection) as well as for any visual inspections performed under Section E.1 (Confirmation Results above Target Action Levels).

### 6.1 Post-Storm Inspections

Part I.G.2 of the Permit requires that the facility’s Pollution Prevention Team (PPT) inspect control measures and storm water management devices at any Site affected by a “storm rain event” within 15 calendar days after such storm rain event. A “storm rain event” is defined as a 0.25 in. or more intensive rain event occurring within 30 min. If several storms exceeding the above intensity threshold occur over a period not to exceed 15 d from the first event, a single inspection following these storms is sufficient for compliance, provided the inspection occurs no more than 15 d from the date of the first storm.

Precipitation data are collected year-round at meteorological towers across the Laboratory. In addition, an extensive seasonal rain gage network is deployed from April to November when rain precipitation is most likely to occur on the Pajarito Plateau. Using a geospatial information system, SMAs are given a seasonal assignment to an individual rain gage using the method of Thiessen polygons. The use of the extended rain gage network directs the PPT response to only those SMAs where precipitation exceeds the established threshold. Table 6-1 lists the rain gages in use for the 2013 season and the numbers of SMAs

and Sites assigned to each rain gage. Procedures for managing precipitation data are described in more detail in the SDPPP.

Table 6-2 lists the SMAs where post-storm inspections triggered by “storm rain events” that met or exceeded the 30-min 0.25-in. threshold were conducted in 2013. During the monsoon season (from July to September), several storm rain events occurred over a period less than 15 d from the first event. As allowed by the Permit, a single inspection following these storms was conducted no more than 15 d from the date of the first storm. Table 6-2 indicates where a single inspection was conducted following two or more closely spaced storm rain events.

In 2013, 859 individual post-storm inspections were conducted at SMAs in response to triggering storm events. Twenty-nine post-storm inspections were conducted more than 15 d from the triggering storm rain event.

Twelve post-storm inspections initiated by rainfall on September 1, 2013, were completed 16 d from the triggering event. A force majeure event occurred when unprecedented rainfall and subsequent flooding during the week of September 10, 2013, limited access to Sites and SMAs. The 12 affected sites were inspected immediately after Site access was restored on September 17, 2013.

Thirteen post-storm inspections initiated by rainfall on September 22, 2013, were completed 32 d from the triggering event. A force majeure event occurred when Congress did not pass an appropriations bill or a Continuing Resolution to fund DOE at the start of fiscal year 2014. As a result, from October 1 to October 18, 2013, the Laboratory suspended most of the activities implemented under the Permit. Following the pause, an additional 5 working days were necessary to safely restart field activities and allow subcontractors to return to work. Normal operations resumed on October 28, 2013. Control measures and storm water management devices at Sites within the 13 affected SMAs were inspected on October 24, 2013.

One post-storm inspection conducted on July 24, 2013, was completed 19 days from the triggering rain event that occurred on July 5, 2013. Three post-storm inspections were conducted on September 23, 2013, 73 days after the triggering rain event that occurred on July 12, 2013. Administrative errors led to failures to meet the 15-d requirement in these four inspections.

## **6.2 Annual Erosion Evaluation Inspections**

Part I.G.1 of the Permit requires that the facility’s PPT inspect and evaluate each Site annually for changes of conditions affecting erosion. Table 6-3 summarizes the 2013 annual erosion evaluation inspections at each of the 250 SMAs/406 Sites. Annual inspections were conducted in April and May. Annual inspections were combined with significant event inspections and were performed again in October and November to investigate impacts to Sites and SMAs from the September 2013 rain event and subsequent flooding.

## **6.3 Significant Event Inspections**

The facility’s PPT must inspect and reevaluate all Sites after notice of a significant event, such as a fire or flood, that could significantly impact control measures and environmental conditions in the affected area. Following Laboratory-wide flooding in September 2013, all 250 SMAs/408 Sites were inspected in October and November. Inspectors observed that 143 SMAs incurred no damage and required no maintenance. Table 6-4 summarizes the findings at 107 SMAs where inspections were performed.

#### **6.4 Visual Inspections for TAL Exceedance**

Part I.E.1(a) of the Permit requires that after the installation of baseline or enhanced control measures if any validated sample analytical result for a specific pollutant of concern at a particular SMA is greater than the applicable MTAL or the average of all applicable sampling results is greater than the applicable ATAL (or applicable maximum quantitation limit [MQL], whichever is greater), the Permittees shall conduct visual inspections for all Sites within the SMA drainage area. TAL exceedance inspections were conducted at 71 SMAs during 2013. Table 6-5 summarizes the 71 visual inspections conducted in 2013.

#### **6.5 Remediation Construction Activity Inspections**

Part I.I.1 of the Permit requires that if soil must be disturbed to install a control measure, the Permittees shall take all necessary steps to minimize migration of sediments and runoff from disturbed sites. The Permittees shall conduct Site inspections once a week to ensure sediments and runoff control measures are maintained in good order. Corrective actions shall be taken immediately if deficiencies of control measures are noticed by either inspectors or contractors. Table 6-6 summarizes 44 remediation construction activity inspections conducted at 8 SMAs in 2013.

#### **6.6 Sampler Inspections**

Part I.D.3 of the Permit describes the procedures for collecting storm water samples to fulfill the requirements of confirmation monitoring. The facility's PPT uses programmable Model 3700 Portable Samplers from Teledyne ISCO to collect storm water. Each sampler is configured with a Model 1640 Liquid Level Actuator and is powered by a sealed rechargeable 12-volt 35-amp-hour lead-acid battery. Samples are collected in 1-L certified clean polyethylene or glass bottles, as approved for use under 40 CFR Part 136, for the analysis being performed.

Sampling equipment for confirmation monitoring was activated beginning on March 26, 2013. Sampling equipment was activated during the year as corrective action monitoring was initiated and shut down during the year as sampling requirements were fulfilled. To prevent damage to equipment in the winter months and to avoid collecting snow melt, all samplers were deactivated by November 26, 2013. During periods when samplers were in place, inspections are conducted to confirm sampler operability and to retrieve storm water collected from measurable storm events. Samples from measurable storm events are placed on ice during retrieval from the field and filtered and preserved as specified in 40 CFR Part 136 before they are shipped to off-site subcontracted analytical laboratories. Maximum holding times, allowed bottle types, and required preservation are provided in Table 3-1.

During 2013, sampling equipment was inspected on 1935 different occasions. Samplers were capable of collecting measurable discharges during 1877 inspections. In the aggregate, the sampling equipment was capable of collecting measurable discharge during 97.0% of inspections. When samplers were inspected and found not to be ready to collect samples, the days of inoperability were deduced from available information. The estimate of the loss of sampler-days of operability was made from the previous inspection if other information was not available. During inspections, the samplers could not collect measurable discharge under the following circumstances, resulting in the possible loss of sampler-days of operability as noted.

- Table 6-7 describes 6 sampler inspections that produced insufficient sample volume to collect measurable discharge. The sampling equipment was operable but incapable of collecting a sample resulting in the loss of 64 sampler days.

- Table 6-8 describes 3 sampler inspections conducted at 2 SMAs when the battery voltage was not sufficient to operate the sampling equipment, resulting in the loss of as many as 86 sampler days of operability.
- Table 6-9 describes 9 sampler inspections conducted at 7 SMAs when the sampling equipment was malfunctioning and required repairs, resulting in the loss of as many as 104 sampler days of operability.
- Table 6-10 describes 47 sampler inspections at 25 SMAs when the sampling equipment was inoperable after it was triggered, resulting in the loss of as many as 402 sampler days of operability.

Measurable discharge can be generated from precipitation less intense than that required to trigger a post-storm inspection. However, when a defined “storm rain event” of 0.25-in. or more intensive rain within 30 min occurs, as defined in Part I.G.2 of the Permit, all stations associated with the rain gage are inspected for the presence of measurable discharge. The presence of a “storm rain event” during the periods when samplers were incapable of collecting a sample are included in Tables 6-7 through 6-12 to help identify where the loss of potential discharge was more likely. Of the 622 unique “storm rain events” summarized in Section 6.1, samplers were inoperable and unable to collect 64 times. The September 12 and 13, 2013, storms were associated with 42 of the occasions when samplers were inoperable during “storm rain events.” In the aggregate, sampling equipment was capable of collecting measurable discharge during 89.7% of “storm rain events.”

## **7.0 SUMMARY OF SDPPP CHANGES**

The original SDPPP was published and submitted to EPA on April 30, 2011, as required by Part I.F.4 of the Permit. The first revision (Revision 1) of the SDPPP was completed by and submitted to EPA on May 1, 2012. The 2012 annual update to the SDPPP was published May 1, 2013. This requirement states that the SDPPP must be updated annually to fully incorporate all changes made during the previous year and to reflect any changes projected for the following year.

Part I.F.3 of the Permit requires that the Permittees keep at a minimum documents and records with the SDPPP as necessary to reflect the following:

- a. Construction or a change in design, operation, or maintenance at the facility having a significant impact on the discharge, or potential for discharge, of pollutants from the facility;
- b. Findings of deficiencies in control measures during inspection or based on analytical monitoring results;
- c. Any change of monitoring requirement or compliance status;
- d. Any change of SMA location; and
- e. Summary of changes from the previous year’s SDPPP.

If any of the circumstances described above occur at any Site, the Permittees must address these changes or deficiencies to ensure compliance with Permit conditions and applicable monitoring requirements. All changes must be incorporated into the SDPPP, and a summary of these changes must be included in the Annual Report.

The 2013 annual update to the SDPPP will be published by May 1, 2014. The following sections summarize the SDPPP changes associated with the requirements in Part I.F.3 of the Permit.

## **7.1 Activities Impacting Discharge**

No construction activities or changes in design, operation, or maintenance at the Sites or adjacent Laboratory facilities resulted in a significant impact on the discharge, or potential for discharge, of pollutants from the Sites.

## **7.2 Findings of Deficiency**

Within the 250 SMAs identified in the Permit, 93 individual control measures were installed from January 1 to December 31, 2013. In 2013, 1474 Permit-required inspections were conducted to assess both the individual control measures and overall site conditions for the 250 SMAs, as summarized in Section 6 of this report. These inspections include required visual inspections based on analytical monitoring results (i.e., TAL exceedances). A finding of deficiency is identified as a required inspection that was not performed or was not performed within Permit-defined time frames. During 2013, 4 post-storm inspections of control measures and storm water management devices were not conducted within the required 15 d of the triggering “storm rain event,” as described in Section 6.1.

## **7.3 Change of Monitoring Requirements or Compliance Status**

As identified in the Permit and discussed in Section 8 of this report, Sites moved through six compliance phases during 2013. A change in the compliance status of a Site reflects movement between these phases. Section 8 of this report summarizes the compliance status of Sites and SMAs as of December 31, 2013; the Site compliance status will be included in the 2013 SDPPP annual update. Changes in monitoring requirements are summarized in Section 3 of this report, specifically identifying the SMAs where baseline confirmation monitoring has been completed and those SMAs where baseline monitoring will continue.

## **7.4 SMA Location Change**

In accordance with Part I.D.2 of the Permit, minor sampler relocations were made at 12 SMAs during 2013. The sampler moves resulted in either minor increases or decreases in the drainage area of the SMA. Sampler coordinates and SMA drainage areas are updated in Attachment 4 in each volume of the SDPPP. During 2013, the boundaries of 21 SMAs were adjusted, and the boundaries of 81 Sites were modified. The samplers relocated during 2013 are listed in Table 7-1.

## **7.5 SDPPP Changes**

The Laboratory must update the SDPPP annually to incorporate changes made during the previous year, per Part I.F.3 and F.4 of the Permit. Changes from the 2012 SDPPP fall into the following categories:

- Update descriptions of Site and SMA conditions and features including
  - ❖ new or replaced BCMS to describe current control measures;
  - ❖ Site boundary changes; and
  - ❖ minor sampler movements.
- Update Site maps to reflect current control measures and site characteristic changes
- Update change of Site-specific compliance status, including identifying Sites that require corrective action per Part I.E of the Permit
- Schedule additional control measure installations



- Update information on monitoring and inspection schedules and procedures
- Include precipitation data from the previous year
- Add training information
- Discuss records and documents associated with the requirements in Part I.F.3 of the Permit
- Update references and procedural documents
- Correct typographical and other scrivener errors

Table 7-2 summarizes the types of changes made to each of the five volumes of the SDPPP from January 1 to December 31, 2013. These changes are tracked alongside the current version of the SDPPP and will be incorporated into the annual SDPPP update to be issued by May 1, 2014. A total of 1629 changes were made to the five volumes of the SDPPP during this time period.

## 8.0 COMPLIANCE STATUS

Permitted Sites and SMAs must achieve defined and conditional milestones to remain compliant with the terms of the Individual Permit. By April 30, 2011, the Permittees had fulfilled the requirement to install BCMs to address the nonnumeric technology-based effluent limits prescribed by the Permit. Following installation of BCMs, the Permittees had initiated confirmation monitoring to demonstrate the effectiveness of installed control measures. Analytical results for pollutants from confirmation monitoring are compared with TALs to determine the effectiveness of the measures. Where confirmation monitoring shows TALs are not being met at a particular Site, the Permittees must take corrective action in accordance with the timelines specified in Part I.E.4 of the Permit by taking additional actions or measures reasonably expected to

- meet applicable TALs at that Site;
- achieve total retention of storm water discharges from the Site;
- totally eliminate exposure of pollutants to storm water at the Site; or
- demonstrate the Site has achieved RCRA “no further action” status or a “Certificate of Completion” under the Consent Order.

In recognition of the number of Sites and the unique characteristics of each Site, Part I.E.4 of the Permit categorizes the Sites into “High Priority Sites” (HPS) and “Moderate Priority Sites” (MPS) and establishes deadlines for corrective action based on this prioritization:

- Permittees are required to certify completion of corrective action at all “High Priority Sites” within three (3) years of the effective date of the Permit (October 31, 2013).
- Permittees are required to certify completion of corrective action at “Moderate Priority Sites” within five (5) years of the effective date of the Permit (October 31, 2015).

The 3- and 5-yr deadlines may be modified by conditions described in Sections E.3, Alternative Compliance, or Additional Sampling Requirements in Part I.E of the Permit.

Table 8-1 summarizes the significant milestones for compliance phases identified under the Individual Permit. In this Annual Report, the compliance status of a specific Permitted Feature/SMA or Site will be described according to the Permit compliance phases and milestones identified in Table 8-1.

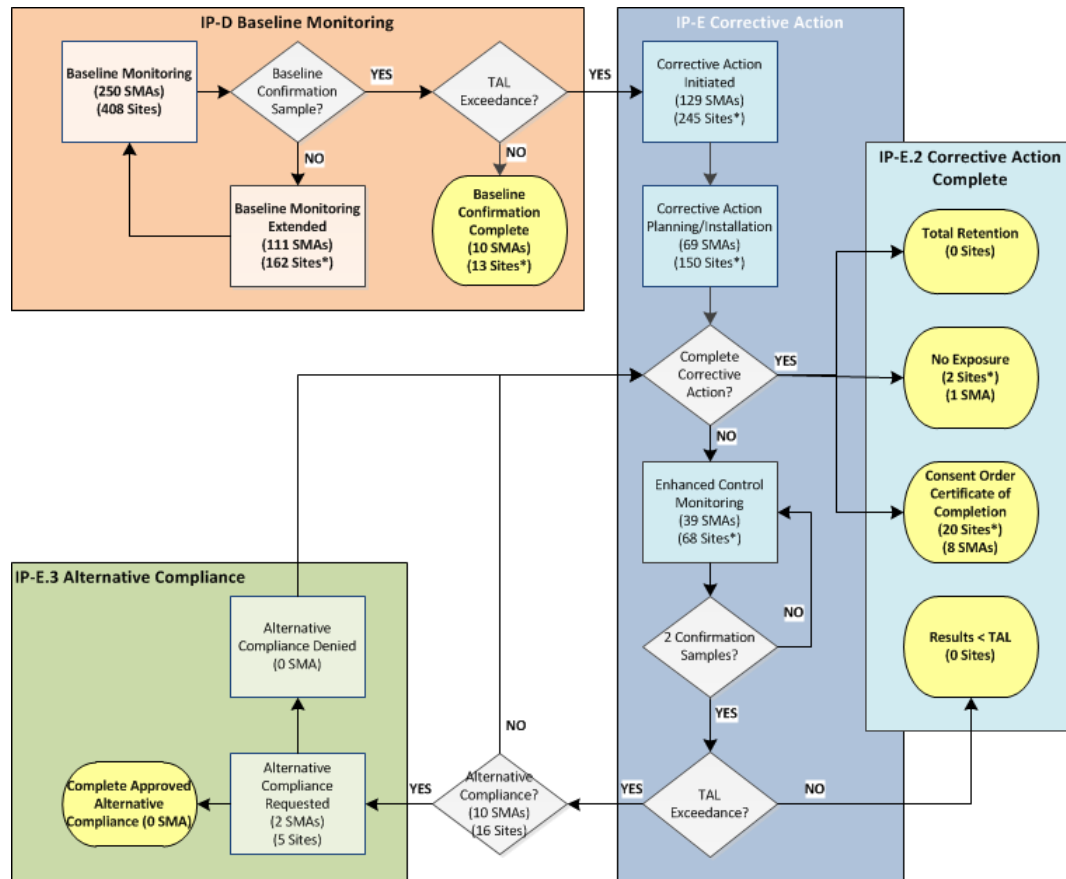
### 8.1 Compliance Status Changes

During the 2013 annual reporting period, permitted Sites moved among six compliance phases. As of December 31, 2013, the status of the Permitted Sites is as follows:

1. Baseline Monitoring Extended (MEX) was continued at 111 SMAs associated with 162 sites.
2. Baseline Confirmation Complete (BCComp) was obtained at 13 Sites with 10 associated SMAs.
3. Corrective Action Initiated (CAI) was initiated at 245 Sites with 129 associated SMAs.
4. Enhanced Control Monitoring (CAM) was initiated at 42 SMAs associated with 67 Sites.
5. Corrective Action Complete (CAComp) was certified at 22 Sites associated with 17 SMAs, of which monitoring is complete at 9 SMAs.
6. Alternative Compliance Requested (AltComp) was requested at 5 Sites associated with 2 SMAs.

Part I.H.2(a), H.2(i), and F.3(c) of the Permit require that the Annual Report include a summary of the Site-specific compliance status for each SMA (or Site) during the reporting period and highlight any change of compliance status from the previous Annual Report.

The Permit compliance status for the 2013 annual reporting period is summarized in Table 8-2 and is shown in Figure 8-1. The Site-specific compliance status is provided in Table 8-3.



\*Counts of unique Sites in each stage are presented.

Figure 8-1 Permit compliance status as of December 31, 2013

### 8.1.1 Baseline Monitoring Extended

Baseline monitoring was extended at 44 SMAs associated with 68 Sites on November 1, 2011, and at 136 SMAs associated with 235 Sites on May 1, 2012, where no baseline confirmation monitoring samples could be collected by the date milestones. During the 2012 monitoring season, confirmation monitoring samples were collected at 15 SMAs in the Baseline Monitoring Extended phase. During the 2013 monitoring season, confirmation monitoring samples were collected at 55 SMAs in the Baseline Monitoring Extended phase.

- Corrective action was initiated at 48 of the 55 SMAs because confirmation monitoring results exceeded TALs.
- Samples from CDV-SMA-2.5 collected in 2012 indicated no TAL exceedances, but the semivolatile analyses did not meet minimally acceptable quality criteria so the results were not accepted for confirmation monitoring. During 2013, confirmation monitoring sample was collected and analyzed. No TAL exceedances were observed.

### 8.1.2 Baseline Confirmation Complete

Baseline confirmation is complete at 13 Sites associated with 10 SMAs. Analytical results for all pollutants of concern are at or below the MTALs, and the geometric means of all applicable sampling results are at or below the ATALs, or the applicable MQLs, whichever is greater. No further sampling is required for the Sites within the applicable SMAs for the remaining period of the Permit.

Part I.E.1(d) of the Permit extends the compliance deadline for High Priority Sites. If no confirmation sample could be collected because of a lack of a measurable storm event before the second year of the Permit (or before September 30, 2012), then the compliance deadlines for corrective action under Section E.4 below shall be extended for a one-(1-) yr period following the first successful confirmation sampling event.

### 8.1.3 Corrective Action Initiated

Corrective action is initiated as a result of a TAL exceedance during baseline confirmation monitoring.

- Corrective action was initiated at 37 Sites associated with 18 SMAs where baseline monitoring ended on October 31, 2011.
- Corrective action was initiated at 78 Sites associated with 50 SMAs where baseline monitoring ended on April 30, 2012.
- Corrective action was initiated at 27 Sites associated with 13 SMAs where confirmation monitoring samples were collected during extended baseline monitoring in the 2012 monitoring season.
- Corrective action was initiated at 103 Sites associated with 48 SMAs where confirmation monitoring samples were collected during extended baseline monitoring in the 2013 monitoring season.

As of December 31, 2013, corrective action had been initiated at 129 SMAs associated with 245 Sites, and completion of installation of control measures had not been certified at 69 SMAs associated with 150 Sites.

#### **8.1.4 Enhanced Control Monitoring**

The corrective action selected at 84 Sites associated with 49 SMAs was to install enhanced control measures to achieve compliance with TALs for all Sites within the each SMA drainage area.

- Two confirmation monitoring samples were collected at 10 SMAs during the 2012 and 2013 monitoring year. Because TALs were exceeded at these SMAs, the existing control measures will be reevaluated, and further measures to achieve completion of corrective action will be initiated.
- One confirmation monitoring sample was collected at 15 SMAs during the 2013 monitoring year. Monitoring will continue at these SMAs until a second confirmation monitoring sample can be collected.
- No confirmation monitoring samples were collected at 24 SMAs during the 2013 monitoring year. Monitoring will continue at these SMAs until 2 confirmation monitoring samples can be collected.

#### **8.1.5 Corrective Action Complete**

Following initiation of corrective action, compliance with the Permit can be achieved by installing and certifying measures reasonably expected to meet TALs at the Site, achieve total retention of storm water discharges from the Site, totally eliminate exposure of pollutants to storm water at the Site, or demonstrate that the Site has achieved RCRA “corrective action complete without controls/corrective action complete with controls” status or a certificate of completion under the Consent Order.

As of December 31, 2013, corrective action was completed at 22 Sites. The Permittees met the requirement to certify completion of corrective action at High Priority Sites with TAL exceedances by October 31, 2013. At 20 Sites the corrective action selected was a demonstration that each Site achieved a RCRA “Corrective Action Complete without Controls/Corrective Action Complete with Controls” status or a certificate of completion under the Consent Order. At two Sites, the corrective action selected was a demonstration that control measures are in place to totally eliminate exposure of pollutants to storm water. Section 4 of this report discusses further corrective action activities. All Sites associated with 8 SMAs were certified as corrective action complete, and monitoring of storm water discharges will cease at these SMAs.

#### **8.1.6 Alternative Compliance Requested**

When the Permittees are unable to certify completion of corrective action under Part I.E.2(a) though (d) of the Permit, individually or collectively, Part I.E.3 allows them to file a written request for alternative compliance with the EPA at least 6 mo before the applicable deadlines to complete corrective action. On April 30, 2013, the Permittees submitted a request for alternative compliance (LANL 2013, 241092) for Sites 03-013(a) and 03-052(f), monitored at S-SMA-0.25 (LANL 2013, 241094), and at Site 03-056(c) within S-SMA-2 (LANL 2013, 241093). In response to public comments, the alternative compliance request was revised on October 1, 2013, to include Sites 03-045(b) and 03-045(c) within S-SMA-2 (LANL 2013, 250076).

#### **8.2 24-h and 30-d Analytical Reporting**

Part II.B of the Permit requires that exceedances of MTALs for any applicable pollutants are reported orally to EPA Region 6 and NMED Surface Water Quality Bureau (SWQB), within 24 h from the time the Permittees become aware of the exceedance. During 2013, EPA Region 6 and the NMED-SWQB were notified of each MTAL exceedance listed in Table 3-6.

Part I.E.1(c) of the Permit requires the reporting of the first confirmation monitoring results obtained following installation of enhanced controls to EPA within 30 d of receipt of results.

- The first sampling results from samples collected at 2M-SMA-2, M-SMA-1, and S-SMA-3.6 were submitted to EPA on August 22, 2013 (LANL 2013, 246781) with enclosures (LANL 2013, 246782.1; LANL 2013, 246782.5; LANL 2013, 246782.10).
- The first sampling results from samples collected at CDB-SMA-0.25, CHQ-SMA-1.02, DP-SMA-0.3, S-SMA-2, and STRM-SMA-1.05 were submitted to EPA on September 16, 2013 (LANL 2013, 249471) with enclosures (LANL 2013, 249472.1; LANL 2013, 249472.4; LANL 2013, 249472.7; LANL 2013, 249472.10; LANL 2013, 249472.14).
- The first sampling results from samples collected at 2M-SMA-1.44, 2M-SMA-1.65, A-SMA-2.7, CDB-SMA-1, CDV-SMA-6.02, LA-SMA-1, LA-SMA-5.91, LA-SMA-10.12, M-SMA-1.22, S-SMA-2.01, S-SMA-4.1, STRM-SMA-1.5, W-SMA-1, W-SMA-8.71, W-SMA-9.9, W-SMA-11.7, and W-SMA-14.1 were submitted to EPA on November 19, 2013 (LANL 2013, 251210) with enclosures (LANL 2013, 251211; LANL 2013, 251212; LANL 2013, 251213; LANL 2013, 251214; LANL 2013, 251215; LANL 2013, 251216; LANL 2013, 251217; LANL 2013, 251218; LANL 2013, 251219; LANL 2013, 251220; LANL 2013, 251221; LANL 2013, 251222; LANL 2013, 251223; LANL 2013, 251224; LANL 2013, 251225; LANL 2013, 251226; LANL 2013, 251227).

### 8.3 Website Updates

Part I.I.7(a) of the Permit requires the Permittees to establish a website allowing public access to this Annual Report and other specified documents. The website is available at <http://www.lanl.gov/community-environment/environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php>. Alternatively, the individual web pages can be accessed from the Laboratory's public home page by searching on the term "Individual Permit."

During 2013, the following documents were added to the Individual Permit home web page on the Laboratory's public website.

- Five 2012 updates to Revision 1 volumes of the Site Discharge Pollution Prevention Plan are available from the "Site Discharge Pollution Prevention Plan (SDPPP)" drop-down list.
- Current maps for each SMA showing surface hydrological features, locations of Sites, samplers control measures, and roads and structures are available from the "Site Monitoring Area Maps" drop-down list.
- Previous year annual reports, compliance status reports, and TAL exceedance reports are available from the "Reports" drop-down list.
- Certificates of completion of enhanced and baseline controls installed for the Individual Permit are available from the "Construction Certifications" drop-down list.
- Documents certifying completion of corrective action are available from the "Corrective Action" drop-down list.
- Documents related to requests for alternative compliance are available from the "Alternative Compliance" drop-down list.
- Reports related to the Individual Permit providing force majeure requests and notifications, general interest, and background information are provided from the "Miscellaneous EPA Submittals" and "Public Meeting" drop-down lists.

## **8.4 Email Notification**

Part I.I.7(b) of the Permit requires the Permittees to establish a mechanism for the public to subscribe to email notifications about compliance with the Permit on the public web site. The “Subscribe” function is established and is available from each Individual Permit web page.

## **8.5 Public Meetings**

Part I.I.7(c) of the Permit establishes a requirement for public meeting to be held approximately every 6 mo. Public meetings are advertised through the email notification process and in local newspapers. Public meetings were held on December 13, 2012, June 4, 2013, and January 22, 2014. The agenda and presentations for these meetings are available at the “Individual Permit Public Meetings” page. Additionally, meetings with the technical oversight team were held on February 23, 2013, July 30–August 1, 2013, and January 14, 2014.

## **9.0 CHANGES IN COMPLIANCE STATUS FROM LAST ANNUAL REPORT**

### **9.1 Criteria for Compliance Status Changes**

Part I.D.4(a) and (b) allow the reduction of monitoring requirements if confirmation results are below applicable TALs.

- If all analytical results for a particular pollutant of concern at a particular SMA are at or below the MTAL and the average of all applicable sampling results is at or below the ATAL or the applicable MQL, whichever is greater, monitoring of that pollutant at the SMA is no longer required for the remaining period of the Permit.
- Similarly, if the analytical results for all pollutants of concern at a particular SMA are at or below the MTALs and the average of all applicable sampling results is at or below the ATALs or the applicable MQLs, whichever is greater, no further sampling is required for the Site or group of Sites within the associated SMA for the remaining period of the Permit.

A minimum of two (2) confirmation samples must be collected and analyzed before a particular pollutant of concern or a particular SMA may be removed from monitoring requirements, except as provided in Part I.E of the Permit:

- If during any period in which two confirmation samples are required only one confirmation sample could be collected from a measurable storm event, compliance with the applicable TALs will be determined by the single confirmation sample result [Part I.E.5(d)].
- If no confirmation sample could be collected during the applicable period from a measurable storm event, confirmation sampling shall continue until at least one sample is collected, and compliance with applicable TALs will be determined based on the single result from the first successful confirmation sampling event [Part I.E.5(e)].

### **9.2 2013 Compliance Status Changes**

The Laboratory has discontinued monitoring at 10 SMAs based on the above criteria: 2M-SMA-2.5, A-SMA-3.5, ACID-SMA-1.05, CDV-SMA-1.2, CDV-SMA-2.5, M-SMA-13, PJ-SMA-14.8, PJ-SMA-16, R-SMA-2.3, and W-SMA-9.05. Inspection of the Sites and installed controls will continue in accordance with Part I.G of the Permit, and all control measures will be maintained in effective operating condition as required by Part I.B.2 and E.5(c).

CDV-SMA-1.2 and W-SMA-9.05 were affected by significant flooding during the week of September 10, 2013. Repairs to berm 8 at CDV-SMA-1.2 were completed in January 2014, and repair of a berm at W-SMA-0.05 is pending but the berm continues to operate effectively.

## 10.0 REQUESTS FOR EPA APPROVAL

Several requests for EPA approval were submitted by the Permittees during the 2013 annual reporting period.

On April 30, 2013, the Permittees submitted a request for alternative compliance for Sites 03-013(a) and 03-052(f) monitored at S-SMA-0.25 and at Site 03-056(c) within S-SMA-2. In response to public comments, the alternative compliance request was revised on October 1, 2013, to include Sites 03-045(b) and 03-045(c) within S-SMA-2.

Part I.H.2(j) of the Permit provide lists of requests, for EPA's approval, including any requests for change of monitoring location or Site deletion and any requests to place a Site or Sites into alternative compliance (Part 1.E.3 of the Permit).

On September 23, 2013, the Permittees submitted a request for an extension of completion of corrective action resulting from force majeure under Part I.E.4(c) for Site 03-029 in S-SMA-1.1, 03-012(b) in S-SMA-2, 03-052(b) in S-SMA-2.01, 03-014(b2) in S-SMA-3.53, and 60-007(b) in S-SMA-3.6 in Upper Sandia Canyon (LANL 2013, 250039).

Also, on September 23, 2013, the Permittees submitted a request for an extension of completion of corrective action resulting from force majeure under Part I.E.4(c) for Site 50-006(a) in Upper Mortandad Canyon (LANL 2013, 250038).

On October 25, 2013, the Permittees submitted a request for Permit Modification for Site monitoring requirements at Site 72-001 in S-SMA-6 (LANL 2013, 250400). The request seeks to remove aluminum, cyanide, PCBs, gross-alpha radioactivity, and radium-226 and radium-228 from the monitoring requirements of the SMA. It seeks to have the Site removed from the list of High Priority Sites identified in Part I.E.4(a) of the Permit and thereby extend the deadline for completion of corrective action for copper until November 1, 2015.

On December 20, 2012, the Laboratory received approval from NMED to split SWMU 32-002(b) into two separate SWMUs, designated as SWMU 32-002(b1) and SWMU 32-002(b2). The Individual Permit associates former Site 32-002(b) with the drainage designated by LA-SMA-5.361 and Permitted Feature L017. The newly designated Sites will continue to be associated with the same SMA and Permitted Feature. The Site designation of 32-002(b) will be retired. Tables 1-2 and 2-3 have been modified to reflect this update.

There are several errors that the Permittees will seek to have corrected during the Permit renewal cycle. Tables 1-2 and 2-3 have been modified to reflect these corrections, including the following:

- A typographical error in the Individual Permit Appendix B incorrectly identifies Site 46-004(e2) as part of CDB-SMA-0.55. This Site is actually within the drainage area of CDB-SMA-0.25.
- Review of site descriptions and activities conducted at SWMUs and AOCs in the area within the PJ-SMA-5.1 drainage identified SWMU 22-010(b) as part of the SMA.
- Review of site descriptions and activities conducted at SWMUs and AOCs in the area within the CDV-SMA-6.02 drainage identified SWMU 14-002(c) as part of the SMA.

- Review of the SWMUs and AOCs in the area within W-SMA-7 identified that Site 16-026(h) was incorrectly associated with industrial materials to be monitored at the SMA. The Site intended for monitoring is 16-029(e), not 16-026(h).

## 11.0 REFERENCES

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- NMED (New Mexico Environment Department), September 27, 2013. "Certificates of Completion, One Solid Waste Management Unit and One Area of Concern, Middle Mortandad/Ten Site Aggregate Area," New Mexico Environment Department letter to P. Maggiore (DOE-LASO) and J.D. Mousseau (LANL) from J.E. Kieling (NMED-HWB), Santa Fe, New Mexico. (NMED 2013, 523693)

**Table 1-1  
Individual Permit Annual Report Requirements**

Part I Requirement		Annual Report Section
Part	Description	
H.2 (a)	For each SMA (or Site), a summary of the Site-specific compliance status during the reporting period.	8.1, Compliance Status Changes Table 8-3, Site-Specific Compliance Status
H.2 (b)	SMA and associated Outfall and Site(s) numbers/identifications.	1.0, Introduction Table 1-2, Permitted Features, SMAs, and Sites
H.2 (c)	Monitoring results available during the reporting period.	3.0, Monitoring Results Appendix B, Analytical Monitoring Results
H.2 (d)	Identification of pollutants which exceed applicable MTAL or ATAL.	3.1, Confirmation Monitoring TAL Exceedances Table 3-6, Summary of Confirmatory Monitoring TAL Exceedances
H.2 (e)	Description of baseline control measures installed, including the completion date or targeted completion date.	2.0, Control Measures Appendix C, Baseline Control Measures
H.2 (f)	Description of corrective actions required under Section E of this Permit to be taken or having been taken, including completion date or targeted completion date, and Progress update.	4.0, Corrective Actions Activities Table 8-3, Site-Specific Compliance Status
H.2 (g)	Identification of Sites that meet No Exposure status.	4.1.3, No Exposure
H.2 (h)	Identification of Sites that meet “corrective action complete without controls/corrective action complete with controls” under RCRA or that have been issued a certificate of completion by NMED under the Consent Order.	4.1.4, Certificate of Completion under NMED’s Consent Order
H.2 (i)	Highlights of any change of compliance status from the Annual Report.	9.0, Changes in Compliance Status from Last Annual Report
H.2 (j)	Lists of requests for EPA’s approval, including any requests for change of monitoring location or Site deletion and any requests to place a Site or Sites into Section E.3, Alternative Compliance.	10.0, Requests for EPA Approval
H.2 (k)	Summary of inspections performed in accordance with Individual Permit Section G.1 and 2 above, as well as for any visual inspections performed under Section E.1.	6.0, Summary of Inspections Table 6-2, Summary of Post-Storm Inspections Table 6-3, Summary of Annual Erosion Evaluation Inspections Table 6-4, Summary of Significant Event Inspections Table 6-5, Summary of Visual Inspections for TAL Exceedances Table 6-6, Summary of Remediation Construction Activity Inspections
E.5 (c)	Summary of any actions taken under paragraph E.5(c) of the Permit.	7.0, Summary of SDPPP Changes

**Table 1-1 (continued)**

Part I Requirement		Annual Report Section
Part	Description	
F.3	Maintenance of documents and records with the SDPPP as necessary to reflect a–e below. If any of the circumstances described [below] occur at any Site, the Permittees must address these changes or deficiencies to ensure compliance with Permit conditions and applicable monitoring requirements. All changes must be incorporated into the SDPPP and a summary of these changes must be included in the Annual Report.	7.0, Summary of SDPPP Changes
F.3(a)	Construction or a change in design, operation, or maintenance at the facility having a significant impact on the discharge, or potential for discharge, of pollutants from the facility;	7.1, Activities Impacting Discharge
F.3(b)	Findings of deficiencies in control measures during inspection or based on analytical monitoring results;	7.2, Findings of Deficiency
F.3(c)	Change(s) of monitoring requirement or compliance status;	7.3, Change of Monitoring Requirements or Compliance Status
F.3(d)	Change(s) of SMA location; and	7.4, SMA Location Change
F.3(e)	Summary of changes from the last year's SDPPP.	7.5, SDPPP Changes
I.5	This Permit may be reopened and modified in accordance 40 CFR §122.62. Any changes to monitoring and/or control measure requirements made to the Permit in accordance with such a permit modification shall be addressed in the Annual Report and in the annual SDPPP update.	10.0, Requests for EPA Approval

**Table 1-2  
Permitted Features, SMAs, and Sites**

Watershed	Canyon	Permitted Feature	SMA	Site Number		
Los Alamos/Pueblo	Rendija Canyon	R001	R-SMA-0.5	C-00-020		
		R002	R-SMA-1	C-00-041		
		R003	R-SMA-1.95	00-015		
		R004	R-SMA-2.05	00-011(c)		
		R005	R-SMA-2.3	00-011(e)		
		R006	R-SMA-2.5	00-011(a)		
	Bayo Canyon	B001	B-SMA-0.5	10-001(a)		
				10-001(b)		
				10-001(c)		
				10-001(d)		
				10-004(a)		
				10-004(b)		
				10-008		
				10-009		
				B002	B-SMA-1	00-011(d)
				Pueblo Canyon	P001	ACID-SMA-1.05
	P002	ACID-SMA-2	01-002(b)-00			
			45-001			
			45-002			
	P002A	ACID-SMA-2.01	45-004			
			00-030(f)			
	P003	ACID-SMA-2.1	01-002(b)-00			
	P004	P-SMA-0.3	00-018(b)			
	P005	P-SMA-1	73-001(a)			
			73-004(d)			
	P006	P-SMA-2	73-002			
			73-006			
	P007	P-SMA-2.15	31-001			
	P008	P-SMA-2.2	00-019			
	P009	P-SMA-3.05	00-018(a)			
	Los Alamos Canyon	L001	LA-SMA-0.85	03-055(c)		
				00-017		
		L002	LA-SMA-0.9	C-00-044		
				00-017		
		L003	LA-SMA-1	C-00-044		
				43-001(b2)		
L004	LA-SMA-1.1	C-43-001				
L005	LA-SMA-1.25	01-001(f)				
L006	LA-SMA-2.1					



**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Los Alamos/Pueblo	Los Alamos Canyon	L007	LA-SMA-2.3	01-001(b)
		L008	LA-SMA-3.1	01-001(e)
				01-003(a)
		L009	LA-SMA-3.9	01-001(g)
				01-006(a)
		L010	LA-SMA-4.1	01-003(b)
				01-006(b)
		L011	LA-SMA-4.2	01-001(c)
				01-006(c)
				01-006(d)
		L012	LA-SMA-5.01	01-001(d)
				01-006(h)
		L012A	LA-SMA-5.02	01-003(e)
		L013	LA-SMA-5.2	01-003(d)
		L014	LA-SMA-5.35	C-41-004
		L015	LA-SMA-5.31	41-002(c)
		L016	LA-SMA-5.33	32-004
		L017	LA-SMA-5.361	32-002(b1)
				32-002(b2)
		L017A	LA-SMA-5.362	32-003
		L018	LA-SMA-5.51	02-003(a)
				02-003(e)
				02-004(a)
				02-005
				02-006(b)
				02-006(c)
				02-006(d)
				02-006(e)
				02-008(a)
				02-009(b)
02-011(a)				
02-011(b)				
02-011(c)				
02-011(d)				
L018A	LA-SMA-5.52	02-003(b)		
		02-007		
		02-008(c)		
L018B	LA-SMA-5.53	02-009(a)		
L018C	LA-SMA-5.54	02-009(c)		

**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Los Alamos/Pueblo	Los Alamos Canyon	L019	LA-SMA-5.91	21-009
				21-021
				21-023(c)
				21-027(d)
		L019A	LA-SMA-5.92	21-013(b)
				21-013(g)
				21-018(a)
				21-021
		L020	LA-SMA-6.25	21-021
				21-024(d)
				21-027(c)
		L021	LA-SMA-6.27	21-021
				21-027(c)
		L022	LA-SMA-6.3	21-006(b)
		L022A	LA-SMA-6.31	21-027(a)
		L023	LA-SMA-6.32	21-021
		L024	LA-SMA-6.34	21-021
				21-022(h)
		L025	LA-SMA-6.36	21-021
				21-024(a)
		L026	LA-SMA-6.38	21-021
				21-024(c)
		L027	LA-SMA-6.395	21-021
				21-024(j)
	L028	LA-SMA-6.5	21-021	
			21-024(i)	
	L029	LA-SMA-9	26-001	
			26-002(a)	
			26-002(b)	
			26-003	
	L030	LA-SMA-10.11	53-002(a)	
	L030A	LA-SMA-10.12	53-008	
	DP Canyon	D001	DP-SMA-0.3	21-029
				21-021
21-021				
D002		DP-SMA-0.4	21-021	
			21-024(l)	
D003	DP-SMA-0.6	21-011(k)		
D004	DP-SMA-1	21-021		
		21-021		

**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Los Alamos/Pueblo	DP Canyon	D005	DP-SMA-2	21-021 21-024(h)
		D006	DP-SMA-2.35	21-021 21-024(n)
		D007	DP-SMA-3	21-013(c) 21-021
		D008	DP-SMA-4	21-021
Sandia	Sandia Canyon	S001	S-SMA-0.25	03-013(a) 03-052(f)
		S002	S-SMA-1.1	03-029
		S003	S-SMA-2	03-012(b)
				03-045(b)
				03-045(c)
				03-056(c)
		S003A	S-SMA-2.01	03-052(b)
		S004	S-SMA-2.8	03-014(c2)
		S005	S-SMA-3.51	03-009(i)
		S005A	S-SMA-3.52	03-021
		S005B	S-SMA-3.53	03-014(b2)
		S006	S-SMA-3.6	60-007(b)
		S007	S-SMA-3.7	53-012(e)
		S008	S-SMA-3.71	53-001(a)
		S009	S-SMA-3.72	53-001(b)
		S010	S-SMA-3.95	20-002(a)
S011	S-SMA-4.1	53-014		
S012	S-SMA-4.5	20-002(d)		
S013	S-SMA-5	20-002(c)		
S014	S-SMA-5.2	20-003(c)		
S015	S-SMA-5.5	20-005		
S016	S-SMA-6	72-001		
Mortandad	Cañada del Buey	C001	CDB-SMA-0.15	04-003(a)
				04-004
		C002	CDB-SMA-0.25	46-004(c2)
				46-004(e2)
		C003	CDB-SMA-0.55	46-004(g)
				46-004(m)
46-004(s)				
		46-006(f)		

**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Mortandad	Cañada del Buey	C004	CDB-SMA-1	46-003(c)
				46-004(d2)
				46-004(f)
				46-004(t)
				46-004(w)
				46-008(g)
				46-009(a)
				C-46-001
		C005	CDB-SMA-1.15	46-004(b)
				46-004(y)
				46-004(z)
				46-006(d)
		C006	CDB-SMA-1.35	46-004(a2)
				46-004(u)
				46-004(v)
				46-004(x)
				46-006(d)
		C007	CDB-SMA-1.54	46-004(h)
				46-004(q)
				46-006(d)
		C008	CDB-SMA-1.55	46-003(e)
	C009	CDB-SMA-1.65	46-003(b)	
	C010	CDB-SMA-4	54-017	
			54-018	
			54-020	
	Mortandad Canyon	M001	M-SMA-1	03-050(a)
				03-054(e)
		M002	M-SMA-1.2	03-049(a)
		M002A	M-SMA-1.21	03-049(e)
		M002B	M-SMA-1.22	03-045(h)
M003		M-SMA-3	48-001	
			48-005	
			48-007(c)	
M004	M-SMA-3.1	48-001		
		48-007(b)		
M005	M-SMA-3.5	48-001		
		48-003		

**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Mortandad	Mortandad Canyon	M006	M-SMA-4	48-001
				48-005
				48-007(a)
				48-007(d)
				48-010
		M007	M-SMA-5	42-001(a)
				42-001(b)
				42-001(c)
				42-002(a)
				42-002(b)
		M008	M-SMA-6	35-016(h)
		M009	M-SMA-7	35-016(g)
		M010	M-SMA-7.9	50-006(d)
		M011	M-SMA-9.1	35-016(f)
		M012	M-SMA-10	35-008
				35-014(e)
		M012A	M-SMA-10.01	35-016(e)
		M013	M-SMA-10.3	35-014(e2)
				35-016(i)
		M014	M-SMA-11.1	35-016(o)
		M015	M-SMA-12	35-016(p)
		M016	M-SMA-12.5	05-005(b)
05-006(c)				
M017	M-SMA-12.6	05-004		
M018	M-SMA-12.7	05-002		
		05-005(a)		
		05-006(b)		
		05-006(e)		
M019	M-SMA-12.8	05-001(a)		
		05-002		
M020	M-SMA-12.9	05-001(b)		
		05-002		
M021	M-SMA-12.92	00-001		
M022	M-SMA-13	05-001(c)		

**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Mortandad	Ten Site Canyon	T001	Pratt-SMA-1.05	35-003(h)
				35-003(p)
				35-003(r)
				35-004(h)
				35-009(d)
				35-016(k)
				35-016(l)
				35-016(m)
		T002	T-SMA-1	50-006(a)
				50-009
		T003	T-SMA-2.5	35-014(g3)
		T004	T-SMA-2.85	35-014(g)
				35-016(n)
		T005	T-SMA-3	35-016(b)
		T006	T-SMA-4	35-004(a)
				35-009(a)
				35-016(c)
				35-016(d)
		T007	T-SMA-5	35-004(a)
				35-009(a)
35-016(a)				
35-016(q)				
T008	T-SMA-6.8	35-010(e)		
T009	T-SMA-7	04-003(b)		
T010	T-SMA-7.1	04-001		
		04-002		
Pajarito	Twomile Canyon	E001	2M-SMA-1	03-010(a)
		E002	2M-SMA-1.42	06-001(a)
		E003	2M-SMA-1.43	22-014(a)
				22-015(a)
		E004	2M-SMA-1.44	06-001(b)
		E005	2M-SMA-1.45	06-006
		E006	2M-SMA-1.5	22-014(b)
		E007	2M-SMA-1.65	40-005
		E008	2M-SMA-1.67	06-003(h)
		E009	2M-SMA-1.7	03-055(a)
		E010	2M-SMA-1.8	03-001(k)
E011	2M-SMA-1.9	03-003(a)		

**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Pajarito	Twomile Canyon	E012	2M-SMA-2	03-050(d)
				03-054(b)
		E013	2M-SMA-2.2	03-003(k)
		E014	2M-SMA-3	07-001(a)
				07-001(b)
				07-001(c)
	07-001(d)			
	E015	2M-SMA-2.5	40-001(c)	
	Threemile Canyon	H001	3M-SMA-0.2	15-010(b)
		H002	3M-SMA-0.4	15-006(b)
		H003	3M-SMA-0.5	15-006(c)
				15-009(c)
		H004	3M-SMA-0.6	15-008(b)
		H005	3M-SMA-2.6	36-008
				C-36-003
		H006	3M-SMA-4	18-002(b)
	18-003(c)			
	18-010(f)			
	Pajarito Canyon	J001	PJ-SMA-1.05	09-013
		J002	PJ-SMA-2	09-009
		J003	PJ-SMA-3.05	09-004(o)
		J004	PJ-SMA-4.05	09-004(g)
		J005	PJ-SMA-5	22-015(c)
		J006	PJ-SMA-5.1	22-016
				22-010(b)
		J007	PJ-SMA-6	40-010
		J008	PJ-SMA-7	40-006(c)
		J009	PJ-SMA-8	40-006(b)
		J010	PJ-SMA-9	40-009
		J012	PJ-SMA-10	40-006(a)
		J013	PJ-SMA-11	40-003(a)
		J014	PJ-SMA-11.1	40-003(b)
J015		PJ-SMA-13	18-002(a)	
J016		PJ-SMA-13.7	18-010(b)	
J017		PJ-SMA-14	54-004	
J018		PJ-SMA-14.2	18-012(b)	
J019		PJ-SMA-14.3	18-003(e)	
J020		PJ-SMA-14.4	18-010(d)	
J021		PJ-SMA-14.6	18-010(e)	

**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Pajarito	Pajarito Canyon	J022	PJ-SMA-14.8	18-012(a)
		J023	PJ-SMA-16	27-002
		J024	PJ-SMA-17	54-018
		J026	PJ-SMA-18	54-014(d)
				54-017
		J025	PJ-SMA-19	54-013(b)
				54-017
				54-020
		J027	PJ-SMA-20	54-017
		J028	STRM-SMA-1.05	08-009(f)
		J029	STRM-SMA-1.5	08-009(d)
J030	STRM-SMA-4.2	09-008(b)		
J031	STRM-SMA-5.05	09-013		
Water/Cañon de Valle	Cañon de Valle	V001	CDV-SMA-1.2	16-017(b)-99
				16-029(k)
		V002	CDV-SMA-1.3	16-017(a)-99
				16-026(m)
		V003	CDV-SMA-1.4	16-020
				16-026(l)
				16-028(c)
				16-030(c)
		V004	CDV-SMA-1.45	16-026(i)
		V005	CDV-SMA-1.7	16-019
		V006	CDV-SMA-2	16-021(c)
		V007	CDV-SMA-2.3	13-001
				13-002
				16-003(n)
				16-003(o)
				16-029(h)
				16-031(h)
V008	CDV-SMA-2.41	16-018		
V008A	CDV-SMA-2.42	16-010(b)		
V009	CDV-SMA-2.5	16-010(c)		
		16-010(d)		
		16-028(a)		
V009A	CDV-SMA-2.51	16-010(i)		
V010	CDV-SMA-3	14-009		
V011	CDV-SMA-4	14-010		



**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Water/Cañon de Valle	Cañon de Valle	V012	CDV-SMA-6.01	14-001(g) 14-006
		V012A	CDV-SMA-6.02	14-002(c)
				14-002(d)
				14-002(e)
		V013	CDV-SMA-7	15-008(d)
		V014	CDV-SMA-8	15-011(c)
		V015	CDV-SMA-8.5	15-014(a)
	V016	CDV-SMA-9.05	15-007(b)	
	Fence Canyon	F001	F-SMA-2	36-004(c)
	Potrillo Canyon	I001	PT-SMA-0.5	15-009(e)
				C-15-004
		I002	PT-SMA-1	15-004(f)
				15-008(a)
		I003	PT-SMA-1.7	15-006(a)
		I004	PT-SMA-2	15-008(f)
				36-003(b)
				36-004(e)
		I004A	PT-SMA-2.01	C-36-001 C-36-006(e)
		I005	PT-SMA-3	36-004(a)
	36-006			
	I007	PT-SMA-4.2	36-004(d)	
	Water Canyon	W001	W-SMA-1	16-017(j)-99
				16-026(c2)
				16-026(v)
		W002	W-SMA-1.5	16-026(b2)
				16-028(d)
		W003	W-SMA-2.05	16-028(e)
		W004	W-SMA-3.5	16-026(y)
		W005	W-SMA-4.1	16-003(a)
		W006	W-SMA-5	16-001(e)
				16-003(f)
	16-026(b)			
	16-026(c)			
16-026(d)				
W007	W-SMA-6	16-026(e)		
W008	W-SMA-7	11-001(c) 16-029(e)		

**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Water/Cañon de Valle	Water Canyon	W009	W-SMA-7.8	16-031(a)
		W010	W-SMA-7.9	16-006(c)
		W011	W-SMA-8	16-016(g)
				16-028(b)
		W012	W-SMA-8.7	13-001
				13-002
				16-004(a)
				16-026(j2)
				16-029(h)
				16-035
		W012A	W-SMA-8.71	16-004(c)
		W013	W-SMA-9.05	16-030(g)
		W014	W-SMA-9.5	11-012(c)
		W015	W-SMA-9.7	11-011(a)
				11-011(b)
		W016	W-SMA-9.8	11-005(c)
		W017	W-SMA-9.9	11-006(b)
		W018	W-SMA-10	11-002
				11-003(b)
				11-005(a)
				11-005(b)
				11-006(c)
11-006(d)				
11-011(d)				
W019	W-SMA-11.7	49-008(c)		
W020	W-SMA-12.05	49-001(g)		
W021	W-SMA-14.1	15-004(h)		
		15-014(l)		
W022	W-SMA-15.1	49-005(a)		
Ancho	Ancho Canyon	A001	A-SMA-1.1	39-004(a)
				39-004(d)
		A002	A-SMA-2	39-004(b)
				39-004(e)
		A003	A-SMA-2.5	39-010
		A004	A-SMA-2.7	39-002(c)
				39-008
A005	A-SMA-2.8	39-001(b)		
A006	A-SMA-3	39-002(b)		
		39-004(c)		

**Table 1-2 (continued)**

<b>Watershed</b>	<b>Canyon</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Site Number</b>
Ancho	Ancho Canyon	A007	A-SMA-3.5	39-006(a)
		A008	A-SMA-4	33-010(d)
		A009	A-SMA-6	33-004(k)
				33-007(a)
		33-010(a)		
Chaquehui	Chaquehui Canyon	Q001	CHQ-SMA-0.5	33-004(g)
				33-007(c)
				33-009
		Q002	CHQ-SMA-1.01	33-002(d)
		Q002A	CHQ-SMA-1.02	33-004(h)
				33-008(c)
				33-011(d)
				33-015
		Q002B	CHQ-SMA-1.03	33-008(c)
				33-012(a)
				33-017
				C-33-001
				C-33-003
		Q003	CHQ-SMA-2	33-004(d)
				33-007(c)
				C-33-003
		Q004	CHQ-SMA-3.05	33-010(f)
		Q005	CHQ-SMA-4	33-011(e)
		Q006	CHQ-SMA-4.1	33-016
		Q007	CHQ-SMA-4.5	33-011(b)
Q008	CHQ-SMA-5.05	33-007(b)		
Q009	CHQ-SMA-6	33-004(j)		
		33-006(a)		
		33-007(b)		
		33-010(c)		
		33-010(g)		
		33-010(h)		
		33-014		
Q010	CHQ-SMA-7.1	33-010(g)		

**Table 1-3  
Permitted Features, SMAs,  
and Sites Summarized by Watershed**

<b>Watershed</b>	<b>Number of Permitted Features/SMAs</b>	<b>Number of Sites</b>
Los Alamos/Pueblo	64	102
Sandia	19	23
Mortandad	45	96
Pajarito	51	61
Water/Cañon de Valle	50	90
Ancho	9	15
Chaquehui	12	24
<b>Total</b>	<b>250</b>	<b>411</b>

Notes: Current as of December 31, 2013. A total of 408 unique Sites exist. A total of 405 Sites are permitted. Permitted Site 32-002(b) is retired and has been replaced by 32-002(b1) and 32-002(b2). Site 14-002(c) in CDV-SMA-6.02 and Site 22-010(b) in PJ-SMA-5.1 have been added. Three Sites (54-017, 54-018, and 54-020) drain to both Pajarito and Mortandad watersheds and thus are counted twice, increasing the total to 411. Site 16-029(e) replaces 16-026(h2) in W-SMA-7.

**Table 2-1  
Additional Control Measures Installed during 2013**

SMA	BMP ID	Control Measure Type	Control Measure Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>	Install Date	Comments
R-SMA-0.5	R00103060026	Berm	Straw Wattles	— <sup>e</sup>	X <sup>f</sup>	—	X	7/22/2013	Additional control
R-SMA-0.5	R00103060027	Berm	Straw Wattles	—	X	—	X	7/22/2013	Additional control
R-SMA-2.3	R00503060005	Berm	Straw Wattles	—	X	—	X	11/13/2013	Replaced baseline control
R-SMA-2.3	R00503060006	Berm	Straw Wattles	—	X	—	X	11/13/2013	Replaced baseline control
R-SMA-2.3	R00503060007	Berm	Straw Wattles	—	X	—	X	11/13/2013	Replaced baseline control
P-SMA-2.2	P00803060026	Berm	Straw Wattles	—	X	X	—	7/31/2013	Additional control
LA-SMA-2.3	L00703060007	Berm	Straw Wattles	—	X	—	X	5/22/2013	Replaced baseline control
LA-SMA-3.1	L00803060008	Berm	Straw Wattles	—	X	—	X	5/22/2013	Additional control
LA-SMA-5.02	L012A03060016	Berm	Straw Wattles	—	X	—	X	11/6/2013	Additional control
LA-SMA-5.02	L012A03060017	Berm	Straw Wattles	—	X	—	X	11/6/2013	Additional control
LA-SMA-5.02	L012A03060018	Berm	Straw Wattles	—	X	—	X	11/6/2013	Additional control
LA-SMA-5.2	L01306020006	Check Dam	Log Check Dam	—	X	—	X	5/29/2013	Additional control
LA-SMA-5.2	L01306020007	Check Dam	Log Check Dam	—	X	—	X	5/29/2013	Additional control
LA-SMA-5.31	L01501010015	Seed and Mulch	Seed and Wood Mulch	X	—	—	—	5/16/2013	Additional control
LA-SMA-5.53	L018B03060008	Berm	Straw Wattles	—	X	X	—	11/5/2013	Replaced baseline control
LA-SMA-5.53	L018B03060009	Berm	Straw Wattles	—	X	X	—	11/5/2013	Replaced baseline control
LA-SMA-5.54	L018C03060005	Berm	Straw Wattles	—	X	X	—	5/1/2013	Additional control
LA-SMA-5.54	L018C03060009	Berm	Straw Wattles	—	X	—	X	11/5/2013	Additional control
LA-SMA-5.54	L018C03060010	Berm	Straw Wattles	—	X	X	—	11/5/2013	Additional control
LA-SMA-6.25	L02003060009	Berm	Straw Wattles	—	X	—	X	11/15/2013	Additional control
LA-SMA-6.25	L02003060010	Berm	Straw Wattles	—	X	—	X	11/15/2013	Additional control

Table 2-1 (continued)

SMA	BMP ID	Control Measure Type	Control Measure Description	EC	SC	RON	ROFF	Install Date	Comments
LA-SMA-6.27	L02103060012	Berm	Straw Wattles	—	X	—	X	11/15/2013	Additional control
LA-SMA-6.27	L02103060013	Berm	Straw Wattles	—	X	—	X	11/15/2013	Additional control
S-SMA-3.53	S005B01010010	Seed and Mulch	Seed and Wood Mulch	X	—	—	—	5/16/2013	Additional control
S-SMA-3.6	S00603100030	Berm	Gravel Bags	—	X	X	—	9/24/2013	Additional control
S-SMA-3.6	S00604060028	Channel/Swale	Riprap	X	—	X	—	4/26/2013	Additional control
S-SMA-3.6	S00604060029	Channel/Swale	Riprap	X	—	X	—	4/26/2013	Additional control
S-SMA-3.6	S00606010022	Check Dam	Rock Check Dam	—	X	—	X	4/26/2013	Additional control
S-SMA-3.6	S00606010023	Check Dam	Rock Check Dam	—	X	—	X	4/26/2013	Additional control
S-SMA-3.6	S00607010026	Gabion	Gabions	X	—	X	—	4/26/2013	Additional control
S-SMA-3.6	S00607020024	Gabion	Gabion Blanket	X	—	X	—	4/26/2013	Additional control
S-SMA-3.6	S00607020025	Gabion	Gabion Blanket	X	—	X	—	4/26/2013	Additional control
S-SMA-3.95	S01003060008	Berm	Straw Wattles	—	X	X	—	11/6/2013	Additional control
S-SMA-4.5	S01203060008	Berm	Straw Wattles	—	X	X	—	11/6/2013	Additional control
CDB-SMA-0.15	C00103060016	Berm	Straw Wattles	—	X	X	—	11/14/2013	Additional control
CDB-SMA-0.15	C00103060017	Berm	Straw Wattles	—	X	X	—	11/14/2013	Additional control
CDB-SMA-0.15	C00103060018	Berm	Straw Wattles	—	X	X	—	11/14/2013	Additional control
M-SMA-1.22	M002B01010015	Seed and Mulch	Seed and Wood Mulch	X	—	—	—	4/4/2013	Additional control
M-SMA-6	M00803100026	Berm	Gravel Bags	—	—	—	—	7/19/2013	Additional control
M-SMA-6	M00804060025	Channel/Swale	Riprap	X	—	X	—	4/30/2013	Additional control
M-SMA-6	M00806010027	Check Dam	Rock Check Dam	—	X	X	—	12/17/2013	Additional control
M-SMA-6	M00806010028	Check Dam	Rock Check Dam	—	X	X	—	12/17/2013	Additional control
M-SMA-10.3	M01306010015	Check Dam	Rock Check Dam	—	X	—	X	8/1/2013	Replaced baseline control
M-SMA-12.9	M02006020013	Check Dam	Log Check Dam	X	—	—	X	5/1/2013	Additional control
T-SMA-6.8	T00801060004	Seed and Mulch	Erosion Control Blanket	X	—	—	—	5/4/2013	Additional control
2M-SMA-3	E01403060014	Berm	Straw Wattles	—	X	X	—	7/25/2013	Replaced baseline control
2M-SMA-3	E01403060015	Berm	Straw Wattles	—	X	—	X	7/25/2013	Replaced baseline control
2M-SMA-3	E01403060017	Berm	Straw Wattles	—	X	—	X	11/7/2013	Replaced baseline control

Table 2-1 (continued)

SMA	BMP ID	Control Measure Type	Control Measure Description	EC	SC	RON	ROFF	Install Date	Comments
2M-SMA-3	E01403060018	Berm	Straw Wattles	—	X	X	—	11/7/2013	Replaced baseline control
3M-SMA-0.4	H00208020006	Cap	Rock Cap	X	—	—	—	11/19/2013	Additional control
PJ-SMA-5.1	J00603010011	Berm	Earthen Berm	—	X	X	—	11/5/2013	PJ-SMA-5.1
PJ-SMA-5.1	J00608030012	Cap	Concrete/Asphalt Cap	X	—	—	X	11/5/2013	PJ-SMA-5.1
PJ-SMA-8	J00906010011	Check Dam	Rock Check Dam	—	X	X	—	11/7/2013	Additional control
PJ-SMA-10	J01206010008	Check Dam	Rock Check Dam	—	X	—	X	7/25/2013	Additional control
PJ-SMA-10	J01206010009	Check Dam	Rock Check Dam	—	X	—	X	7/25/2013	Additional control
PJ-SMA-10	J01206010010	Check Dam	Rock Check Dam	—	X	—	X	7/25/2013	Additional control
PJ-SMA-11	J01301010020	Seed and Mulch	Seed and Wood Mulch	X	—	—	—	8/13/2013	Additional control
PJ-SMA-11	J01303060019	Berm	Straw Wattles	—	X	X	X	8/13/2013	Additional control
PJ-SMA-11	J01303060021	Berm	Straw Wattles	—	X	—	X	11/20/2013	Replaced baseline control
PJ-SMA-11.1	J01403060016	Berm	Straw Wattles	—	X	—	X	11/20/2013	Replaced baseline control
PJ-SMA-14.2	J01803060006	Berm	Straw Wattles	—	X	X	—	7/16/2013	Additional control
PJ-SMA-14.3	J01903060005	Berm	Straw Wattles	—	X	—	X	11/6/2013	Additional control
PJ-SMA-14.8	J02203060008	Berm	Straw Wattles	—	X	—	X	11/6/2013	Replaced baseline control
CDV-SMA-1.4	V00303060077	Berm	Straw Wattles	—	X	X	—	11/14/2013	Additional control
CDV-SMA-1.4	V00303060078	Berm	Straw Wattles	—	X	X	—	11/14/2013	Additional control
CDV-SMA-1.4	V00303060079	Berm	Straw Wattles	—	X	X	—	11/14/2013	Additional control
CDV-SMA-1.4	V00303060080	Berm	Straw Wattles	—	X	X	—	11/14/2013	Additional control
CDV-SMA-1.4	V00303060081	Berm	Straw Wattles	—	X	X	—	11/14/2013	Additional control
CDV-SMA-2.3	V00703060022	Berm	Straw Wattles	—	X	X	—	11/13/2013	Replaced baseline control
CDV-SMA-2.3	V00703060023	Berm	Straw Wattles	—	X	—	X	11/13/2013	Replaced baseline control
CDV-SMA-2.5	V00903120034	Berm	Rock Berm	—	X	—	X	11/18/2013	Replaced baseline control
CDV-SMA-2.5	V00903120035	Berm	Rock Berm	—	X	—	X	11/18/2013	Replaced baseline control
CDV-SMA-2.51	V009A03060030	Berm	Straw Wattles	—	X	X	—	11/22/2013	Replaced baseline control
CDV-SMA-2.51	V009A03060031	Berm	Straw Wattles	—	X	X	—	11/22/2013	Replaced baseline control
CDV-SMA-4	V01103010008	Berm	Earthen Berm	—	X	—	X	8/27/2013	Additional control

Table 2-1 (continued)

SMA	BMP ID	Control Measure Type	Control Measure Description	EC	SC	RON	ROFF	Install Date	Comments
CDV-SMA-4	V01104060007	Channel/Swale	Riprap	X	—	X	—	8/27/2013	Additional control
CDV-SMA-4	V01106010009	Check Dam	Rock Check Dam	—	X	—	X	8/27/2013	Additional control
CDV-SMA-6.01	V01203010016	Berm	Earthen Berm	—	X	—	X	9/9/2013	Replaced baseline control
CDV-SMA-6.01	V01203060015	Berm	Straw Wattles	—	X	X	—	8/8/2013	Replaced baseline control
CDV-SMA-6.02	V012A03060007	Berm	Straw Wattles	—	X	—	X	7/18/2013	Additional control
CDV-SMA-8	V01403010012	Berm	Earthen Berm	—	X	X	—	12/17/2013	Replaced baseline control
CDV-SMA-8	V01406010010	Check Dam	Rock Check Dam	—	X	X	—	12/17/2013	Replaced baseline control
CDV-SMA-8	V01406010011	Check Dam	Rock Check Dam	—	X	X	—	12/17/2013	Replaced baseline control
PT-SMA-0.5	I00103140010	Berm	Coir Log	—	X	—	X	11/20/2013	Replaced baseline control
PT-SMA-0.5	I00103140011	Berm	Coir Log	—	X	—	X	11/20/2013	Replaced enhanced control
PT-SMA-3	I00503060011	Berm	Straw Wattles	—	X	X	—	8/13/2013	Additional control
PT-SMA-3	I00503060012	Berm	Straw Wattles	—	X	X	—	11/25/2013	Additional control
W-SMA-5	W00603060030	Berm	Straw Wattles	—	X	X	—	11/26/2013	Additional control
W-SMA-6	W00701010007	Seed and Mulch	Seed and Wood Mulch	X	—	—	—	7/22/2013	Additional control
W-SMA-6	W00703060005	Berm	Straw Wattles	—	X	—	X	7/22/2013	Additional control
W-SMA-6	W00703060006	Berm	Straw Wattles	—	X	—	X	7/22/2013	Additional control
W-SMA-7	W00803060017	Berm	Straw Wattles	—	X	X	—	7/22/2013	Additional control
W-SMA-7	W00803060018	Berm	Straw Wattles	—	X	X	—	7/22/2013	Additional control
W-SMA-7	W00803060019	Berm	Straw Wattles	—	X	—	X	7/22/2013	Additional control
W-SMA-7	W00803060020	Berm	Straw Wattles	—	X	—	X	7/22/2013	Additional control
W-SMA-7	W00803060021	Berm	Straw Wattles	—	X	—	X	7/22/2013	Additional control
W-SMA-7	W00806010015	Check Dam	Rock Check Dam	—	X	—	X	7/22/2013	Additional control
W-SMA-7	W00806010016	Check Dam	Rock Check Dam	—	X	—	X	7/22/2013	Additional control
W-SMA-7	W00808040023	Cap	Metal Cap	—	—	X	—	7/22/2013	Additional control
W-SMA-7	W0081010022	Seed and Mulch	Seed and Wood Mulch	X	—	—	—	7/22/2013	Additional control
W-SMA-9.7	W01503060009	Berm	Straw Wattles	—	X	—	X	7/18/2013	Additional control
W-SMA-9.7	W01503060010	Berm	Straw Wattles	—	X	—	X	7/18/2013	Additional control



Table 2-1 (continued)

SMA	BMP ID	Control Measure Type	Control Measure Description	EC	SC	RON	ROFF	Install Date	Comments
W-SMA-9.7	W01503060011	Berm	Straw Wattles	—	X	X	—	7/18/2013	Additional control
W-SMA-9.7	W01503060012	Berm	Straw Wattles	—	X	X	—	8/14/2013	Additional control
W-SMA-9.7	W01503060014	Berm	Straw Wattles	—	X	X	—	11/25/2013	Additional control
A-SMA-2	A00203060018	Berm	Straw Wattles	—	X	—	X	7/30/2013	Replaced baseline control
A-SMA-2	A00203060024	Berm	Straw Wattles	—	X	X	—	8/16/2013	Additional control
A-SMA-2	A00203060027	Berm	Straw Wattles	—	X	X	—	8/16/2013	Additional control
A-SMA-2	A00203060029	Berm	Straw Wattles	—	X	X	—	8/16/2013	Additional control
A-SMA-2	A00203060030	Berm	Straw Wattles	—	X	X	—	8/16/2013	Additional control
A-SMA-2	A00203060031	Berm	Straw Wattles	—	X	X	—	8/16/2013	Additional control
A-SMA-2	A00203060032	Berm	Straw Wattles	—	X	X	—	8/16/2013	Additional control
A-SMA-2	A00203060033	Berm	Straw Wattles	—	X	X	—	11/20/2013	Replaced baseline control
A-SMA-2	A00203060034	Berm	Straw Wattles	—	X	X	—	11/20/2013	Replaced baseline control
A-SMA-2	A00203060035	Berm	Straw Wattles	—	X	X	—	11/20/2013	Additional control
A-SMA-2	A00203060036	Berm	Straw Wattles	—	X	X	—	11/20/2013	Additional control
A-SMA-2	A00203060037	Berm	Straw Wattles	—	X	X	—	11/20/2013	Additional control
A-SMA-2	A00203060038	Berm	Straw Wattles	—	X	X	—	11/20/2013	Additional control
A-SMA-2	A00203060039	Berm	Straw Wattles	—	X	X	—	11/20/2013	Additional control
A-SMA-2.5	A00303060008	Berm	Straw Wattles	—	X	X	—	7/19/2013	Replaced baseline control
A-SMA-2.5	A00303060009	Berm	Straw Wattles	—	X	X	—	7/19/2013	Replaced baseline control
A-SMA-3	A00606010019	Check Dam	Rock Check Dam	—	X	X	—	11/26/2013	Replaced baseline control
A-SMA-3.5	A00703060004	Berm	Straw Wattles	—	X	X	—	11/12/2013	Additional control
CHQ-SMA-1.01	Q00203060009	Berm	Straw Wattles	—	X	X	—	11/22/2013	Replaced baseline control
CHQ-SMA-1.01	Q00203060010	Berm	Straw Wattles	—	X	X	—	11/22/2013	Replaced baseline control
CHQ-SMA-1.01	Q00203060011	Berm	Straw Wattles	—	X	X	—	11/22/2013	Replaced baseline control
CHQ-SMA-4	Q00503010020	Berm	Earthen Berm	—	X	—	X	11/13/2013	Additional control

**Table 2-1 (continued)**

SMA	BMP ID	Control Measure Type	Control Measure Description	EC	SC	RON	ROFF	Install Date	Comments
CHQ-SMA-4.5	Q00703060011	Berm	Straw Wattles	—	X	—	X	7/19/2013	Additional control
CHQ-SMA-4.5	Q00703060013	Berm	Straw Wattles	—	X	—	X	7/19/2013	Additional control
CHQ-SMA-4.5	Q00703060014	Berm	Straw Wattles	—	X	—	X	8/13/2013	Replaced baseline control
CHQ-SMA-4.5	Q00703060015	Berm	Straw Wattles	—	X	—	X	11/7/2013	Replaced baseline control

<sup>a</sup> EC = Erosion control.

<sup>b</sup> SC = Sediment control.

<sup>c</sup> RON = Run-on control.

<sup>d</sup> ROFF = Runoff control.

<sup>e</sup> — = Control does not perform the identified function.

<sup>f</sup> X = Control performs the identified function.

**Table 3-1  
Measurable Storm Event Minimum and Suggested Sample Volumes**

Analysis Type	Minimum Volume (L)	Suggested Volume (L)	Bottle Type	Preservation	Maximum Holding*
Radioactivities – Ra-226 and Ra-228	2	2	Polyethylene or Glass	HNO <sub>3</sub> to pH<2	6 mo
Radioactivities – Adjusted Gross Alpha	1	2	Polyethylene or Glass	HNO <sub>3</sub> to pH<2	6 mo
Metals – Dissolved	0.25	0.5	Polyethylene (with Boron)/ Glass (without Boron)	HNO <sub>3</sub> to pH<2	6 mo
Metals – Total	0.25	0.5	Polyethylene or Glass	HNO <sub>3</sub> to pH<2	Mercury – 28 d Selenium – 6 mo
Cyanide, weak acid dissociable	0.5	1	Polyethylene or Glass	Cool, ≤6°C, NaOH to pH >12	14 d
Dioxin	1	3	Glass	Cool, ≤6°C	1 yr
Semivolatile compounds	1	3	Amber Glass	Cool, ≤6°C, store in dark	7 d until extraction, 40 d after extraction
Pesticides	1	3	Glass	Cool, ≤6°C	7 d until extraction, 40 d after extraction
PCBs	1	3	Glass	Cool, ≤6°C	1 yr until extraction, 1 yr after extraction
High Explosives	0.75	2.5	Amber Glass	Cool, ≤6°C, store in dark	7 d until extraction, 40 d after extraction

\*Holding time is from sample collection until laboratory analysis, unless otherwise noted.

**Table 3-2  
Baseline Confirmation Monitoring**

Permitted Feature	SMA	Station Number	Stage Number	Sample	Sample Date	Associated Rain Gauge	Storm Date	24-h Total (in.)	Duration (h)	Field Prep	Radioactivities		Metals		Cyanide	Organic Analyses		
											Gross Alpha	Radium-226/228	Selenium and Mercury	Dissolved Metals <sup>a</sup>	Cyanide (wad <sup>b</sup> )	Hex <sup>c</sup>	SVOAs <sup>d</sup>	Total PCBs
E003	2M-SMA-1.43	SS093204	MEx <sup>e</sup>	WT_IPC-13-32394	07/12/13	RG-TA-06	07/12/13	1.62	1.5	F <sup>f</sup>	— <sup>g</sup>	—	—	X <sup>h</sup>	—	—	—	—
E003	2M-SMA-1.43	SS093204	MEx	WT_IPC-13-32260	07/12/13	RG-TA-06	07/12/13	1.62	1.5	UF <sup>i</sup>	X	X	X	—	X	—	—	—
E014	2M-SMA-3	SS2439	MEx	WT_IPC-13-32525	07/12/13	RG-TA-06	07/12/13	1.62	1.5	F	—	—	—	X	—	—	—	—
E014	2M-SMA-3	SS2439	MEx	WT_IPC-13-32040	07/12/13	RG-TA-06	07/12/13	1.62	1.5	UF	X	X	X	—	X	X	—	—
H002	3M-SMA-0.4	SS101502	MEx	WT_IPC-13-32417	07/12/13	RG262.4	07/12/13	0.48	0.83	F	—	—	—	X	—	—	—	—
H002	3M-SMA-0.4	SS101502	MEx	WT_IPC-13-32065	07/12/13	RG262.4	07/12/13	0.48	0.83	UF	X	X	X	—	X	X	—	—
A002	A-SMA-2	SS2732	MEx	WT_IPC-13-32528	09/12/13	RG267.4	09/12/13	2.13	6.58	F	—	—	—	X	—	—	—	—
A002	A-SMA-2	SS2732	MEx	WT_IPC-13-32042	09/12/13	RG267.4	09/12/13	2.13	6.58	UF	X	X	X	—	X	X	—	—
A006	A-SMA-3	SS100210	MEx	WT_IPC-13-39424	07/25/13	RG265	07/25/13	0.99	1.5	F	—	—	—	X	—	—	—	—
A006	A-SMA-3	SS100210	MEx	WT_IPC-13-39423	07/25/13	RG265	07/25/13	0.99	1.5	UF	X	X	X	—	X	X	—	X
A007	A-SMA-3.5	SS090208	MEx	WT_IPC-13-32343	07/25/13	RG340	07/25/13	0.99	1.58	F	—	—	—	X	—	—	—	—
A007	A-SMA-3.5	SS090208	MEx	WT_IPC-13-32194	07/25/13	RG340	07/25/13	0.99	1.58	UF	X	X	X	—	X	—	—	X
A009	A-SMA-6	SS310	MEx	WT_IPC-13-32530	08/04/13	RG340	08/04/13	0.33	1.5	F	—	—	—	X	—	—	—	—
A009	A-SMA-6	SS310	MEx	WT_IPC-13-32044	08/04/13	RG340	08/04/13	0.33	1.5	UF	X	X	X	—	X	X	—	—
B001	B-SMA-0.5	SS100302	MEx	WT_IPC-13-32406	09/13/13	RG-TA-53	09/13/13	1.96	6.25	F	—	—	—	X	—	—	—	—
B001	B-SMA-0.5	SS100302	MEx	WT_IPC-13-32265	09/13/13	RG-TA-53	09/13/13	1.96	6.25	UF	X	X	X	—	X	—	—	—
B002	B-SMA-1	SS080301	MEx	WT_IPC-13-32320	09/13/13	RG055.5	09/13/13	2.26	4.83	F	—	—	—	X	—	—	—	—
B002	B-SMA-1	SS080301	MEx	WT_IPC-13-32051	09/13/13	RG055.5	09/13/13	2.26	4.83	UF	X	X	X	—	X	X	—	—
C003	CDB-SMA-0.55	SS091312	MEx	WT_IPC-13-32368	09/13/13	RG245.5	09/13/13	2.06	5.16	F	—	—	—	X	—	—	—	—
C003	CDB-SMA-0.55	SS091312	MEx	WT_IPC-13-32159	09/13/13	RG245.5	09/13/13	2.06	5.16	UF	X	X	X	—	X	—	X	X
C010	CDB-SMA-4	SS101317	MEx	WT_IPC-13-32416	07/25/13	RG-TA-54	07/25/13	0.66	3.25	F	—	—	—	X	—	—	—	—
C010	CDB-SMA-4	SS101317	MEx	WT_IPC-13-32138	07/25/13	RG-TA-54	07/25/13	0.66	3.25	UF	X	X	X	—	X	—	X	X
V001	CDV-SMA-1.2	SS100421	MEx	WT_IPC-13-32407	09/12/13	RG253	09/12/13	2.4	10.5	F	—	—	—	X	—	—	—	—
V001	CDV-SMA-1.2	SS100421	MEx	WT_IPC-13-32062	09/12/13	RG253	09/12/13	2.4	10.5	UF	X	X	X	—	X	X	—	—
V002	CDV-SMA-1.3	SS100422	MEx	WT_IPC-13-32408	09/13/13	RG253	09/13/13	2.59	5.58	F	—	—	—	X	—	—	—	—
V002	CDV-SMA-1.3	SS100422	MEx	WT_IPC-13-32063	09/13/13	RG253	09/13/13	2.59	5.58	UF	X	X	X	—	X	X	—	—
V005	CDV-SMA-1.7	SS2547	MEx	WT_IPC-13-32531	09/13/13	RG253	09/13/13	2.59	5.58	F	—	—	—	X	—	—	—	—
V005	CDV-SMA-1.7	SS2547	MEx	WT_IPC-13-32045	09/13/13	RG253	09/13/13	2.59	5.58	UF	X	X	X	—	X	X	—	—
V006	CDV-SMA-2	SS255	MEx	WT_IPC-13-32532	07/12/13	RG257	07/12/13	0.8	1	F	—	—	—	X	—	—	—	—
V006	CDV-SMA-2	SS255	MEx	WT_IPC-13-32175	07/12/13	RG257	07/12/13	0.8	1	UF	X	X	X	—	X	—	X	—
V008A	CDV-SMA-2.42	SS090408	MEx	WT_IPC-13-32344	07/12/13	RG257	07/12/13	0.8	1	F	—	—	—	X	—	—	—	—
V008A	CDV-SMA-2.42	SS090408	MEx	WT_IPC-13-32195	07/12/13	RG257	07/12/13	0.8	1	UF	X	X	X	—	X	—	—	X
V009	CDV-SMA-2.5	SS090420	MEx	WT_IPC-13-32515	07/26/13	RG257	07/26/13	0.38	1.58	UF	—	—	—	—	—	—	X	—
V009A	CDV-SMA-2.51	SS090409	MEx	WT_IPC-13-32345	09/13/13	RG257	09/13/13	2.63	5.66	F	—	—	—	X	—	—	—	—

Table 3-2 (continued)

Permitted Feature	SMA	Station Number	Stage Number	Sample	Sample Date	Associated Rain Gauge	Storm Date	24-h Total (in.)	Duration (h)	Field Prep	Radioactivities		Metals		Cyanide	Organic Analyses		
											Gross Alpha	Radium-226/228	Selenium and Mercury	Dissolved Metals <sup>a</sup>	Cyanide (wad <sup>b</sup> )	Hexp <sup>c</sup>	SVOAs <sup>d</sup>	Total PCBs
V009A	CDV-SMA-2.51	SS090409	MEx	WT_IPC-13-32087	09/13/13	RG257	09/13/13	2.63	5.66	UF	X	X	X	—	X	X	X	—
V013	CDV-SMA-7	SS252625	MEx	WT_IPC-13-32534	09/13/13	RG257	09/13/13	2.63	5.66	F	—	—	—	X	—	—	—	—
V013	CDV-SMA-7	SS252625	MEx	WT_IPC-13-32218	09/13/13	RG257	09/13/13	2.63	5.66	UF	X	X	X	—	X	—	—	—
Q004	CHQ-SMA-3.05	SS090615	MEx	WT_IPC-13-32351	09/10/13	RG340	09/10/13	1.34	7.83	F	—	—	—	X	—	—	—	—
Q004	CHQ-SMA-3.05	SS090615	MEx	WT_IPC-13-32149	09/10/13	RG340	09/10/13	1.34	7.83	UF	X	X	X	—	X	—	—	X
Q006	CHQ-SMA-4.1	SS100617	MEx	WT_IPC-13-32409	09/13/13	RG340	09/13/13	1.37	6	F	—	—	—	X	—	—	—	—
Q006	CHQ-SMA-4.1	SS100617	MEx	WT_IPC-13-32034	09/13/13	RG340	09/13/13	1.37	6	UF	X	X	X	—	X	X	—	X
Q007	CHQ-SMA-4.5	SS341	MEx	WT_IPC-13-32537	07/25/13	RG340	07/25/13	0.99	1.58	F	—	—	—	X	—	—	—	—
Q007	CHQ-SMA-4.5	SS341	MEx	WT_IPC-13-32219	07/25/13	RG340	07/25/13	0.99	1.58	UF	X	X	X	—	X	—	—	—
Q009	CHQ-SMA-6	SS3377	MEx	WT_IPC-13-32538	07/25/13	RG340	07/25/13	0.99	1.58	F	—	—	—	X	—	—	—	—
Q009	CHQ-SMA-6	SS3377	MEx	WT_IPC-13-32047	07/25/13	RG340	07/25/13	0.99	1.58	UF	X	X	X	—	X	X	—	—
D002	DP-SMA-0.4	SS081901	MEx	WT_IPC-13-32335	09/13/13	RG038	09/13/13	2.08	5	F	—	—	—	X	—	—	—	—
D002	DP-SMA-0.4	SS081901	MEx	WT_IPC-13-32236	09/13/13	RG038	09/13/13	2.08	5	UF	X	X	X	—	X	—	—	—
D006	DP-SMA-2.35	SS091901	MEx	WT_IPC-13-32382	09/13/13	RG038	09/13/13	2.08	5	F	—	—	—	X	—	—	—	—
D006	DP-SMA-2.35	SS091901	MEx	WT_IPC-13-32254	09/13/13	RG038	09/13/13	2.08	5	UF	X	X	X	—	X	—	—	—
L006	LA-SMA-2.1	SS081005	MEx	WT_IPC-13-32326	09/13/13	RG055.5	09/13/13	2.26	4.83	F	—	—	—	X	—	—	—	—
L006	LA-SMA-2.1	SS081005	MEx	WT_IPC-13-32192	09/13/13	RG055.5	09/13/13	2.26	4.83	UF	X	X	X	—	X	—	—	X
L018	LA-SMA-5.51	SS091015	MEx	WT_IPC-13-32358	07/12/13	RG038	07/12/13	0.49	1.25	F	—	—	—	X	—	—	—	—
L018	LA-SMA-5.51	SS091015	MEx	WT_IPC-13-32200	07/12/13	RG038	07/12/13	0.49	1.25	UF	X	X	X	—	X	—	—	X
L018C	LA-SMA-5.54	SS091018	MEx	WT_IPC-13-32361	09/13/13	RG038	09/13/13	2.08	5	F	—	—	—	X	—	—	—	—
L018C	LA-SMA-5.54	SS091018	MEx	WT_IPC-13-32203	09/13/13	RG038	09/13/13	2.08	5	UF	X	X	X	—	X	—	—	X
L019A	LA-SMA-5.92	SS091020	MEx	WT_IPC-13-32362	07/12/13	RG038	07/12/13	0.49	1.25	F	—	—	—	X	—	—	—	—
L019A	LA-SMA-5.92	SS091020	MEx	WT_IPC-13-32245	07/12/13	RG038	07/12/13	0.49	1.25	UF	X	X	X	—	X	—	—	—
L027	LA-SMA-6.395	SS091002	MEx	WT_IPC-13-32355	09/13/13	RG038	09/13/13	2.08	5	F	—	—	—	X	—	—	—	—
L027	LA-SMA-6.395	SS091002	MEx	WT_IPC-13-32244	09/13/13	RG038	09/13/13	2.08	5	UF	X	X	X	—	X	—	—	—
M002	M-SMA-1.2	SS091202	MEx	WT_IPC-13-32364	09/13/13	RG121.9	09/13/13	2.35	5.5	F	—	—	—	X	—	—	—	—
M002	M-SMA-1.2	SS091202	MEx	WT_IPC-13-32247	09/13/13	RG121.9	09/13/13	2.35	5.5	UF	X	X	X	—	X	—	—	—
M012	M-SMA-10	SS2002	MEx	WT_IPC-13-32297	06/30/13	RG200.5	06/30/13	0.45	1	F	—	—	—	X	—	—	—	—
M012	M-SMA-10	SS2002	MEx	WT_IPC-13-32222	06/30/13	RG200.5	06/30/13	0.45	1	UF	X	X	X	—	X	—	—	—
M017	M-SMA-12.6	SS2058	MEx	WT_IPC-13-41871	09/13/13	RG203	09/13/13	2.34	5.33	F	—	—	—	X	—	—	—	—
M017	M-SMA-12.6	SS2058	MEx	WT_IPC-13-41870	09/13/13	RG203	09/13/13	2.34	5.33	UF	X	X	X	—	X	X	X	—
M022	M-SMA-13	SS205	MEx	WT_IPC-13-32304	09/13/13	RG203	09/13/13	2.34	5.33	F	—	—	—	X	—	—	—	—
M022	M-SMA-13	SS205	MEx	WT_IPC-13-32049	09/13/13	RG203	09/13/13	2.34	5.33	UF	X	X	X	—	X	X	—	—
M003	M-SMA-3	SS1985	MEx	WT_IPC-13-32305	07/12/13	RG-TA-06	07/12/13	1.62	1.5	F	—	—	—	X	—	—	—	—
M003	M-SMA-3	SS1985	MEx	WT_IPC-13-32183	07/12/13	RG-TA-06	07/12/13	1.62	1.5	UF	X	X	X	—	X	—	—	X

Table 3-2 (continued)

Permitted Feature	SMA	Station Number	Stage Number	Sample	Sample Date	Associated Rain Gauge	Storm Date	24-h Total (in.)	Duration (h)	Field Prep	Radioactivities		Metals		Cyanide	Organic Analyses		
											Gross Alpha	Radium-226/228	Selenium and Mercury	Dissolved Metals <sup>a</sup>	Cyanide (wad <sup>b</sup> )	Hexp <sup>c</sup>	SVOAs <sup>d</sup>	Total PCBs
M010	M-SMA-7.9	SS121237	MEx	WT_IPC-13-32309	09/13/13	RG200.5	09/13/13	2.53	5.25	F	—	—	—	X	—	—	—	—
M010	M-SMA-7.9	SS121237	MEx	WT_IPC-13-32187	09/13/13	RG200.5	09/13/13	2.53	5.25	UF	X	X	X	—	X	—	—	X
J001	PJ-SMA-1.05	SS092327	MEx	WT_IPC-13-32388	09/13/13	RG240	09/13/13	2.18	5.33	F	—	—	—	X	—	—	—	—
J001	PJ-SMA-1.05	SS092327	MEx	WT_IPC-13-32208	09/13/13	RG240	09/13/13	2.18	5.33	UF	X	X	X	—	X	—	—	X
J013	PJ-SMA-11	SS102333	MEx	WT_IPC-13-32422	09/13/13	RG-TA-06	09/13/13	2.93	7.75	F	—	—	—	X	—	—	—	—
J013	PJ-SMA-11	SS102333	MEx	WT_IPC-13-32267	09/13/13	RG-TA-06	09/13/13	2.93	7.75	UF	X	X	X	—	X	—	—	—
J014	PJ-SMA-11.1	SS102334	MEx	WT_IPC-13-32423	09/13/13	RG-TA-06	09/13/13	2.93	7.75	F	—	—	—	X	—	—	—	—
J014	PJ-SMA-11.1	SS102334	MEx	WT_IPC-13-32268	09/13/13	RG-TA-06	09/13/13	2.93	7.75	UF	X	X	X	—	X	—	—	—
J023	PJ-SMA-16	SS092325	MEx	WT_IPC-13-32387	08/08/13	RG-TA-54	08/08/13	0.86	1.25	F	—	—	—	X	—	—	—	—
J023	PJ-SMA-16	SS092325	MEx	WT_IPC-13-32055	08/08/13	RG-TA-54	08/08/13	0.86	1.25	UF	X	X	X	—	X	X	—	—
J024	PJ-SMA-17	SS092331	MEx	WT_IPC-13-39439	07/25/13	RG-TA-54	07/25/13	0.66	3.25	F	—	—	—	X	—	—	—	—
J024	PJ-SMA-17	SS092331	MEx	WT_IPC-13-39438	07/25/13	RG-TA-54	07/25/13	0.66	3.25	UF	X	X	X	—	X	—	—	X
J026	PJ-SMA-18	SS092329	MEx	WT_IPC-13-32390	07/25/13	RG-TA-54	07/25/13	0.66	3.25	F	—	—	—	X	—	—	—	—
J026	PJ-SMA-18	SS092329	MEx	WT_IPC-13-32209	07/25/13	RG-TA-54	07/25/13	0.66	3.25	UF	X	X	X	—	X	—	—	X
J025	PJ-SMA-19	SS092330	MEx	WT_IPC-13-32391	08/08/13	RG-TA-54	08/08/13	0.86	1.25	F	—	—	—	X	—	—	—	—
J025	PJ-SMA-19	SS092330	MEx	WT_IPC-13-32210	08/08/13	RG-TA-54	08/08/13	0.86	1.25	UF	X	X	X	—	X	—	—	X
J004	PJ-SMA-4.05	SS092328	MEx	WT_IPC-13-42056	09/13/13	RG257	09/12/13	2.2	9.5	F	—	—	—	X	—	—	—	—
J004	PJ-SMA-4.05	SS092328	MEx	WT_IPC-13-42057	09/13/13	RG257	09/12/13	2.2	9.5	UF	X	X	X	—	X	—	—	—
T001	PRATT-SMA-1.05	SS093401	MEx	WT_IPC-13-32395	09/13/13	RG200.5	09/13/13	2.53	5.25	F	—	—	—	X	—	—	—	—
T001	PRATT-SMA-1.05	SS093401	MEx	WT_IPC-13-32212	09/13/13	RG200.5	09/13/13	2.53	5.25	UF	X	X	X	—	X	—	—	X
P004	P-SMA-0.3	SS080801	MEx	WT_IPC-13-32322	07/25/13	RG-TA-53	07/25/13	0.45	1.75	F	—	—	—	X	—	—	—	—
P004	P-SMA-0.3	SS080801	MEx	WT_IPC-13-32227	07/25/13	RG-TA-53	07/25/13	0.45	1.75	UF	X	X	X	—	X	—	—	—
P009	P-SMA-3.05	SS090802	MEx	WT_IPC-13-32353	09/13/13	RG055.5	09/13/13	2.26	4.83	F	—	—	—	X	—	—	—	—
P009	P-SMA-3.05	SS090802	MEx	WT_IPC-13-32197	09/13/13	RG055.5	09/13/13	2.26	4.83	UF	X	X	X	—	X	—	—	X
R005	R-SMA-2.3	SS082704	MEx	WT_IPC-13-32338	06/14/13	RG038	06/14/13	0.53	1.58	F	—	—	—	X	—	—	—	—
R005	R-SMA-2.3	SS082704	MEx	WT_IPC-13-32052	06/14/13	RG038	06/14/13	0.53	1.58	UF	X	X	X	—	X	X	—	—
S010	S-SMA-3.95	SS091606	MEx	WT_IPC-13-32376	09/13/13	RG203	09/13/13	2.34	5.33	F	—	—	—	X	—	—	—	—
S010	S-SMA-3.95	SS091606	MEx	WT_IPC-13-32088	09/13/13	RG203	09/13/13	2.34	5.33	UF	X	X	X	—	X	X	X	—
T004	T-SMA-2.85	SS093714	MEx	WT_IPC-13-32396	07/12/13	RG200.5	07/12/13	1.16	1.33	F	—	—	—	X	—	—	—	—
T004	T-SMA-2.85	SS093714	MEx	WT_IPC-13-32261	07/12/13	RG200.5	07/12/13	1.16	1.33	UF	X	X	X	—	X	—	—	—
T006	T-SMA-4	SS20136	MEx	WT_IPC-13-32437	09/13/13	RG200.5	09/13/13	2.53	5.25	F	—	—	—	X	—	—	—	—
T006	T-SMA-4	SS20136	MEx	WT_IPC-13-32274	09/13/13	RG200.5	09/13/13	2.53	5.25	UF	X	X	X	—	X	—	—	—
W011	W-SMA-8	SS2523	MEx	WT_IPC-13-32443	09/12/13	RG257	09/12/13	2.2	9.5	F	—	—	—	X	—	—	—	—
W011	W-SMA-8	SS2523	MEx	WT_IPC-13-32181	09/12/13	RG257	09/12/13	2.2	9.5	UF	X	X	X	—	X	—	X	—
W012	W-SMA-8.7	SS103933	MEx	WT_IPC-13-32433	09/12/13	RG257	09/12/13	2.2	9.5	F	—	—	—	X	—	—	—	—

Table 3-2 (continued)

Permitted Feature	SMA	Station Number	Stage Number	Sample	Sample Date	Associated Rain Gauge	Storm Date	24-h Total (in.)	Duration (h)	Field Prep	Radioactivities		Metals		Cyanide	Organic Analyses		
											Gross Alpha	Radium-226/228	Selenium and Mercury	Dissolved Metals <sup>a</sup>	Cyanide (wad <sup>b</sup> )	Hexp <sup>c</sup>	SVOAs <sup>d</sup>	Total PCBs
W012	W-SMA-8.7	SS103933	MEx	WT_IPC-13-32071	09/12/13	RG257	09/12/13	2.2	9.5	UF	X	X	X	—	X	X	—	—
W013	W-SMA-9.05	SS093914	MEx	WT_IPC-13-32397	09/13/13	RG257	09/13/13	2.63	5.66	F	—	—	—	X	—	—	—	—
W013	W-SMA-9.05	SS093914	MEx	WT_IPC-13-32057	09/13/13	RG257	09/13/13	2.63	5.66	UF	X	X	X	—	X	X	—	—
W015	W-SMA-9.7	SS093916	MEx	WT_IPC-13-32399	09/13/13	RG257	09/13/13	2.63	5.66	F	—	—	—	X	—	—	—	—
W015	W-SMA-9.7	SS093916	MEx	WT_IPC-13-32263	09/13/13	RG257	09/13/13	2.63	5.66	UF	X	X	X	—	X	—	—	—

<sup>a</sup> Dissolved Metals = Aluminum, antimony, arsenic, boron, cadmium, chromium, cobalt, copper, lead, nickel, silver, thallium, vanadium, zinc.

<sup>b</sup> wad = Weak acid dissociable.

<sup>c</sup> Hexp = High explosives.

<sup>d</sup> SVOAs = Semivolatile organic analytes.

<sup>e</sup> MEx = Extended Baseline Monitoring: One confirmation monitoring sample is collected to determine if corrective action is required.

<sup>f</sup> F = Filtered.

<sup>g</sup> — = Not applicable.

<sup>h</sup> X = The sample is analyzed for the associated parameters.

<sup>i</sup> UF = Unfiltered.

Table 3-3  
Summary of Confirmation Monitoring by December 31, 2013

Confirmation Monitoring Phase	No Samples	One Sample	Two Samples	Total
Baseline Monitoring Extended	111	55	0	166
Enhanced Control Monitoring	22	17	9	48
Monitoring Not Required	36	0	0	36
<b>Total</b>	<b>169</b>	<b>72</b>	<b>9</b>	<b>250</b>

Table 3-4  
Non-Confirmation Monitoring

Permitted Feature	SMA	Station Number	Sample Date	Sample	Field Prep	Sample Type	Discussion
I001	PT-SMA-0.5	SS26565	9/13/2013	WT_IPC-13-41872	UF <sup>a</sup>	INV	A measurable storm event for this SMA did not occur. Sufficient volume was not collected to perform required analyses. As a result of limited sample volume, the method detection limit reported for nondetected hexachlorobenzene and pentachlorophenol was 6.52 µg/L, which is above the minimum quantification level of 5 µg/L.
I001	PT-SMA-0.5	SS26565	9/13/2013	WT_IPC-13-41873	F <sup>b</sup>	INV	
J004	PJ-SMA-4.05	SS092328	7/12/2013	WT_IPC-13-32259	UF	INV	The sample collected was not representative of discharge from the associated Site 09-004(g). The sample collected was from backflow from R-Site road and was not representative of discharge from the Site.
J004	PJ-SMA-4.05	SS092328	7/12/2013	WT_IPC-13-32389	F	INV	

<sup>a</sup> UF = Unfiltered.

<sup>b</sup> F = Filtered.

**Table 3-5  
Enhanced Control Confirmation Monitoring**

Permitted Feature	SMA	Station Number	Stage Number	Sample	Sample Date	Associated Rain Gage	Storm Date	24-h Total (in.)	Duration (h)	Field Prep	Radioactivities		Metals					Cyanide	Organic Analyses		
											Gross Alpha	Radium-226/228	Aluminum	Copper	Copper and Zinc	Selenium and Mercury	Dissolved Metals <sup>a</sup>	Cyanide (wad <sup>b</sup> )	Hexp <sup>c</sup>	SVOAs <sup>d</sup>	Total PCBs
E004	2M-SMA-1.44	SS093205	CAM5 Sample 1 <sup>e</sup>	WT_IPC-13-32120	09/12/13	RG-TA-06	09/12/13	2.46	15	F <sup>f</sup>	— <sup>g</sup>	—	—	X <sup>h</sup>	—	—	—	—	—	—	—
E004	2M-SMA-1.44	SS093205	CAM5 Sample 1	WT_IPC-13-32474	09/12/13	RG-TA-06	09/12/13	2.46	15	UF <sup>i</sup>	X	—	—	—	—	—	—	—	—	—	—
E007	2M-SMA-1.65	SS093209	CAM5 Sample 1	WT_IPC-13-32462	09/13/13	RG-TA-06	09/13/13	2.93	7.75	UF	X	—	—	—	—	—	—	—	—	—	—
E012	2M-SMA-2	SS123221	CAM5 Sample 1	WT_IPC-13-34609	06/14/13	RG121.9	06/14/13	0.44	1.16	F	—	—	—	—	—	—	X	—	—	—	—
E012	2M-SMA-2	SS123221	CAM5 Sample 1	WT_IPC-13-34607	06/14/13	RG121.9	06/14/13	0.44	1.16	UF	X	X	—	—	—	X	—	X	—	—	X
E012	2M-SMA-2	SS123221	CAM5 Sample 2 <sup>j</sup>	WT_IPC-13-34610	08/18/13	RG121.9	08/18/13	0.20	0.91	F	—	—	—	—	—	—	X	—	—	—	—
E012	2M-SMA-2	SS123221	CAM5 Sample 2	WT_IPC-13-34608	08/18/13	RG121.9	08/18/13	0.20	0.91	UF	X	X	—	—	—	X	—	X	—	—	X
A004	A-SMA-2.7	SS120211	CAM5 Sample 1	WT_IPC-13-32490	09/13/13	RG265	09/13/13	1.27	5.66	F	—	—	—	—	—	—	X	—	—	—	—
A004	A-SMA-2.7	SS120211	CAM5 Sample 1	WT_IPC-13-32036	09/13/13	RG265	09/13/13	1.27	5.66	UF	X	X	—	—	—	X	—	X	X	—	—
C002	CDB-SMA-0.25	SS091311	CAM5 Sample 1	WT_IPC-13-39426	07/26/13	RG245.5	07/26/13	0.39	1.33	F	—	—	X	X	—	—	—	—	—	—	—
C002	CDB-SMA-0.25	SS091311	CAM5 Sample 1	WT_IPC-13-39427	07/26/13	RG245.5	07/26/13	0.39	1.33	UF	—	—	—	—	—	—	—	—	—	X	X
C002	CDB-SMA-0.25	SS091311	CAM5 Sample 2	WT_IPC-13-32113	09/10/13	RG245.5	09/10/13	1.32	7.58	F	—	—	X	X	—	—	—	—	—	—	—
C002	CDB-SMA-0.25	SS091311	CAM5 Sample 2	WT_IPC-13-32514	09/10/13	RG245.5	09/10/13	1.32	7.58	UF	—	—	—	—	—	—	—	—	—	X	X
C004	CDB-SMA-1	SS2185	CAM5 Sample 1	WT_IPC-13-32108	09/13/13	RG245.5	09/13/13	2.06	5.16	F	—	—	X	X	—	—	—	—	—	—	—
C004	CDB-SMA-1	SS2185	CAM5 Sample 1	WT_IPC-13-32481	09/13/13	RG245.5	09/13/13	2.06	5.16	UF	X	—	—	—	—	—	—	—	—	—	X
V012A	CDV-SMA-6.02	SS130423	CAM5 Sample 1	WT_IPC-13-40966	09/13/13	RG257	09/13/13	2.63	5.66	F	—	—	—	—	—	—	X	—	—	—	—
V012A	CDV-SMA-6.02	SS130423	CAM5 Sample 1	WT_IPC-13-40964	09/13/13	RG257	09/13/13	2.63	5.66	UF	X	X	—	—	—	X	—	X	X	—	—
Q002A	CHQ-SMA-1.02	SS090613	CAM5 Sample 1	WT_IPC-13-32118	07/25/13	RG340	07/25/13	0.99	1.58	F	—	—	—	X	—	—	—	—	—	—	—
Q002A	CHQ-SMA-1.02	SS090613	CAM5 Sample 1	WT_IPC-13-32459	07/25/13	RG340	07/25/13	0.99	1.58	UF	—	—	—	—	—	—	—	X	—	—	X
Q002A	CHQ-SMA-1.02	SS090613	CAM5 Sample 2	WT_IPC-13-32123	09/15/13	RG340	09/15/13	0.00	0	F	—	—	—	X	—	—	—	—	—	—	—
Q002A	CHQ-SMA-1.02	SS090613	CAM5 Sample 2	WT_IPC-13-32460	09/15/13	RG340	09/15/13	0.00	0	UF	—	—	—	—	—	—	—	X	—	—	X
D001	DP-SMA-0.3	SS0375	CAM5 Sample 1	WT_IPC-13-39145	07/12/13	RG038	07/12/13	0.49	1.25	UF	X	X	—	—	—	—	—	—	—	—	—
D001	DP-SMA-0.3	SS0375	CAM5 Sample 2	WT_IPC-13-39146	09/13/13	RG038	09/13/13	2.08	5	UF	X	X	—	—	—	—	—	—	—	—	—
L001	LA-SMA-0.85	SS121043	CAM5 Sample 2	WT_IPC-13-32499	05/15/13	RG121.9	05/15/13	0.07	0.41	F	—	—	—	—	—	—	X	—	—	—	—
L001	LA-SMA-0.85	SS121043	CAM5 Sample 2	WT_IPC-13-32171	05/15/13	RG121.9	05/15/13	0.07	0.41	UF	X	X	—	—	—	X	—	X	—	—	—
L003	LA-SMA-1	SS121044	CAM5 Sample 1	WT_IPC-13-32488	09/13/13	RG121.9	09/13/13	2.35	5.5	F	—	—	—	—	—	—	X	—	—	—	—
L003	LA-SMA-1	SS121044	CAM5 Sample 1	WT_IPC-13-32154	09/13/13	RG121.9	09/13/13	2.35	5.5	UF	X	X	—	—	—	X	—	X	—	—	X
L030A	LA-SMA-10.12	SS091021	CAM5 Sample 1	WT_IPC-13-32140	09/12/13	RG-TA-53	09/12/13	1.94	7.5	UF	X	—	—	—	—	—	—	X	—	—	X
L019	LA-SMA-5.91	SS091019	CAM5 Sample 1	WT_IPC-13-40974	09/12/13	RG038	09/12/13	1.33	6.58	UF	X	—	—	—	—	—	—	—	—	—	—
M001	M-SMA-1	SS121238	CAM5 Sample 1	WT_IPC-13-32501	06/14/13	RG121.9	06/14/13	0.44	1.16	F	—	—	—	—	—	—	X	—	—	—	—
M001	M-SMA-1	SS121238	CAM5 Sample 1	WT_IPC-13-32157	06/14/13	RG121.9	06/14/13	0.44	1.16	UF	X	X	—	—	—	X	—	X	—	—	X
M001	M-SMA-1	SS121238	CAM5 Sample 2	WT_IPC-13-38616	07/02/13	RG121.9	07/02/13	0.27	0.91	F	—	—	—	—	—	—	X	—	—	—	—
M001	M-SMA-1	SS121238	CAM5 Sample 2	WT_IPC-13-38617	07/02/13	RG121.9	07/02/13	0.27	0.91	UF	X	X	—	—	—	X	—	X	—	—	X
M002B	M-SMA-1.22	SS091228	CAM5 Sample 1	WT_IPC-13-34611	09/12/13	RG121.9	09/12/13	2.31	9.58	F	—	—	X	X	—	—	—	—	—	—	—
S003	S-SMA-2	SS101626	CAM3 Sample 1 <sup>k</sup>	WT_IPC-13-39143	07/11/13	RG121.9	07/11/13	0.16	0.41	F	—	—	—	—	X	—	—	—	—	—	—



Table 3-5 (continued)

Permitted Feature	SMA	Station Number	Stage Number	Sample	Sample Date	Associated Rain Gage	Storm Date	24-h Total (in.)	Duration (h)	Field Prep	Radioactivities		Metals					Cyanide	Organic Analyses	
											Gross Alpha	Radium-226/228	Aluminum	Copper	Copper and Zinc	Selenium and Mercury	Dissolved Metals <sup>a</sup>	Cyanide (wad <sup>b</sup> )	Hexp <sup>c</sup>	SVOAs <sup>d</sup>
S003	S-SMA-2	SS101626	CAM3 Sample 1	WT_IPC-13-39141	07/11/13	RG121.9	07/11/13	0.16	0.41	UF	—	—	—	—	—	—	—	—	—	X
S003	S-SMA-2	SS101626	CAM3 Sample 2 <sup>i</sup>	WT_IPC-13-39144	08/01/13	RG121.9	08/01/13	0.12	0.66	F	—	—	—	X	—	—	—	—	—	—
S003	S-SMA-2	SS101626	CAM3 Sample 2	WT_IPC-13-39142	08/01/13	RG121.9	08/01/13	0.12	0.66	UF	—	—	—	—	—	—	—	—	—	X
S003A	S-SMA-2.01	SS091602	CAM3 Sample 1	WT_IPC-13-32114	09/13/13	RG121.9	09/13/13	2.35	5.5	F	—	—	—	X	—	—	—	—	—	—
S003A	S-SMA-2.01	SS091602	CAM3 Sample 1	WT_IPC-13-32511	09/13/13	RG121.9	09/13/13	2.35	5.5	UF	—	—	—	—	—	—	—	—	—	X
S006	S-SMA-3.6	SS12255	CAM3 Sample 1	WT_IPC-13-32126	06/14/13	RG121.9	06/14/13	0.44	1.16	F	—	—	—	—	X	—	—	—	—	—
S006	S-SMA-3.6	SS12255	CAM3 Sample 1	WT_IPC-13-32094	06/14/13	RG121.9	06/14/13	0.44	1.16	UF	—	—	—	—	—	—	—	X	—	X
S006	S-SMA-3.6	SS12255	CAM3 Sample 2	WT_IPC-13-32127	07/02/13	RG121.9	07/02/13	0.27	0.91	F	—	—	—	X	—	—	—	—	—	—
S006	S-SMA-3.6	SS12255	CAM3 Sample 2	WT_IPC-13-32095	07/02/13	RG121.9	07/02/13	0.27	0.91	UF	—	—	—	—	—	—	—	X	—	X
S011	S-SMA-4.1	SS101623	CAM3 Sample 1	WT_IPC-13-32509	09/13/13	RG-TA-53	09/13/13	1.96	6.25	UF	—	—	—	—	—	—	—	—	—	X
J028	STRM-SMA-1.05	SS093001	CAM5 Sample 1	WT_IPC-13-34615	07/12/13	RG240	07/12/13	0.43	1.08	F	—	—	—	X	—	—	—	—	—	—
J028	STRM-SMA-1.05	SS093001	CAM5 Sample 2	WT_IPC-13-34616	08/01/13	RG240	08/01/13	0.25	1.16	F	—	—	—	X	—	—	—	—	—	—
J029	STRM-SMA-1.5	SS133007	CAM5 Sample 1	WT_IPC-13-34681	09/13/13	RG240	09/13/13	2.18	5.33	F	—	—	—	—	—	X	—	—	—	—
J029	STRM-SMA-1.5	SS133007	CAM5 Sample 1	WT_IPC-13-34679	09/13/13	RG240	09/13/13	2.18	5.33	UF	X	X	—	—	X	—	X	—	X	—
W001	W-SMA-1	SS133939	CAM5 Sample 1	WT_IPC-13-32495	09/12/13	RG253	09/12/13	2.4	10.5	F	—	—	—	—	—	X	—	—	—	—
W001	W-SMA-1	SS133939	CAM5 Sample 1	WT_IPC-13-32167	09/12/13	RG253	09/12/13	2.4	10.5	UF	X	X	—	—	X	—	X	—	—	—
W019	W-SMA-11.7	SS103935	CAM5 Sample 1	WT_IPC-13-32101	09/13/13	RG262.4	09/13/13	2.27	5.58	F	—	—	X	—	—	—	—	—	—	—
W019	W-SMA-11.7	SS103935	CAM5 Sample 1	WT_IPC-13-32468	09/13/13	RG262.4	09/13/13	2.27	5.58	UF	X	—	—	—	—	—	—	—	—	—
W021	W-SMA-14.1	SS133939	CAM5 Sample 1	WT_IPC-13-32492	09/13/13	RG262.4	09/13/13	2.27	5.58	F	—	—	—	—	—	X	—	—	—	—
W021	W-SMA-14.1	SS133939	CAM5 Sample 1	WT_IPC-13-32037	09/13/13	RG262.4	09/13/13	2.27	5.58	UF	X	X	—	—	X	—	X	X	—	—
W012A	W-SMA-8.71	SS123938	CAM5 Sample 1	WT_IPC-13-32496	09/13/13	RG257	09/13/13	2.63	5.66	F	—	—	—	—	—	X	—	—	—	—
W012A	W-SMA-8.71	SS123938	CAM5 Sample 1	WT_IPC-13-32168	09/13/13	RG257	09/13/13	2.63	5.66	UF	X	X	—	—	X	—	X	X	—	—
W017	W-SMA-9.9	SS103934	CAM5 Sample 1	WT_IPC-13-32100	09/13/13	RG257	09/13/13	2.63	5.66	F	—	—	X	—	—	—	—	—	—	—
W017	W-SMA-9.9	SS103934	CAM5 Sample 1	WT_IPC-13-32142	09/13/13	RG257	09/13/13	2.63	5.66	UF	X	—	—	—	—	—	X	—	—	—

<sup>a</sup> Dissolved Metals = Aluminum, antimony, arsenic, boron, cadmium, chromium, cobalt, copper, lead, nickel, silver, thallium, vanadium, zinc.

<sup>b</sup> wad = Weak acid dissociable.

<sup>c</sup> Hexp = High explosives.

<sup>d</sup> SVOAs = Semivolatile organic analytes.

<sup>e</sup> CAM5 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>f</sup> F = Filtered.

<sup>g</sup> — = Not applicable.

<sup>h</sup> X = The sample is analyzed for the associated parameters.

<sup>i</sup> UF = Unfiltered.

<sup>j</sup> CAM5 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>k</sup> CAM3 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

<sup>l</sup> CAM3 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

**Table 3-6  
Summary of Confirmation Monitoring TAL Exceedances**

SMA	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	% of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	% MTAL Exceedances	Concentration Range	Result/MTAL Ratio Range
2M-SMA-1.43	MEx <sup>a</sup>	Aluminum	µg/L	1	1	100%	n/a <sup>b</sup>	n/a	n/a	750	1	100%	1500	2
2M-SMA-1.43	MEx	Gross alpha	pCi/L	1	1	100%	15	52	3.47	n/a	n/a	n/a	52	n/a
2M-SMA-1.44	CAM5 <sup>c</sup>	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	39.5	9.2
2M-SMA-1.65	CAM5	Gross alpha	pCi/L	1	1	100%	15	22.6	1.51	n/a	n/a	n/a	22.6	n/a
2M-SMA-2	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	18.5 to 19.9	4.3 to 8.9
2M-SMA-2	CAM5	Total PCB	µg/L	2	2	100%	0.00064	0.0271	42.4	n/a	n/a	n/a	0.0148 to 0.0497	n/a
2M-SMA-2	CAM5	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	102 to 123	2.4 to 2.9
2M-SMA-3	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	3750	5
2M-SMA-3	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	6.05	1.4
3M-SMA-0.4	MEx	Gross alpha	pCi/L	1	1	100%	15	120	8	n/a	n/a	n/a	120	n/a
A-SMA-2	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	1310	1.7
A-SMA-2	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	23.9	5.6
A-SMA-2	MEx	Gross alpha	pCi/L	1	1	100%	15	23.7	1.58	n/a	n/a	n/a	23.7	n/a
A-SMA-2.7	CAM5	Gross alpha	pCi/L	1	1	100%	15	175	11.7	n/a	n/a	n/a	175	n/a
A-SMA-3	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	997	1.3
A-SMA-3	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	245	56.0
A-SMA-3	MEx	Gross alpha	pCi/L	1	1	100%	15	136	9.07	n/a	n/a	n/a	136	n/a
A-SMA-3	MEx	Mercury	µg/L	1	1	100%	0.77	9.04	11.7	1.4	1	100%	9.04	6.5
A-SMA-3	MEx	Selenium	µg/L	1	1	100%	5	12.1	2.42	20	0	0%	12.1	0.605
A-SMA-3	MEx	Total PCB	µg/L	1	1	100%	0.00064	3.06	4780	n/a	n/a	n/a	3.06	n/a
A-SMA-6	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.86	1.4
A-SMA-6	MEx	Gross alpha	pCi/L	1	1	100%	15	29.6	1.97	n/a	n/a	n/a	29.6	n/a
B-SMA-0.5	MEx	Gross alpha	pCi/L	1	1	100%	15	486	32.4	n/a	n/a	n/a	486	n/a
B-SMA-1	MEx	Gross alpha	pCi/L	1	1	100%	15	126	8.4	n/a	n/a	n/a	126	n/a
CDB-SMA-0.25	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	15.2 to 15.2	6.5
CDB-SMA-0.25	CAM5	Total PCB	µg/L	2	2	100%	0.00064	0.00366	5.71	n/a	n/a	n/a	0.00282 to 0.00474	n/a
CDB-SMA-0.55	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	16.3	3.8
CDB-SMA-0.55	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.000711	1.11	n/a	n/a	n/a	0.000711	n/a
CDB-SMA-1	CAM5	Gross alpha	pCi/L	1	1	100%	15	71.5	4.77	n/a	n/a	n/a	71.5	n/a
CDB-SMA-1	CAM5	Total PCB	µg/L	1	1	100%	0.00064	0.0721	113	n/a	n/a	n/a	0.0721	n/a
CDB-SMA-4	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	8.14	1.9
CDB-SMA-4	MEx	Gross alpha	pCi/L	1	1	100%	15	54.8	3.65	n/a	n/a	n/a	54.8	n/a
CDB-SMA-4	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.00437	6.83	n/a	n/a	n/a	0.00437	n/a
CDV-SMA-1.3	MEx	Gross alpha	pCi/L	1	1	100%	15	34.7	2.31	n/a	n/a	n/a	34.7	n/a
CDV-SMA-1.7	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	11	2.6
CDV-SMA-1.7	MEx	Cyanide (wad) <sup>d</sup>	mg/L	1	1	100%	0.01	0.0175	1.75	0.022	0	0%	0.0175	0.8
CDV-SMA-1.7	MEx	Gross alpha	pCi/L	1	1	100%	15	36.9	2.46	n/a	n/a	n/a	36.9	n/a
CDV-SMA-1.7	MEx	RDX	µg/L	1	1	100%	200	908	4.54	n/a	n/a	n/a	908	n/a
CDV-SMA-2	MEx	Gross alpha	pCi/L	1	1	100%	15	18.2	1.21	n/a	n/a	n/a	18.2	n/a
CDV-SMA-2.42	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	4.37	1.0
CDV-SMA-2.42	MEx	Gross alpha	pCi/L	1	1	100%	15	89.3	5.95	n/a	n/a	n/a	89.3	n/a
CDV-SMA-2.42	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0332	51.9	n/a	n/a	n/a	0.0332	n/a
CDV-SMA-2.51	MEx	Gross alpha	pCi/L	1	1	100%	15	16.4	1.09	n/a	n/a	n/a	16.4	n/a

Table 3-6 (continued)

SMA	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	% of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	% MTAL Exceedances	Concentration Range	Result/MTAL Ratio Range
CDV-SMA-7	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	956	1.3
CDV-SMA-7	MEx	Gross alpha	pCi/L	1	1	100%	15	191	12.7	n/a	n/a	n/a	191	n/a
CDV-SMA-7	MEx	Selenium	µg/L	1	1	100%	5	5.33	1.07	20	0	0%	5.33	0.3
CHQ-SMA-1.02	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	1	50%	1.82 to 4.46	0.4 to 1.0
CHQ-SMA-1.02	CAM5	Total PCB	µg/L	2	2	100%	0.00064	0.0103	16.1	n/a	n/a	n/a	0.0066 to 0.016	n/a
CHQ-SMA-3.05	MEx	Gross alpha	pCi/L	1	1	100%	15	60.3	4.02	n/a	n/a	n/a	60.3	n/a
CHQ-SMA-3.05	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.000851	1.33	n/a	n/a	n/a	0.000851	n/a
CHQ-SMA-4.1	MEx	Gross alpha	pCi/L	1	1	100%	15	34.5	2.3	n/a	n/a	n/a	34.5	n/a
CHQ-SMA-4.5	MEx	Gross alpha	pCi/L	1	1	100%	15	103	6.87	n/a	n/a	n/a	103	n/a
CHQ-SMA-6	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	87.6	20.4
CHQ-SMA-6	MEx	Gross alpha	pCi/L	1	1	100%	15	157	10.5	n/a	n/a	n/a	157	n/a
DP-SMA-0.3	CAM5	Gross alpha	pCi/L	2	2	100%	15	77.7	5.18	n/a	n/a	n/a	68.7 to 87.8	n/a
DP-SMA-0.4	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	3540	4.72
DP-SMA-0.4	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	10.7	2.5
DP-SMA-2.35	MEx	Gross alpha	pCi/L	1	1	100%	15	25	1.67	n/a	n/a	n/a	25	n/a
LA-SMA-0.85	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	22.8 to 26.4	5.3 to 6.1
LA-SMA-0.85	CAM5	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	56.1 to 78.2	1.3 to 1.9
LA-SMA-1	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	800	1.1
LA-SMA-1	CAM5	Gross alpha	pCi/L	1	1	100%	15	434	28.9	n/a	n/a	n/a	434	n/a
LA-SMA-1	CAM5	Total PCB	µg/L	1	1	100%	0.00064	0.0175	27.3	n/a	n/a	n/a	0.0175	n/a
LA-SMA-2.1	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	11.1	2.6
LA-SMA-2.1	MEx	Gross alpha	pCi/L	1	1	100%	15	125	8.33	n/a	n/a	n/a	125	n/a
LA-SMA-2.1	MEx	Total PCB	µg/L	1	1	100%	0.00064	21.1	33000	n/a	n/a	n/a	21.1	n/a
LA-SMA-5.51	MEx	Gross alpha	pCi/L	1	1	100%	15	92.3	6.15	n/a	n/a	n/a	92.3	n/a
LA-SMA-5.51	MEx	Mercury	µg/L	1	1	100%	0.77	2.39	3.1	1.4	1	100%	2.39	1.7
LA-SMA-5.51	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0591	92.3	n/a	n/a	n/a	0.0591	n/a
LA-SMA-5.54	MEx	Gross alpha	pCi/L	1	1	100%	15	356	23.7	n/a	n/a	n/a	356	n/a
LA-SMA-5.54	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0598	93.4	n/a	n/a	n/a	0.0598	n/a
LA-SMA-5.91	CAM5	Gross alpha	pCi/L	1	1	100%	15	15.7	1.05	n/a	n/a	n/a	15.7	n/a
LA-SMA-5.92	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	8.32	1.9
LA-SMA-5.92	MEx	Gross alpha	pCi/L	1	1	100%	15	264	17.6	n/a	n/a	n/a	264	n/a
LA-SMA-5.92	MEx	Mercury	µg/L	1	1	100%	0.77	2.89	3.75	1.4	1	100%	2.89	2.1
LA-SMA-6.395	MEx	Gross alpha	pCi/L	1	1	100%	15	300	20	n/a	n/a	n/a	300	n/a
M-SMA-1	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	9.66 to 31.2	2.2 to 7.3
M-SMA-1	CAM5	Gross alpha	pCi/L	2	2	100%	15	19.2	1.28	n/a	n/a	n/a	11.3 to 32.5	n/a
M-SMA-1	CAM5	Total PCB	µg/L	2	2	100%	0.00064	0.0103	16.2	n/a	n/a	n/a	0.0102 to 0.0105	n/a
M-SMA-1	CAM5	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	53.4 to 264	1.3 to 6.3
M-SMA-1.2	MEx	Arsenic	µg/L	1	1	100%	9	10.6	1.18	340	0	0%	10.6	0.03
M-SMA-1.2	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	38.4	8.9
M-SMA-1.22	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.96	1.4
M-SMA-10	MEx	Gross alpha	pCi/L	1	1	100%	15	32.2	2.15	n/a	n/a	n/a	32.2	n/a
M-SMA-12.6	MEx	Gross alpha	pCi/L	1	1	100%	15	19.2	1.28	n/a	n/a	n/a	19.2	n/a
M-SMA-3	MEx	Gross alpha	pCi/L	1	1	100%	15	25.4	1.69	n/a	n/a	n/a	25.4	n/a
M-SMA-3	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0181	28.3	n/a	n/a	n/a	0.0181	n/a

Table 3-6 (continued)

SMA	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	% of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	% MTAL Exceedances	Concentration Range	Result/MTAL Ratio Range
M-SMA-7.9	MEx	Gross alpha	pCi/L	1	1	100%	15	51.4	3.43	n/a	n/a	n/a	51.4	n/a
M-SMA-7.9	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.00215	3.36	n/a	n/a	n/a	0.00215	n/a
PJ-SMA-1.05	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.00872	13.6	n/a	n/a	n/a	0.00872	n/a
PJ-SMA-11	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	42.9	10.0
PJ-SMA-11	MEx	Gross alpha	pCi/L	1	1	100%	15	65.4	4.36	n/a	n/a	n/a	65.4	n/a
PJ-SMA-11.1	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	1040	1.4
PJ-SMA-11.1	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	20.9	4.9
PJ-SMA-11.1	MEx	Gross alpha	pCi/L	1	1	100%	15	89.4	5.96	n/a	n/a	n/a	89.4	n/a
PJ-SMA-17	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.13	1.2
PJ-SMA-17	MEx	Gross alpha	pCi/L	1	1	100%	15	61.6	4.11	n/a	n/a	n/a	61.6	n/a
PJ-SMA-18	MEx	Gross alpha	pCi/L	1	1	100%	15	23.6	1.57	n/a	n/a	n/a	23.6	n/a
PJ-SMA-19	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	761	1.0
PJ-SMA-19	MEx	Gross alpha	pCi/L	1	1	100%	15	51.2	3.41	n/a	n/a	n/a	51.2	n/a
PJ-SMA-19	MEx	Mercury	µg/L	1	1	100%	0.77	1.67	2.17	1.4	1	100%	1.67	1.2
PJ-SMA-19	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	43.7	1.46	n/a	n/a	n/a	43.7	n/a
PJ-SMA-19	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0204	31.9	n/a	n/a	n/a	0.0204	n/a
PJ-SMA-4.05	MEx	Gross alpha	pCi/L	1	1	100%	15	47.2	3.15	n/a	n/a	n/a	47.2	n/a
Pratt-SMA-1.05	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	943	1.3
Pratt-SMA-1.05	MEx	Gross alpha	pCi/L	1	1	100%	15	96.5	6.43	n/a	n/a	n/a	96.5	n/a
Pratt-SMA-1.05	MEx	Mercury	µg/L	1	1	100%	0.77	0.91	1.18	1.4	0	0%	0.91	0.65
Pratt-SMA-1.05	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.447	698	n/a	n/a	n/a	0.447	n/a
P-SMA-0.3	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	9.01	2.1
P-SMA-0.3	MEx	Gross alpha	pCi/L	1	1	100%	15	28.6	1.91	n/a	n/a	n/a	28.6	n/a
P-SMA-0.3	MEx	Mercury	µg/L	1	1	100%	0.77	39.3	51	1.4	1	100%	39.3	28.1
P-SMA-0.3	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	55.6	1.85	n/a	n/a	n/a	55.6	n/a
P-SMA-0.3	MEx	Selenium	µg/L	1	1	100%	5	10.7	2.14	20	0	0%	10.7	0.535
P-SMA-3.05	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.2	1.2
P-SMA-3.05	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0868	136	n/a	n/a	n/a	0.0868	n/a
S-SMA-2	CAM3 <sup>e</sup>	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	4.43 to 5.08	1.0 to 1.2
S-SMA-2	CAM3	Total PCB	µg/L	2	2	100%	0.00064	0.104	162	n/a	n/a	n/a	0.049 to 0.22	n/a
S-SMA-2	CAM3	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	44.2 to 54	1.1 to 1.3
S-SMA-2.01	CAM3	Total PCB	µg/L	1	1	100%	0.00064	0.164	256	n/a	n/a	n/a	0.164	n/a
S-SMA-3.6	CAM3	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	15.4 to 20.8	3.6 to 4.8
S-SMA-3.6	CAM3	Total PCB	µg/L	2	2	100%	0.00064	0.00345	5.39	n/a	n/a	n/a	0.0016 to 0.00745	n/a
S-SMA-3.6	CAM3	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	108 to 135	2.6 to 3.2
S-SMA-3.95	MEx	Gross alpha	pCi/L	1	1	100%	15	15.4	1.03	n/a	n/a	n/a	15.4	n/a
S-SMA-4.1	CAM3	Total PCB	µg/L	1	1	100%	0.00064	0.00155	2.42	n/a	n/a	n/a	0.00155	n/a
STRM-SMA-1.05	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	9.92 to 10.8	2.3 to 2.5
STRM-SMA-1.5	CAM5	Gross alpha	pCi/L	1	1	100%	15	16.1	1.07	n/a	n/a	n/a	16.1	n/a
STRM-SMA-1.5	CAM5	Silver	µg/L	1	1	100%	n/a	n/a	n/a	0.5	1	100%	4.02	8.04
T-SMA-2.85	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.64	1.3
T-SMA-2.85	MEx	Gross alpha	pCi/L	1	1	100%	15	36.6	2.44	n/a	n/a	n/a	36.6	n/a
T-SMA-4	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	6.61	1.5
T-SMA-4	MEx	Gross alpha	pCi/L	1	1	100%	15	94.8	6.32	n/a	n/a	n/a	94.8	n/a

Table 3-6 (continued)

SMA	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	% of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	% MTAL Exceedances	Concentration Range	Result/MTAL Ratio Range
T-SMA-4	MEx	Mercury	µg/L	1	1	100%	0.77	2.14	2.78	1.4	1	100%	2.14	1.5
W-SMA-1	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	1010	1.3
W-SMA-1	CAM5	Gross alpha	pCi/L	1	1	100%	15	314	20.9	n/a	n/a	n/a	314	n/a
W-SMA-11.7	CAM5	Gross alpha	pCi/L	1	1	100%	15	39.6	2.64	n/a	n/a	n/a	39.6	n/a
W-SMA-14.1	CAM5	Gross alpha	pCi/L	1	1	100%	15	38.7	2.58	n/a	n/a	n/a	38.7	n/a
W-SMA-8	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	823	1.1
W-SMA-8	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	28.1	6.5
W-SMA-8.7	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	1920	2.6
W-SMA-8.71	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	19.8	4.6
W-SMA-8.71	CAM5	Mercury	µg/L	1	1	100%	0.77	1.51	1.96	1.4	1	100%	1.51	1.1
W-SMA-8.71	CAM5	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	1	100%	55.4	1.3
W-SMA-9.7	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	9.74	2.3
W-SMA-9.9	CAM5	Gross alpha	pCi/L	1	1	100%	15	74.4	4.96	n/a	n/a	n/a	74.4	n/a

<sup>a</sup> MEx = Extended Baseline Monitoring: One confirmation monitoring sample is collected to determine if corrective action is required.

<sup>b</sup> n/a = Not applicable.

<sup>c</sup> CAM5 = Corrective Action Enhanced Control Monitoring: Confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>d</sup> wad = Weak acid dissociable.

<sup>e</sup> CAM3 = Corrective Action Enhanced Control Monitoring: Confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

**Table 4-1**  
**Deadlines for Completion of Corrective Action at**  
**SMA s Associated with High Priority Sites and a Baseline Monitoring**  
**Confirmation Sample Collected after September 30, 2012**

Permit Feature	SMA Number	Site Number	Sample Collection	Receipt of Results	Deadline for Completion of Corrective Action
P005	P-SMA-1	73-001(a)	n/a*	n/a	n/a
P005	P-SMA-1	73-004(d)	n/a	n/a	n/a
P008	P-SMA-2.2	00-019	n/a	n/a	n/a
P009	P-SMA-3.05	00-018(a)	9/13/2013	10/21/2013	10/21/2014
L006	LA-SMA-2.1	01-001(f)	9/13/2013	10/28/2013	10/28/2014
L008	LA-SMA-3.1	01-001(e)	n/a	n/a	n/a
L008	LA-SMA-3.1	01-003(a)	n/a	n/a	n/a
L012	LA-SMA-5.01	01-001(d)	n/a	n/a	n/a
L012	LA-SMA-5.01	01-006(h)	n/a	n/a	n/a
L018	LA-SMA-5.51	02-003(a)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-003(e)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-004(a)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-005	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-006(b)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-006(c)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-006(d)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-006(e)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-008(a)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-009(b)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-011(a)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-011(b)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-011(c)	7/12/2013	8/21/2013	8/21/2014
L018	LA-SMA-5.51	02-011(d)	7/12/2013	8/21/2013	8/21/2014
L018A	LA-SMA-5.52	02-003(b)	n/a	n/a	n/a
L018A	LA-SMA-5.52	02-007	n/a	n/a	n/a
L018A	LA-SMA-5.52	02-008(c)	n/a	n/a	n/a
L018B	LA-SMA-5.53	02-009(a)	n/a	n/a	n/a
L018C	LA-SMA-5.54	02-009(c)	9/13/2013	10/28/2013	10/28/2014
L028	LA-SMA-6.5	21-024(i)	n/a	n/a	n/a
S005	S-SMA-3.51	03-009(i)	n/a	n/a	n/a
S005A	S-SMA-3.52	03-021	n/a	n/a	n/a
S013	S-SMA-5	20-002(c)	n/a	n/a	n/a

**Table 4-1 (continued)**

Permit Feature	SMA Number	Site Number	Sample Collection	Receipt of Results	Deadline for Completion of Corrective Action
C010	CDB-SMA-4	54-017	7/25/2013	8/27/2013	8/27/2014
C010	CDB-SMA-4	54-018	7/25/2013	8/27/2013	8/27/2014
C010	CDB-SMA-4	54-020	7/25/2013	8/27/2013	8/27/2014
M005	M-SMA-3.5	48-003	n/a	n/a	n/a
M010	M-SMA-7.9	50-006(d)	9/13/2013	10/22/2013	10/22/2014
T001	Pratt-SMA-1.05	35-003(h)	9/13/2013	10/24/2013	10/24/2014
T001	Pratt-SMA-1.05	35-003(p)	9/13/2013	10/24/2013	10/24/2014
T001	Pratt-SMA-1.05	35-003(r)	9/13/2013	10/24/2013	10/24/2014
T001	Pratt-SMA-1.05	35-004(h)	9/13/2013	10/24/2013	10/24/2014
T001	Pratt-SMA-1.05	35-009(d)	9/13/2013	10/24/2013	10/24/2014
T001	Pratt-SMA-1.05	35-016(k)	9/13/2013	10/24/2013	10/24/2014
T001	Pratt-SMA-1.05	35-016(l)	9/13/2013	10/24/2013	10/24/2014
T001	Pratt-SMA-1.05	35-016(m)	9/13/2013	10/24/2013	10/24/2014
J024	PJ-SMA-17	54-018	7/25/2013	9/4/2013	9/4/2014
J026	PJ-SMA-18	54-017	7/25/2013	9/3/2013	9/3/2014
J025	PJ-SMA-19	54-013(b)	8/8/2013	9/11/2013	9/11/2014
J025	PJ-SMA-19	54-017	8/8/2013	9/11/2013	9/11/2014
J025	PJ-SMA-19	54-020	8/8/2013	9/11/2013	9/11/2014

\* n/a = not applicable

**Table 4-2**  
**Permit Phase of SMAs Associated with High and Moderate Priority Sites**

SMA Association	Baseline Monitoring Extended	Baseline Complete	Corrective Action Planning After Baseline Monitoring	Corrective Action Planning After Corrective Action Monitoring	Corrective Action Monitoring	Corrective Action Complete: No Exposure	Corrective Action Complete: Certificate of Completion	Alternative Compliance Requested	Total
SMAs associated with HPS	11	0	12	1	3	1	3	2	33
SMAs associated with MPS	100	10	57	9	36	0	5	0	217
<b>Total</b>	<b>111</b>	<b>10</b>	<b>69</b>	<b>10</b>	<b>39</b>	<b>1</b>	<b>8</b>	<b>2</b>	<b>250</b>

**Table 4-3  
Enhanced Control Measures Installed during 2013**

SMA	BMP ID	Control Measure Type	Control Measure Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>	Install Date
CDV-SMA-1.4	V00303010070	Berm	Earthen Berm	— <sup>e</sup>	—	X <sup>f</sup>	X	8/27/2013
CDV-SMA-1.4	V00303010071	Berm	Earthen Berm	—	X	—	X	8/27/2013
CDV-SMA-1.4	V00303010072	Berm	Earthen Berm	—	X	—	X	8/27/2013
CDV-SMA-1.4	V00305020074	Sediment Trap and Basin	Sediment Basin	—	—	X	X	8/27/2013
CDV-SMA-1.4	V00305020073	Sediment Trap and Basin	Sediment Basin	—	—	X	X	8/27/2013
CDV-SMA-1.4	V00305020075	Sediment Trap and Basin	Sediment Basin	—	—	X	X	8/27/2013
CDV-SMA-1.4	V00305020076	Sediment Trap and Basin	Sediment Basin	—	—	X	X	8/27/2013
CDV-SMA-2.41	V00806010012	Check Dam	Rock Check Dam	—	X	—	X	2/7/2013
CDV-SMA-2.41	V00803010013	Berm	Earthen Berm	—	X	—	X	2/7/2013
CDV-SMA-2.41	V00804010014	Channel/Swale	Earthen Channel/Swale	X	—	X	—	2/7/2013
M-SMA-1.22	M002B03010010	Berm	Earthen Berm	—	X	—	X	3/1/2013
M-SMA-1.22	M002B03010011	Berm	Earthen Berm	—	X	—	X	3/1/2013
M-SMA-1.22	M002B03010012	Berm	Earthen Berm	—	X	—	X	3/1/2013
M-SMA-1.22	M002B05030013	Sediment Trap and Basin	Sand Filter	—	X	—	X	3/1/2013
PJ-SMA-13.7	J01608030010	Cap	Concrete/Asphalt Cap	—	X	—	—	5/28/2013
PJ-SMA-13.7	J01605020008	Sediment Trap and Basin	Sediment Basin	—	X	—	X	1/22/2013
PJ-SMA-13.7	J01605020009	Sediment Trap and Basin	Sediment Basin	—	X	—	X	1/22/2013
PT-SMA-1.7	I00303010018	Berm	Earthen Berm	—	X	—	X	5/22/2013
PT-SMA-1.7	I00305040019	Sediment Trap and Basin	Gravel Infiltration Strip	—	X	—	X	5/22/2013
PT-SMA-1.7	I00306010020	Check Dam	Rock Check Dam	—	X	—	X	5/22/2013
PT-SMA-1.7	I00306010021	Check Dam	Rock Check Dam	—	X	—	X	5/22/2013
PT-SMA-1.7	I00306010022	Check Dam	Rock Check Dam	—	X	—	X	5/22/2013
PT-SMA-1.7	I00306010023	Check Dam	Rock Check Dam	—	X	—	X	5/22/2013
PT-SMA-1.7	I00306010024	Check Dam	Rock Check Dam	—	X	—	X	5/22/2013
PT-SMA-1.7	I00306010025	Check Dam	Rock Check Dam	—	X	—	X	5/22/2013



Table 4-3 (continued)

SMA	BMP ID	Control Measure Type	Control Measure Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>	Install Date
R-SMA-1.95	R00303140016	Berm	Coir Log	—	X	—	X	9/4/2013
R-SMA-1.95	R00303140015	Berm	Coir Log	—	X	—	X	9/4/2013
R-SMA-1.95	R00303140009	Berm	Coir Log	—	X	—	X	8/20/2013
R-SMA-1.95	R00303140010	Berm	Coir Log	—	X	—	X	8/20/2013
R-SMA-1.95	R00303140011	Berm	Coir Log	—	X	—	X	8/20/2013
R-SMA-1.95	R00303140012	Berm	Coir Log	—	X	—	X	8/20/2013
R-SMA-1.95	R00303140013	Berm	Coir Log	—	X	—	X	8/20/2013
R-SMA-1.95	R00303140014	Berm	Coir Log	—	X	—	X	8/20/2013
R-SMA-1.95	R00303140017	Berm	Coir Log	—	X	—	X	8/20/2013
R-SMA-1.95	R00303140018	Berm	Coir Log	—	X	—	X	8/20/2013
S-SMA-2	S00304060012	Channel/Swale	Riprap	X	—	X	—	4/26/2013
S-SMA-2	S00304060016	Channel/Swale	Riprap	X	—	X	—	4/26/2013
S-SMA-2	S00304060021	Channel/Swale	Riprap	X	—	X	—	4/26/2013
S-SMA-2	S00301010013	Seed and Mulch	Seed and Wood Mulch	X	—	—	—	4/26/2013
S-SMA-2	S00305040014	Sediment Trap and Basin	Gravel Infiltration Strip	—	—	X	X	4/26/2013
S-SMA-2	S00301010015	Seed and Mulch	Seed and Wood Mulch	X	—	—	—	4/26/2013
S-SMA-2	S00306010017	Check Dam	Rock Check Dam	—	—	X	X	4/26/2013
S-SMA-2	S00306010018	Check Dam	Rock Check Dam	—	—	X	X	4/26/2013
S-SMA-2	S00306010019	Check Dam	Rock Check Dam	—	—	X	X	4/26/2013
S-SMA-2	S00306010020	Check Dam	Rock Check Dam	—	—	X	X	4/26/2013
STRM-SMA-1.05	J02808030008	Cap	Concrete/Asphalt Cap	—	—	—	—	3/26/2013
STRM-SMA-1.5	J02903010013	Berm	Earthen Berm	—	—	X	X	4/17/2013
STRM-SMA-1.5	J02903010014	Berm	Earthen Berm	—	X	—	X	4/17/2013
STRM-SMA-1.5	J02903120015	Berm	Rock Berm	—	X	—	X	4/17/2013
STRM-SMA-1.5	J02904060016	Channel/Swale	Riprap	X	X	—	—	4/17/2013
STRM-SMA-1.5	J02908030017	Cap	Concrete/Asphalt Cap	X	X	—	—	4/17/2013
T-SMA-1	T00203010013	Berm	Earthen Berm	—	—	X	X	5/28/2013

Table 4-3 (continued)

SMA	BMP ID	Control Measure Type	Control Measure Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>	Install Date
T-SMA-1	T00203010014	Berm	Earthen Berm	—	—	X	X	5/28/2013
T-SMA-1	T00203010015	Berm	Earthen Berm	—	X	—	X	5/28/2013
T-SMA-1	T00204020016	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—	5/28/2013
T-SMA-1	T00204040017	Channel/Swale	Culvert	X	—	X	—	5/28/2013
T-SMA-1	T00204040018	Channel/Swale	Culvert	X	—	X	—	5/28/2013
T-SMA-1	T00208010019	Cap	Earth Cap	X	—	X	—	5/28/2013
W-SMA-1	W00106010012	Check Dam	Rock Check Dam	—	—	X	X	3/11/2013
W-SMA-1	W00106010013	Check Dam	Rock Check Dam	—	—	X	X	3/11/2013
W-SMA-1	W00103010014	Berm	Earthen Berm	—	—	X	X	3/11/2013
W-SMA-1	W00103010015	Berm	Earthen Berm	—	—	X	X	3/11/2013
W-SMA-1	W00105030016	Sediment Trap and Basin	Sand Filter	—	X	—	X	3/11/2013
W-SMA-1	W00104060017	Channel/Swale	Riprap	X	X	—	—	3/11/2013
W-SMA-1	W00108020018	Cap	Rock Cap	X	—	—	—	3/11/2013

<sup>a</sup> EC = Erosion control.

<sup>b</sup> SC = Sediment control.

<sup>c</sup> RON = Run-on control.

<sup>d</sup> ROFF = Runoff control.

<sup>e</sup> — = Control does not perform the identified function.

<sup>f</sup> X = Control performs the identified function.

**Table 4-4**  
**Cumulative List of Individual Permit Sites with a Certificate of Completion under the Consent Order**

Site No.	Site Priority	Permitted Feature	SMA	Corrective Action Complete Status	Date Issued	Reference
00-011(a)	Moderate	R006	R-SMA-2.5	Complete with Controls	May 7, 2013	NMED 2013, 522505
00-011(c)	Moderate	R004	R-SMA-2.05	Complete without Controls	May 16, 2012	NMED 2012, 520388
00-011(d)	Moderate	B002	B-SMA-1	Complete with Controls	May 7, 2013	NMED 2013, 522505
00-011(e)	Moderate	R005	R-SMA-2.3	Complete with Controls	May 7, 2013	NMED 2013, 522505
00-018(b)	Moderate	P004	P-SMA-0.3	Complete without Controls	January 14, 2011	NMED 2011,111673
01-001(b)	Moderate	L007	LA-SMA-2.3	Complete with Controls	September 10, 2010	NMED 2010, 110667
01-001(c)	Moderate	L011	LA-SMA-4.2	Complete with Controls	September 10, 2010	NMED 2010, 110667
01-001(e)	High	L008	LA-SMA-3.1	Complete with Controls	September 10, 2010	NMED 2010, 110667
01-003(e)	High	L012A	LA-SMA-5.02	Complete with Controls	September 10, 2010	NMED 2010, 110667
01-006(d)	Moderate	L011	LA-SMA-4.2	Complete with Controls	September 10, 2010	NMED 2010, 110667
03-056(c)	High	S003	S-SMA-2	Complete with Controls	February 18, 2011	NMED 2011, 111821
16-030(c)	Moderate	V003	CDV-SMA-1.4	Complete without Controls	January 23, 2008	NMED 2008, 100116
21-013(b)	Moderate	L019A	LA-SMA-5.92	Complete with Controls	June 3, 2011	NMED 2011, 203706
21-013(g)	Moderate	L019A	LA-SMA-5.92	Complete with Controls	June 3, 2011	NMED 2011, 203706
21-018(a)	Moderate	L019A	LA-SMA-5.92	Complete with Controls	June 3, 2011	NMED 2011, 203706
21-023(c)	Moderate	L019	LA-SMA-5.91	Complete with Controls	June 3, 2011	NMED 2011, 203706
32-002(b1)	Moderate	L017	LA-SMA-5.361	Complete with Controls	December 28, 2012	NMED 2012, 521746
32-003	Moderate	L017A	LA-SMA-5.362	Complete with Controls	December 20, 2012	NMED 2012, 521776
32-004	Moderate	L016	LA-SMA-5.33	Complete with Controls	December 28, 2012	NMED 2012, 521746
35-014(e2)	High	M013	M-SMA-10.3	Complete with Controls	September 27, 2013	NMED 2013, 523693
35-016(i)	High	M013	M-SMA-10.3	Complete with Controls	September 27, 2013	NMED 2013, 523693
39-001(b)	Moderate	A005	A-SMA-2.8	Complete without Controls	April 6, 2010	NMED 2010, 110430
39-002(c)	Moderate	A004	A-SMA-2.7	Complete without Controls	April 6, 2010	NMED 2010, 110430
43-001(b2)	Moderate	L004	LA-SMA-1.1	Complete with Controls	September 10, 2010	NMED 2010, 110667
45-001	Moderate	P002	ACID-SMA-2	Complete without Controls	February 22, 2013	NMED 2013, 522072
45-002	Moderate	P002	ACID-SMA-2	Complete without Controls	February 22, 2013	NMED 2013, 522072

**Table 4-4 (continued)**

<b>Site No.</b>	<b>Site Priority</b>	<b>Permitted Feature</b>	<b>SMA</b>	<b>Corrective Action Complete Status</b>	<b>Date Issued</b>	<b>Reference</b>
45-004	Moderate	P002	ACID-SMA-2	Complete without Controls	February 22, 2013	NMED 2013, 522072
46-004(m)	Moderate	C003	CDB-SMA-0.55	Complete without Controls	July 13, 2012	NMED 2012, 520940
48-007(a)	Moderate	M006	M-SMA-4	Complete with Controls	September 7, 2010	NMED 2010, 110665
48-007(d)	Moderate	M006	M-SMA-4	Complete with Controls	September 7, 2010	NMED 2010, 110665
48-010	Moderate	M006	M-SMA-4	Complete with Controls	September 7, 2010	NMED 2010, 110665
53-002(a)	Moderate	L030	LA-SMA-10.11	Complete with Controls	September 13, 2006	NMED 2006, 095421
53-014	High	S011	S-SMA-4.1	Complete without Controls	July 31, 2013	NMED 2013, 523159
73-002	Moderate	P006	P-SMA-2	Complete with Controls	August 13, 2007	NMED 2007, 098441
73-006	Moderate	P006	P-SMA-2	Complete with Controls	August 13, 2007	NMED 2007, 098441
C-00-020	Moderate	R001	R-SMA-0.5	Complete without Controls	May 16, 2012	NMED 2012, 520388
C-46-001	Moderate	C004	CDB-SMA-1	Complete without Controls	July 13, 2012	NMED 2012, 520940

**Table 4-5  
List of Sites with Certification of Completion of Corrective Action**

Site Number	Permitted Feature	Associated SMA Number	Watershed	Site Priority
00-018(b)	P004	P-SMA-0.3	Los Alamos/Pueblo	Moderate
01-001(b)	L007	LA-SMA-2.3	Los Alamos/Pueblo	Moderate
01-003(e)	L012A	LA-SMA-5.02	Los Alamos/Pueblo	High
03-056(c)	S003	S-SMA-2	Sandia	High
16-030(c)	V003	CDV-SMA-1.4	Water/Cañon de Valle	Moderate
21-023(c)	L019	LA-SMA-5.91	Los Alamos/Pueblo	Moderate
32-004	L016	LA-SMA-5.33	Los Alamos/Pueblo	Moderate
39-002(c)	A004	A-SMA-2.7	Ancho	Moderate
43-001(b2)	L004	LA-SMA-1.1	Los Alamos/Pueblo	Moderate
45-001	P002	ACID-SMA-2	Los Alamos/Pueblo	Moderate
45-002				
45-004				
48-007(a)	M006	M-SMA-4	Mortandad	Moderate
48-007(d)				
48-010				
53-014	S011	S-SMA-4.1	Sandia	High
C-00-020	R001	R-SMA-0.5	Los Alamos/Pueblo	Moderate
C-46-001	C004	CDB-SMA-1	Mortandad	Moderate

**Table 4-6  
Summary of Site Corrective Actions Planned**

Permitted Feature	SMA	Site	Site Priority	Corrective Action Planned
R002	R-SMA-1	C-00-041	MPS <sup>a</sup>	CoC <sup>b</sup>
R003	R-SMA-1.09	00-015	MPS	On-hold: Unexploded Ordinance
B001	B-SMA-0.5	10-001(a)	MPS	CoC
B001	B-SMA-0.5	10-001(b)	MPS	CoC
B001	B-SMA-0.5	10-001(c)	MPS	CoC
B001	B-SMA-0.5	10-001(d)	MPS	CoC
B001	B-SMA-0.5	10-004(a)	MPS	CoC
B001	B-SMA-0.5	10-004(b)	MPS	CoC
B001	B-SMA-0.5	10-008	MPS	CoC
B001	B-SMA-0.5	10-009	MPS	CoC
B002	B-SMA-1	00-011(d)	MPS	CoC
P002	ACID-SMA-2	01-002(b)-00	MPS	CoC, Alternatives analysis

Table 4-6 (continued)

Permitted Feature	SMA	Site	Site Priority	Corrective Action Planned
P003	ACID-SMA-2.1	01-002(b)-00	MPS	CoC, Alternatives analysis <sup>c</sup>
P009	P-SMA-3.05	00-018(a)	HPS <sup>d</sup>	CoC
L001	LA-SMA-0.85	03-055(c)	MPS	CoC
L005	LA-SMA-1.25	C-43-001	MPS	CoC
L006	LA-SMA-2.1	01-001(f)	HPS	Alternatives analysis
L010	LA-SMA-4.1	01-003(b)	MPS	CoC
L010	LA-SMA-4.1	01-006(b)	MPS	CoC
L018	LA-SMA-5.51	02-003(a)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-003(e)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-004(a)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-005	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-006(b)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-006(c)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-006(d)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-006(e)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-008(a)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-009(b)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-011(a)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-011(b)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-011(c)	HPS	Alternatives analysis
L018	LA-SMA-5.51	02-011(d)	HPS	Alternatives analysis
L018C	LA-SMA-5.54	02-009(c)	HPS	Alternative compliance <sup>e</sup>
L019A	LA-SMA-5.92	21-013(b)	MPS	CoC
L019A	LA-SMA-5.92	21-013(g)	MPS	CoC
L019A	LA-SMA-5.92	21-018(a)	MPS	CoC
L019A	LA-SMA-5.92	21-021	MPS	Alternative compliance
L027	LA-SMA-6.395	21-021	MPS	Alternative compliance
L027	LA-SMA-6.395	21-024(j)	MPS	CoC
D001	DP-SMA-0.3	21-029	MPS	CoC
D002	DP-SMA-0.4	21-021	MPS	Alternative compliance
D006	DP-SMA-2.35	21-021	MPS	Alternative compliance
D006	DP-SMA-2.35	21-024(n)	MPS	CoC
S010	S-SMA-3.95	20-002(a)	MPS	CoC, Alternatives analysis
C002	CDB-SMA-0.25	46-004(c2)	MPS	CoC
C002	CDB-SMA-0.25	46-004(e2)	MPS	CoC
C003	CDB-SMA-0.55	46-004(g)	MPS	CoC
C003	CDB-SMA-0.55	46-004(s)	MPS	CoC
C003	CDB-SMA-0.55	46-006(f)	MPS	CoC

Table 4-6 (continued)

Permitted Feature	SMA	Site	Site Priority	Corrective Action Planned
C010	CDB-SMA-4	54-017	HPS	No-exposure <sup>f</sup>
C010	CDB-SMA-4	54-018	HPS	No-exposure
C010	CDB-SMA-4	54-020	HPS	No-exposure
M001	M-SMA-1	03-050(a)	MPS	Alternative compliance
M001	M-SMA-1	03-054(e)	MPS	CoC
M002	M-SMA-1.2	03-049(a)	MPS	Alternatives analysis
M003	M-SMA-3	48-001	MPS	CoC
M003	M-SMA-3	48-005	MPS	Alternative compliance
M003	M-SMA-3	48-007(c)	MPS	CoC
M006	M-SMA-4	48-001	MPS	CoC
M006	M-SMA-4	48-005	MPS	No-exposure
M008	M-SMA-6	35-016(h)	MPS	CoC
M009	M-SMA-7	35-016(g)	MPS	CoC
M010	M-SMA-7.9	50-006(d)	HPS	Alternative compliance
M012	M-SMA-10	35-008	MPS	CoC
M012	M-SMA-10	35-014(e)	MPS	CoC
M017	M-SMA-12.6	05-004	MPS	CoC
T001	Pratt-SMA-1.05	35-003(h)	HPS	CoC
T001	Pratt-SMA-1.05	35-003(p)	HPS	CoC
T001	Pratt-SMA-1.05	35-003(r)	HPS	CoC
T001	Pratt-SMA-1.05	35-004(h)	HPS	CoC
T001	Pratt-SMA-1.05	35-009(d)	HPS	CoC
T001	Pratt-SMA-1.05	35-016(k)	HPS	CoC
T001	Pratt-SMA-1.05	35-016(l)	HPS	CoC
T001	Pratt-SMA-1.05	35-016(m)	HPS	CoC
T002	T-SMA-1	50-006(a)	HPS	CoC
T004	T-SMA-2.85	35-014(g)	MPS	CoC
T004	T-SMA-2.85	35-016(n)	MPS	CoC
T005	T-SMA-3	35-016(b)	MPS	CoC
T006	T-SMA-4	35-004(a)	MPS	CoC
T006	T-SMA-4	35-009(a)	MPS	CoC
T006	T-SMA-4	35-016(c)	MPS	CoC
T006	T-SMA-4	35-016(d)	MPS	CoC
E001	2M-SMA-1	03-010(a)	MPS	CoC
E003	2M-SMA-1.43	22-014(a)	MPS	No-exposure
E003	2M-SMA-1.43	22-015(a)	MPS	CoC
E011	2M-SMA-1.9	03-003(a)	MPS	CoC
E012	2M-SMA-2	03-050(d)	MPS	CoC

Table 4-6 (continued)

Permitted Feature	SMA	Site	Site Priority	Corrective Action Planned
E012	2M-SMA-2	03-054(b)	MPS	CoC
E014	2M-SMA-3	07-001(a)	MPS	CoC
E014	2M-SMA-3	07-001(b)	MPS	CoC
E014	2M-SMA-3	07-001(c)	MPS	CoC
E014	2M-SMA-3	07-001(d)	MPS	CoC
H002	3M-SMA-0.4	15-006(b)	MPS	Alternative compliance
J001	PJ-SMA-1.05	09-013	MPS	CoC
J004	PJ-SMA-4.05	09-004(g)	MPS	CoC, No-exposure
J005	PJ-SMA-5	22-015(c)	MPS	Alternatives analysis
J013	PJ-SMA-11	40-003(a)	MPS	Alternatives analysis
J014	PJ-SMA-11.1	40-003(b)	MPS	Alternatives analysis
J024	PJ-SMA-17	54-018	HPS	No-exposure
J026	PJ-SMA-18	54-014(d)	MPS	No-exposure
J026	PJ-SMA-18	54-017	HPS	No-exposure
J025	PJ-SMA-19	54-013(b)	HPS	No-exposure
J025	PJ-SMA-19	54-017	HPS	No-exposure
J025	PJ-SMA-19	54-020	HPS	No-exposure
J028	STRM-SMA-1.05	08-009(f)	MPS	CoC
V002	CDV-SMA-1.3	16-017(a)-99	MPS	CoC
V002	CDV-SMA-1.3	16-026(m)	MPS	CoC
V005	CDV-SMA-1.7	16-019	MPS	Alternatives analysis
V006	CDV-SMA-2	16-021(c)	MPS	Alternative compliance
V008A	CDV-SMA-2.42	16-010(b)	MPS	Alternative compliance
V009A	CDV-SMA-2.51	16-010(i)	MPS	CoC
V013	CDV-SMA-7	15-008(d)	MPS	CoC
W006	W-SMA-5	16-001(e)	MPS	CoC
W006	W-SMA-5	16-003(f)	MPS	CoC
W006	W-SMA-5	16-026(b)	MPS	CoC
W006	W-SMA-5	16-026(c)	MPS	CoC
W006	W-SMA-5	16-026(d)	MPS	CoC
W006	W-SMA-5	16-026(e)	MPS	Alternative compliance
W011	W-SMA-8	16-016(g)	MPS	Alternatives analysis
W011	W-SMA-8	16-028(b)	MPS	Alternatives analysis
W012	W-SMA-8.7	13-001	MPS	CoC
W012	W-SMA-8.7	13-002	MPS	CoC
W012	W-SMA-8.7	16-004(a)	MPS	CoC
W012	W-SMA-8.7	16-026(j2)	MPS	CoC
W012	W-SMA-8.7	16-029(h)	MPS	CoC



**Table 4-6 (continued)**

Permitted Feature	SMA	Site	Site Priority	Corrective Action Planned
W012	W-SMA-8.7	16-035	MPS	CoC
W015	W-SMA-9.7	11-011(a)	MPS	CoC
W015	W-SMA-9.7	11-011(b)	MPS	CoC
A002	A-SMA-2	39-004(b)	MPS	Alternatives analysis
A002	A-SMA-2	39-004(e)	MPS	Alternatives analysis
A006	A-SMA-3	39-002(b)	MPS	Alternative compliance
A006	A-SMA-3	39-004(c)	MPS	Alternatives analysis
A009	A-SMA-6	33-004(k)	MPS	CoC
A009	A-SMA-6	33-007(a)	MPS	CoC
A009	A-SMA-6	33-010(a)	MPS	CoC
Q002A	CHQ-SMA-1.02	33-004(h)	MPS	CoC
Q002A	CHQ-SMA-1.02	33-008(c)	MPS	CoC
Q002A	CHQ-SMA-1.02	33-011(d)	MPS	CoC
Q002A	CHQ-SMA-1.02	33-015	MPS	CoC
Q003	CHQ-SMA-2	33-004(d)	MPS	CoC
Q003	CHQ-SMA-2	33-007(c)	MPS	CoC
Q003	CHQ-SMA-2	C-33-003	MPS	CoC
Q004	CHQ-SMA-3.05	33-010(f)	MPS	CoC
Q006	CHQ-SMA-4.1	33-016	MPS	CoC
Q007	CHQ-SMA-4.5	33-011(b)	MPS	CoC
Q009	CHQ-SMA-6	33-004(j)	MPS	Alternatives analysis
Q009	CHQ-SMA-6	33-006(a)	MPS	Alternatives analysis
Q009	CHQ-SMA-6	33-007(b)	MPS	Alternatives analysis
Q009	CHQ-SMA-6	33-010(c)	MPS	Alternatives analysis
Q009	CHQ-SMA-6	33-010(g)	MPS	Alternatives analysis
Q009	CHQ-SMA-6	33-010(h)	MPS	Alternatives analysis
Q009	CHQ-SMA-6	33-014	MPS	Alternatives analysis

<sup>a</sup> MPS = Moderate Priority Site.

<sup>b</sup> CoC = Eligible for certificate of completion.

<sup>c</sup> Alternatives analysis = Permittees will evaluate if corrective action can be obtained through Permit sections I.E.2(a) through (d).

<sup>d</sup> HPS = High Priority Site.

<sup>e</sup> Alternative compliance = Alternative compliance request at Site with a TAL exceedance that is not a significant industrial material.

<sup>f</sup> No-exposure = Corrective action is expected to be completed with a certification of no exposure per Permit section I.E.2(c).

**Table 6-1  
Individual Permit Rain Gage Network during 2013**

Rain Gage	Number of SMAs	Number of Sites
<b>LANL Meteorology Towers</b>		
RG-NCOM	3	3
RG-NCOM (Winter)	12	15
RG-TA-06	23	30
RG-TA-53	11	21
RG-TA-54	6	11
<b>LANL Seasonal Rain Gages</b>		
RG038	34	70
RG055.5	16	25
RG121.9	22	30
RG200.5	23	51
RG203	12	18
RG240	5	5
RG245.5	19	43
RG253	9	17
RG257	29	56
RG262.4	14	21
RG265	4	6
RG267.4	5	8
RG340	15	34

**Table 6-2  
Summary of Post-Storm Inspections**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
26-Jan-13	RG-NCOM	0.31	B002	B-SMA-1	04-Feb-13	Yes
			P001	ACID-SMA-1.05	04-Feb-13	Yes
			P002	ACID-SMA-2	04-Feb-13	Yes
			P002A	ACID-SMA-2.01	04-Feb-13	Yes
			P003	ACID-SMA-2.1	04-Feb-13	Yes
			P009	P-SMA-3.05	04-Feb-13	Yes
			R001	R-SMA-0.5	04-Feb-13	Yes
			R002	R-SMA-1	04-Feb-13	Yes
			R003	R-SMA-1.95	04-Feb-13	Yes
			R004	R-SMA-2.05	04-Feb-13	Yes
			R005	R-SMA-2.3	04-Feb-13	Yes
			R006	R-SMA-2.5	04-Feb-13	Yes
14-Jun-13	RG055.5	0.45	P001	ACID-SMA-1.05	20-Jun-13	Yes
			P002	ACID-SMA-2	20-Jun-13	Yes
			P002A	ACID-SMA-2.01	18-Jun-13	Yes
			P003	ACID-SMA-2.1	20-Jun-13	Yes
			B002	B-SMA-1	18-Jun-13	Yes
			L006	LA-SMA-2.1	18-Jun-13	Yes
			L007	LA-SMA-2.3	18-Jun-13	Yes
			L008	LA-SMA-3.1	18-Jun-13	Yes
			L009	LA-SMA-3.9	18-Jun-13	Yes
			L010	LA-SMA-4.1	18-Jun-13	Yes
			L011	LA-SMA-4.2	18-Jun-13	Yes
			L012	LA-SMA-5.01	18-Jun-13	Yes
			L012A	LA-SMA-5.02	18-Jun-13	Yes
			L013	LA-SMA-5.2	18-Jun-13	Yes
			L014	LA-SMA-5.35	18-Jun-13	Yes
P009	P-SMA-3.05	18-Jun-13	Yes			
14-Jun-13	RG-NCOM	0.49	R001	R-SMA-0.5	17-Jun-13	Yes
			R002	R-SMA-1	17-Jun-13	Yes
			R004	R-SMA-2.05	19-Jun-13	Yes
28-Jun-13	RG-TA-54	0.68	C010	CDB-SMA-4	11-Jul-13	Yes
			J023	PJ-SMA-16	02-Jul-13	Yes
			J024	PJ-SMA-17	11-Jul-13	Yes
			J026	PJ-SMA-18	11-Jul-13	Yes
			J025	PJ-SMA-19	11-Jul-13	Yes
J027	PJ-SMA-20	11-Jul-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
30-Jun-13	RG200.5	0.38	C001	CDB-SMA-0.15	03-Jul-13	Yes
			M012	M-SMA-10	11-Jul-13	Yes
			M012A	M-SMA-10.01	11-Jul-13	Yes
			M013	M-SMA-10.3	11-Jul-13	Yes
			M014	M-SMA-11.1	11-Jul-13	Yes
			M015	M-SMA-12	11-Jul-13	Yes
			M005	M-SMA-3.5	03-Jul-13	Yes
			M006	M-SMA-4	08-Jul-13	Yes
			M007	M-SMA-5	11-Jul-13	Yes
			M008	M-SMA-6	15-Jul-13	Yes
			M009	M-SMA-7	11-Jul-13	Yes
			M010	M-SMA-7.9	11-Jul-13	Yes
			M011	M-SMA-9.1	11-Jul-13	Yes
			T001	Pratt-SMA-1.05	10-Jul-13	Yes
			T002	T-SMA-1	08-Jul-13	Yes
			T003	T-SMA-2.5	03-Jul-13	Yes
			T004	T-SMA-2.85	09-Jul-13	Yes
			T005	T-SMA-3	09-Jul-13	Yes
			T006	T-SMA-4	09-Jul-13	Yes
			T007	T-SMA-5	09-Jul-13	Yes
T008	T-SMA-6.8	09-Jul-13	Yes			
T009	T-SMA-7	09-Jul-13	Yes			
T010	T-SMA-7.1	09-Jul-13	Yes			
30-Jun-13	RG203	0.31	M016	M-SMA-12.5	02-Jul-13	Yes
			M017	M-SMA-12.6	02-Jul-13	Yes
			M018	M-SMA-12.7	09-Jul-13	Yes
			M019	M-SMA-12.8	09-Jul-13	Yes
			M020	M-SMA-12.9	09-Jul-13	Yes
			M021	M-SMA-12.92	09-Jul-13	Yes
			M022	M-SMA-13	09-Jul-13	Yes
			S007	S-SMA-3.7	03-Jul-13	Yes
			S008	S-SMA-3.71	03-Jul-13	Yes
			S009	S-SMA-3.72	03-Jul-13	Yes
			S010	S-SMA-3.95	02-Jul-13	Yes
			S012	S-SMA-4.5	02-Jul-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
30-Jun-13	RG257	0.28	V006	CDV-SMA-2	03-Jul-13	Yes
			V007	CDV-SMA-2.3	11-Jul-13	Yes
			V008	CDV-SMA-2.41	11-Jul-13	Yes
			V008A	CDV-SMA-2.42	03-Jul-13	Yes
			V009	CDV-SMA-2.5	03-Jul-13	Yes
			V009A	CDV-SMA-2.51	03-Jul-13	Yes
			V010	CDV-SMA-3	02-Jul-13	Yes
			V011	CDV-SMA-4	02-Jul-13	Yes
			V012	CDV-SMA-6.01	02-Jul-13	Yes
			V012A	CDV-SMA-6.02	02-Jul-13	Yes
			V013	CDV-SMA-7	15-Jul-13	Yes
			J003	PJ-SMA-3.05	15-Jul-13	Yes
			J004	PJ-SMA-4.05	15-Jul-13	Yes
			W018	W-SMA-10	03-Jul-13	Yes
			W004	W-SMA-3.5	11-Jul-13	Yes
			W005	W-SMA-4.1	11-Jul-13	Yes
			W006	W-SMA-5	03-Jul-13	Yes
			W007	W-SMA-6	10-Jul-13	Yes
			W008	W-SMA-7	11-Jul-13	Yes
			W009	W-SMA-7.8	11-Jul-13	Yes
			W010	W-SMA-7.9	11-Jul-13	Yes
			W011	W-SMA-8	11-Jul-13	Yes
			W012	W-SMA-8.7	03-Jul-13	Yes
W012A	W-SMA-8.71	03-Jul-13	Yes			
W013	W-SMA-9.05	03-Jul-13	Yes			
W014	W-SMA-9.5	03-Jul-13	Yes			
W015	W-SMA-9.7	03-Jul-13	Yes			
W016	W-SMA-9.8	03-Jul-13	Yes			
W017	W-SMA-9.9	03-Jul-13	Yes			
30-Jun-13	RG-NCOM	0.29	R001	R-SMA-0.5	09-Jul-13	Yes
			R002	R-SMA-1	03-Jul-13	Yes
			R004	R-SMA-2.05	15-Jul-13	Yes
03-Jul-13	RG265	0.28	A003	A-SMA-2.5	10-Jul-13	Yes
			A004	A-SMA-2.7	10-Jul-13	Yes
			A005	A-SMA-2.8	10-Jul-13	Yes
			A006	A-SMA-3	10-Jul-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
03-Jul-13	RG340	0.37	A007	A-SMA-3.5	09-Jul-13	Yes
			A008	A-SMA-4	09-Jul-13	Yes
			A009	A-SMA-6	09-Jul-13	Yes
			Q001	CHQ-SMA-0.5	09-Jul-13	Yes
			Q002	CHQ-SMA-1.01	09-Jul-13	Yes
			Q002A	CHQ-SMA-1.02	09-Jul-13	Yes
			Q002B	CHQ-SMA-1.03	09-Jul-13	Yes
			Q003	CHQ-SMA-2	09-Jul-13	Yes
			Q004	CHQ-SMA-3.05	09-Jul-13	Yes
			Q005	CHQ-SMA-4	09-Jul-13	Yes
			Q006	CHQ-SMA-4.1	09-Jul-13	Yes
			Q007	CHQ-SMA-4.5	09-Jul-13	Yes
			Q008	CHQ-SMA-5.05	09-Jul-13	Yes
			Q009	CHQ-SMA-6	09-Jul-13	Yes
Q010	CHQ-SMA-7.1	09-Jul-13	Yes			
03-Jul-13	RG-TA-54	0.49	C010	CDB-SMA-4	11-Jul-13	Yes
			J023	PJ-SMA-16	15-Jul-13	Yes
			J024	PJ-SMA-17	11-Jul-13	Yes
			J026	PJ-SMA-18	11-Jul-13	Yes
			J025	PJ-SMA-19	11-Jul-13	Yes
			J027	PJ-SMA-20	11-Jul-13	Yes
05-Jul-13	RG262.4	0.34	H002	3M-SMA-0.4	09-Jul-13	Yes
			H003	3M-SMA-0.5	09-Jul-13	Yes
			V014	CDV-SMA-8	15-Jul-13	Yes
			V015	CDV-SMA-8.5	09-Jul-13	Yes
			V016	CDV-SMA-9.05	09-Jul-13	Yes
			I001	PT-SMA-0.5	09-Jul-13	Yes
			I002	PT-SMA-1	09-Jul-13	Yes
			I003	PT-SMA-1.7	10-Jul-13	Yes
			I004	PT-SMA-2	08-Jul-13	Yes
			I004A	PT-SMA-2.01	09-Jul-13	Yes
			W019	W-SMA-11.7	24-Jul-13	No
			W020	W-SMA-12.05	16-Jul-13	Yes
			W021	W-SMA-14.1	10-Jul-13	Yes
W022	W-SMA-15.1	16-Jul-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
05-Jul-13	RG267.4	0.3	A001	A-SMA-1.1	10-Jul-13	Yes
			A002	A-SMA-2	10-Jul-13	Yes
			F001	F-SMA-2	10-Jul-13	Yes
			I005	PT-SMA-3	15-Jul-13	Yes
			I007	PT-SMA-4.2	09-Jul-13	Yes
09-Jul-13	RG245.5	0.41	H004	3M-SMA-0.6	22-Jul-13	Yes
			H005	3M-SMA-2.6	22-Jul-13	Yes
			H006	3M-SMA-4	22-Jul-13	Yes
			C002	CDB-SMA-0.25	17-Jul-13	Yes
			C003	CDB-SMA-0.55	17-Jul-13	Yes
			C004	CDB-SMA-1	17-Jul-13	Yes
			C005	CDB-SMA-1.15	17-Jul-13	Yes
			C006	CDB-SMA-1.35	17-Jul-13	Yes
			C007	CDB-SMA-1.54	17-Jul-13	Yes
			C008	CDB-SMA-1.55	17-Jul-13	Yes
			C009	CDB-SMA-1.65	17-Jul-13	Yes
			J015	PJ-SMA-13	22-Jul-13	Yes
			J016	PJ-SMA-13.7	22-Jul-13	Yes
			J017	PJ-SMA-14	22-Jul-13	Yes
			J018	PJ-SMA-14.2	22-Jul-13	Yes
			J019	PJ-SMA-14.3	22-Jul-13	Yes
			J020	PJ-SMA-14.4	22-Jul-13	Yes
			J021	PJ-SMA-14.6	22-Jul-13	Yes
J022	PJ-SMA-14.8	22-Jul-13	Yes			
11-Jul-13	RG257	0.3	V006	CDV-SMA-2	16-Jul-13	Yes
			V007	CDV-SMA-2.3	16-Jul-13	Yes
			V008	CDV-SMA-2.41	17-Jul-13	Yes
			V008A	CDV-SMA-2.42	17-Jul-13	Yes
			V009	CDV-SMA-2.5	18-Jul-13	Yes
			V009A	CDV-SMA-2.51	16-Jul-13	Yes
			V010	CDV-SMA-3	15-Jul-13	Yes
			V011	CDV-SMA-4	15-Jul-13	Yes
			V012	CDV-SMA-6.01	18-Jul-13	Yes
			V012A	CDV-SMA-6.02	15-Jul-13	Yes
			V013	CDV-SMA-7	15-Jul-13	Yes
			J003	PJ-SMA-3.05	15-Jul-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
11-Jul-13	RG257	0.3	J004	PJ-SMA-4.05	15-Jul-13	Yes
			W018	W-SMA-10	18-Jul-13	Yes
			W004	W-SMA-3.5	17-Jul-13	Yes
			W005	W-SMA-4.1	17-Jul-13	Yes
			W006	W-SMA-5	24-Jul-13	Yes
			W007	W-SMA-6	17-Jul-13	Yes
			W008	W-SMA-7	17-Jul-13	Yes
			W009	W-SMA-7.8	17-Jul-13	Yes
			W010	W-SMA-7.9	17-Jul-13	Yes
			W011	W-SMA-8	17-Jul-13	Yes
			W012	W-SMA-8.7	17-Jul-13	Yes
			W012A	W-SMA-8.71	17-Jul-13	Yes
			W013	W-SMA-9.05	17-Jul-13	Yes
			W014	W-SMA-9.5	18-Jul-13	Yes
			W015	W-SMA-9.7	18-Jul-13	Yes
			W016	W-SMA-9.8	18-Jul-13	Yes
			W017	W-SMA-9.9	18-Jul-13	Yes
11-Jul-13	RG265	0.3	A003	A-SMA-2.5	16-Jul-13	Yes
			A004	A-SMA-2.7	16-Jul-13	Yes
			A005	A-SMA-2.8	16-Jul-13	Yes
			A006	A-SMA-3	16-Jul-13	Yes
11-Jul-13	RG340	0.29	A007	A-SMA-3.5	24-Jul-13	Yes
			A008	A-SMA-4	24-Jul-13	Yes
			A009	A-SMA-6	24-Jul-13	Yes
			Q001	CHQ-SMA-0.5	25-Jul-13	Yes
			Q002	CHQ-SMA-1.01	24-Jul-13	Yes
			Q002A	CHQ-SMA-1.02	24-Jul-13	Yes
			Q002B	CHQ-SMA-1.03	24-Jul-13	Yes
			Q003	CHQ-SMA-2	25-Jul-13	Yes
			Q004	CHQ-SMA-3.05	24-Jul-13	Yes
			Q005	CHQ-SMA-4	24-Jul-13	Yes
			Q006	CHQ-SMA-4.1	24-Jul-13	Yes
			Q007	CHQ-SMA-4.5	24-Jul-13	Yes
			Q008	CHQ-SMA-5.05	24-Jul-13	Yes
			Q009	CHQ-SMA-6	24-Jul-13	Yes
Q010	CHQ-SMA-7.1	24-Jul-13	Yes			



**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
11-Jul-13	RG-TA-06	0.25	E002	2M-SMA-1.42	23-Jul-13	Yes
			E003	2M-SMA-1.43	23-Jul-13	Yes
			E004	2M-SMA-1.44	23-Jul-13	Yes
			E005	2M-SMA-1.45	23-Jul-13	Yes
			E006	2M-SMA-1.5	15-Jul-13	Yes
			E007	2M-SMA-1.65	15-Jul-13	Yes
			E008	2M-SMA-1.67	15-Jul-13	Yes
			E009	2M-SMA-1.7	22-Jul-13	Yes
			E010	2M-SMA-1.8	22-Jul-13	Yes
			E015	2M-SMA-2.5	23-Jul-13	Yes
			E014	2M-SMA-3	23-Jul-13	Yes
			H001	3M-SMA-0.2	24-Jul-13	Yes
			M003	M-SMA-3	23-Jul-13	Yes
			M004	M-SMA-3.1	23-Jul-13	Yes
			J012	PJ-SMA-10	23-Jul-13	Yes
			J013	PJ-SMA-11	23-Jul-13	Yes
			J014	PJ-SMA-11.1	23-Jul-13	Yes
			J005	PJ-SMA-5	23-Jul-13	Yes
			J006	PJ-SMA-5.1	23-Jul-13	Yes
			J007	PJ-SMA-6	15-Jul-13	Yes
J008	PJ-SMA-7	15-Jul-13	Yes			
J009	PJ-SMA-8	23-Jul-13	Yes			
J010	PJ-SMA-9	24-Jul-13	Yes			
11-Jul-13	RG-TA-54	0.66	C010	CDB-SMA-4	24-Jul-13	Yes
			J023	PJ-SMA-16	15-Jul-13	Yes
			J024	PJ-SMA-17	24-Jul-13	Yes
			J026	PJ-SMA-18	24-Jul-13	Yes
			J025	PJ-SMA-19	24-Jul-13	Yes
			J027	PJ-SMA-20	24-Jul-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Jul-13	RG038	0.33	D001	DP-SMA-0.3	16-Jul-13	Yes
			D002	DP-SMA-0.4	16-Jul-13	Yes
			D003	DP-SMA-0.6	16-Jul-13	Yes
			D004	DP-SMA-1	16-Jul-13	Yes
			D005	DP-SMA-2	16-Jul-13	Yes
			D006	DP-SMA-2.35	16-Jul-13	Yes
			D007	DP-SMA-3	16-Jul-13	Yes
			L015	LA-SMA-5.31	23-Jul-13	Yes
			L016	LA-SMA-5.33	23-Jul-13	Yes
			L017	LA-SMA-5.361	23-Jul-13	Yes
			L017A	LA-SMA-5.362	23-Jul-13	Yes
			L018	LA-SMA-5.51	23-Jul-13	Yes
			L018A	LA-SMA-5.52	23-Jul-13	Yes
			L018B	LA-SMA-5.53	23-Jul-13	Yes
			L018C	LA-SMA-5.54	19-Jul-13	Yes
			L019	LA-SMA-5.91	17-Jul-13	Yes
			L019A	LA-SMA-5.92	17-Jul-13	Yes
			L020	LA-SMA-6.25	19-Jul-13	Yes
			L021	LA-SMA-6.27	22-Jul-13	Yes
			L022	LA-SMA-6.3	22-Jul-13	Yes
			L022A	LA-SMA-6.31	22-Jul-13	Yes
			L023	LA-SMA-6.32	17-Jul-13	Yes
			L024	LA-SMA-6.34	22-Jul-13	Yes
			L025	LA-SMA-6.36	22-Jul-13	Yes
			L026	LA-SMA-6.38	22-Jul-13	Yes
			L027	LA-SMA-6.395	22-Jul-13	Yes
			L028	LA-SMA-6.5	22-Jul-13	Yes
			P005	P-SMA-1	17-Jul-13	Yes
			P006	P-SMA-2	17-Jul-13	Yes
			P007	P-SMA-2.15	18-Jul-13	Yes
			P008	P-SMA-2.2	23-Jul-13	Yes
			R003	R-SMA-1.95	23-Sep-13	No
R005	R-SMA-2.3	23-Sep-13	No			
R006	R-SMA-2.5	23-Sep-13	No			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Jul-13	RG055.5	0.64	P001	ACID-SMA-1.05	23-Jul-13	Yes
			P002	ACID-SMA-2	23-Jul-13	Yes
			P002A	ACID-SMA-2.01	23-Jul-13	Yes
			P003	ACID-SMA-2.1	23-Jul-13	Yes
			B002	B-SMA-1	24-Jul-13	Yes
			L006	LA-SMA-2.1	17-Jul-13	Yes
			L007	LA-SMA-2.3	23-Jul-13	Yes
			L008	LA-SMA-3.1	23-Jul-13	Yes
			L009	LA-SMA-3.9	23-Jul-13	Yes
			L010	LA-SMA-4.1	23-Jul-13	Yes
			L011	LA-SMA-4.2	18-Jul-13	Yes
			L012	LA-SMA-5.01	18-Jul-13	Yes
			L012A	LA-SMA-5.02	23-Jul-13	Yes
			L013	LA-SMA-5.2	17-Jul-13	Yes
			L014	LA-SMA-5.35	23-Jul-13	Yes
			P009	P-SMA-3.05	24-Jul-13	Yes
12-Jul-13	RG121.9	0.63	E001	2M-SMA-1	25-Jul-13	Yes
			E011	2M-SMA-1.9	25-Jul-13	Yes
			E012	2M-SMA-2	25-Jul-13	Yes
			E013	2M-SMA-2.2	25-Jul-13	Yes
			L001	LA-SMA-0.85	24-Jul-13	Yes
			L002	LA-SMA-0.9	23-Jul-13	Yes
			L003	LA-SMA-1	23-Jul-13	Yes
			L004	LA-SMA-1.1	24-Jul-13	Yes
			L005	LA-SMA-1.25	24-Jul-13	Yes
			M001	M-SMA-1	25-Jul-13	Yes
			M002	M-SMA-1.2	25-Jul-13	Yes
			M002A	M-SMA-1.21	25-Jul-13	Yes
			M002B	M-SMA-1.22	25-Jul-13	Yes
			S001	S-SMA-0.25	24-Jul-13	Yes
			S002	S-SMA-1.1	24-Jul-13	Yes
			S003	S-SMA-2	24-Jul-13	Yes
			S003A	S-SMA-2.01	25-Jul-13	Yes
			S004	S-SMA-2.8	25-Jul-13	Yes
			S005	S-SMA-3.51	25-Jul-13	Yes
			S005A	S-SMA-3.52	25-Jul-13	Yes
S005B	S-SMA-3.53	25-Jul-13	Yes			
			S006	S-SMA-3.6	25-Jul-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Jul-13	RG200.5	0.86	C001	CDB-SMA-0.15	23-Jul-13	Yes
			M012	M-SMA-10	23-Jul-13	Yes
			M012A	M-SMA-10.01	23-Jul-13	Yes
			M013	M-SMA-10.3	23-Jul-13	Yes
			M014	M-SMA-11.1	23-Jul-13	Yes
			M015	M-SMA-12	23-Jul-13	Yes
			M005	M-SMA-3.5	23-Jul-13	Yes
			M006	M-SMA-4	23-Jul-13	Yes
			M007	M-SMA-5	24-Jul-13	Yes
			M008	M-SMA-6	15-Jul-13	Yes
			M009	M-SMA-7	23-Jul-13	Yes
			M010	M-SMA-7.9	23-Jul-13	Yes
			M011	M-SMA-9.1	23-Jul-13	Yes
			T001	Pratt-SMA-1.05	16-Jul-13	Yes
			T002	T-SMA-1	23-Jul-13	Yes
			T003	T-SMA-2.5	23-Jul-13	Yes
			T004	T-SMA-2.85	23-Jul-13	Yes
			T005	T-SMA-3	23-Jul-13	Yes
			T006	T-SMA-4	23-Jul-13	Yes
			T007	T-SMA-5	23-Jul-13	Yes
T008	T-SMA-6.8	16-Jul-13	Yes			
T009	T-SMA-7	16-Jul-13	Yes			
T010	T-SMA-7.1	16-Jul-13	Yes			
12-Jul-13	RG240	0.33	J001	PJ-SMA-1.05	23-Jul-13	Yes
			J028	STRM-SMA-1.05	23-Jul-13	Yes
			J029	STRM-SMA-1.5	23-Jul-13	Yes
			J030	STRM-SMA-4.2	23-Jul-13	Yes
			J031	STRM-SMA-5.05	23-Jul-13	Yes
12-Jul-13	RG253	0.28	V001	CDV-SMA-1.2	16-Jul-13	Yes
			V002	CDV-SMA-1.3	16-Jul-13	Yes
			V003	CDV-SMA-1.4	24-Jul-13	Yes
			V004	CDV-SMA-1.45	16-Jul-13	Yes
			V005	CDV-SMA-1.7	16-Jul-13	Yes
			J002	PJ-SMA-2	24-Jul-13	Yes
			W001	W-SMA-1	18-Jul-13	Yes
			W002	W-SMA-1.5	24-Jul-13	Yes
			W003	W-SMA-2.05	18-Jul-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Jul-13	RG257	0.72	V006	CDV-SMA-2	16-Jul-13	Yes
			V007	CDV-SMA-2.3	16-Jul-13	Yes
			V008	CDV-SMA-2.41	17-Jul-13	Yes
			V008A	CDV-SMA-2.42	17-Jul-13	Yes
			V009	CDV-SMA-2.5	18-Jul-13	Yes
			V009A	CDV-SMA-2.51	16-Jul-13	Yes
			V010	CDV-SMA-3	15-Jul-13	Yes
			V011	CDV-SMA-4	15-Jul-13	Yes
			V012	CDV-SMA-6.01	18-Jul-13	Yes
			V012A	CDV-SMA-6.02	15-Jul-13	Yes
			V013	CDV-SMA-7	15-Jul-13	Yes
			J003	PJ-SMA-3.05	15-Jul-13	Yes
			J004	PJ-SMA-4.05	15-Jul-13	Yes
			W018	W-SMA-10	18-Jul-13	Yes
			W004	W-SMA-3.5	17-Jul-13	Yes
			W005	W-SMA-4.1	17-Jul-13	Yes
			W006	W-SMA-5	24-Jul-13	Yes
			W007	W-SMA-6	17-Jul-13	Yes
			W008	W-SMA-7	17-Jul-13	Yes
			W009	W-SMA-7.8	17-Jul-13	Yes
			W010	W-SMA-7.9	17-Jul-13	Yes
			W011	W-SMA-8	17-Jul-13	Yes
			W012	W-SMA-8.7	17-Jul-13	Yes
			W012A	W-SMA-8.71	17-Jul-13	Yes
			W013	W-SMA-9.05	17-Jul-13	Yes
			W014	W-SMA-9.5	18-Jul-13	Yes
W015	W-SMA-9.7	18-Jul-13	Yes			
W016	W-SMA-9.8	18-Jul-13	Yes			
W017	W-SMA-9.9	18-Jul-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Jul-13	RG262.4	0.4	H002	3M-SMA-0.4	22-Jul-13	Yes
			H003	3M-SMA-0.5	22-Jul-13	Yes
			V014	CDV-SMA-8	15-Jul-13	Yes
			V015	CDV-SMA-8.5	24-Jul-13	Yes
			V016	CDV-SMA-9.05	22-Jul-13	Yes
			I001	PT-SMA-0.5	22-Jul-13	Yes
			I002	PT-SMA-1	22-Jul-13	Yes
			I003	PT-SMA-1.7	22-Jul-13	Yes
			I004	PT-SMA-2	22-Jul-13	Yes
			I004A	PT-SMA-2.01	22-Jul-13	Yes
			W019	W-SMA-11.7	24-Jul-13	Yes
			W020	W-SMA-12.05	16-Jul-13	Yes
			W021	W-SMA-14.1	22-Jul-13	Yes
			W022	W-SMA-15.1	16-Jul-13	Yes
12-Jul-13	RG267.4	0.35	A001	A-SMA-1.1	16-Jul-13	Yes
			A002	A-SMA-2	16-Jul-13	Yes
			F001	F-SMA-2	22-Jul-13	Yes
			I005	PT-SMA-3	15-Jul-13	Yes
			I007	PT-SMA-4.2	22-Jul-13	Yes
12-Jul-13	RG-NCOM	0.5	R001	R-SMA-0.5	24-Jul-13	Yes
			R002	R-SMA-1	23-Jul-13	Yes
			R004	R-SMA-2.05	15-Jul-13	Yes
12-Jul-13	RG-TA-06	1.13	E002	2M-SMA-1.42	23-Jul-13	Yes
			E003	2M-SMA-1.43	23-Jul-13	Yes
			E004	2M-SMA-1.44	23-Jul-13	Yes
			E005	2M-SMA-1.45	23-Jul-13	Yes
			E006	2M-SMA-1.5	15-Jul-13	Yes
			E007	2M-SMA-1.65	15-Jul-13	Yes
			E008	2M-SMA-1.67	15-Jul-13	Yes
			E009	2M-SMA-1.7	22-Jul-13	Yes
			E010	2M-SMA-1.8	22-Jul-13	Yes
			E015	2M-SMA-2.5	23-Jul-13	Yes
			E014	2M-SMA-3	23-Jul-13	Yes
			H001	3M-SMA-0.2	24-Jul-13	Yes
			M003	M-SMA-3	23-Jul-13	Yes
			M004	M-SMA-3.1	23-Jul-13	Yes
J012	PJ-SMA-10	23-Jul-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Jul-13	RG-TA-06	1.13	J013	PJ-SMA-11	23-Jul-13	Yes
			J014	PJ-SMA-11.1	23-Jul-13	Yes
			J005	PJ-SMA-5	23-Jul-13	Yes
			J006	PJ-SMA-5.1	23-Jul-13	Yes
			J007	PJ-SMA-6	15-Jul-13	Yes
			J008	PJ-SMA-7	15-Jul-13	Yes
			J009	PJ-SMA-8	23-Jul-13	Yes
			J010	PJ-SMA-9	24-Jul-13	Yes
13-Jul-13	RG240	0.29	J001	PJ-SMA-1.05	23-Jul-13	Yes
			J028	STRM-SMA-1.05	23-Jul-13	Yes
			J029	STRM-SMA-1.5	23-Jul-13	Yes
			J030	STRM-SMA-4.2	23-Jul-13	Yes
			J031	STRM-SMA-5.05	23-Jul-13	Yes
13-Jul-13	RG253	0.57	V001	CDV-SMA-1.2	16-Jul-13	Yes
			V002	CDV-SMA-1.3	16-Jul-13	Yes
			V003	CDV-SMA-1.4	24-Jul-13	Yes
			V004	CDV-SMA-1.45	16-Jul-13	Yes
			V005	CDV-SMA-1.7	16-Jul-13	Yes
			J002	PJ-SMA-2	24-Jul-13	Yes
			W001	W-SMA-1	18-Jul-13	Yes
			W002	W-SMA-1.5	24-Jul-13	Yes
			W003	W-SMA-2.05	18-Jul-13	Yes
14-Jul-13	RG262.4	0.27	H002	3M-SMA-0.4	22-Jul-13	Yes
			H003	3M-SMA-0.5	22-Jul-13	Yes
			V014	CDV-SMA-8	15-Jul-13	Yes
			V015	CDV-SMA-8.5	24-Jul-13	Yes
			V016	CDV-SMA-9.05	22-Jul-13	Yes
			I001	PT-SMA-0.5	22-Jul-13	Yes
			I002	PT-SMA-1	22-Jul-13	Yes
			I003	PT-SMA-1.7	22-Jul-13	Yes
			I004	PT-SMA-2	22-Jul-13	Yes
			I004A	PT-SMA-2.01	22-Jul-13	Yes
			W019	W-SMA-11.7	24-Jul-13	Yes
			W020	W-SMA-12.05	16-Jul-13	Yes
			W021	W-SMA-14.1	22-Jul-13	Yes
W022	W-SMA-15.1	16-Jul-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
14-Jul-13	RG-TA-54	0.44	C010	CDB-SMA-4	24-Jul-13	Yes
			J023	PJ-SMA-16	15-Jul-13	Yes
			J024	PJ-SMA-17	24-Jul-13	Yes
			J026	PJ-SMA-18	24-Jul-13	Yes
			J025	PJ-SMA-19	24-Jul-13	Yes
			J027	PJ-SMA-20	24-Jul-13	Yes
22-Jul-13	RG257	0.25	V006	CDV-SMA-2	02-Aug-13	Yes
			V007	CDV-SMA-2.3	01-Aug-13	Yes
			V008	CDV-SMA-2.41	02-Aug-13	Yes
			V008A	CDV-SMA-2.42	01-Aug-13	Yes
			V009	CDV-SMA-2.5	01-Aug-13	Yes
			V009A	CDV-SMA-2.51	01-Aug-13	Yes
			V010	CDV-SMA-3	24-Jul-13	Yes
			V011	CDV-SMA-4	24-Jul-13	Yes
			V012	CDV-SMA-6.01	24-Jul-13	Yes
			V012A	CDV-SMA-6.02	24-Jul-13	Yes
			V013	CDV-SMA-7	30-Jul-13	Yes
			J003	PJ-SMA-3.05	24-Jul-13	Yes
			J004	PJ-SMA-4.05	24-Jul-13	Yes
			W018	W-SMA-10	31-Jul-13	Yes
			W004	W-SMA-3.5	30-Jul-13	Yes
			W005	W-SMA-4.1	30-Jul-13	Yes
			W006	W-SMA-5	24-Jul-13	Yes
			W007	W-SMA-6	30-Jul-13	Yes
			W008	W-SMA-7	30-Jul-13	Yes
			W009	W-SMA-7.8	30-Jul-13	Yes
			W010	W-SMA-7.9	30-Jul-13	Yes
			W011	W-SMA-8	30-Jul-13	Yes
			W012	W-SMA-8.7	01-Aug-13	Yes
			W012A	W-SMA-8.71	01-Aug-13	Yes
W013	W-SMA-9.05	30-Jul-13	Yes			
W014	W-SMA-9.5	31-Jul-13	Yes			
W015	W-SMA-9.7	31-Jul-13	Yes			
W016	W-SMA-9.8	31-Jul-13	Yes			
W017	W-SMA-9.9	31-Jul-13	Yes			



**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
25-Jul-13	RG245.5	0.48	H004	3M-SMA-0.6	29-Jul-13	Yes
			H005	3M-SMA-2.6	05-Aug-13	Yes
			H006	3M-SMA-4	05-Aug-13	Yes
			C002	CDB-SMA-0.25	06-Aug-13	Yes
			C003	CDB-SMA-0.55	06-Aug-13	Yes
			C004	CDB-SMA-1	02-Aug-13	Yes
			C005	CDB-SMA-1.15	06-Aug-13	Yes
			C006	CDB-SMA-1.35	06-Aug-13	Yes
			C007	CDB-SMA-1.54	06-Aug-13	Yes
			C008	CDB-SMA-1.55	02-Aug-13	Yes
			C009	CDB-SMA-1.65	02-Aug-13	Yes
			J015	PJ-SMA-13	05-Aug-13	Yes
			J016	PJ-SMA-13.7	05-Aug-13	Yes
			J017	PJ-SMA-14	05-Aug-13	Yes
			J018	PJ-SMA-14.2	05-Aug-13	Yes
			J019	PJ-SMA-14.3	05-Aug-13	Yes
			J020	PJ-SMA-14.4	05-Aug-13	Yes
			J021	PJ-SMA-14.6	05-Aug-13	Yes
J022	PJ-SMA-14.8	05-Aug-13	Yes			
25-Jul-13	RG262.4	0.46	H002	3M-SMA-0.4	05-Aug-13	Yes
			H003	3M-SMA-0.5	29-Jul-13	Yes
			V014	CDV-SMA-8	06-Aug-13	Yes
			V015	CDV-SMA-8.5	06-Aug-13	Yes
			V016	CDV-SMA-9.05	05-Aug-13	Yes
			I001	PT-SMA-0.5	29-Jul-13	Yes
			I002	PT-SMA-1	30-Jul-13	Yes
			I003	PT-SMA-1.7	08-Aug-13	Yes
			I004	PT-SMA-2	05-Aug-13	Yes
			I004A	PT-SMA-2.01	05-Aug-13	Yes
			W019	W-SMA-11.7	08-Aug-13	Yes
			W020	W-SMA-12.05	07-Aug-13	Yes
			W021	W-SMA-14.1	05-Aug-13	Yes
W022	W-SMA-15.1	07-Aug-13	Yes			
25-Jul-13	RG265	0.66	A003	A-SMA-2.5	08-Aug-13	Yes
			A004	A-SMA-2.7	08-Aug-13	Yes
			A005	A-SMA-2.8	08-Aug-13	Yes
			A006	A-SMA-3	08-Aug-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
25-Jul-13	RG267.4	0.45	A001	A-SMA-1.1	08-Aug-13	Yes
			A002	A-SMA-2	08-Aug-13	Yes
			F001	F-SMA-2	05-Aug-13	Yes
			I005	PT-SMA-3	05-Aug-13	Yes
			I007	PT-SMA-4.2	05-Aug-13	Yes
25-Jul-13	RG340	0.68	A007	A-SMA-3.5	07-Aug-13	Yes
			A008	A-SMA-4	06-Aug-13	Yes
			A009	A-SMA-6	06-Aug-13	Yes
			Q001	CHQ-SMA-0.5	06-Aug-13	Yes
			Q002	CHQ-SMA-1.01	07-Aug-13	Yes
			Q002A	CHQ-SMA-1.02	06-Aug-13	Yes
			Q002B	CHQ-SMA-1.03	06-Aug-13	Yes
			Q003	CHQ-SMA-2	06-Aug-13	Yes
			Q004	CHQ-SMA-3.05	06-Aug-13	Yes
			Q005	CHQ-SMA-4	06-Aug-13	Yes
			Q006	CHQ-SMA-4.1	06-Aug-13	Yes
			Q007	CHQ-SMA-4.5	06-Aug-13	Yes
			Q008	CHQ-SMA-5.05	06-Aug-13	Yes
			Q009	CHQ-SMA-6	06-Aug-13	Yes
Q010	CHQ-SMA-7.1	06-Aug-13	Yes			
25-Jul-13	RG-TA-53	0.25	B001	B-SMA-0.5	05-Aug-13	Yes
			D008	DP-SMA-4	29-Jul-13	Yes
			L030	LA-SMA-10.11	01-Aug-13	Yes
			L030A	LA-SMA-10.12	01-Aug-13	Yes
			L029	LA-SMA-9	29-Jul-13	Yes
			P004	P-SMA-0.3	05-Aug-13	Yes
			S011	S-SMA-4.1	01-Aug-13	Yes
			S013	S-SMA-5	01-Aug-13	Yes
			S014	S-SMA-5.2	01-Aug-13	Yes
			S015	S-SMA-5.5	01-Aug-13	Yes
			S016	S-SMA-6	07-Aug-13	Yes
25-Jul-13	RG-TA-54	0.3	C010	CDB-SMA-4	08-Aug-13	Yes
			J023	PJ-SMA-16	08-Aug-13	Yes
			J024	PJ-SMA-17	08-Aug-13	Yes
			J026	PJ-SMA-18	08-Aug-13	Yes
			J025	PJ-SMA-19	08-Aug-13	Yes
J027	PJ-SMA-20	08-Aug-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
26-Jul-13	RG200.5	0.32	C001	CDB-SMA-0.15	02-Aug-13	Yes
			M012	M-SMA-10	07-Aug-13	Yes
			M012A	M-SMA-10.01	07-Aug-13	Yes
			M013	M-SMA-10.3	07-Aug-13	Yes
			M014	M-SMA-11.1	07-Aug-13	Yes
			M015	M-SMA-12	07-Aug-13	Yes
			M005	M-SMA-3.5	02-Aug-13	Yes
			M006	M-SMA-4	02-Aug-13	Yes
			M007	M-SMA-5	07-Aug-13	Yes
			M008	M-SMA-6	07-Aug-13	Yes
			M009	M-SMA-7	07-Aug-13	Yes
			M010	M-SMA-7.9	07-Aug-13	Yes
			M011	M-SMA-9.1	07-Aug-13	Yes
			T001	Pratt-SMA-1.05	29-Jul-13	Yes
			T002	T-SMA-1	06-Aug-13	Yes
			T003	T-SMA-2.5	02-Aug-13	Yes
			T004	T-SMA-2.85	02-Aug-13	Yes
			T005	T-SMA-3	06-Aug-13	Yes
			T006	T-SMA-4	06-Aug-13	Yes
			T007	T-SMA-5	06-Aug-13	Yes
T008	T-SMA-6.8	29-Jul-13	Yes			
T009	T-SMA-7	29-Jul-13	Yes			
T010	T-SMA-7.1	29-Jul-13	Yes			
26-Jul-13	RG203	0.41	M016	M-SMA-12.5	29-Jul-13	Yes
			M017	M-SMA-12.6	29-Jul-13	Yes
			M018	M-SMA-12.7	29-Jul-13	Yes
			M019	M-SMA-12.8	29-Jul-13	Yes
			M020	M-SMA-12.9	29-Jul-13	Yes
			M021	M-SMA-12.92	29-Jul-13	Yes
			M022	M-SMA-13	29-Jul-13	Yes
			S007	S-SMA-3.7	01-Aug-13	Yes
			S008	S-SMA-3.71	01-Aug-13	Yes
			S009	S-SMA-3.72	01-Aug-13	Yes
			S010	S-SMA-3.95	01-Aug-13	Yes
			S012	S-SMA-4.5	01-Aug-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
26-Jul-13	RG245.5	0.26	H004	3M-SMA-0.6	29-Jul-13	Yes
			H005	3M-SMA-2.6	05-Aug-13	Yes
			H006	3M-SMA-4	05-Aug-13	Yes
			C002	CDB-SMA-0.25	06-Aug-13	Yes
			C003	CDB-SMA-0.55	06-Aug-13	Yes
			C004	CDB-SMA-1	02-Aug-13	Yes
			C005	CDB-SMA-1.15	06-Aug-13	Yes
			C006	CDB-SMA-1.35	06-Aug-13	Yes
			C007	CDB-SMA-1.54	06-Aug-13	Yes
			C008	CDB-SMA-1.55	02-Aug-13	Yes
			C009	CDB-SMA-1.65	02-Aug-13	Yes
			J015	PJ-SMA-13	05-Aug-13	Yes
			J016	PJ-SMA-13.7	05-Aug-13	Yes
			J017	PJ-SMA-14	05-Aug-13	Yes
			J018	PJ-SMA-14.2	05-Aug-13	Yes
			J019	PJ-SMA-14.3	05-Aug-13	Yes
			J020	PJ-SMA-14.4	05-Aug-13	Yes
			J021	PJ-SMA-14.6	05-Aug-13	Yes
J022	PJ-SMA-14.8	05-Aug-13	Yes			
26-Jul-13	RG253	0.33	V001	CDV-SMA-1.2	07-Aug-13	Yes
			V002	CDV-SMA-1.3	07-Aug-13	Yes
			V003	CDV-SMA-1.4	07-Aug-13	Yes
			V004	CDV-SMA-1.45	07-Aug-13	Yes
			V005	CDV-SMA-1.7	07-Aug-13	Yes
			J002	PJ-SMA-2	31-Jul-13	Yes
			W001	W-SMA-1	07-Aug-13	Yes
			W002	W-SMA-1.5	07-Aug-13	Yes
			W003	W-SMA-2.05	07-Aug-13	Yes
26-Jul-13	RG265	0.34	A003	A-SMA-2.5	08-Aug-13	Yes
			A004	A-SMA-2.7	08-Aug-13	Yes
			A005	A-SMA-2.8	08-Aug-13	Yes
			A006	A-SMA-3	08-Aug-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
26-Jul-13	RG340	0.3	A007	A-SMA-3.5	07-Aug-13	Yes
			A008	A-SMA-4	06-Aug-13	Yes
			A009	A-SMA-6	06-Aug-13	Yes
			Q001	CHQ-SMA-0.5	06-Aug-13	Yes
			Q002	CHQ-SMA-1.01	07-Aug-13	Yes
			Q002A	CHQ-SMA-1.02	06-Aug-13	Yes
			Q002B	CHQ-SMA-1.03	06-Aug-13	Yes
			Q003	CHQ-SMA-2	06-Aug-13	Yes
			Q004	CHQ-SMA-3.05	06-Aug-13	Yes
			Q005	CHQ-SMA-4	06-Aug-13	Yes
			Q006	CHQ-SMA-4.1	06-Aug-13	Yes
			Q007	CHQ-SMA-4.5	06-Aug-13	Yes
			Q008	CHQ-SMA-5.05	06-Aug-13	Yes
Q009	CHQ-SMA-6	06-Aug-13	Yes			
Q010	CHQ-SMA-7.1	06-Aug-13	Yes			
26-Jul-13	RG-TA-54	0.25	C010	CDB-SMA-4	08-Aug-13	Yes
			J023	PJ-SMA-16	08-Aug-13	Yes
			J024	PJ-SMA-17	08-Aug-13	Yes
			J026	PJ-SMA-18	08-Aug-13	Yes
			J025	PJ-SMA-19	08-Aug-13	Yes
			J027	PJ-SMA-20	08-Aug-13	Yes
04-Aug-13	RG240	0.25	J001	PJ-SMA-1.05	14-Aug-13	Yes
			J028	STRM-SMA-1.05	15-Aug-13	Yes
			J029	STRM-SMA-1.5	15-Aug-13	Yes
			J030	STRM-SMA-4.2	15-Aug-13	Yes
			J031	STRM-SMA-5.05	14-Aug-13	Yes
04-Aug-13	RG262.4	0.26	H002	3M-SMA-0.4	05-Aug-13	Yes
			H003	3M-SMA-0.5	14-Aug-13	Yes
			V014	CDV-SMA-8	06-Aug-13	Yes
			V015	CDV-SMA-8.5	06-Aug-13	Yes
			V016	CDV-SMA-9.05	05-Aug-13	Yes
			I001	PT-SMA-0.5	14-Aug-13	Yes
			I002	PT-SMA-1	14-Aug-13	Yes
			I003	PT-SMA-1.7	08-Aug-13	Yes
			I004	PT-SMA-2	05-Aug-13	Yes
			I004A	PT-SMA-2.01	05-Aug-13	Yes
			W019	W-SMA-11.7	08-Aug-13	Yes
			W020	W-SMA-12.05	07-Aug-13	Yes
			W021	W-SMA-14.1	05-Aug-13	Yes
W022	W-SMA-15.1	07-Aug-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
05-Aug-13	RG055.5	0.35	P001	ACID-SMA-1.05	19-Aug-13	Yes
			P002	ACID-SMA-2	12-Aug-13	Yes
			P002A	ACID-SMA-2.01	12-Aug-13	Yes
			P003	ACID-SMA-2.1	12-Aug-13	Yes
			B002	B-SMA-1	07-Aug-13	Yes
			L006	LA-SMA-2.1	14-Aug-13	Yes
			L007	LA-SMA-2.3	14-Aug-13	Yes
			L008	LA-SMA-3.1	14-Aug-13	Yes
			L009	LA-SMA-3.9	14-Aug-13	Yes
			L010	LA-SMA-4.1	14-Aug-13	Yes
			L011	LA-SMA-4.2	14-Aug-13	Yes
			L012	LA-SMA-5.01	14-Aug-13	Yes
			L012A	LA-SMA-5.02	14-Aug-13	Yes
			L013	LA-SMA-5.2	12-Aug-13	Yes
			L014	LA-SMA-5.35	12-Aug-13	Yes
P009	P-SMA-3.05	12-Aug-13	Yes			
05-Aug-13	RG253	0.5	V001	CDV-SMA-1.2	07-Aug-13	Yes
			V002	CDV-SMA-1.3	07-Aug-13	Yes
			V003	CDV-SMA-1.4	07-Aug-13	Yes
			V004	CDV-SMA-1.45	07-Aug-13	Yes
			V005	CDV-SMA-1.7	07-Aug-13	Yes
			J002	PJ-SMA-2	15-Aug-13	Yes
			W001	W-SMA-1	07-Aug-13	Yes
			W002	W-SMA-1.5	07-Aug-13	Yes
			W003	W-SMA-2.05	07-Aug-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
05-Aug-13	RG257	0.25	V006	CDV-SMA-2	16-Aug-13	Yes
			V007	CDV-SMA-2.3	20-Aug-13	Yes
			V008	CDV-SMA-2.41	20-Aug-13	Yes
			V008A	CDV-SMA-2.42	20-Aug-13	Yes
			V009	CDV-SMA-2.5	20-Aug-13	Yes
			V009A	CDV-SMA-2.51	20-Aug-13	Yes
			V010	CDV-SMA-3	15-Aug-13	Yes
			V011	CDV-SMA-4	15-Aug-13	Yes
			V012	CDV-SMA-6.01	15-Aug-13	Yes
			V012A	CDV-SMA-6.02	15-Aug-13	Yes
			V013	CDV-SMA-7	14-Aug-13	Yes
			J003	PJ-SMA-3.05	15-Aug-13	Yes
			J004	PJ-SMA-4.05	15-Aug-13	Yes
			W018	W-SMA-10	16-Aug-13	Yes
			W004	W-SMA-3.5	20-Aug-13	Yes
			W005	W-SMA-4.1	20-Aug-13	Yes
			W006	W-SMA-5	20-Aug-13	Yes
			W007	W-SMA-6	20-Aug-13	Yes
			W008	W-SMA-7	20-Aug-13	Yes
			W009	W-SMA-7.8	20-Aug-13	Yes
			W010	W-SMA-7.9	20-Aug-13	Yes
			W011	W-SMA-8	20-Aug-13	Yes
			W012	W-SMA-8.7	20-Aug-13	Yes
			W012A	W-SMA-8.71	20-Aug-13	Yes
W013	W-SMA-9.05	20-Aug-13	Yes			
W014	W-SMA-9.5	16-Aug-13	Yes			
W015	W-SMA-9.7	16-Aug-13	Yes			
W016	W-SMA-9.8	16-Aug-13	Yes			
W017	W-SMA-9.9	16-Aug-13	Yes			
05-Aug-13	RG-TA-54	0.56	C010	CDB-SMA-4	08-Aug-13	Yes
			J023	PJ-SMA-16	08-Aug-13	Yes
			J024	PJ-SMA-17	08-Aug-13	Yes
			J026	PJ-SMA-18	08-Aug-13	Yes
			J025	PJ-SMA-19	08-Aug-13	Yes
			J027	PJ-SMA-20	08-Aug-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
08-Aug-13	RG-TA-54	0.77	C010	CDB-SMA-4	22-Aug-13	Yes
			J023	PJ-SMA-16	22-Aug-13	Yes
			J024	PJ-SMA-17	22-Aug-13	Yes
			J026	PJ-SMA-18	22-Aug-13	Yes
			J025	PJ-SMA-19	22-Aug-13	Yes
			J027	PJ-SMA-20	22-Aug-13	Yes
20-Aug-13	RG240	0.58	J001	PJ-SMA-1.05	22-Aug-13	Yes
			J028	STRM-SMA-1.05	23-Aug-13	Yes
			J029	STRM-SMA-1.5	23-Aug-13	Yes
			J030	STRM-SMA-4.2	23-Aug-13	Yes
			J031	STRM-SMA-5.05	23-Aug-13	Yes
20-Aug-13	RG-NCOM	0.41	R001	R-SMA-0.5	22-Aug-13	Yes
			R002	R-SMA-1	22-Aug-13	Yes
			R004	R-SMA-2.05	26-Aug-13	Yes
01-Sep-13	RG240	0.3	J001	PJ-SMA-1.05	17-Sep-13	No
			J028	STRM-SMA-1.05	11-Sep-13	Yes
			J029	STRM-SMA-1.5	11-Sep-13	Yes
			J030	STRM-SMA-4.2	17-Sep-13	No
			J031	STRM-SMA-5.05	17-Sep-13	No
01-Sep-13	RG340	0.31	A007	A-SMA-3.5	17-Sep-13	No
			A008	A-SMA-4	17-Sep-13	No
			A009	A-SMA-6	16-Sep-13	Yes
			Q001	CHQ-SMA-0.5	17-Sep-13	No
			Q002	CHQ-SMA-1.01	17-Sep-13	No
			Q002A	CHQ-SMA-1.02	17-Sep-13	No
			Q002B	CHQ-SMA-1.03	17-Sep-13	No
			Q003	CHQ-SMA-2	17-Sep-13	No
			Q004	CHQ-SMA-3.05	17-Sep-13	No
			Q005	CHQ-SMA-4	16-Sep-13	Yes
			Q006	CHQ-SMA-4.1	16-Sep-13	Yes
			Q007	CHQ-SMA-4.5	17-Sep-13	No
			Q008	CHQ-SMA-5.05	16-Sep-13	Yes
Q009	CHQ-SMA-6	16-Sep-13	Yes			
Q010	CHQ-SMA-7.1	16-Sep-13	Yes			



**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
10-Sep-13	RG203	0.29	M016	M-SMA-12.5	24-Sep-13	Yes
			M017	M-SMA-12.6	23-Sep-13	Yes
			M018	M-SMA-12.7	24-Sep-13	Yes
			M019	M-SMA-12.8	24-Sep-13	Yes
			M020	M-SMA-12.9	24-Sep-13	Yes
			M021	M-SMA-12.92	23-Sep-13	Yes
			M022	M-SMA-13	24-Sep-13	Yes
			S007	S-SMA-3.7	24-Sep-13	Yes
			S008	S-SMA-3.71	24-Sep-13	Yes
			S009	S-SMA-3.72	24-Sep-13	Yes
			S010	S-SMA-3.95	24-Sep-13	Yes
			S012	S-SMA-4.5	24-Sep-13	Yes
12-Sep-13	RG055.5	0.28	P001	ACID-SMA-1.05	25-Sep-13	Yes
			P002	ACID-SMA-2	25-Sep-13	Yes
			P002A	ACID-SMA-2.01	25-Sep-13	Yes
			P003	ACID-SMA-2.1	25-Sep-13	Yes
			B002	B-SMA-1	23-Sep-13	Yes
			L006	LA-SMA-2.1	25-Sep-13	Yes
			L007	LA-SMA-2.3	25-Sep-13	Yes
			L008	LA-SMA-3.1	25-Sep-13	Yes
			L009	LA-SMA-3.9	25-Sep-13	Yes
			L010	LA-SMA-4.1	25-Sep-13	Yes
			L011	LA-SMA-4.2	25-Sep-13	Yes
			L012	LA-SMA-5.01	25-Sep-13	Yes
			L012A	LA-SMA-5.02	25-Sep-13	Yes
			L013	LA-SMA-5.2	25-Sep-13	Yes
			L014	LA-SMA-5.35	25-Sep-13	Yes
P009	P-SMA-3.05	26-Sep-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Sep-13	RG121.9	0.35	E001	2M-SMA-1	24-Sep-13	Yes
			E011	2M-SMA-1.9	24-Sep-13	Yes
			E012	2M-SMA-2	24-Sep-13	Yes
			E013	2M-SMA-2.2	24-Sep-13	Yes
			L001	LA-SMA-0.85	24-Sep-13	Yes
			L002	LA-SMA-0.9	25-Sep-13	Yes
			L003	LA-SMA-1	26-Sep-13	Yes
			L004	LA-SMA-1.1	24-Sep-13	Yes
			L005	LA-SMA-1.25	24-Sep-13	Yes
			M001	M-SMA-1	23-Sep-13	Yes
			M002	M-SMA-1.2	23-Sep-13	Yes
			M002A	M-SMA-1.21	23-Sep-13	Yes
			M002B	M-SMA-1.22	17-Sep-13	Yes
			S001	S-SMA-0.25	24-Sep-13	Yes
			S002	S-SMA-1.1	24-Sep-13	Yes
			S003	S-SMA-2	24-Sep-13	Yes
			S003A	S-SMA-2.01	24-Sep-13	Yes
			S004	S-SMA-2.8	24-Sep-13	Yes
			S005	S-SMA-3.51	24-Sep-13	Yes
			S005A	S-SMA-3.52	24-Sep-13	Yes
S005B	S-SMA-3.53	24-Sep-13	Yes			
S006	S-SMA-3.6	24-Sep-13	Yes			
12-Sep-13	RG203	0.27	M016	M-SMA-12.5	24-Sep-13	Yes
			M017	M-SMA-12.6	23-Sep-13	Yes
			M018	M-SMA-12.7	24-Sep-13	Yes
			M019	M-SMA-12.8	24-Sep-13	Yes
			M020	M-SMA-12.9	24-Sep-13	Yes
			M021	M-SMA-12.92	23-Sep-13	Yes
			M022	M-SMA-13	24-Sep-13	Yes
			S007	S-SMA-3.7	24-Sep-13	Yes
			S008	S-SMA-3.71	24-Sep-13	Yes
			S009	S-SMA-3.72	24-Sep-13	Yes
			S010	S-SMA-3.95	24-Sep-13	Yes
			S012	S-SMA-4.5	24-Sep-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Sep-13	RG245.5	0.3	H004	3M-SMA-0.6	20-Sep-13	Yes
			H005	3M-SMA-2.6	19-Sep-13	Yes
			H006	3M-SMA-4	19-Sep-13	Yes
			C002	CDB-SMA-0.25	26-Sep-13	Yes
			C003	CDB-SMA-0.55	26-Sep-13	Yes
			C004	CDB-SMA-1	26-Sep-13	Yes
			C005	CDB-SMA-1.15	26-Sep-13	Yes
			C006	CDB-SMA-1.35	26-Sep-13	Yes
			C007	CDB-SMA-1.54	26-Sep-13	Yes
			C008	CDB-SMA-1.55	24-Sep-13	Yes
			C009	CDB-SMA-1.65	24-Sep-13	Yes
			J015	PJ-SMA-13	25-Sep-13	Yes
			J016	PJ-SMA-13.7	25-Sep-13	Yes
			J017	PJ-SMA-14	25-Sep-13	Yes
			J018	PJ-SMA-14.2	25-Sep-13	Yes
			J019	PJ-SMA-14.3	25-Sep-13	Yes
			J020	PJ-SMA-14.4	18-Sep-13	Yes
			J021	PJ-SMA-14.6	18-Sep-13	Yes
			J022	PJ-SMA-14.8	25-Sep-13	Yes
12-Sep-13	RG253	0.28	V001	CDV-SMA-1.2	20-Sep-13	Yes
			V002	CDV-SMA-1.3	20-Sep-13	Yes
			V003	CDV-SMA-1.4	24-Sep-13	Yes
			V004	CDV-SMA-1.45	19-Sep-13	Yes
			V005	CDV-SMA-1.7	24-Sep-13	Yes
			J002	PJ-SMA-2	23-Sep-13	Yes
			W001	W-SMA-1	19-Sep-13	Yes
			W002	W-SMA-1.5	19-Sep-13	Yes
			W003	W-SMA-2.05	19-Sep-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Sep-13	RG257	0.28	V006	CDV-SMA-2	24-Sep-13	Yes
			V007	CDV-SMA-2.3	19-Sep-13	Yes
			V008	CDV-SMA-2.41	20-Sep-13	Yes
			V008A	CDV-SMA-2.42	20-Sep-13	Yes
			V009	CDV-SMA-2.5	24-Sep-13	Yes
			V009A	CDV-SMA-2.51	24-Sep-13	Yes
			V010	CDV-SMA-3	24-Sep-13	Yes
			V011	CDV-SMA-4	24-Sep-13	Yes
			V012	CDV-SMA-6.01	24-Sep-13	Yes
			V012A	CDV-SMA-6.02	24-Sep-13	Yes
			V013	CDV-SMA-7	23-Sep-13	Yes
			J003	PJ-SMA-3.05	23-Sep-13	Yes
			J004	PJ-SMA-4.05	23-Sep-13	Yes
			W018	W-SMA-10	20-Sep-13	Yes
			W004	W-SMA-3.5	19-Sep-13	Yes
			W005	W-SMA-4.1	24-Sep-13	Yes
			W006	W-SMA-5	24-Sep-13	Yes
			W007	W-SMA-6	25-Sep-13	Yes
			W008	W-SMA-7	19-Sep-13	Yes
			W009	W-SMA-7.8	19-Sep-13	Yes
			W010	W-SMA-7.9	25-Sep-13	Yes
			W011	W-SMA-8	25-Sep-13	Yes
			W012	W-SMA-8.7	25-Sep-13	Yes
			W012A	W-SMA-8.71	19-Sep-13	Yes
			W013	W-SMA-9.05	25-Sep-13	Yes
			W014	W-SMA-9.5	20-Sep-13	Yes
W015	W-SMA-9.7	20-Sep-13	Yes			
W016	W-SMA-9.8	20-Sep-13	Yes			
W017	W-SMA-9.9	20-Sep-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Sep-13	RG262.4	0.27	H002	3M-SMA-0.4	24-Sep-13	Yes
			H003	3M-SMA-0.5	20-Sep-13	Yes
			V014	CDV-SMA-8	24-Sep-13	Yes
			V015	CDV-SMA-8.5	25-Sep-13	Yes
			V016	CDV-SMA-9.05	25-Sep-13	Yes
			I001	PT-SMA-0.5	19-Sep-13	Yes
			I002	PT-SMA-1	18-Sep-13	Yes
			I003	PT-SMA-1.7	24-Sep-13	Yes
			I004	PT-SMA-2	20-Sep-13	Yes
			I004A	PT-SMA-2.01	20-Sep-13	Yes
			W019	W-SMA-11.7	20-Sep-13	Yes
			W020	W-SMA-12.05	19-Sep-13	Yes
			W021	W-SMA-14.1	24-Sep-13	Yes
			W022	W-SMA-15.1	19-Sep-13	Yes
12-Sep-13	RG265	0.65	A003	A-SMA-2.5	23-Sep-13	Yes
			A004	A-SMA-2.7	23-Sep-13	Yes
			A005	A-SMA-2.8	23-Sep-13	Yes
			A006	A-SMA-3	23-Sep-13	Yes
12-Sep-13	RG267.4	0.43	A001	A-SMA-1.1	23-Sep-13	Yes
			A002	A-SMA-2	23-Sep-13	Yes
			F001	F-SMA-2	19-Sep-13	Yes
			I005	PT-SMA-3	20-Sep-13	Yes
			I007	PT-SMA-4.2	19-Sep-13	Yes
12-Sep-13	RG340	0.49	A007	A-SMA-3.5	17-Sep-13	Yes
			A008	A-SMA-4	17-Sep-13	Yes
			A009	A-SMA-6	16-Sep-13	Yes
			Q001	CHQ-SMA-0.5	17-Sep-13	Yes
			Q002	CHQ-SMA-1.01	17-Sep-13	Yes
			Q002A	CHQ-SMA-1.02	17-Sep-13	Yes
			Q002B	CHQ-SMA-1.03	17-Sep-13	Yes
			Q003	CHQ-SMA-2	17-Sep-13	Yes
			Q004	CHQ-SMA-3.05	17-Sep-13	Yes
			Q005	CHQ-SMA-4	16-Sep-13	Yes
			Q006	CHQ-SMA-4.1	16-Sep-13	Yes
			Q007	CHQ-SMA-4.5	17-Sep-13	Yes
			Q008	CHQ-SMA-5.05	16-Sep-13	Yes
Q009	CHQ-SMA-6	16-Sep-13	Yes			
Q010	CHQ-SMA-7.1	16-Sep-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Sep-13	RG-NCOM	0.47	R001	R-SMA-0.5	25-Sep-13	Yes
			R002	R-SMA-1	23-Sep-13	Yes
			R004	R-SMA-2.05	23-Sep-13	Yes
12-Sep-13	RG-TA-06	0.31	E002	2M-SMA-1.42	20-Sep-13	Yes
			E003	2M-SMA-1.43	20-Sep-13	Yes
			E004	2M-SMA-1.44	23-Sep-13	Yes
			E005	2M-SMA-1.45	20-Sep-13	Yes
			E006	2M-SMA-1.5	19-Sep-13	Yes
			E007	2M-SMA-1.65	25-Sep-13	Yes
			E008	2M-SMA-1.67	24-Sep-13	Yes
			E009	2M-SMA-1.7	19-Sep-13	Yes
			E010	2M-SMA-1.8	24-Sep-13	Yes
			E015	2M-SMA-2.5	25-Sep-13	Yes
			E014	2M-SMA-3	25-Sep-13	Yes
			H001	3M-SMA-0.2	23-Sep-13	Yes
			M003	M-SMA-3	24-Sep-13	Yes
			M004	M-SMA-3.1	24-Sep-13	Yes
			J012	PJ-SMA-10	19-Sep-13	Yes
			J013	PJ-SMA-11	19-Sep-13	Yes
			J014	PJ-SMA-11.1	19-Sep-13	Yes
			J005	PJ-SMA-5	20-Sep-13	Yes
			J006	PJ-SMA-5.1	20-Sep-13	Yes
			J007	PJ-SMA-6	25-Sep-13	Yes
J008	PJ-SMA-7	19-Sep-13	Yes			
J009	PJ-SMA-8	19-Sep-13	Yes			
J010	PJ-SMA-9	19-Sep-13	Yes			
12-Sep-13	RG-TA-53	0.33	B001	B-SMA-0.5	26-Sep-13	Yes
			D008	DP-SMA-4	25-Sep-13	Yes
			L030	LA-SMA-10.11	24-Sep-13	Yes
			L030A	LA-SMA-10.12	24-Sep-13	Yes
			L029	LA-SMA-9	24-Sep-13	Yes
			P004	P-SMA-0.3	26-Sep-13	Yes
			S011	S-SMA-4.1	24-Sep-13	Yes
			S013	S-SMA-5	24-Sep-13	Yes
			S014	S-SMA-5.2	24-Sep-13	Yes
			S015	S-SMA-5.5	24-Sep-13	Yes
			S016	S-SMA-6	26-Sep-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
12-Sep-13	RG-TA-54	0.71	C010	CDB-SMA-4	26-Sep-13	Yes
			J023	PJ-SMA-16	26-Sep-13	Yes
			J024	PJ-SMA-17	26-Sep-13	Yes
			J026	PJ-SMA-18	26-Sep-13	Yes
			J025	PJ-SMA-19	26-Sep-13	Yes
			J027	PJ-SMA-20	26-Sep-13	Yes
13-Sep-13	RG038	0.71	D001	DP-SMA-0.3	25-Sep-13	Yes
			D002	DP-SMA-0.4	25-Sep-13	Yes
			D003	DP-SMA-0.6	25-Sep-13	Yes
			D004	DP-SMA-1	25-Sep-13	Yes
			D005	DP-SMA-2	25-Sep-13	Yes
			D006	DP-SMA-2.35	25-Sep-13	Yes
			D007	DP-SMA-3	25-Sep-13	Yes
			L015	LA-SMA-5.31	25-Sep-13	Yes
			L016	LA-SMA-5.33	25-Sep-13	Yes
			L017	LA-SMA-5.361	20-Sep-13	Yes
			L017A	LA-SMA-5.362	20-Sep-13	Yes
			L018	LA-SMA-5.51	25-Sep-13	Yes
			L018A	LA-SMA-5.52	25-Sep-13	Yes
			L018B	LA-SMA-5.53	25-Sep-13	Yes
			L018C	LA-SMA-5.54	25-Sep-13	Yes
			L019	LA-SMA-5.91	23-Sep-13	Yes
			L019A	LA-SMA-5.92	23-Sep-13	Yes
			L020	LA-SMA-6.25	23-Sep-13	Yes
			L021	LA-SMA-6.27	23-Sep-13	Yes
			L022	LA-SMA-6.3	23-Sep-13	Yes
			L022A	LA-SMA-6.31	23-Sep-13	Yes
			L023	LA-SMA-6.32	23-Sep-13	Yes
			L024	LA-SMA-6.34	23-Sep-13	Yes
			L025	LA-SMA-6.36	23-Sep-13	Yes
			L026	LA-SMA-6.38	23-Sep-13	Yes
			L027	LA-SMA-6.395	23-Sep-13	Yes
			L028	LA-SMA-6.5	23-Sep-13	Yes
			P005	P-SMA-1	19-Sep-13	Yes
			P006	P-SMA-2	25-Sep-13	Yes
			P007	P-SMA-2.15	25-Sep-13	Yes
P008	P-SMA-2.2	26-Sep-13	Yes			
R003	R-SMA-1.95	23-Sep-13	Yes			
R005	R-SMA-2.3	23-Sep-13	Yes			
R006	R-SMA-2.5	23-Sep-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
13-Sep-13	RG055.5	0.96	P001	ACID-SMA-1.05	25-Sep-13	Yes
			P002	ACID-SMA-2	25-Sep-13	Yes
			P002A	ACID-SMA-2.01	25-Sep-13	Yes
			P003	ACID-SMA-2.1	25-Sep-13	Yes
			B002	B-SMA-1	23-Sep-13	Yes
			L006	LA-SMA-2.1	25-Sep-13	Yes
			L007	LA-SMA-2.3	25-Sep-13	Yes
			L008	LA-SMA-3.1	25-Sep-13	Yes
			L009	LA-SMA-3.9	25-Sep-13	Yes
			L010	LA-SMA-4.1	25-Sep-13	Yes
			L011	LA-SMA-4.2	25-Sep-13	Yes
			L012	LA-SMA-5.01	25-Sep-13	Yes
			L012A	LA-SMA-5.02	25-Sep-13	Yes
			L013	LA-SMA-5.2	25-Sep-13	Yes
			L014	LA-SMA-5.35	25-Sep-13	Yes
13-Sep-13	RG121.9	1.11	P009	P-SMA-3.05	26-Sep-13	Yes
			E001	2M-SMA-1	24-Sep-13	Yes
			E011	2M-SMA-1.9	24-Sep-13	Yes
			E012	2M-SMA-2	24-Sep-13	Yes
			E013	2M-SMA-2.2	24-Sep-13	Yes
			L001	LA-SMA-0.85	24-Sep-13	Yes
			L002	LA-SMA-0.9	25-Sep-13	Yes
			L003	LA-SMA-1	26-Sep-13	Yes
			L004	LA-SMA-1.1	24-Sep-13	Yes
			L005	LA-SMA-1.25	24-Sep-13	Yes
			M001	M-SMA-1	23-Sep-13	Yes
			M002	M-SMA-1.2	23-Sep-13	Yes
			M002A	M-SMA-1.21	23-Sep-13	Yes
			M002B	M-SMA-1.22	17-Sep-13	Yes
			S001	S-SMA-0.25	24-Sep-13	Yes
			S002	S-SMA-1.1	24-Sep-13	Yes
			S003	S-SMA-2	24-Sep-13	Yes
			S003A	S-SMA-2.01	24-Sep-13	Yes
			S004	S-SMA-2.8	24-Sep-13	Yes
			S005	S-SMA-3.51	24-Sep-13	Yes
S005A	S-SMA-3.52	24-Sep-13	Yes			
S005B	S-SMA-3.53	24-Sep-13	Yes			
S006	S-SMA-3.6	24-Sep-13	Yes			



**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
13-Sep-13	RG200.5	1.01	C001	CDB-SMA-0.15	25-Sep-13	Yes
			M012	M-SMA-10	25-Sep-13	Yes
			M012A	M-SMA-10.01	25-Sep-13	Yes
			M013	M-SMA-10.3	25-Sep-13	Yes
			M014	M-SMA-11.1	25-Sep-13	Yes
			M015	M-SMA-12	25-Sep-13	Yes
			M005	M-SMA-3.5	24-Sep-13	Yes
			M006	M-SMA-4	24-Sep-13	Yes
			M007	M-SMA-5	25-Sep-13	Yes
			M008	M-SMA-6	25-Sep-13	Yes
			M009	M-SMA-7	25-Sep-13	Yes
			M010	M-SMA-7.9	25-Sep-13	Yes
			M011	M-SMA-9.1	25-Sep-13	Yes
			T001	Pratt-SMA-1.05	24-Sep-13	Yes
			T002	T-SMA-1	25-Sep-13	Yes
			T003	T-SMA-2.5	24-Sep-13	Yes
			T004	T-SMA-2.85	24-Sep-13	Yes
			T005	T-SMA-3	25-Sep-13	Yes
			T006	T-SMA-4	25-Sep-13	Yes
			T007	T-SMA-5	25-Sep-13	Yes
T008	T-SMA-6.8	24-Sep-13	Yes			
T009	T-SMA-7	24-Sep-13	Yes			
T010	T-SMA-7.1	24-Sep-13	Yes			
13-Sep-13	RG203	0.79	M016	M-SMA-12.5	24-Sep-13	Yes
			M017	M-SMA-12.6	23-Sep-13	Yes
			M018	M-SMA-12.7	24-Sep-13	Yes
			M019	M-SMA-12.8	24-Sep-13	Yes
			M020	M-SMA-12.9	24-Sep-13	Yes
			M021	M-SMA-12.92	23-Sep-13	Yes
			M022	M-SMA-13	24-Sep-13	Yes
			S007	S-SMA-3.7	24-Sep-13	Yes
			S008	S-SMA-3.71	24-Sep-13	Yes
			S009	S-SMA-3.72	24-Sep-13	Yes
			S010	S-SMA-3.95	24-Sep-13	Yes
			S012	S-SMA-4.5	24-Sep-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
13-Sep-13	RG240	0.97	J001	PJ-SMA-1.05	17-Sep-13	Yes
			J028	STRM-SMA-1.05	25-Sep-13	Yes
			J029	STRM-SMA-1.5	25-Sep-13	Yes
			J030	STRM-SMA-4.2	17-Sep-13	Yes
			J031	STRM-SMA-5.05	17-Sep-13	Yes
13-Sep-13	RG245.5	0.69	H004	3M-SMA-0.6	20-Sep-13	Yes
			H005	3M-SMA-2.6	19-Sep-13	Yes
			H006	3M-SMA-4	19-Sep-13	Yes
			C002	CDB-SMA-0.25	26-Sep-13	Yes
			C003	CDB-SMA-0.55	26-Sep-13	Yes
			C004	CDB-SMA-1	26-Sep-13	Yes
			C005	CDB-SMA-1.15	26-Sep-13	Yes
			C006	CDB-SMA-1.35	26-Sep-13	Yes
			C007	CDB-SMA-1.54	26-Sep-13	Yes
			C008	CDB-SMA-1.55	24-Sep-13	Yes
			C009	CDB-SMA-1.65	24-Sep-13	Yes
			J015	PJ-SMA-13	25-Sep-13	Yes
			J016	PJ-SMA-13.7	25-Sep-13	Yes
			J017	PJ-SMA-14	25-Sep-13	Yes
			J018	PJ-SMA-14.2	25-Sep-13	Yes
			J019	PJ-SMA-14.3	25-Sep-13	Yes
			J020	PJ-SMA-14.4	18-Sep-13	Yes
			J021	PJ-SMA-14.6	18-Sep-13	Yes
J022	PJ-SMA-14.8	25-Sep-13	Yes			
13-Sep-13	RG253	1.19	V001	CDV-SMA-1.2	20-Sep-13	Yes
			V002	CDV-SMA-1.3	20-Sep-13	Yes
			V003	CDV-SMA-1.4	24-Sep-13	Yes
			V004	CDV-SMA-1.45	19-Sep-13	Yes
			V005	CDV-SMA-1.7	24-Sep-13	Yes
			J002	PJ-SMA-2	23-Sep-13	Yes
			W001	W-SMA-1	19-Sep-13	Yes
			W002	W-SMA-1.5	19-Sep-13	Yes
			W003	W-SMA-2.05	19-Sep-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
13-Sep-13	RG257	1.33	V006	CDV-SMA-2	24-Sep-13	Yes
			V007	CDV-SMA-2.3	19-Sep-13	Yes
			V008	CDV-SMA-2.41	20-Sep-13	Yes
			V008A	CDV-SMA-2.42	20-Sep-13	Yes
			V009	CDV-SMA-2.5	24-Sep-13	Yes
			V009A	CDV-SMA-2.51	24-Sep-13	Yes
			V010	CDV-SMA-3	24-Sep-13	Yes
			V011	CDV-SMA-4	24-Sep-13	Yes
			V012	CDV-SMA-6.01	24-Sep-13	Yes
			V012A	CDV-SMA-6.02	24-Sep-13	Yes
			V013	CDV-SMA-7	23-Sep-13	Yes
			J003	PJ-SMA-3.05	23-Sep-13	Yes
			J004	PJ-SMA-4.05	23-Sep-13	Yes
			W018	W-SMA-10	20-Sep-13	Yes
			W004	W-SMA-3.5	19-Sep-13	Yes
			W005	W-SMA-4.1	24-Sep-13	Yes
			W006	W-SMA-5	24-Sep-13	Yes
			W007	W-SMA-6	25-Sep-13	Yes
			W008	W-SMA-7	19-Sep-13	Yes
			W009	W-SMA-7.8	19-Sep-13	Yes
			W010	W-SMA-7.9	25-Sep-13	Yes
			W011	W-SMA-8	25-Sep-13	Yes
			W012	W-SMA-8.7	25-Sep-13	Yes
			W012A	W-SMA-8.71	19-Sep-13	Yes
			W013	W-SMA-9.05	25-Sep-13	Yes
			W014	W-SMA-9.5	20-Sep-13	Yes
W015	W-SMA-9.7	20-Sep-13	Yes			
W016	W-SMA-9.8	20-Sep-13	Yes			
W017	W-SMA-9.9	20-Sep-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
13-Sep-13	RG262.4	0.98	H002	3M-SMA-0.4	24-Sep-13	Yes
			H003	3M-SMA-0.5	20-Sep-13	Yes
			V014	CDV-SMA-8	24-Sep-13	Yes
			V015	CDV-SMA-8.5	25-Sep-13	Yes
			V016	CDV-SMA-9.05	25-Sep-13	Yes
			I001	PT-SMA-0.5	19-Sep-13	Yes
			I002	PT-SMA-1	18-Sep-13	Yes
			I003	PT-SMA-1.7	24-Sep-13	Yes
			I004	PT-SMA-2	20-Sep-13	Yes
			I004A	PT-SMA-2.01	20-Sep-13	Yes
			W019	W-SMA-11.7	20-Sep-13	Yes
			W020	W-SMA-12.05	19-Sep-13	Yes
			W021	W-SMA-14.1	24-Sep-13	Yes
			W022	W-SMA-15.1	19-Sep-13	Yes
13-Sep-13	RG265	0.38	A003	A-SMA-2.5	23-Sep-13	Yes
			A004	A-SMA-2.7	23-Sep-13	Yes
			A005	A-SMA-2.8	23-Sep-13	Yes
			A006	A-SMA-3	23-Sep-13	Yes
13-Sep-13	RG267.4	0.57	A001	A-SMA-1.1	23-Sep-13	Yes
			A002	A-SMA-2	23-Sep-13	Yes
			F001	F-SMA-2	19-Sep-13	Yes
			I005	PT-SMA-3	20-Sep-13	Yes
			I007	PT-SMA-4.2	19-Sep-13	Yes
13-Sep-13	RG340	0.46	A007	A-SMA-3.5	17-Sep-13	Yes
			A008	A-SMA-4	17-Sep-13	Yes
			A009	A-SMA-6	16-Sep-13	Yes
			Q001	CHQ-SMA-0.5	17-Sep-13	Yes
			Q002	CHQ-SMA-1.01	17-Sep-13	Yes
			Q002A	CHQ-SMA-1.02	17-Sep-13	Yes
			Q002B	CHQ-SMA-1.03	17-Sep-13	Yes
			Q003	CHQ-SMA-2	17-Sep-13	Yes
			Q004	CHQ-SMA-3.05	17-Sep-13	Yes
			Q005	CHQ-SMA-4	16-Sep-13	Yes
			Q006	CHQ-SMA-4.1	16-Sep-13	Yes
			Q007	CHQ-SMA-4.5	17-Sep-13	Yes
			Q008	CHQ-SMA-5.05	16-Sep-13	Yes
Q009	CHQ-SMA-6	16-Sep-13	Yes			
Q010	CHQ-SMA-7.1	16-Sep-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
13-Sep-13	RG-NCOM	0.81	R001	R-SMA-0.5	25-Sep-13	Yes
			R002	R-SMA-1	23-Sep-13	Yes
			R004	R-SMA-2.05	23-Sep-13	Yes
13-Sep-13	RG-TA-06	1.39	E002	2M-SMA-1.42	20-Sep-13	Yes
			E003	2M-SMA-1.43	20-Sep-13	Yes
			E004	2M-SMA-1.44	23-Sep-13	Yes
			E005	2M-SMA-1.45	20-Sep-13	Yes
			E006	2M-SMA-1.5	19-Sep-13	Yes
			E007	2M-SMA-1.65	25-Sep-13	Yes
			E008	2M-SMA-1.67	24-Sep-13	Yes
			E009	2M-SMA-1.7	19-Sep-13	Yes
			E010	2M-SMA-1.8	24-Sep-13	Yes
			E015	2M-SMA-2.5	25-Sep-13	Yes
			E014	2M-SMA-3	25-Sep-13	Yes
			H001	3M-SMA-0.2	23-Sep-13	Yes
			M003	M-SMA-3	24-Sep-13	Yes
			M004	M-SMA-3.1	24-Sep-13	Yes
			J012	PJ-SMA-10	19-Sep-13	Yes
			J013	PJ-SMA-11	19-Sep-13	Yes
			J014	PJ-SMA-11.1	19-Sep-13	Yes
			J005	PJ-SMA-5	20-Sep-13	Yes
			J006	PJ-SMA-5.1	20-Sep-13	Yes
			J007	PJ-SMA-6	25-Sep-13	Yes
J008	PJ-SMA-7	19-Sep-13	Yes			
J009	PJ-SMA-8	19-Sep-13	Yes			
J010	PJ-SMA-9	19-Sep-13	Yes			
13-Sep-13	RG-TA-53	0.63	B001	B-SMA-0.5	26-Sep-13	Yes
			D008	DP-SMA-4	25-Sep-13	Yes
			L030	LA-SMA-10.11	24-Sep-13	Yes
			L030A	LA-SMA-10.12	24-Sep-13	Yes
			L029	LA-SMA-9	24-Sep-13	Yes
			P004	P-SMA-0.3	26-Sep-13	Yes
			S011	S-SMA-4.1	24-Sep-13	Yes
			S013	S-SMA-5	24-Sep-13	Yes
			S014	S-SMA-5.2	24-Sep-13	Yes
			S015	S-SMA-5.5	24-Sep-13	Yes
			S016	S-SMA-6	26-Sep-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
13-Sep-13	RG-TA-54	0.42	C010	CDB-SMA-4	26-Sep-13	Yes
			J023	PJ-SMA-16	26-Sep-13	Yes
			J024	PJ-SMA-17	26-Sep-13	Yes
			J026	PJ-SMA-18	26-Sep-13	Yes
			J025	PJ-SMA-19	26-Sep-13	Yes
			J027	PJ-SMA-20	26-Sep-13	Yes
14-Sep-13	RG262.4	0.33	H002	3M-SMA-0.4	24-Sep-13	Yes
			H003	3M-SMA-0.5	20-Sep-13	Yes
			V014	CDV-SMA-8	24-Sep-13	Yes
			V015	CDV-SMA-8.5	25-Sep-13	Yes
			V016	CDV-SMA-9.05	25-Sep-13	Yes
			I001	PT-SMA-0.5	19-Sep-13	Yes
			I002	PT-SMA-1	18-Sep-13	Yes
			I003	PT-SMA-1.7	24-Sep-13	Yes
			I004	PT-SMA-2	20-Sep-13	Yes
			I004A	PT-SMA-2.01	20-Sep-13	Yes
			W019	W-SMA-11.7	20-Sep-13	Yes
			W020	W-SMA-12.05	19-Sep-13	Yes
			W021	W-SMA-14.1	24-Sep-13	Yes
			W022	W-SMA-15.1	19-Sep-13	Yes
14-Sep-13	RG265	0.32	A003	A-SMA-2.5	23-Sep-13	Yes
			A004	A-SMA-2.7	23-Sep-13	Yes
			A005	A-SMA-2.8	23-Sep-13	Yes
			A006	A-SMA-3	23-Sep-13	Yes
14-Sep-13	RG267.4	0.25	A001	A-SMA-1.1	23-Sep-13	Yes
			A002	A-SMA-2	23-Sep-13	Yes
			F001	F-SMA-2	19-Sep-13	Yes
			I005	PT-SMA-3	20-Sep-13	Yes
			I007	PT-SMA-4.2	19-Sep-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
14-Sep-13	RG340	0.63	A007	A-SMA-3.5	17-Sep-13	Yes
			A008	A-SMA-4	17-Sep-13	Yes
			A009	A-SMA-6	16-Sep-13	Yes
			Q001	CHQ-SMA-0.5	17-Sep-13	Yes
			Q002	CHQ-SMA-1.01	17-Sep-13	Yes
			Q002A	CHQ-SMA-1.02	17-Sep-13	Yes
			Q002B	CHQ-SMA-1.03	17-Sep-13	Yes
			Q003	CHQ-SMA-2	17-Sep-13	Yes
			Q004	CHQ-SMA-3.05	17-Sep-13	Yes
			Q005	CHQ-SMA-4	16-Sep-13	Yes
			Q006	CHQ-SMA-4.1	16-Sep-13	Yes
			Q007	CHQ-SMA-4.5	17-Sep-13	Yes
			Q008	CHQ-SMA-5.05	16-Sep-13	Yes
			Q009	CHQ-SMA-6	16-Sep-13	Yes
Q010	CHQ-SMA-7.1	16-Sep-13	Yes			
17-Sep-13	RG200.5	0.26	C001	CDB-SMA-0.15	25-Sep-13	Yes
			M012	M-SMA-10	25-Sep-13	Yes
			M012A	M-SMA-10.01	25-Sep-13	Yes
			M013	M-SMA-10.3	25-Sep-13	Yes
			M014	M-SMA-11.1	25-Sep-13	Yes
			M015	M-SMA-12	25-Sep-13	Yes
			M005	M-SMA-3.5	24-Sep-13	Yes
			M006	M-SMA-4	24-Sep-13	Yes
			M007	M-SMA-5	25-Sep-13	Yes
			M008	M-SMA-6	25-Sep-13	Yes
			M009	M-SMA-7	25-Sep-13	Yes
			M010	M-SMA-7.9	25-Sep-13	Yes
			M011	M-SMA-9.1	25-Sep-13	Yes
			T001	Pratt-SMA-1.05	24-Sep-13	Yes
			T002	T-SMA-1	25-Sep-13	Yes
			T003	T-SMA-2.5	24-Sep-13	Yes
			T004	T-SMA-2.85	24-Sep-13	Yes
			T005	T-SMA-3	25-Sep-13	Yes
			T006	T-SMA-4	25-Sep-13	Yes
			T007	T-SMA-5	25-Sep-13	Yes
T008	T-SMA-6.8	24-Sep-13	Yes			
T009	T-SMA-7	24-Sep-13	Yes			
T010	T-SMA-7.1	24-Sep-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
17-Sep-13	RG253	0.35	V001	CDV-SMA-1.2	20-Sep-13	Yes
			V002	CDV-SMA-1.3	20-Sep-13	Yes
			V003	CDV-SMA-1.4	24-Sep-13	Yes
			V004	CDV-SMA-1.45	19-Sep-13	Yes
			V005	CDV-SMA-1.7	24-Sep-13	Yes
			J002	PJ-SMA-2	23-Sep-13	Yes
			W001	W-SMA-1	19-Sep-13	Yes
			W002	W-SMA-1.5	19-Sep-13	Yes
			W003	W-SMA-2.05	19-Sep-13	Yes
17-Sep-13	RG257	0.34	V006	CDV-SMA-2	24-Sep-13	Yes
			V007	CDV-SMA-2.3	19-Sep-13	Yes
			V008	CDV-SMA-2.41	20-Sep-13	Yes
			V008A	CDV-SMA-2.42	20-Sep-13	Yes
			V009	CDV-SMA-2.5	24-Sep-13	Yes
			V009A	CDV-SMA-2.51	24-Sep-13	Yes
			V010	CDV-SMA-3	24-Sep-13	Yes
			V011	CDV-SMA-4	24-Sep-13	Yes
			V012	CDV-SMA-6.01	24-Sep-13	Yes
			V012A	CDV-SMA-6.02	24-Sep-13	Yes
			V013	CDV-SMA-7	23-Sep-13	Yes
			J003	PJ-SMA-3.05	23-Sep-13	Yes
			J004	PJ-SMA-4.05	23-Sep-13	Yes
			W018	W-SMA-10	20-Sep-13	Yes
			W004	W-SMA-3.5	19-Sep-13	Yes
			W005	W-SMA-4.1	24-Sep-13	Yes
			W006	W-SMA-5	24-Sep-13	Yes
			W007	W-SMA-6	25-Sep-13	Yes
			W008	W-SMA-7	19-Sep-13	Yes
			W009	W-SMA-7.8	19-Sep-13	Yes
			W010	W-SMA-7.9	25-Sep-13	Yes
			W011	W-SMA-8	25-Sep-13	Yes
			W012	W-SMA-8.7	25-Sep-13	Yes
			W012A	W-SMA-8.71	19-Sep-13	Yes
			W013	W-SMA-9.05	25-Sep-13	Yes
			W014	W-SMA-9.5	20-Sep-13	Yes
			W015	W-SMA-9.7	20-Sep-13	Yes
W016	W-SMA-9.8	20-Sep-13	Yes			
W017	W-SMA-9.9	20-Sep-13	Yes			



**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
17-Sep-13	RG-TA-06	0.36	E002	2M-SMA-1.42	20-Sep-13	Yes
			E003	2M-SMA-1.43	20-Sep-13	Yes
			E004	2M-SMA-1.44	23-Sep-13	Yes
			E005	2M-SMA-1.45	20-Sep-13	Yes
			E006	2M-SMA-1.5	19-Sep-13	Yes
			E007	2M-SMA-1.65	25-Sep-13	Yes
			E008	2M-SMA-1.67	24-Sep-13	Yes
			E009	2M-SMA-1.7	19-Sep-13	Yes
			E010	2M-SMA-1.8	24-Sep-13	Yes
			E015	2M-SMA-2.5	25-Sep-13	Yes
			E014	2M-SMA-3	25-Sep-13	Yes
			H001	3M-SMA-0.2	23-Sep-13	Yes
			M003	M-SMA-3	24-Sep-13	Yes
			M004	M-SMA-3.1	24-Sep-13	Yes
			J012	PJ-SMA-10	19-Sep-13	Yes
			J013	PJ-SMA-11	19-Sep-13	Yes
			J014	PJ-SMA-11.1	19-Sep-13	Yes
			J005	PJ-SMA-5	20-Sep-13	Yes
			J006	PJ-SMA-5.1	20-Sep-13	Yes
			J007	PJ-SMA-6	25-Sep-13	Yes
J008	PJ-SMA-7	19-Sep-13	Yes			
J009	PJ-SMA-8	19-Sep-13	Yes			
J010	PJ-SMA-9	19-Sep-13	Yes			
17-Sep-13	RG-TA-53	0.27	B001	B-SMA-0.5	26-Sep-13	Yes
			D008	DP-SMA-4	25-Sep-13	Yes
			L030	LA-SMA-10.11	24-Sep-13	Yes
			L030A	LA-SMA-10.12	24-Sep-13	Yes
			L029	LA-SMA-9	24-Sep-13	Yes
			P004	P-SMA-0.3	26-Sep-13	Yes
			S011	S-SMA-4.1	24-Sep-13	Yes
			S013	S-SMA-5	24-Sep-13	Yes
			S014	S-SMA-5.2	24-Sep-13	Yes
			S015	S-SMA-5.5	24-Sep-13	Yes
			S016	S-SMA-6	26-Sep-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
21-Sep-13	RG-TA-53	0.35	B001	B-SMA-0.5	26-Sep-13	Yes
			D008	DP-SMA-4	25-Sep-13	Yes
			L030	LA-SMA-10.11	24-Sep-13	Yes
			L030A	LA-SMA-10.12	24-Sep-13	Yes
			L029	LA-SMA-9	24-Sep-13	Yes
			P004	P-SMA-0.3	26-Sep-13	Yes
			S011	S-SMA-4.1	24-Sep-13	Yes
			S013	S-SMA-5	24-Sep-13	Yes
			S014	S-SMA-5.2	24-Sep-13	Yes
			S015	S-SMA-5.5	24-Sep-13	Yes
			S016	S-SMA-6	26-Sep-13	Yes
22-Sep-13	RG200.5	0.26	C001	CDB-SMA-0.15	25-Sep-13	Yes
			M012	M-SMA-10	25-Sep-13	Yes
			M012A	M-SMA-10.01	25-Sep-13	Yes
			M013	M-SMA-10.3	25-Sep-13	Yes
			M014	M-SMA-11.1	25-Sep-13	Yes
			M015	M-SMA-12	25-Sep-13	Yes
			M005	M-SMA-3.5	24-Sep-13	Yes
			M006	M-SMA-4	24-Sep-13	Yes
			M007	M-SMA-5	25-Sep-13	Yes
			M008	M-SMA-6	25-Sep-13	Yes
			M009	M-SMA-7	25-Sep-13	Yes
			M010	M-SMA-7.9	25-Sep-13	Yes
			M011	M-SMA-9.1	25-Sep-13	Yes
			T001	Pratt-SMA-1.05	24-Sep-13	Yes
			T002	T-SMA-1	25-Sep-13	Yes
			T003	T-SMA-2.5	24-Sep-13	Yes
			T004	T-SMA-2.85	24-Sep-13	Yes
			T005	T-SMA-3	25-Sep-13	Yes
			T006	T-SMA-4	25-Sep-13	Yes
			T007	T-SMA-5	25-Sep-13	Yes
T008	T-SMA-6.8	24-Sep-13	Yes			
T009	T-SMA-7	24-Sep-13	Yes			
T010	T-SMA-7.1	24-Sep-13	Yes			

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
22-Sep-13	RG265	0.25	A003	A-SMA-2.5	23-Sep-13	Yes
			A004	A-SMA-2.7	23-Sep-13	Yes
			A005	A-SMA-2.8	23-Sep-13	Yes
			A006	A-SMA-3	23-Sep-13	Yes
22-Sep-13	RG340	0.27	A007	A-SMA-3.5	24-Oct-13	No
			A008	A-SMA-4	24-Oct-13	No
			A009	A-SMA-6	24-Oct-13	No
			Q001	CHQ-SMA-0.5	30-Sep-13	Yes
			Q002	CHQ-SMA-1.01	24-Oct-13	No
			Q002A	CHQ-SMA-1.02	24-Oct-13	No
			Q002B	CHQ-SMA-1.03	24-Oct-13	No
			Q003	CHQ-SMA-2	30-Sep-13	Yes
			Q004	CHQ-SMA-3.05	24-Oct-13	No
			Q005	CHQ-SMA-4	24-Oct-13	No
			Q006	CHQ-SMA-4.1	24-Oct-13	No
			Q007	CHQ-SMA-4.5	24-Oct-13	No
			Q008	CHQ-SMA-5.05	24-Oct-13	No
			Q009	CHQ-SMA-6	24-Oct-13	No
Q010	CHQ-SMA-7.1	24-Oct-13	No			
22-Sep-13	RG-TA-54	0.31	C010	CDB-SMA-4	26-Sep-13	Yes
			J023	PJ-SMA-16	26-Sep-13	Yes
			J024	PJ-SMA-17	26-Sep-13	Yes
			J026	PJ-SMA-18	26-Sep-13	Yes
			J025	PJ-SMA-19	26-Sep-13	Yes
			J027	PJ-SMA-20	26-Sep-13	Yes
04-Nov-13	RG267.4	0.3	A001	A-SMA-1.1	12-Nov-13	Yes
			A002	A-SMA-2	12-Nov-13	Yes
			F001	F-SMA-2	12-Nov-13	Yes
			I005	PT-SMA-3	13-Nov-13	Yes
			I007	PT-SMA-4.2	13-Nov-13	Yes
04-Nov-13	RG-TA-53	0.39	B001	B-SMA-0.5	08-Nov-13	Yes
			D008	DP-SMA-4	06-Nov-13	Yes
			L030	LA-SMA-10.11	14-Nov-13	Yes
			L030A	LA-SMA-10.12	14-Nov-13	Yes
			L029	LA-SMA-9	07-Nov-13	Yes
			P004	P-SMA-0.3	18-Nov-13	Yes

**Table 6-2 (continued)**

Storm Date	Rain Gage	30-Min Maximum Intensity (in./30 min)	Permitted Feature	SMA	Inspection Date	Inspected within 15 d?
04-Nov-13	RG-TA-53	0.39	S011	S-SMA-4.1	14-Nov-13	Yes
			S013	S-SMA-5	13-Nov-13	Yes
			S014	S-SMA-5.2	13-Nov-13	Yes
			S015	S-SMA-5.5	13-Nov-13	Yes
			S016	S-SMA-6	18-Nov-13	Yes
04-Nov-13	RG-TA-54	0.35	C010	CDB-SMA-4	13-Nov-13	Yes
			J023	PJ-SMA-16	13-Nov-13	Yes
			J024	PJ-SMA-17	13-Nov-13	Yes
			J026	PJ-SMA-18	13-Nov-13	Yes
			J025	PJ-SMA-19	13-Nov-13	Yes
			J027	PJ-SMA-20	13-Nov-13	Yes

Note: Highlighted cells indicate inspections that occurred more than 15 d from the triggering rain event.

**Table 6-3  
Summary of  
Annual Erosion Evaluation Inspections**

Permitted Feature	SMA	Inspection Date
R001	R-SMA-0.5	6-May-13
R001	R-SMA-0.5	20-Nov-13
R002	R-SMA-1	6-May-13
R002	R-SMA-1	21-Nov-13
R003	R-SMA-1.95	6-May-13
R003	R-SMA-1.95	13-Nov-13
R004	R-SMA-2.05	6-May-13
R004	R-SMA-2.05	13-Nov-13
R005	R-SMA-2.3	6-May-13
R005	R-SMA-2.3	13-Nov-13
R006	R-SMA-2.5	6-May-13
R006	R-SMA-2.5	13-Nov-13
B001	B-SMA-0.5	14-May-13
B001	B-SMA-0.5	8-Nov-13
B002	B-SMA-1	6-May-13
B002	B-SMA-1	20-Nov-13
P001	ACID-SMA-1.05	8-May-13

**Table 6-3 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
P001	ACID-SMA-1.05	20-Nov-13
P002	ACID-SMA-2	8-May-13
P002	ACID-SMA-2	19-Nov-13
P002A	ACID-SMA-2.01	8-May-13
P002A	ACID-SMA-2.01	20-Nov-13
P003	ACID-SMA-2.1	8-May-13
P003	ACID-SMA-2.1	20-Nov-13
P004	P-SMA-0.3	7-May-13
P004	P-SMA-0.3	14-Nov-13
P005	P-SMA-1	7-May-13
P005	P-SMA-1	6-Dec-13
P006	P-SMA-2	7-May-13
P006	P-SMA-2	15-Nov-13
P007	P-SMA-2.15	7-May-13
P007	P-SMA-2.15	15-Nov-13
P008	P-SMA-2.2	7-May-13
P008	P-SMA-2.2	21-Nov-13
P009	P-SMA-3.05	7-May-13
P009	P-SMA-3.05	22-Nov-13
L001	LA-SMA-0.85	9-May-13
L001	LA-SMA-0.85	12-Nov-13
L002	LA-SMA-0.9	16-May-13
L002	LA-SMA-0.9	12-Nov-13
L003	LA-SMA-1	9-May-13
L003	LA-SMA-1	22-Nov-13
L004	LA-SMA-1.1	9-May-13
L004	LA-SMA-1.1	14-Nov-13
L005	LA-SMA-1.25	9-May-13
L005	LA-SMA-1.25	14-Nov-13
L006	LA-SMA-2.1	13-May-13
L006	LA-SMA-2.1	21-Nov-13
L007	LA-SMA-2.3	13-May-13
L007	LA-SMA-2.3	5-Nov-13
L008	LA-SMA-3.1	14-May-13
L008	LA-SMA-3.1	5-Nov-13
L009	LA-SMA-3.9	14-May-13
L009	LA-SMA-3.9	5-Nov-13
L010	LA-SMA-4.1	2-Apr-13

Table 6-3 (continued)

Permitted Feature	SMA	Inspection Date
L010	LA-SMA-4.1	5-Dec-13
L011	LA-SMA-4.2	2-Apr-13
L011	LA-SMA-4.2	5-Dec-13
L012	LA-SMA-5.01	2-Apr-13
L012	LA-SMA-5.01	5-Dec-13
L012A	LA-SMA-5.02	2-Apr-13
L012A	LA-SMA-5.02	5-Dec-13
L013	LA-SMA-5.2	16-May-13
L013	LA-SMA-5.2	15-Nov-13
L015	LA-SMA-5.31	16-May-13
L015	LA-SMA-5.31	21-Nov-13
L016	LA-SMA-5.33	14-May-13
L016	LA-SMA-5.33	6-Dec-13
L014	LA-SMA-5.35	16-May-13
L014	LA-SMA-5.35	15-Nov-13
L017	LA-SMA-5.361	17-Apr-13
L017	LA-SMA-5.361	6-Dec-13
L017A	LA-SMA-5.362	17-Apr-13
L017A	LA-SMA-5.362	6-Dec-13
L018	LA-SMA-5.51	11-Apr-13
L018	LA-SMA-5.51	19-Nov-13
L018A	LA-SMA-5.52	11-Apr-13
L018A	LA-SMA-5.52	14-Nov-13
L018B	LA-SMA-5.53	11-Apr-13
L018B	LA-SMA-5.53	14-Nov-13
L018C	LA-SMA-5.54	11-Apr-13
L018C	LA-SMA-5.54	22-Nov-13
L019	LA-SMA-5.91	14-May-13
L019	LA-SMA-5.91	21-Nov-13
L019A	LA-SMA-5.92	14-May-13
L019A	LA-SMA-5.92	7-Nov-13
L020	LA-SMA-6.25	17-Apr-13
L020	LA-SMA-6.25	21-Nov-13
L021	LA-SMA-6.27	17-Apr-13
L021	LA-SMA-6.27	21-Nov-13
L022	LA-SMA-6.3	17-Apr-13
L022	LA-SMA-6.3	21-Nov-13
L022A	LA-SMA-6.31	17-Apr-13

**Table 6-3 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
L022A	LA-SMA-6.31	21-Nov-13
L023	LA-SMA-6.32	17-Apr-13
L023	LA-SMA-6.32	7-Nov-13
L024	LA-SMA-6.34	17-Apr-13
L024	LA-SMA-6.34	13-Nov-13
L025	LA-SMA-6.36	17-Apr-13
L025	LA-SMA-6.36	13-Nov-13
L026	LA-SMA-6.38	17-Apr-13
L026	LA-SMA-6.38	8-Nov-13
L027	LA-SMA-6.395	17-Apr-13
L027	LA-SMA-6.395	21-Nov-13
L028	LA-SMA-6.5	17-Apr-13
L028	LA-SMA-6.5	8-Nov-13
L029	LA-SMA-9	14-May-13
L029	LA-SMA-9	7-Nov-13
L030	LA-SMA-10.11	26-Apr-13
L030	LA-SMA-10.11	14-Nov-13
L030A	LA-SMA-10.12	26-Apr-13
L030A	LA-SMA-10.12	14-Nov-13
D001	DP-SMA-0.3	17-Apr-13
D001	DP-SMA-0.3	7-Nov-13
D002	DP-SMA-0.4	17-Apr-13
D002	DP-SMA-0.4	21-Nov-13
D003	DP-SMA-0.6	17-Apr-13
D003	DP-SMA-0.6	6-Nov-13
D004	DP-SMA-1	17-Apr-13
D004	DP-SMA-1	6-Nov-13
D005	DP-SMA-2	17-Apr-13
D005	DP-SMA-2	6-Nov-13
D006	DP-SMA-2.35	17-Apr-13
D006	DP-SMA-2.35	21-Nov-13
D007	DP-SMA-3	17-Apr-13
D007	DP-SMA-3	6-Nov-13
D008	DP-SMA-4	17-Apr-13
D008	DP-SMA-4	6-Nov-13
S001	S-SMA-0.25	8-May-13
S001	S-SMA-0.25	12-Nov-13
S002	S-SMA-1.1	8-May-13

**Table 6-3 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
S002	S-SMA-1.1	12-Nov-13
S003	S-SMA-2	8-May-13
S003	S-SMA-2	12-Nov-13
S003A	S-SMA-2.01	26-Apr-13
S003A	S-SMA-2.01	21-Nov-13
S004	S-SMA-2.8	26-Apr-13
S004	S-SMA-2.8	6-Nov-13
S005	S-SMA-3.51	26-Apr-13
S005	S-SMA-3.51	6-Nov-13
S005A	S-SMA-3.52	26-Apr-13
S005A	S-SMA-3.52	6-Nov-13
S005B	S-SMA-3.53	26-Apr-13
S005B	S-SMA-3.53	6-Nov-13
S006	S-SMA-3.6	26-Apr-13
S006	S-SMA-3.6	7-Nov-13
S007	S-SMA-3.7	26-Apr-13
S007	S-SMA-3.7	14-Nov-13
S008	S-SMA-3.71	26-Apr-13
S008	S-SMA-3.71	14-Nov-13
S009	S-SMA-3.72	26-Apr-13
S009	S-SMA-3.72	14-Nov-13
S010	S-SMA-3.95	2-May-13
S010	S-SMA-3.95	20-Nov-13
S011	S-SMA-4.1	26-Apr-13
S011	S-SMA-4.1	14-Nov-13
S012	S-SMA-4.5	2-May-13
S012	S-SMA-4.5	13-Nov-13
S013	S-SMA-5	2-May-13
S013	S-SMA-5	13-Nov-13
S014	S-SMA-5.2	2-May-13
S014	S-SMA-5.2	13-Nov-13
S015	S-SMA-5.5	2-May-13
S015	S-SMA-5.5	13-Nov-13
S016	S-SMA-6	8-May-13
S016	S-SMA-6	18-Nov-13
C001	CDB-SMA-0.15	2-May-13
C001	CDB-SMA-0.15	4-Dec-13
C002	CDB-SMA-0.25	2-May-13



**Table 6-3 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
C002	CDB-SMA-0.25	20-Nov-13
C003	CDB-SMA-0.55	2-May-13
C003	CDB-SMA-0.55	14-Nov-13
C004	CDB-SMA-1	2-May-13
C004	CDB-SMA-1	14-Nov-13
C005	CDB-SMA-1.15	2-May-13
C005	CDB-SMA-1.15	20-Nov-13
C006	CDB-SMA-1.35	2-May-13
C006	CDB-SMA-1.35	20-Nov-13
C007	CDB-SMA-1.54	2-May-13
C007	CDB-SMA-1.54	20-Nov-13
C008	CDB-SMA-1.55	2-May-13
C008	CDB-SMA-1.55	21-Nov-13
C009	CDB-SMA-1.65	2-May-13
C009	CDB-SMA-1.65	21-Nov-13
C010	CDB-SMA-4	16-May-13
C010	CDB-SMA-4	13-Nov-13
M001	M-SMA-1	4-Apr-13
M001	M-SMA-1	6-Nov-13
M002	M-SMA-1.2	4-Apr-13
M002	M-SMA-1.2	20-Nov-13
M002A	M-SMA-1.21	4-Apr-13
M002A	M-SMA-1.21	6-Nov-13
M002B	M-SMA-1.22	4-Apr-13
M002B	M-SMA-1.22	20-Nov-13
M003	M-SMA-3	30-Apr-13
M003	M-SMA-3	15-Nov-13
M004	M-SMA-3.1	29-Apr-13
M004	M-SMA-3.1	15-Nov-13
M005	M-SMA-3.5	29-Apr-13
M005	M-SMA-3.5	15-Nov-13
M006	M-SMA-4	29-Apr-13
M006	M-SMA-4	15-Nov-13
M007	M-SMA-5	15-May-13
M007	M-SMA-5	3-Dec-13
M008	M-SMA-6	30-Apr-13
M008	M-SMA-6	3-Dec-13
M009	M-SMA-7	30-Apr-13

Table 6-3 (continued)

Permitted Feature	SMA	Inspection Date
M009	M-SMA-7	3-Dec-13
M010	M-SMA-7.9	30-Apr-13
M010	M-SMA-7.9	19-Nov-13
M011	M-SMA-9.1	30-Apr-13
M011	M-SMA-9.1	3-Dec-13
M012	M-SMA-10	30-Apr-13
M012	M-SMA-10	3-Dec-13
M012A	M-SMA-10.01	30-Apr-13
M012A	M-SMA-10.01	3-Dec-13
M013	M-SMA-10.3	30-Apr-13
M013	M-SMA-10.3	3-Dec-13
M014	M-SMA-11.1	30-Apr-13
M014	M-SMA-11.1	3-Dec-13
M015	M-SMA-12	30-Apr-13
M015	M-SMA-12	3-Dec-13
M016	M-SMA-12.5	1-May-13
M016	M-SMA-12.5	2-Dec-13
M017	M-SMA-12.6	1-May-13
M017	M-SMA-12.6	20-Nov-13
M018	M-SMA-12.7	1-May-13
M018	M-SMA-12.7	17-Dec-13
M019	M-SMA-12.8	1-May-13
M019	M-SMA-12.8	17-Dec-13
M020	M-SMA-12.9	1-May-13
M020	M-SMA-12.9	17-Dec-13
M021	M-SMA-12.92	1-May-13
M021	M-SMA-12.92	20-Nov-13
M022	M-SMA-13	1-May-13
M022	M-SMA-13	20-Nov-13
T001	PRATT-SMA-1.05	30-Apr-13
T001	PRATT-SMA-1.05	20-Nov-13
T002	T-SMA-1	22-Apr-13
T002	T-SMA-1	19-Nov-13
T003	T-SMA-2.5	30-Apr-13
T003	T-SMA-2.5	19-Nov-13
T004	T-SMA-2.85	30-Apr-13
T004	T-SMA-2.85	19-Nov-13
T005	T-SMA-3	30-Apr-13

**Table 6-3 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
T005	T-SMA-3	21-Nov-13
T006	T-SMA-4	30-Apr-13
T006	T-SMA-4	20-Nov-13
T007	T-SMA-5	30-Apr-13
T007	T-SMA-5	21-Nov-13
T008	T-SMA-6.8	4-May-13
T008	T-SMA-6.8	12-Nov-13
T009	T-SMA-7	1-May-13
T009	T-SMA-7	12-Nov-13
T010	T-SMA-7.1	1-May-13
T010	T-SMA-7.1	12-Nov-13
E001	2M-SMA-1	23-Apr-13
E001	2M-SMA-1	8-Nov-13
E002	2M-SMA-1.42	23-Apr-13
E002	2M-SMA-1.42	6-Nov-13
E003	2M-SMA-1.43	23-Apr-13
E003	2M-SMA-1.43	6-Nov-13
E004	2M-SMA-1.44	23-Apr-13
E004	2M-SMA-1.44	6-Nov-13
E005	2M-SMA-1.45	23-Apr-13
E005	2M-SMA-1.45	6-Nov-13
E006	2M-SMA-1.5	23-Apr-13
E006	2M-SMA-1.5	6-Nov-13
E007	2M-SMA-1.65	7-May-13
E007	2M-SMA-1.65	7-Nov-13
E008	2M-SMA-1.67	23-Apr-13
E008	2M-SMA-1.67	5-Nov-13
E009	2M-SMA-1.7	23-Apr-13
E009	2M-SMA-1.7	7-Nov-13
E010	2M-SMA-1.8	23-Apr-13
E010	2M-SMA-1.8	7-Nov-13
E011	2M-SMA-1.9	23-Apr-13
E011	2M-SMA-1.9	8-Nov-13
E012	2M-SMA-2	23-Apr-13
E012	2M-SMA-2	7-Nov-13
E013	2M-SMA-2.2	23-Apr-13
E013	2M-SMA-2.2	7-Nov-13
E014	2M-SMA-3	7-May-13

**Table 6-3 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
E014	2M-SMA-3	19-Nov-13
E015	2M-SMA-2.5	7-May-13
E015	2M-SMA-2.5	7-Nov-13
H001	3M-SMA-0.2	7-May-13
H001	3M-SMA-0.2	4-Nov-13
H002	3M-SMA-0.4	13-May-13
H002	3M-SMA-0.4	19-Nov-13
H003	3M-SMA-0.5	8-May-13
H003	3M-SMA-0.5	19-Nov-13
H004	3M-SMA-0.6	8-May-13
H004	3M-SMA-0.6	19-Nov-13
H005	3M-SMA-2.6	2-May-13
H005	3M-SMA-2.6	22-Nov-13
H006	3M-SMA-4	2-May-13
H006	3M-SMA-4	5-Dec-13
J001	PJ-SMA-1.05	23-Apr-13
J001	PJ-SMA-1.05	6-Nov-13
J002	PJ-SMA-2	8-May-13
J002	PJ-SMA-2	6-Nov-13
J003	PJ-SMA-3.05	8-May-13
J003	PJ-SMA-3.05	6-Nov-13
J004	PJ-SMA-4.05	8-May-13
J004	PJ-SMA-4.05	6-Nov-13
J005	PJ-SMA-5	23-Apr-13
J005	PJ-SMA-5	5-Nov-13
J006	PJ-SMA-5.1	23-Apr-13
J006	PJ-SMA-5.1	5-Nov-13
J007	PJ-SMA-6	7-May-13
J007	PJ-SMA-6	7-Nov-13
J008	PJ-SMA-7	7-May-13
J008	PJ-SMA-7	7-Nov-13
J009	PJ-SMA-8	7-May-13
J009	PJ-SMA-8	7-Nov-13
J010	PJ-SMA-9	7-May-13
J010	PJ-SMA-9	7-Nov-13
J012	PJ-SMA-10	7-May-13
J012	PJ-SMA-10	7-Nov-13
J013	PJ-SMA-11	7-May-13

**Table 6-3 (continued)**

Permitted Feature	SMA	Inspection Date
J013	PJ-SMA-11	18-Nov-13
J014	PJ-SMA-11.1	7-May-13
J014	PJ-SMA-11.1	18-Nov-13
J015	PJ-SMA-13	2-May-13
J015	PJ-SMA-13	5-Dec-13
J016	PJ-SMA-13.7	2-May-13
J016	PJ-SMA-13.7	5-Dec-13
J017	PJ-SMA-14	2-May-13
J017	PJ-SMA-14	13-Nov-13
J018	PJ-SMA-14.2	2-May-13
J018	PJ-SMA-14.2	4-Dec-13
J019	PJ-SMA-14.3	2-May-13
J019	PJ-SMA-14.3	4-Dec-13
J020	PJ-SMA-14.4	2-May-13
J020	PJ-SMA-14.4	4-Dec-13
J021	PJ-SMA-14.6	2-May-13
J021	PJ-SMA-14.6	4-Dec-13
J022	PJ-SMA-14.8	2-May-13
J022	PJ-SMA-14.8	5-Dec-13
J023	PJ-SMA-16	2-May-13
J023	PJ-SMA-16	15-Nov-13
J024	PJ-SMA-17	16-May-13
J024	PJ-SMA-17	13-Nov-13
J026	PJ-SMA-18	16-May-13
J026	PJ-SMA-18	13-Nov-13
J025	PJ-SMA-19	16-May-13
J025	PJ-SMA-19	13-Nov-13
J027	PJ-SMA-20	16-May-13
J027	PJ-SMA-20	13-Nov-13
J028	STRM-SMA-1.05	8-May-13
J028	STRM-SMA-1.05	6-Nov-13
J029	STRM-SMA-1.5	8-May-13
J029	STRM-SMA-1.5	6-Nov-13
J030	STRM-SMA-4.2	23-Apr-13
J030	STRM-SMA-4.2	30-Oct-13
J031	STRM-SMA-5.05	23-Apr-13
J031	STRM-SMA-5.05	30-Oct-13
V001	CDV-SMA-1.2	3-May-13

**Table 6-3 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
V001	CDV-SMA-1.2	1-Nov-13
V002	CDV-SMA-1.3	3-May-13
V002	CDV-SMA-1.3	1-Nov-13
V003	CDV-SMA-1.4	3-May-13
V003	CDV-SMA-1.4	31-Oct-13
V004	CDV-SMA-1.45	3-May-13
V004	CDV-SMA-1.45	31-Oct-13
V005	CDV-SMA-1.7	16-May-13
V005	CDV-SMA-1.7	1-Nov-13
V006	CDV-SMA-2	16-May-13
V006	CDV-SMA-2	1-Nov-13
V007	CDV-SMA-2.3	3-May-13
V007	CDV-SMA-2.3	18-Nov-13
V008	CDV-SMA-2.41	3-May-13
V008	CDV-SMA-2.41	18-Nov-13
V008A	CDV-SMA-2.42	3-May-13
V008A	CDV-SMA-2.42	18-Nov-13
V009	CDV-SMA-2.5	3-May-13
V009	CDV-SMA-2.5	18-Nov-13
V009A	CDV-SMA-2.51	3-May-13
V009A	CDV-SMA-2.51	18-Nov-13
V010	CDV-SMA-3	29-Apr-13
V010	CDV-SMA-3	4-Nov-13
V011	CDV-SMA-4	29-Apr-13
V011	CDV-SMA-4	4-Nov-13
V012	CDV-SMA-6.01	29-Apr-13
V012	CDV-SMA-6.01	4-Nov-13
V012A	CDV-SMA-6.02	29-Apr-13
V012A	CDV-SMA-6.02	4-Nov-13
V013	CDV-SMA-7	7-May-13
V013	CDV-SMA-7	4-Nov-13
V014	CDV-SMA-8	8-May-13
V014	CDV-SMA-8	4-Nov-13
V015	CDV-SMA-8.5	3-Apr-13
V015	CDV-SMA-8.5	4-Nov-13
V016	CDV-SMA-9.05	3-Apr-13
V016	CDV-SMA-9.05	18-Nov-13
F001	F-SMA-2	8-May-13

**Table 6-3 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
F001	F-SMA-2	12-Nov-13
I001	PT-SMA-0.5	8-May-13
I001	PT-SMA-0.5	12-Nov-13
I002	PT-SMA-1	8-May-13
I002	PT-SMA-1	12-Nov-13
I003	PT-SMA-1.7	3-Apr-13
I003	PT-SMA-1.7	4-Nov-13
I004	PT-SMA-2	8-May-13
I004	PT-SMA-2	12-Nov-13
I004A	PT-SMA-2.01	8-May-13
I004A	PT-SMA-2.01	12-Nov-13
I005	PT-SMA-3	8-May-13
I005	PT-SMA-3	13-Nov-13
I007	PT-SMA-4.2	8-May-13
I007	PT-SMA-4.2	13-Nov-13
W001	W-SMA-1	7-May-13
W001	W-SMA-1	30-Oct-13
W002	W-SMA-1.5	7-May-13
W002	W-SMA-1.5	30-Oct-13
W003	W-SMA-2.05	7-May-13
W003	W-SMA-2.05	30-Oct-13
W004	W-SMA-3.5	7-May-13
W004	W-SMA-3.5	31-Oct-13
W005	W-SMA-4.1	7-May-13
W005	W-SMA-4.1	31-Oct-13
W006	W-SMA-5	7-May-13
W006	W-SMA-5	31-Oct-13
W007	W-SMA-6	7-May-13
W007	W-SMA-6	30-Oct-13
W008	W-SMA-7	7-May-13
W008	W-SMA-7	30-Oct-13
W009	W-SMA-7.8	7-May-13
W009	W-SMA-7.8	30-Oct-13
W010	W-SMA-7.9	7-May-13
W010	W-SMA-7.9	30-Oct-13
W011	W-SMA-8	7-May-13
W011	W-SMA-8	30-Oct-13
W012	W-SMA-8.7	3-May-13

Table 6-3 (continued)

Permitted Feature	SMA	Inspection Date
W012	W-SMA-8.7	31-Oct-13
W012A	W-SMA-8.71	3-May-13
W012A	W-SMA-8.71	31-Oct-13
W013	W-SMA-9.05	7-May-13
W013	W-SMA-9.05	30-Oct-13
W014	W-SMA-9.5	7-May-13
W014	W-SMA-9.5	29-Oct-13
W015	W-SMA-9.7	7-May-13
W015	W-SMA-9.7	29-Oct-13
W016	W-SMA-9.8	7-May-13
W016	W-SMA-9.8	29-Oct-13
W017	W-SMA-9.9	7-May-13
W017	W-SMA-9.9	29-Oct-13
W018	W-SMA-10	7-May-13
W018	W-SMA-10	29-Oct-13
W019	W-SMA-11.7	9-May-13
W019	W-SMA-11.7	28-Oct-13
W020	W-SMA-12.05	9-May-13
W020	W-SMA-12.05	28-Oct-13
W021	W-SMA-14.1	3-Apr-13
W021	W-SMA-14.1	4-Nov-13
W022	W-SMA-15.1	9-May-13
W022	W-SMA-15.1	28-Oct-13
A001	A-SMA-1.1	13-May-13
A001	A-SMA-1.1	28-Oct-13
A002	A-SMA-2	13-May-13
A002	A-SMA-2	28-Oct-13
A003	A-SMA-2.5	13-May-13
A003	A-SMA-2.5	29-Oct-13
A004	A-SMA-2.7	13-May-13
A004	A-SMA-2.7	29-Oct-13
A005	A-SMA-2.8	13-May-13
A005	A-SMA-2.8	29-Oct-13
A006	A-SMA-3	13-May-13
A006	A-SMA-3	29-Oct-13
A007	A-SMA-3.5	13-May-13
A007	A-SMA-3.5	24-Oct-13
A008	A-SMA-4	6-May-13



**Table 6-3 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
A008	A-SMA-4	24-Oct-13
A009	A-SMA-6	6-May-13
A009	A-SMA-6	24-Oct-13
Q001	CHQ-SMA-0.5	9-May-13
Q001	CHQ-SMA-0.5	29-Oct-13
Q002	CHQ-SMA-1.01	6-May-13
Q002	CHQ-SMA-1.01	24-Oct-13
Q002A	CHQ-SMA-1.02	6-May-13
Q002A	CHQ-SMA-1.02	24-Oct-13
Q002B	CHQ-SMA-1.03	6-May-13
Q002B	CHQ-SMA-1.03	24-Oct-13
Q003	CHQ-SMA-2	9-May-13
Q003	CHQ-SMA-2	29-Oct-13
Q004	CHQ-SMA-3.05	9-May-13
Q004	CHQ-SMA-3.05	24-Oct-13
Q005	CHQ-SMA-4	9-May-13
Q005	CHQ-SMA-4	24-Oct-13
Q006	CHQ-SMA-4.1	9-May-13
Q006	CHQ-SMA-4.1	24-Oct-13
Q007	CHQ-SMA-4.5	6-May-13
Q007	CHQ-SMA-4.5	24-Oct-13
Q008	CHQ-SMA-5.05	9-May-13
Q008	CHQ-SMA-5.05	24-Oct-13
Q009	CHQ-SMA-6	9-May-13
Q009	CHQ-SMA-6	24-Oct-13
Q010	CHQ-SMA-7.1	9-May-13
Q010	CHQ-SMA-7.1	24-Oct-13

**Table 6-4  
Summary of Significant Event Inspections  
for the Rain Events Occurring from September 10 to September 14, 2013**

Permitted Feature	SMA	Inspection Date	Observations	Maintenance Performed	Maintenance Date
E001	2M-SMA-1	24-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Flow breached natural bank adjacent to rock check dam 17 and flowed to riprap 10. Recommend stabilizing flow path to send water to the sediment basin next to riprap 10 in lieu of repairing bank. Earthen berm 14 received sediment from slope below Eco-block, reduced capacity. Rock check dam 16 sedimented in. Rock check dam 22 needs some rock removed to create a spillway. Controls are operating effectively, repair recommended.	Repair pending.	To be completed in 2014
E002	2M-SMA-1.42	20-Sep-13	Rock check dam 6 is partly sedimented in. Control is operating effectively, repair recommended.	Repair pending.	To be completed in 2014
E010	2M-SMA-1.8	24-Sep-13	There are existing cracks with vegetation growth in asphalt caps 8 and 9. Controls are not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
E012	2M-SMA-2	24-Sep-13	Repair recommended on the back side of sediment basin 14. Control is operating effectively.	Repair pending.	To be completed in 2014
E013	2M-SMA-2.2	24-Sep-13	Concrete/asphalt cap is not operating effectively. Repair recommended where sealant is flaking.	Repair pending.	To be completed in 2014
H002	3M-SMA-0.4	24-Sep-13	Earthen berm 3 is breached. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
H006	3M-SMA-4	19-Sep-13	There has been an increase in erosion potential at the Site and SMA since the last inspection. Portions of concrete/asphalt channel/swale 9 are filled with sediment. Control is operating effectively, repair recommended. Riprap 6 is no longer present as a result of flooding, replacement recommended. Gabion 2 is detached in some areas and broken apart. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014

**Table 6-4 (continued)**

Permitted Feature	SMA	Inspection Date	Observations	Maintenance Performed	Maintenance Date
P002	ACID-SMA-2	25-Sep-13	There is a hole in earthen berm 4. Berm is not completely breached at this time but is close. Rock check dam 2 needs to have capacity of channel upstream restored. Controls are operating effectively, repair recommended.	Repair pending.	To be completed in 2014
P003	ACID-SMA-2.1	25-Sep-13	There is a hole in earthen berm 2. Berm is not completely breached at this time but is close. Rock check dam 4 needs to have capacity of channel upstream restored. Controls are operating effectively, repair recommended.	Repair pending.	To be completed in 2014
C002	CDB-SMA-0.25	26-Sep-13	There is erosion through the middle of earthen berms 13, 17, and 18 including spillway damage. Controls are not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
C004	CDB-SMA-1	26-Sep-13	Recommend adding additional rock to riprap 6. Control is operating effectively.	Repair pending.	To be completed in 2014
V001	CDV-SMA-1.2	20-Sep-13	There is a small breach on top of base course berm 8. Control is operating effectively, repair recommended.	Base course added to berm to repair breach.	9-Jan-14
V008	CDV-SMA-2.41	20-Sep-13	Sections of earth berm 13 are blown out. Rock check dam is 12 2/3 full of sediment. Controls operating effectively, repair recommended. Earthen channel/swale 14 is blown out. Control is not operating effectively, replacement recommended.	Repair pending.	To be completed in 2014
V012	CDV-SMA-6.01	24-Sep-13	Base course berm 3 is breached. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
V012A	CDV-SMA-6.02	24-Sep-13	Earthen berm is breached on the east side. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
V016	CDV-SMA-9.05	25-Sep-13	Earthen berm 2 is breached. There are several breaches in earthen berms 3 and 4. Controls are not operating effectively, repair recommended. Earthen berm 8 is breached. There is minor rilling on downstream side of earthen berm 7. Controls are operating effectively, repair recommended.	Repair pending.	To be completed in 2014

**Table 6-4 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>	<b>Observations</b>	<b>Maintenance Performed</b>	<b>Maintenance Date</b>
D008	DP-SMA-4	25-Sep-13	Modification requested to rock check dam 8 to extend eastern end and increase height. Control is operating effectively.	Repair pending.	To be completed in 2014
L002	LA-SMA-0.9	25-Sep-13	There has been an increase in erosion potential at the Site and SMA since the last inspection. Earthen berms 13, 14, 15, 16, 17, and 18 are not operating effectively. Modification recommended.	Repair pending.	To be completed in 2014
L003	LA-SMA-1	26-Sep-13	There has been an increase in erosion potential at the Site and SMA since the last inspection. Riprap 22 and 24 are not operating effectively, repair recommended. Rock channel/swale 20 is operating effectively, modification or repair recommended to reshape.	Repair in progress.	To be completed in 2014
L005	LA-SMA-1.25	24-Sep-13	Recommend adding base course to low areas in base course berm 1. Control is operating effectively.	Repair pending.	To be completed in 2014
L006	LA-SMA-2.1	25-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Log berm 7 is operating effectively, modification recommended. Riprap 6 is not operating effectively, replacement recommended.	Repair pending.	To be completed in 2014
L010	LA-SMA-4.1	25-Sep-13	There has been an increase in erosion potential at the Site and SMA since the last inspection. Rock check dam 9 is not operating effectively, modification recommended.	Repair pending.	To be completed in 2014
L011	LA-SMA-4.2	25-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Water bars 3 and 6 are operating effectively, repair recommended. Water bar 4 is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
L012	LA-SMA-5.01	25-Sep-13	Rock berm 10 is operating effectively, modification recommended. Water bars 8 and 9 are operating effectively, repair recommended. Straw wattle 11 operating effectively, replacement recommended.	Repair pending.	To be completed in 2014
L013	LA-SMA-5.2	25-Sep-13	Log check dams 6 and 7 are operating effectively, modification recommended.	Modification in progress.	To be completed in 2014
L015	LA-SMA-5.31	25-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Rock berms 10 and 11 are operating effectively, repair recommended.	Repair pending.	To be completed in 2014

**Table 6-4 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>	<b>Observations</b>	<b>Maintenance Performed</b>	<b>Maintenance Date</b>
L018	LA-SMA-5.51	25-Sep-13	There has been an increase in erosion potential at the Site since the last inspection. Earthen berm 6 is not operating effectively, repair recommended. Earthen berm 8 is operating effectively, repair recommended.	Repair pending.	To be completed in 2014
L018A	LA-SMA-5.52	25-Sep-13	Earthen berm 4 and riprap 5 are operating effectively, repair recommended. Rock check dam 2 is not operating effectively, modification recommended.	Repair pending.	To be completed in 2014
L019	LA-SMA-5.91	23-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Log check dams 13 and 14 are not operating effectively, repair recommended.	Log check dam 13 repaired. Log check dam 14 repaired by adding logs to increase height and extend both ends.	21-Nov-13 28-Jan-14
L019A	LA-SMA-5.92	23-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Log berm 3 is not operating effectively, repair recommended.	Log berm 3 repaired by adding logs to increase height and length. Two log check dams and coir log installed downgradient of new gully.	29-Jan-14
L019A	LA-SMA-5.92	23-Sep-13	Earthen berm 5 is operating effectively, repair recommended.	Repair pending.	To be completed in 2014
L022	LA-SMA-6.3	23-Sep-13	Rock check dam 4 is not operating effectively, modification recommended.	Repair pending.	To be completed in 2014
L022A	LA-SMA-6.31	23-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Rock check dam 5 is not operating effectively, modification recommended.	Repair pending.	To be completed in 2014
L029	LA-SMA-9	24-Sep-13	There has been an increase in erosion potential at the Site and SMA since the last inspection. Earthen berm 12 is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014

**Table 6-4 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>	<b>Observations</b>	<b>Maintenance Performed</b>	<b>Maintenance Date</b>
M001	M-SMA-1	23-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Recommend hydroseed on slope west of and above gabion 8. Gabion 8 is operating effectively, repair recommended to cover exposed filter fabric with rock.	Repair pending.	To be completed in 2014
M021	M-SMA-12.92	23-Sep-13	There is evidence of floatable waste, floatable garbage, or debris within the SMA that could be discharged to receiving waters. There has been an increase in erosion potential at Site and SMA since the last inspection. Sediment trap 1 breached and sediment trap 3 breached to next sediment trap. Sediment trap 4 overflowed to the west. Controls 1 and 3 not operating effectively, control 4 is operating effectively. Repairs recommended.	Repair pending engineered design.	To be completed in 2014
M003	M-SMA-3	24-Sep-13	Recommend extending riprap 8 to the west. Control is operating effectively.	Repair pending.	To be completed in 2014
J001	PJ-SMA-1.05	17-Sep-13	Earthen berm 17 is breached south of spillway. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
J013	PJ-SMA-11	19-Sep-13	There has been an increase in erosion potential at the Site since the last inspection. There is an increase in flow path away from drainage into PJ-SMA-11.1 drainage. Rock check dams 6, 7, and 8 are full of sediment. Controls are not operating effectively, recommend replacement. Earth berm 3 is breached on the west side of spillway. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
J013	PJ-SMA-11	19-Sep-13	Water flowed under straw wattles 12 and 13 and wattle 14 are sedimented in. Controls are not operating effectively, replacement recommended.	Wattles 12 and 13 retrenched and repaired. Installed straw wattle to replace 14.	20-Nov-13
J013	PJ-SMA-11	19-Sep-13	Straw wattle 19 is partially sedimented in on the northwest corner. Control is operating effectively, recommend removing sediment.	Installed additional straw wattle on north side of 19.	9-Jan-14

**Table 6-4 (continued)**

Permitted Feature	SMA	Inspection Date	Observations	Maintenance Performed	Maintenance Date
J014	PJ-SMA-11.1	19-Sep-13	There has been an increase in erosion potential at the Site and SMA since the last inspection. There is rolling coming from hill slope and an increase in flow path away from drainage. Rock check dams 4, 9, 10, 11, and 12 are sedimented in. Rock check dam 5 breached around south edge, rock check dams 6 and 8 are partially sedimented in. Controls are operating effectively, repair or replacement recommended.	Repair pending.	To be completed in 2014
J014	PJ-SMA-11.1	19-Sep-13	Straw wattle 14 is sedimented in. Control is not operating effectively, replacement recommended. Rock check dam 7 is full of debris and needle-cast. Control is operating effectively, repair recommended.	Installed straw wattle to replace 14. Removed needle cast and debris from rock check dam 7.	20-Nov-13
J018	PJ-SMA-14.2	25-Sep-13	Rock berm 4 impacted by floodwater and sediment. Control is not operating effectively, replacement recommended.	Repair pending.	To be completed in 2014
J024	PJ-SMA-17	26-Sep-13	There has been an increase in erosion potential at the Site and SMA since the last inspection. Rills and gullies forming on mesa top northeast and northwest of sampler location.	Repair pending.	To be completed in 2014
J026	PJ-SMA-18	26-Sep-13	Earthen channel/swale 9 is filled with sediment. Recommend building up rock check dam 6 with additional rock. Controls are operating effectively, repair recommended.	Repair pending.	To be completed in 2014
J002	PJ-SMA-2	23-Sep-13	Rock check dams 19, 20, and 21 are sedimented in. Controls are not operating effectively, replacement recommended.	Repair pending.	To be completed in 2014
J004	PJ-SMA-4.05	23-Sep-13	Earthen berm is breached on the east side. Control is operating effectively, repair recommended. Rock check dam 6 is sedimented in. Control is not operating effectively, replacement recommended.	Repair pending.	To be completed in 2014
J007	PJ-SMA-6	25-Sep-13	There is rilling/erosion on western edge of earthen berm 9. There are bare areas in seed and wood mulch 17 from rain/flow. The eastern, downstream side of earthen berm 11 next to spillway is eroded away. Controls are operating effectively, repairs recommended.	Repair pending.	To be completed in 2014
J008	PJ-SMA-7	19-Sep-13	Earthen berm 4 is breached. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014

**Table 6-4 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>	<b>Observations</b>	<b>Maintenance Performed</b>	<b>Maintenance Date</b>
J010	PJ-SMA-9	19-Sep-13	There has been an increase in erosion potential at the Site since the last inspection. Minor rilling observed, recommend monitoring. Rock check dam 6 is sedimented in. Control is not operating effectively, replacement recommended. Rock check dam 7 has a slight breach on the south edge. Control is operating effectively, repair recommended.	Repair pending.	To be completed in 2014
T001	PRATT-SMA-1.05	24-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Earthen berm 2 is not operating effectively, repair recommended. Base course berms 13 and 15 and rock check dam 11 are operating effectively, modification recommended. Rock check dam 12 is not operating effectively, modification recommended.	Repair pending.	To be completed in 2014
P004	P-SMA-0.3	26-Sep-13	Earthen berm 6 is breached in 2 locations. Control is not operating effectively, repair recommended. Culvert 3 approximately 3/4 filled with sediment. Control is operating effectively, no action recommended.	Earth berm 6 has been removed by Los Alamos County construction. Backup controls are in place. Replacement of berm pending completion of construction.	To be completed in 2014
P005	P-SMA-1	19-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. There is a rock slide east of sample and damage to the fence. Earthen berms 18 and 19 are eroded away on north sections. Controls are not operating effectively, repair recommended. Straw wattles 25, 33, 34, 35, 36, 37, and 39 are sedimented in and eroding under wattle. Controls are not operating effectively, replacement recommended. Straw wattle 38 is filled in with sediment. Control is operating effectively, replacement recommended.	Repair pending. This site is also being inspected as part of the DOE Airport Landfill Closure and Debris Disposal Area Project. Coordinating maintenance response with DOE.	To be completed in 2014
P007	P-SMA-2.15	25-Sep-13	Rock check dam 4 is sedimented in. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
P009	P-SMA-3.05	26-Sep-13	Earthen berms 8 and 9 need to be built up, seeded, and matted. Controls are operating effectively, repair recommended.	Repair pending.	To be completed in 2014



**Table 6-4 (continued)**

Permitted Feature	SMA	Inspection Date	Observations	Maintenance Performed	Maintenance Date
R002	R-SMA-1	23-Sep-13	There has been an increase in erosion potential at the Site since the last inspection. Channel erosion, channel incision, and an increase in headcutting were observed. Recommend installing controls to arrest the headcut in the channel extending through C-00-041. Control options may include a one rock check dam upstream from the headcut, a rundown, and plunge pool. Rock check dam 5 is operating effectively and trapping sediment effectively; however, there is very little capacity left. Repair recommended to build up height. There is erosion on the north edge of gabion blanket 4. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
S002	S-SMA-1.1	24-Sep-13	There is rilling on backside of berm of sediment basin 13. Control is operating effectively; recommend adding base course to rills. Recommend follow-up inspection with engineer. Discharge from sealed riser pipe. Some head cutting below riprap -0019. Monitor for now.	Rills on berm forming sediment basin repaired by adding base course. Project engineer notified regarding riser pipe.	6-Jan-14
S005	S-SMA-3.51	24-Sep-13	Rock check dam 10 not operating effectively, rebuild recommended. Rock check dam 9 operating effectively, repair recommended to add angular rock.	Repair pending.	To be completed in 2014
S005B	S-SMA-3.53	24-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. Riprap 6 is operating effectively, repair recommended to reshape channel and extend riprap to culvert outlet.	Repair pending.	To be completed in 2014
S010	S-SMA-3.95	24-Sep-13	There is evidence of floatable waste, floatable garbage, or debris within the SMA that could be discharged to receiving waters. Trash cleanup recommended.	Repair pending.	To be completed in 2014
S011	S-SMA-4.1	24-Sep-13	Seed and wood mulch 7 is not operating effectively, erosion is occurring on hill slope. Replacement recommended. There is erosion occurring under wattles 10 and 11. Controls are not operating effectively, repair recommended. Recommend addition additional rock to rock berm 8. Control measure is operating effectively.	Repair pending.	To be completed in 2014

**Table 6-4 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>	<b>Observations</b>	<b>Maintenance Performed</b>	<b>Maintenance Date</b>
S013	S-SMA-5	24-Sep-13	There has been an increase in erosion potential at the Site and SMA since the last inspection. Earthen berm 6 is filled in with sediment and rock on spillway is missing. The majority of riprap 3 is missing, and established vegetation 7 has been scoured. Controls are not operating effectively, repair/replacement of BMPs recommended.	Repair pending per field team leader review 15-Nov-13. SMA is in a floodplain, all BMPs heavily impacted. Replacement of BMPs pending evaluation of site	To be completed in 2014
S014	S-SMA-5.2	24-Sep-13	Erosion is occurring around rock check dam 12. Control is not operating effectively, modification recommended. Extension of rock check dam 8 to the east recommended. Control is operating effectively.	Repair pending.	To be completed in 2014
S016	S-SMA-6	26-Sep-13	There has been an increase in erosion potential at the Site and SMA since the last inspection. Riprap 4 and rock check dams 5 and 7 have been blown out. Coir logs 10 and 11 have been washed away. Controls are not operating effectively, replacement recommended.	Repair pending. Per discussion with facility manager, coir logs are still in place and buried in channel banks.	To be completed in 2014
T002	T-SMA-1	25-Sep-13	There is erosion above and between culverts 17 and 18. Controls are operating effectively, repair recommended.	Repair pending engineer review. Will reassess in spring.	To be completed in 2014
T006	T-SMA-4	25-Sep-13	Log berms 9 and 10 are damaged. Controls are not operating effectively, repair recommended. Sediment is filling in behind rock check dams 6, 7, and 8. Controls are operating effectively, replacement recommended.	Repair pending.	To be completed in 2014
T007	T-SMA-5	25-Sep-13	Rock check dam 11 and rock berm 10 are operating effectively, modification recommended to add rock to build up.	Repair pending.	To be completed in 2014

**Table 6-4 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>	<b>Observations</b>	<b>Maintenance Performed</b>	<b>Maintenance Date</b>
T010	T-SMA-7.1	24-Sep-13	There has been an increase in erosion potential at the Site since the last inspection. Base course berm 5 is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
W019	W-SMA-11.7	20-Sep-13	There is a small breach in middle of earthen berm 45. Control is operating effectively, repair recommended. Most of the riprap 4 is sedimented in. Water flowed around east side of rock check dam 6. Controls are not operating effectively, repair recommended.	Repair pending.	To be completed in 2014
W013	W-SMA-9.05	25-Sep-13	There has been an increase in erosion potential at the SMA since the last inspection. There is erosion on the back side of earthen berm 10. Control is operating effectively, repair recommended.	Repair pending.	To be completed in 2014
W017	W-SMA-9.9	20-Sep-13	Earthen berm 19 is breached in center. Control is not operating effectively, repair recommended.	Repair pending.	To be completed in 2014

**Table 6-5  
Summary of  
Visual Inspections for TAL Exceedances**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
E003	2M-SMA-1.43	5-Sep-13
E004	2M-SMA-1.44	6-Nov-13
E007	2M-SMA-1.65	7-Nov-13
E012	2M-SMA-2	5-Sep-13
E014	2M-SMA-3	19-Nov-13
H002	3M-SMA-0.4	26-Sep-13
A002	A-SMA-2	28-Oct-13
A004	A-SMA-2.7	29-Oct-13
A006	A-SMA-3	9-Sep-13
A009	A-SMA-6	9-Sep-13
B001	B-SMA-0.5	8-Nov-13
B002	B-SMA-1	20-Nov-13
C002	CDB-SMA-0.25	18-Sep-13
C003	CDB-SMA-0.55	14-Nov-13
C004	CDB-SMA-1	14-Nov-13
C010	CDB-SMA-4	18-Sep-13
V002	CDV-SMA-1.3	1-Nov-13
V005	CDV-SMA-1.7	1-Nov-13
V006	CDV-SMA-2	5-Sep-13
V008A	CDV-SMA-2.42	11-Sep-13
V009A	CDV-SMA-2.51	18-Nov-13
V013	CDV-SMA-7	4-Nov-13
Q002A	CHQ-SMA-1.02	9-Sep-13
Q004	CHQ-SMA-3.05	24-Oct-13
Q006	CHQ-SMA-4.1	24-Oct-13
Q007	CHQ-SMA-4.5	9-Sep-13
Q009	CHQ-SMA-6	9-Sep-13
D001	DP-SMA-0.3	25-Sep-13
D002	DP-SMA-0.4	21-Nov-13
D006	DP-SMA-2.35	21-Nov-13
L001	LA-SMA-0.85	22-Aug-13
L003	LA-SMA-1	22-Nov-13
L006	LA-SMA-2.1	21-Nov-13
L018	LA-SMA-5.51	17-Sep-13
L018C	LA-SMA-5.54	22-Nov-13
L019	LA-SMA-5.91	21-Nov-13

**Table 6-5 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Inspection Date</b>
L019A	LA-SMA-5.92	21-Nov-13
L027	LA-SMA-6.395	21-Nov-13
M001	M-SMA-1	22-Aug-13
M002	M-SMA-1.2	20-Nov-13
M002B	M-SMA-1.22	20-Nov-13
M012	M-SMA-10	18-Sep-13
M017	M-SMA-12.6	20-Nov-13
M003	M-SMA-3	18-Sep-13
M010	M-SMA-7.9	19-Nov-13
J001	PJ-SMA-1.05	6-Nov-13
J013	PJ-SMA-11	18-Nov-13
J014	PJ-SMA-11.1	18-Nov-13
J024	PJ-SMA-17	18-Sep-13
J026	PJ-SMA-18	18-Sep-13
J025	PJ-SMA-19	13-Nov-13
J004	PJ-SMA-4.05	6-Nov-13
T001	PRATT-SMA-1.05	20-Nov-13
P009	P-SMA-3.05	22-Nov-13
S003	S-SMA-2	5-Sep-13
S003A	S-SMA-2.01	21-Nov-13
S006	S-SMA-3.6	5-Sep-13
S010	S-SMA-3.95	20-Nov-13
S011	S-SMA-4.1	14-Nov-13
J028	STRM-SMA-1.05	5-Sep-13
J029	STRM-SMA-1.5	6-Nov-13
T004	T-SMA-2.85	18-Sep-13
T006	T-SMA-4	20-Nov-13
W001	W-SMA-1	30-Oct-13
W019	W-SMA-11.7	28-Oct-13
W021	W-SMA-14.1	4-Nov-13
W011	W-SMA-8	30-Oct-13
W012	W-SMA-8.7	31-Oct-13
W012A	W-SMA-8.71	31-Oct-13
W015	W-SMA-9.7	29-Oct-13
W017	W-SMA-9.9	29-Oct-13

**Table 6-6  
Summary of Remediation Construction Activity Inspections**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Purpose</b>	<b>Inspection Date</b>	<b>Backup Controls in Place?</b>
H002	3M-SMA-0.4	Facility construction	6/20/2013	Yes
I003	PT-SMA-1.7	Enhanced control installation	4/29/2013	Yes
I003	PT-SMA-1.7	Enhanced control installation	5/6/2013	Yes
I003	PT-SMA-1.7	Enhanced control installation	5/13/2013	Yes
J029	STRM-SMA-1.5	Enhanced control installation	3/25/2013	Yes
J029	STRM-SMA-1.5	Enhanced control installation	4/1/2013	Yes
J029	STRM-SMA-1.5	Enhanced control installation	4/8/2013	Yes
J029	STRM-SMA-1.5	Enhanced control installation	4/15/2013	Yes
J029	STRM-SMA-1.5	Enhanced control installation	4/17/2013	Yes
M002B	M-SMA-1.22	Enhanced control installation	1/30/2013	Yes
M002B	M-SMA-1.22	Enhanced control installation	2/6/2013	Yes
M002B	M-SMA-1.22	Enhanced control installation	2/13/2013	Yes
M002B	M-SMA-1.22	Enhanced control installation	2/20/2013	Yes
P008	P-SMA-2.2	Los Alamos County construction	6/6/2013	Yes
P008	P-SMA-2.2	Los Alamos County construction	6/12/2013	Yes
P008	P-SMA-2.2	Los Alamos County construction	6/20/2013	Yes
P008	P-SMA-2.2	Los Alamos County construction	7/1/2013	Yes
P008	P-SMA-2.2	Los Alamos County construction	7/12/2013	Yes
P008	P-SMA-2.2	Los Alamos County construction	7/19/2013	Yes
P008	P-SMA-2.2	Los Alamos County construction	7/25/2013	Yes
T002	T-SMA-1	Enhanced control installation	3/25/2013	Yes
T002	T-SMA-1	Enhanced control installation	4/1/2013	Yes
T002	T-SMA-1	Enhanced control installation	4/8/2013	Yes
T002	T-SMA-1	Enhanced control installation	4/15/2013	Yes
T002	T-SMA-1	Enhanced control installation	4/22/2013	Yes
T002	T-SMA-1	Enhanced control installation	4/29/2013	Yes

**Table 6-6 (continued)**

<b>Permitted Feature</b>	<b>SMA</b>	<b>Purpose</b>	<b>Inspection Date</b>	<b>Backup Controls in Place?</b>
T002	T-SMA-1	Enhanced control installation	5/6/2013	Yes
T002	T-SMA-1	Enhanced control installation	5/13/2013	Yes
V003	CDV-SMA-1.4	Enhanced control installation	7/17/2013	Yes
V003	CDV-SMA-1.4	Enhanced control installation	7/24/2013	Yes
V003	CDV-SMA-1.4	Enhanced control installation	7/31/2013	Yes
V003	CDV-SMA-1.4	Enhanced control installation	8/7/2013	Yes
V003	CDV-SMA-1.4	Enhanced control installation	8/14/2013	Yes
V003	CDV-SMA-1.4	Enhanced control installation	8/21/2013	Yes
W001	W-SMA-1	Enhanced control installation	1/3/2013	Yes
W001	W-SMA-1	Enhanced control installation	1/10/2013	Yes
W001	W-SMA-1	Enhanced control installation	1/17/2013	Yes
W001	W-SMA-1	Enhanced control installation	1/24/2013	Yes
W001	W-SMA-1	Enhanced control installation	1/31/2013	Yes
W001	W-SMA-1	Enhanced control installation	2/7/2013	Yes
W001	W-SMA-1	Enhanced control installation	2/14/2013	Yes
W001	W-SMA-1	Enhanced control installation	2/20/2013	Yes
W001	W-SMA-1	Enhanced control installation	2/28/2013	Yes
W001	W-SMA-1	Enhanced control installation	3/5/2013	Yes

**Table 6-7  
Samples Collected without Measurable Discharge**

SMA	Compliance Status Report Comment	Storm Rain Event during Periods of Inoperability
LA-SMA-0.85	An initial CAM5 sample was collected on 11/9/2012. The sampler was activated for CAM5 Sample 2 monitoring on 4/2/2013 at 1:05 PM. A sample consisting of snow melt was collected on 4/9/2013 at 8:53 AM. Snow melt samples are not used for purposes of confirmation monitoring. The sampler was reset on 4/17/2013 at 11:54 AM (inoperable 8 days). The sampler was shut down on 5/15/2013 at 1:48 PM after sample collection.	None
LA-SMA-5.35	The sampler was activated for CAM5 Sample 1 monitoring on 5/14/2013 at 10:45 AM. A sample collected on 9/12/2013 at 6:57 PM was not from Site discharge. The sampler was reset on 9/19/2013 at 10:30 AM (inoperable 7 days). The sampler was shut down for the winter on 11/15/2013 at 3:35 PM.	13-Sep-13
S-SMA-3.6	The sampler was activated for CAM3 Sample 1 monitoring on 4/4/2013 at 12:32 PM. A sample collected on 4/9/2013 at 11:56 AM did not consist of discharge from the Site. The sampler was reset on 4/18/2013 at 10:05 AM (inoperable 9 days). The sampler was shut down on 6/14/2013 at 1:51 PM after sample collection and was reactivated for CAM3 Sample 2 monitoring on 7/2/13 at 1:30 PM (inoperable for 18 days). The sampler was shut down on 7/2/2013 at 2:02 PM after sample collection.	None
M-SMA-1.2	The sampler was activated for MEx monitoring on 4/4/2013 at 12:55 PM. A sample consisting of a potable water release was collected on 8/18/2013 at 3:21 PM. The sampler was reset on 8/29/2013 at 12:30 PM (inoperable 11 days). Potable water releases are not used for purposes of confirmation monitoring. The sampler was shut down on 9/13/2013 at 7:49 AM after sample collection.	None
PJ-SMA-4.05	The sampler was activated for MEx monitoring on 4/15/2013 at 3:00 PM. A sample collected on 7/12/2013 at 11:59 AM did not consist of discharge from the Site. The sampler was reset on 7/31/2013 at 12:00 PM (inoperable 16 days). The sampler was shut down on 9/13/2013 at 2:29 PM after sample collection.	7-Jul-13
PT-SMA-0.5	The sampler was activated for CAM5 Sample 1 monitoring on 4/15/2013 at 12:50 PM. The sampler was shut down on 9/17/2013 at 3:30 PM after a non-confirmation monitoring sample collection (on 9/13/2013) and was reset for CAM5 Sample 1 monitoring on 9/30/13 at 12:30 PM (inoperable 13 days). The sampler was shut down for the winter on 11/12/2013 at 11:30 AM.	14-Sep-13



**Table 6-8  
Insufficient Battery Voltage to Operate Sampler**

SMA	Compliance Status Report Comment	Storm Rain Event during Periods of Inoperability
LA-SMA-9	The sampler was activated for MEx monitoring on 3/28/2013 at 10:46 AM. The sampler was found to be inoperable due to low battery voltage and was reset on 9/5/2013 at 11:14 AM (inoperable up to 24 days). The sampler was found to be inoperable due to low battery voltage and was shut down for the winter on 11/8/2013 at 9:31 AM (inoperable up to 39 days).	12-Sep-13 13-Sep-13 17-Sep-13 21-Sep-13 4-Nov-13
PJ-SMA-3.05	The sampler was activated for CAM5 Sample 1 monitoring on 4/8/2013 at 3:15 PM. The sampler was found to have no power on 6/22/2013 at 6:20 AM and was reset on 7/15/2013 at 9:50 AM (inoperable 23 days). The sampler was shut down for the winter on 11/6/2013 at 1:50 PM.	30-Jun-13 11-Jul-13 12-Jul-13

**Table 6-9  
Malfunctioning Sampler Equipment and Repair**

SMA	Compliance Status Report Comment	Storm Rain Event during Periods of Inoperability
P-SMA-2	The sampler was activated for MEx monitoring on 4/3/2013 at 10:20 AM. The sampler malfunctioned on 8/28/2013 at 10:56 AM and was reset on 9/19/2013 at 9:20 AM (inoperable 22 days). The sampler was shut down for the winter on 11/15/2013 at 10:00 AM.	13-Sep-13
LA-SMA-5.91	The sampler was activated for CAM5 Sample 1 monitoring on 7/10/2013 at 9:55 AM. The sampler malfunctioned on 7/12/2013 at 11:13 AM and was reset on 7/17/2013 at 9:30 AM (inoperable 5 days). The sampler malfunctioned on 7/19/2013 at 5:21 PM and was reset on 8/13/2013 at 12:00 PM (inoperable 25 days). The sampler was shut down on 9/12/2013 at 6:36 PM after sample collection.	12-Jul-13
LA-SMA-6.31	The sampler was activated for MEx monitoring on 3/27/2013 at 3:35 PM. The sampler was found to be inoperable due to an actuator malfunction on 9/12/2013 at 9:41 AM and was reset on 9/18/2013 at 10:35 AM (inoperable 6 days). The sampler was shut down for the winter on 11/21/2013 at 12:00 PM.	13-Sep-13
S-SMA-5.5	The sampler was activated for MEx monitoring on 4/8/2013 at 2:50 PM. The sampler malfunctioned on 9/13/2013 at 8:56 AM and was reset on 9/19/2013 at 11:50 AM (inoperable 6 days). The sampler was shut down for the winter on 11/5/2013 at 10:40 AM.	13-Sep-13 17-Sep-13
PJ-SMA-1.05	The sampler was activated for MEx monitoring on 4/2/2013 at 10:02 AM. The sampler malfunctioned on 7/22/2013 at 1:46 PM and was reset on 7/22/2013 at 1:54 PM (inoperable <1 day). The sampler malfunctioned on 7/23/2013 at 1:18 PM and was reset on 7/23/2013 at 1:20 PM (inoperable <1 day). The sampler was shut down on 9/13/2013 at 7:01 AM after sample collection.	None

**Table 6-9 (continued)**

<b>SMA</b>	<b>Compliance Status Report Comment</b>	<b>Storm Rain Event during Periods of Inoperability</b>
PJ-SMA-7	The sampler was activated for MEx monitoring on 4/8/2013 at 10:05 AM. The sampler actuator malfunctioned on 6/5/2013 at 9:31 AM and was reset on 7/15/2013 at 2:46 PM (inoperable 40 days). The sampler was shut down for the winter on 11/7/2013 at 10:25 AM.	11-July-13 12-Jul-13
PT-SMA-3	The sampler was activated for MEx monitoring on 4/3/2013 at 2:15 PM. The sampler intake tube malfunctioned and was shut down for repair on 9/17/2013 at 12:50 PM.	04-Nov-13

**Table 6-10  
Inoperable Triggered Sampler Equipment**

<b>SMA</b>	<b>Compliance Status Report Comment</b>	<b>Storm Rain Event during Periods of Inoperability</b>
B-SMA-0.5	The sampler was activated for MEx monitoring on 4/3/2013 at 9:00 AM. The sampler attempted but was unable to collect a sample on 4/18/2013 at 1:44 PM and was reset on 5/13/2013 at 10:57 AM (inoperable 25 days). The sampler was shut down on 9/13/2013 at 7:55 AM after sample collection.	None
P-SMA-3.05	The sampler was activated for MEx monitoring on 4/2/2013 at 1:14 PM. The sampler attempted but was unable to collect a sample on 6/14/2013 at 12:30 PM and was reset on 6/18/2013 at 11:27 AM (inoperable 4 days). The sampler was shut down on 9/13/2013 at 7:17 AM after sample collection.	None
LA-SMA-6.25	The sampler was activated for MEx monitoring on 3/27/2013 at 2:46 PM. The sampler attempted but was unable to collect a sample on 6/30/2013 at 4:33 PM and was reset on 7/10/2013 at 1:10 PM (inoperable 10 days). The sampler attempted but was unable to collect a sample on 7/12/2013 at 1:29 PM and was reset on 7/18/2013 at 2:05 PM (inoperable 6 days). The sampler attempted but was unable to collect a sample on 9/16/2013 at 11:53 AM and was reset on 9/19/2013 at 8:30 AM (inoperable 3 days). The sampler was shut down for the winter on 11/21/2013 at 12:35 PM.	12-Jul-13
LA-SMA-6.5	The sampler was activated for MEx monitoring on 3/28/2013 at 10:25 AM. The sampler attempted but was unable to collect a sample on 9/13/2013 at 7:35 AM and was reset on 9/18/2013 at 11:10 AM (inoperable 5 days). The sampler was shut down for the winter on 11/8/2013 at 11:16 AM.	13-Sep-13
DP-SMA-1	The sampler was activated for MEx monitoring on 3/28/2013 at 2:25 PM. The sampler attempted but was unable to collect a sample on 9/9/2013 at 5:55 AM and was reset on 9/20/2013 at 4:30 PM (inoperable 11 days). The sampler was shut down for the winter on 11/6/2013 at 1:26 PM.	12-Jul-13

**Table 6-10 (continued)**

<b>SMA</b>	<b>Compliance Status Report Comment</b>	<b>Storm Rain Event during Periods of Inoperability</b>
CDB-SMA-0.15	The sampler was activated for MEx monitoring on 4/3/2013 at 11:30 AM. The sampler attempted but was unable to collect a sample on 9/12/2013 at 3:52 PM and was reset on 9/17/2013 at 10:15 AM (inoperable 5 days). The sampler attempted but was unable to collect a sample on 9/18/2013 at 7:17 AM and was reset on 9/23/2013 at 4:45 PM (inoperable 5 days). The sampler was shut down for the winter on 11/6/2013 at 11:00 AM.	13-Sep-13 22-Sep-13
M-SMA-12	The sampler was activated for MEx monitoring on 4/9/2013 at 12:00 PM. The sampler attempted but was unable to collect a sample on 9/13/2013 at 8:11 AM and was reset on 9/18/2013 at 12:10 PM (inoperable 5 days). The sampler malfunctioned on 9/23/2013 at 8:21 PM and was reset on 9/25/2013 at 2:35 PM (inoperable 2 days). The sampler was shut down for the winter on 11/12/2013 at 11:30 AM.	13-Sep-13 17-Sep-13
M-SMA-12.5	The sampler was activated for MEx monitoring on 4/2/2013 at 8:45 AM. The sampler attempted but was unable to collect a sample on 9/13/2013 at 7:56 AM and was reset on 9/17/2013 at 4:20 PM (inoperable 4 days). The sampler was shut down for the winter on 11/25/2013 at 12:18 PM.	13-Sep-13
M-SMA-12.92	The sampler was activated for MEx monitoring on 4/1/2013 at 2:50 PM. The sampler attempted but was unable to collect a sample on 4/9/2013 at 9:49 PM and was reset on 4/29/2013 at 11:45 AM (inoperable 20 days). The sampler malfunctioned on 9/13/2013 at 8:03 AM and was reset on 9/23/2013 at 8:45 AM (inoperable 10 days). The sampler was shut down for the winter on 11/20/2013 at 1:00 PM.	13-Sep-13
T-SMA-6.8	The sampler was activated for MEx monitoring on 4/1/2013 at 12:53 PM. The sampler attempted but was unable to collect a sample on 9/13/2013 at 7:15 AM and was reset on 9/20/2013 at 1:55 PM (inoperable 7 days). The sampler was shut down for the winter on 11/12/2013 at 3:38 PM.	13-Sep-13 17-Sep-13
2M-SMA-1.67	The sampler was activated for MEx monitoring on 4/2/2013 at 12:40 PM. The sampler attempted but was unable to collect a sample on 7/12/2013 at 11:20 AM and was reset on 7/15/2013 at 1:24 PM (inoperable 3 days). The sampler attempted but was unable to collect a sample on 7/25/2013 at 10:10 PM and was reset on 8/12/2013 at 11:10 AM (inoperable 18 days). The sampler attempted but was unable to collect a sample on 8/18/2013 at 12:00 PM and was reset on 8/29/2013 at 10:00 AM (inoperable 11 days). The sampler attempted but was unable to collect a sample on 9/10/2013 at 9:54 PM and was reset on 9/18/2013 at 2:55 PM (inoperable 8 days). The sampler was shut down for the winter on 11/5/2013 at 2:06 PM.	12-Jul-13 12-Sep-13 13-Sep-13 17-Sep-13
2M-SMA-2	The sampler was activated for CAM5 Sample 1 monitoring on 5/23/2013 at 1:15 PM. The sampler was shut down on 6/14/2013 at 1:05 PM after sample collection and was reset for CAM5 Sample 2 monitoring on 7/8/13 at 12:20 PM (inoperable 24 days). The sampler attempted but was unable to collect a sample on 7/11/2013 at 11:34 AM and was reset on 7/16/2013 at 11:01 AM (inoperable 4 days). The sampler attempted but was unable to collect a sample on 8/5/2013 at 3:23 PM and was reset on 8/6/2013 at 10:33 AM (inoperable 1 day). The sampler was shut down on 8/18/2013 at 2:33 PM after sample collection.	12-Jul-13

**Table 6-10 (continued)**

<b>SMA</b>	<b>Compliance Status Report Comment</b>	<b>Storm Rain Event during Periods of Inoperability</b>
3M-SMA-0.5	The sampler was activated for MEx monitoring on 4/15/2013 at 12:15 PM. The sampler attempted but was unable to collect a sample on 8/4/2013 at 2:40 PM and was reset on 8/6/2013 at 8:55 AM (inoperable 2 days). The sampler attempted but was unable to collect a sample on 8/6/2013 at 6:47 PM and was reset on 8/20/2013 at 10:10 AM (inoperable 14 days). The sampler attempted but was unable to collect a sample on 8/24/2013 at 8:30 PM and was reset on 9/9/2013 at 9:30 AM (inoperable 16 days). The sampler attempted but was unable to collect a sample on 9/11/2013 at 4:53 AM and was reset on 9/11/2013 at 10:55 AM (inoperable <1 day). The sampler was shut down for repair on 9/13/2013 at 6:31 PM after attempted sample collection.	04-Aug-13 13-Sep-13 14-Sep-13
PJ-SMA-9	The sampler was activated for MEx monitoring on 4/8/2013 at 10:58 AM. The sampler attempted to collect a sample and was shut down for repair on 9/18/2013 at 2:10 PM.	None
PJ-SMA-14.4	The sampler was activated for MEx monitoring on 4/3/2013 at 2:57 PM. The sampler attempted but was unable to collect a sample on 7/12/2013 at 12:42 PM and was reset on 7/29/2013 at 10:15 AM (inoperable 17 days). The sampler attempted but was unable to collect a sample on 9/13/2013 at 12:00 PM and was reset on 9/18/2013 at 9:05 AM (inoperable 5 days) The sampler was shut down for the winter on 11/22/2013 at 12:00 PM.	25-Jul-13 26-Jul-13 13-Sep-13
PJ-SMA-14.6	The sampler was activated for MEx monitoring on 4/3/2013 at 2:44 PM. The sampler attempted but was unable to collect a sample on 7/13/2013 at 8:34 PM and was reset on 7/29/2013 at 11:00 AM (inoperable 16 days). The sampler attempted but was unable to collect a sample on 8/4/2013 at 2:34 PM and was reset on 8/14/2013 at 1:15 PM (inoperable 10 days) The sampler was shut down for the winter on 11/22/2013 at 1:30 PM.	25-Jul-13 16-Jul-13
CDV-SMA-1.2	The sampler was activated for MEx monitoring on 4/9/2013 at 1:50 PM. The sampler attempted but was unable to collect a sample on 8/4/2013 at 11:45 AM and was reset on 8/6/2013 at 12:05 PM (inoperable 2 days). The sampler attempted but was unable to collect a sample on 8/18/2013 at 2:32 PM and was reset on 8/22/2013 at 11:30 AM (inoperable 4 days). The sampler attempted but was unable to collect a sample on 9/2/2013 at 6:10 PM and was reset on 9/12/2013 at 1:10 PM (inoperable 10 days). The sampler was shut down on 9/12/2013 at 5:03 PM after attempted sample collection.	05-Aug-13 12-Sep-13 13-Sep-13 17-Sep-13
CDV-SMA-2.5	The sampler was activated for MEx monitoring on 4/17/2013 at 10:50 AM. The sampler attempted but was unable to collect a sample on 7/12/2013 at 12:12 PM and was reset on 7/16/2013 at 2:30 PM (inoperable 4 days). The sampler was shut down on 7/26/2013 at 5:54 PM after sample collection.	12-Jul-13
CDV-SMA-6.01	The sampler was activated for MEx monitoring on 4/11/2013 at 3:30 PM. The sampler attempted but was unable to collect a sample on 7/12/2013 at 11:42 AM and was reset on 7/15/2013 at 11:08 AM (inoperable 3 days). The sampler attempted but was unable to collect a sample on 7/25/2013 at 10:20 AM and was reset on 8/8/2013 at 3:26 PM (inoperable 14 days). The sampler was shut down for the winter on 11/4/2013 at 10:15 AM.	12-Jul-13 05-Aug-13
PT-SMA-4.2	The sampler was activated for MEx monitoring on 4/3/2013 at 2:35 PM. The sampler attempted but was unable to collect a sample on 9/13/2013 at 7:26 AM and was reset on 9/17/2013 at 1:45 PM (inoperable 4 days). The sampler was shut down for the winter on 11/13/2013 at 9:25 AM.	13-Sep-13 14-Sep-13

**Table 6-10 (continued)**

<b>SMA</b>	<b>Compliance Status Report Comment</b>	<b>Storm Rain Event during Periods of Inoperability</b>
W-SMA-9.5	The sampler was activated for MEx monitoring on 4/9/2013 at 9:15 AM. The sampler attempted but was unable to collect a sample on 9/13/2013 at 8:27 AM and was reset on 9/20/2013 at 10:08 AM (inoperable 7 days). The sampler was shut down for the winter on 10/29/2013 at 12:40 PM.	13-Sep-13 17-Sep-13
A-SMA-1.1	The sampler was activated for MEx monitoring on 4/10/2013 at 10:20 AM. The sampler attempted but was unable to collect a sample on 9/13/2013 at 2:15 PM and was reset on 9/17/2013 at 2:10 PM (inoperable 4 days). The sampler was shut down for the winter on 10/28/2013 at 12:10 PM.	13-Sep-13 14-Sep-13
CHQ-SMA-3.05	The sampler was activated for MEx monitoring on 4/11/2013 at 10:30 AM. The sampler attempted but was unable to collect a sample on 9/1/2013 at 2:37 PM and was reset on 9/3/13 at 1:40 AM (inoperable 2 days). The sampler was shut down on 9/10/2013 at 2:45 PM after sample collection.	1-Sep-13
CHQ-SMA-7.1	The sampler was activated for MEx monitoring on 4/10/2013 at 11:20 AM. The sampler attempted but was unable to collect a sample on 9/12/2013 at 5:27 PM and was reset on 9/17/2013 at 11:40 AM (inoperable 5 days). The sampler attempted but was unable to collect samples on 9/18/2013 and on 9/22/2013 and was shut down for the winter 10/24/2013 (inoperable 32 days).	12-Sep-13 13-Sep-13 14-Sep-13 22-Sep-13
PJ-SMA-5.1	The sampler was activated for CAM5 Sample 1 monitoring on 4/2/2013 at 11:42 AM. The sampler attempted to collect a sample on 7/13/2013 at 6:41 PM and was reset on 7/18/2013 at 2:25 PM (inoperable 5 days). The sampler attempted to collect a sample on 7/25/2013 at 10:22 PM and was reset on 8/12/2013 at 8:55 AM (inoperable 17 days). The sampler attempted to collect a sample on 8/18/2013 at 1:59 PM and was reset on 8/26/2013 at 3:20 PM (inoperable 8 days). The sampler attempted to collect a sample on 9/10/2013 at 3:31 PM and was reset on 9/20/2013 at 12:18 PM (inoperable 10 days). The sampler attempted to collect a sample on 9/22/2013 at 4:32 PM and was shut down for the winter.	12-Sep-13 13-Sep-13 17-Sep-13

**Table 7-1  
Minor Sampler Location Adjustments**

<b>SMA</b>	<b>New Station Name</b>	<b>Watershed</b>
LA-SMA-1.25	LA-SMA-1.25 at SS131045	Los Alamos and Pueblo
LA-SMA-5.2	LA-SMA-5.2 at SS131046	Los Alamos and Pueblo
P-SMA-2.2	P-SMA-2.2 at SS130804	Los Alamos and Pueblo
PJ-SMA-10	PJ-SMA-10 at SS132340	Pajarito
PJ-SMA-13.7	PJ-SMA-13.7 at SS132339	Pajarito
STRM-SMA-1.5	STRM-SMA-1.5 at SS133007	Pajarito
CDV-SMA-1.4	CDV-SMA-1.4 at SS130425	Water and Cañon de Valle
CDV-SMA-4	CDV-SMA-4 at SS130424	Water and Cañon de Valle
CDV-SMA-6.02	CDV-SMA-6.02 at SS130423	Water and Cañon de Valle
PT-SMA-1.7	PT-SMA-1.7 at SS134817	Water and Cañon de Valle
W-SMA-1	W-SMA-1 at SS133939	Water and Cañon de Valle
W-SMA-6	W-SMA-6 at SS133940	Water and Cañon de Valle

**Table 7-2  
Summary of SDPPP Changes Completed from January 1 to December 31, 2013**

Description of Type of Change to SDPPP	Number of Changes to SDPPP Volumes for January 1–December 31, 2013, Time Period					
	Volume 1 Los Alamos and Pueblo Watersheds	Volume 2 Sandia and Mortandad Watersheds	Volume 3 Pajarito Watershed	Volume 4 Water and Cañon de Valle Watersheds	Volume 5 Ancho and Chaquehui Watersheds	Total for All SDPPP Volumes
Revisions/Updates to SMA Maps	110	89	75	80	31	385
Add New Control – Augmenting Existing/Baseline Control	16	19	11	31	16	93
Add New Control – Routine/Replacement Control	74	63	52	52	25	266
Retire Control – Damaged and/or Replaced Control	107	88	71	62	30	358
Retire Control – Lifecycle Expired Control	29	27	31	64	26	177
New Control – Corrective Action Control	10	17	8	7	0	42
Edits or changes to SDPPP reference documents	0	0	0	0	0	0
Edits or changes to procedure documents included in SDPPP	0	0	0	0	0	0
SDPPP updates to Site descriptions	64	42	62	0	19	187
Certificate of Completion Issued for SWMU or AOC	0	0	0	0	0	0
Minor Sampler Adjustments, with Updates to Coordinates in Att. D	3	0	3	6	0	12
SMA Boundary Modifications	7	2	4	8	0	21
Site Boundary Modifications	25	15	14	24	3	81
Miscellaneous edit or correction to SDPPP text	2	1	1	3	0	7
<b>TOTAL CHANGES</b>	<b>447</b>	<b>363</b>	<b>332</b>	<b>337</b>	<b>150</b>	<b>1629</b>

**Table 8-1  
Milestones for Significant Compliance Phases for the Individual Permit**

<b>Compliance Phase</b>	<b>Permit Section(s)</b>	<b>Description</b>	<b>Milestone</b>
Baseline Control Measures Installation	Part I, Section B.1	The Permittees must install baseline control measures at each Site within 6 mo of the November 1, 2010, effective date of the Permit. Baseline control measures had already been installed and implemented before the effective date of the Permit at 102 Sites assigned to 63 SMAs.	April 30, 2011
	Appendix E	Appendix E, Table E-1, specifies the control measures installed or to be installed at each Site. Table E-2 lists 63 SMAs where baseline control measures have been installed before November 1, 2010.	
Baseline Control Measures Certification	Part I, Section B.1	The Permittees must certify the baseline control measures specified in Appendix E have been installed for all Sites at each SMA. Certification documentation must include a description and photograph of each control measure.	December 1, 2010  May 30, 2011
	Appendix E	The Permittees must certify the baseline control measures completed at 63 SMAs before November 1, 2010 (listed in Table E-2) within 30 d of effective date of Permit.	
	Appendix E	The Permittees must certify baseline control measures for Sites at the remaining 187 SMAs listed in Table E-1 within 30 d of completion.	
Baseline Monitoring	Part I, Section D.1	The Permittees shall perform confirmation monitoring following installation of control measures. Initial monitoring requirements following installation and implementation of baseline control measures vary on a site-by-site basis.	October 31, 2011  April 30, 2012
	Part I, Section D.1(a)	For Sites at which baseline control measures were installed and implemented before November 1, 2010, the Permittees shall collect two or more confirmation samples within one (1) year after the effective date of the Permit at associated SMAs.	
	Part I, Section D.1(b)	For Sites at which baseline control measures were installed and implemented within six (6) months of the effective date of the Permit, the Permittees shall collect two or more confirmation samples within eighteen (18) months after the effective date of the Permit at associated SMAs.	
Baseline Monitoring Extended (MEx)	Section E.5(e)	If no confirmation sample could be collected during the applicable period from a measurable storm event, confirmation sampling shall continue until at least one sample is collected, and compliance with applicable TALs for that particular Site or Sites will be determined based on the single result from the first successful confirmation sampling event.	As applicable



**Table 8-1 (continued)**

<b>Compliance Phase</b>	<b>Permit Section(s)</b>	<b>Description</b>	<b>Milestone</b>
Baseline Confirmation Complete (BCComp)	Part I, Section D.4(b)	If analytical results for all pollutants of concern at a particular SMA are at or below the MTALs and the average of all applicable sampling results is at or below the ATALs, or the applicable minimum quantitation levels (MQLs), whichever is greater, no further sampling is required for the Site or group of Sites within the associated SMA for the remaining period of the permit.	As applicable
Corrective Action Initiation (CAI)	Part I, Section E	The Permittees shall initiate corrective action as soon as practicable if, following installation of baseline control measures, initial confirmation monitoring shows TALs are not being met at a particular Site.  If confirmation monitoring shows TALs are not being met at a particular Site, the Permittees must take corrective action through installation of measures reasonably expected to (i) meet applicable target action levels at that Site; (ii) achieve total retention of storm water discharges from the Site, (iii) totally eliminate exposure of pollutants to storm water at the Site; or through (iv) demonstrate the Site has achieved RCRA “corrective action complete without controls/corrective action complete with controls” status or a Certificate of Completion under the Consent Order.	See Section 4 of the Annual Report
Enhanced Control Monitoring (CAM3 or CAM5)	Part I, Section E.1(a)	If the selected corrective action entails the design and installation of enhanced control measures, the Permittees shall collect at least two confirmation samples following installation of any enhanced control. If either validated confirmation sample result exceeds applicable TALs, the Permittees shall initiate further measures to achieve completion of corrective action.	As applicable
	Part I, Section E.1(c)	Where applicable, the Permittees shall provide sampling results within 30 d of receipt of analytical results from the first measureable storm event after completion of such measures.	As applicable
	Part I, Section E.1(d)	For “High Priority Sites” [see Part I, Section E.4 (a)], if no confirmation sample could be collected because of a lack of a measurable storm event before the second year of the Permit (October 31, 2012), then the compliance deadlines under Part I, Section E.4, shall be extended for a one- (1-) year period following the first successful confirmation sampling event.	As applicable



**Table 8-2  
Summary of Individual Permit Compliance Status**

<b>Compliance Phase</b>	<b>Number of SMAs</b>	<b>Number of Sites*</b>	<b>Milestone</b>	<b>Status as of December 31, 2013</b>
Baseline Control Measures Installation	250	408	April 30, 2011	Baseline control measure installation and implementation were completed on schedule.
Baseline Control Measures Certification	250	408	May 30, 2011	Baseline control measure certification was completed on schedule.
Baseline Monitoring	250	408	October 31, 2011 April 30, 2012	Baseline monitoring ended on the milestone dates.
Baseline Monitoring Extended	111	162	As applicable	Baseline monitoring is extended until one confirmation sample can be collected.
Baseline Confirmation Complete	10	13	October 31, 2013 October 31, 2015	No TAL exceedances were observed at three Moderate Priority Sites.
Corrective Action Initiated	129	245	As applicable	See Section 4 of the Annual Report for details on the criteria used to determine which SMAs require corrective action.
Enhanced Control Monitoring	39	68	As applicable	Corrective action is being planned at 79 SMAs associated with 166 Sites in 2014.
Corrective Action Complete	2	7	October 13, 2013	Corrective action has been completed at seven High Priority Sites.
	8	15	October 13, 2015	Corrective action has been completed at 15 Moderate Priority Sites.
Alternative Compliance	2	5	As applicable	Alternative compliance for five High Priority Sites was requested prior to October 31, 2013.
Deletion of Site	0	0	As applicable	Deletion of Site from the Permit has not been requested.

\* The number of Sites may add up to more than 405 (the number of permitted Sites) of 406 (the number of NMED-recognized Sites) because some Sites are assigned to more than one SMA in different compliance phases.

**Table 8-3  
Site-Specific Compliance Status**

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
R001	R-SMA-0.5	16-Dec-10	3-Aug-12	12-Sep-12	C-00-020	MPS <sup>a</sup>	CACompD <sup>b</sup>	29-Nov-12	— <sup>c</sup>	29-Nov-12
R002	R-SMA-1	16-May-11	19-Aug-11	13-Oct-11	C-00-041	MPS	CAI <sup>d</sup>	In Planning	—	—
R003	R-SMA-1.95	16-Dec-10	19-Aug-11	1-May-12	00-015	MPS	CAI	In Planning	—	—
R004	R-SMA-2.05	1-Dec-10	In Process	—	00-011(c)	MPS	—	—	—	—
R005	R-SMA-2.3	1-Dec-10	14-Jun-13	<TAL <sup>e</sup>	00-011(e)	MPS	—	—	—	—
R006	R-SMA-2.5	16-Dec-10	In Process	—	00-011(a)	MPS	—	—	—	—
B001	B-SMA-0.5	16-Dec-10	13-Sep-13	30-Oct-13	10-001(a)	MPS	CAI	In Planning	—	—
					10-001(b)	MPS	CAI	In Planning	—	—
					10-001(c)	MPS	CAI	In Planning	—	—
					10-001(d)	MPS	CAI	In Planning	—	—
					10-004(a)	MPS	CAI	In Planning	—	—
					10-004(b)	MPS	CAI	In Planning	—	—
					10-008	MPS	CAI	In Planning	—	—
					10-009	MPS	CAI	In Planning	—	—
B002	B-SMA-1	16-Dec-10	13-Sep-13	22-Oct-13	00-011(d)	MPS	CAI	In Planning	—	—
P001	ACID-SMA-1.05	1-Dec-10	21-Aug-11	<TAL	00-030(g)	MPS	—	—	—	—
P002	ACID-SMA-2	1-Dec-10	19-Aug-11	3-Nov-11	01-002(b)-00	MPS	CAI	In Planning	—	—
					45-001	MPS	CACompD	7-Mar-13	—	7-Mar-13
					45-002	MPS	CACompD	7-Mar-13	—	7-Mar-13
					45-004	MPS	CACompD	7-Mar-13	—	7-Mar-13
P002A	ACID-SMA-2.01	16-Dec-10	In Process	—	00-030(f)	MPS	—	—	—	—
P003	ACID-SMA-2.1	1-Dec-10	3-Aug-12	7-Sep-12	01-002(b)-00	MPS	CAI	In Planning	—	—
P004	P-SMA-0.3	16-Dec-10	25-Jul-13	5-Sep-13	00-018(b)	MPS	CACompD	16-Sep-13	—	16-Sep-13

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
P005	P-SMA-1	1-Dec-10	In Process	—	73-001(a)	HPS <sup>f</sup>	—	—	—	—
					73-004(d)	HPS	—	—	—	—
P006	P-SMA-2	1-Dec-10	In Process	—	73-002	MPS	—	—	—	—
					73-006	MPS	—	—	—	—
P007	P-SMA-2.15	16-Dec-10	In Process	—	31-001	MPS	—	—	—	—
P008	P-SMA-2.2	16-May-11	In Process	—	00-019	HPS	—	—	—	—
P009	P-SMA-3.05	16-Dec-10	13-Sep-13	22-Oct-13	00-018(a)	HPS	CAI	In Planning	—	—
L001	LA-SMA-0.85	1-Dec-10	14-Aug-11	7-Oct-11	03-055(c)	MPS	CAM5 <sup>g</sup>	23-Oct-12	In Process	—
				24-Jun-13	03-055(c)	MPS	CAI2 <sup>h</sup>	In Planning	—	—
L002	LA-SMA-0.9	16-Dec-10	In Process	—	00-017	MPS	—	—	—	—
					C-00-044	MPS	—	—	—	—
L003	LA-SMA-1	16-Dec-10	19-Aug-11	30-Apr-12	00-017	MPS	CAM5	27-Nov-12	In Process	—
					C-00-044	MPS	CAM5	27-Nov-12	In Process	—
L004	LA-SMA-1.1	16-Dec-10	19-Aug-11	11-Oct-11	43-001(b2)	MPS	CACompD	29-Nov-12	—	29-Nov-12
L005	LA-SMA-1.25	1-Dec-10	28-Aug-11	27-Oct-11	C-43-001	MPS	CAM5	30-Aug-12	In Process	—
				15-Nov-12	C-43-001	MPS	CAI2	In Planning	—	—
L006	LA-SMA-2.1	16-May-11	13-Sep-13	3-Nov-13	01-001(f)	HPS	CAI	In Planning	—	—
L007	LA-SMA-2.3	16-Dec-10	21-Aug-11	1-May-12	01-001(b)	MPS	CACompD	29-Nov-12	—	29-Nov-12
L008	LA-SMA-3.1	1-Dec-10	In Process	—	01-001(e)	HPS	—	—	—	—
					01-003(a)	HPS	—	—	—	—
L009	LA-SMA-3.9	16-Dec-10	In Process	—	01-001(g)	MPS	—	—	—	—
					01-006(a)	MPS	—	—	—	—
L010	LA-SMA-4.1	1-Dec-10	4-Sep-11	8-Nov-11	01-003(b)	MPS	CAI	In Planning	—	—
					01-006(b)	MPS	CAI	In Planning	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
L011	LA-SMA-4.2	1-Dec-10	In Process	—	01-001(c)	MPS	—	—	—	—
					01-006(c)	MPS	—	—	—	—
					01-006(d)	MPS	—	—	—	—
L012	LA-SMA-5.01	16-Dec-10	In Process	—	01-001(d)	HPS	—	—	—	—
					01-006(h)	HPS	—	—	—	—
L012A	LA-SMA-5.02	16-May-11	19-Aug-11	25-Oct-11	01-003(e)	HPS	CACompD	29-Nov-12	—	29-Nov-12
L013	LA-SMA-5.2	16-May-11	In Process	—	01-003(d)	MPS	—	—	—	—
L015	LA-SMA-5.31	16-Dec-10	19-Aug-11	30-Apr-12	41-002(c)	MPS	CAM5	27-Jul-12	In Process	—
L016	LA-SMA-5.33	16-Dec-10	21-Aug-11	30-Apr-12	32-004	MPS	CACompD	7-Mar-13	—	7-Mar-13
L014	LA-SMA-5.35	1-Dec-10	7-Sep-11	27-Oct-11	C-41-004	MPS	CAM5	27-Nov-12	In Process	—
L017	LA-SMA-5.361	28-Apr-11	In Process	—	[32-002(b1)] 32-002(b)	MPS	—	—	—	—
					[32-002(b2)] 32-002(b)	MPS	—	—	—	—
L017A	LA-SMA-5.362	28-Apr-11	In Process	—	32-003	MPS	—	—	—	—
L018	LA-SMA-5.51	28-Apr-11	12-Jul-13	21-Aug-13	02-003(a)	HPS	CAI	In Planning	—	—
					02-003(e)	HPS	CAI	In Planning	—	—
					02-004(a)	HPS	CAI	In Planning	—	—
					02-005	HPS	CAI	In Planning	—	—
					02-006(b)	HPS	CAI	In Planning	—	—
					02-006(c)	HPS	CAI	In Planning	—	—
					02-006(d)	HPS	CAI	In Planning	—	—
					02-006(e)	HPS	CAI	In Planning	—	—
					02-008(a)	HPS	CAI	In Planning	—	—
					02-009(b)	HPS	CAI	In Planning	—	—
02-011(a)	HPS	CAI	In Planning	—	—					

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
L018	LA-SMA-5.51	28-Apr-11	12-Jul-13	21-Aug-13	02-011(b)	HPS	CAI	In Planning	—	—
					02-011(c)	HPS	CAI	In Planning	—	—
					02-011(d)	HPS	CAI	In Planning	—	—
L018A	LA-SMA-5.52	28-Apr-11	In Process	—	02-003(b)	HPS	—	—	—	—
					02-007	HPS	—	—	—	—
					02-008(c)	HPS	—	—	—	—
L018B	LA-SMA-5.53	28-Apr-11	In Process	—	02-009(a)	HPS	—	—	—	
L018C	LA-SMA-5.54	28-Apr-11	13-Sep-13	3-Nov-13	02-009(c)	HPS	CAI	In Planning	—	—
L019	LA-SMA-5.91	1-Dec-10	7-Sep-11	31-Oct-11	21-009	MPS	CAM5	8-Jul-13	In Process	—
					21-021	MPS	CAM5	8-Jul-13	In Process	—
					21-023(c)	MPS	CACompD	29-Nov-12	—	29-Nov-12
					21-027(d)	MPS	CAM5	8-Jul-13	In Process	—
L019A	LA-SMA-5.92	1-Dec-10	12-Jul-13	27-Aug-13	21-013(b)	MPS	CAI	In Planning	—	—
					21-013(g)	MPS	CAI	In Planning	—	—
					21-018(a)	MPS	CAI	In Planning	—	—
					21-021	MPS	CAI	In Planning	—	—
L020	LA-SMA-6.25	1-Dec-10	In Process	—	21-021	MPS	—	—	—	—
					21-024(d)	MPS	—	—	—	—
					21-027(c)	MPS	—	—	—	—
L021	LA-SMA-6.27	1-Dec-10	In Process	—	21-021	MPS	—	—	—	—
					21-027(c)	MPS	—	—	—	—
L022	LA-SMA-6.3	16-Dec-10	In Process	—	21-006(b)	MPS	—	—	—	—
L022A	LA-SMA-6.31	16-Dec-10	In Process	—	21-027(a)	MPS	—	—	—	—
L023	LA-SMA-6.32	16-Dec-10	In Process	—	21-021	MPS	—	—	—	—
L024	LA-SMA-6.34	16-Dec-10	In Process	—	21-021	MPS	—	—	—	—
					21-022(h)	MPS	—	—	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
L025	LA-SMA-6.36	16-Dec-10	In Process	—	21-021	MPS	—	—	—	—
					21-024(a)	MPS	—	—	—	—
L026	LA-SMA-6.38	16-Dec-10	In Process	—	21-021	MPS	—	—	—	—
					21-024(c)	MPS	—	—	—	—
L027	LA-SMA-6.395	16-Dec-10	13-Sep-13	25-Oct-13	21-021	MPS	CAI	In Planning	—	—
					21-024(j)	MPS	CAI	In Planning	—	—
L028	LA-SMA-6.5	16-Dec-10	In Process	—	21-021	MPS	—	—	—	—
					21-024(i)	HPS	—	—	—	—
L029	LA-SMA-9	28-Apr-11	In Process	—	26-001	MPS	—	—	—	—
					26-002(a)	MPS	—	—	—	—
					26-002(b)	MPS	—	—	—	—
					26-003	MPS	—	—	—	—
L030	LA-SMA-10.11	16-Dec-10	In Process	—	53-002(a)	MPS	—	—	—	—
L030A	LA-SMA-10.12	16-May-11	1-Sep-11	1-May-12	53-008	MPS	CAM5	30-Nov-12	In Process	—
D001	DP-SMA-0.3	28-Apr-11	19-Aug-11	1-May-12	21-029	MPS	CAM5	8-Jul-13	In Process	—
				30-Oct-13	21-029	MPS	CAI2	In Planning	—	—
D002	DP-SMA-0.4	16-Dec-10	13-Sep-13	26-Oct-13	21-021	MPS	CAI	In Planning	—	—
D003	DP-SMA-0.6	28-Apr-11	In Process	—	21-021	MPS	—	—	—	—
					21-024(l)	MPS	—	—	—	—
D004	DP-SMA-1	16-Dec-10	In Process	—	21-011(k)	MPS	—	—	—	—
					21-021	MPS	—	—	—	—
D005	DP-SMA-2	1-Dec-10	In Process	—	21-021	MPS	—	—	—	—
					21-024(h)	MPS	—	—	—	—
D006	DP-SMA-2.35	16-Dec-10	13-Sep-13	30-Oct-13	21-021	MPS	CAI	In Planning	—	—
					21-024(n)	MPS	CAI	In Planning	—	—



Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
D007	DP-SMA-3	11-Feb-11	29-Jul-11	1-May-12	21-013(c)	MPS	CAM5	30-Aug-12	In Process	—
					21-021	MPS	CAM5	30-Aug-12	In Process	—
D008	DP-SMA-4	16-Dec-10	In Process	—	21-021	MPS	—	—	—	—
S001	S-SMA-0.25	1-Dec-10	15-Aug-11	20-Oct-11	03-013(a)	HPS	AltCompR <sup>i</sup>	30-Apr-13	—	—
					03-052(f)	HPS	AltCompR	30-Apr-13	—	—
S002	S-SMA-1.1	16-May-11	4-Sep-11	2-Nov-11	03-029	HPS	FM <sup>j</sup>	23-Sep-13	In Process	—
S003	S-SMA-2	1-Dec-10	13-Aug-11	20-Oct-11	03-012(b)	HPS	CAM3 <sup>k</sup>	8-Jul-13	In Process	—
					03-045(b)	HPS	CAM3	8-Jul-13	In Process	—
					03-045(c)	HPS	CAM3	8-Jul-13	In Process	—
					03-056(c)	HPS	CACompD	29-Nov-12	—	29-Nov-12
				10-Sep-13	03-012(b)	HPS	CAI2	10-Sep-13	—	—
					03-045(b)	HPS	CAI2	10-Sep-13	—	—
					03-045(c)	HPS	CAI2	10-Sep-13	—	—
					03-056(c)	HPS	CACompD	29-Nov-12	—	29-Nov-12
				—	03-012(b)	HPS	FM	23-Sep-13	—	—
					03-045(b)	HPS	AltCompR	30-Apr-13	—	—
					03-045(c)	HPS	AltCompR	30-Apr-13	—	—
					03-056(c)	HPS	AltCompR	30-Apr-13	—	—
S003A	S-SMA-2.01	16-Dec-10	7-Sep-11	2-Nov-11	03-052(b)	HPS	CAM3	27-Nov-12	In Process	—
				—	03-052(b)	HPS	FM	23-Sep-13	In Process	—
S004	S-SMA-2.8	16-Dec-10	In Process	—	03-014(c2)	MPS	—	—	—	—
S005	S-SMA-3.51	16-Dec-10	In Process	—	03-009(i)	HPS	—	—	—	—
S005A	S-SMA-3.52	16-Dec-10	In Process	—	03-021	HPS	—	—	—	—
S005B	S-SMA-3.53	16-Dec-10	4-Aug-11	30-Apr-12	03-014(b2)	HPS	CAM3	2-May-13	In Process	—
				—	03-014(b2)	HPS	FM	23-Sep-13	In Process	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
S006	S-SMA-3.6	1-Dec-10	13-Aug-11	20-Oct-11	60-007(b)	HPS	CAM3	27-Nov-12	In Process	—
				13-Aug-13	60-007(b)	HPS	CAI2	In Planning	—	—
S007	S-SMA-3.7	16-Dec-10	In Process	—	53-012(e)	MPS	—	—	—	—
S008	S-SMA-3.71	16-Dec-10	In Process	—	53-001(a)	MPS	—	—	—	—
S009	S-SMA-3.72	16-Dec-10	In Process	—	53-001(b)	MPS	—	—	—	—
S010	S-SMA-3.95	16-May-11	13-Sep-13	25-Oct-13	20-002(a)	MPS	CAI	In Planning	—	—
S011	S-SMA-4.1	16-Dec-10	1-Sep-11	2-Nov-11	53-014	HPS	CACompD	20-Aug-13	—	20-Aug-13
S012	S-SMA-4.5	16-May-11	In Process	—	20-002(d)	MPS	—	—	—	—
S013	S-SMA-5	16-May-11	In Process	—	20-002(c)	HPS	—	—	—	—
S014	S-SMA-5.2	16-Dec-10	In Process	—	20-003(c)	MPS	—	—	—	—
S015	S-SMA-5.5	16-May-11	In Process	—	20-005	MPS	—	—	—	—
S016	S-SMA-6	16-May-11	19-Aug-11	2-Nov-11	72-001	HPS	CAI	In Planning	—	—
C001	CDB-SMA-0.15	1-Dec-10	In Process	—	04-003(a)	MPS	—	—	—	—
					04-004	MPS	—	—	—	—
C002	CDB-SMA-0.25	1-Dec-10	1-Sep-11	2-Nov-11	46-004(c2)	MPS	CAM5	19-Jul-12	In Process	—
					46-004(e2)	MPS	CAM5	19-Jul-12	In Process	—
				22-Oct-13	46-004(c2)	MPS	CAI2	In Planning	—	—
					46-004(e2)	MPS	CAI2	In Planning	—	—
C003	CDB-SMA-0.55	12-Jan-11	13-Sep-13	25-Oct-13	46-004(g)	MPS	CAI	In Planning	—	—
					46-004(m)	MPS	CAI	In Planning	—	—
					46-004(s)	MPS	CAI	In Planning	—	—
					46-006(f)	MPS	CAI	In Planning	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
C004	CDB-SMA-1	12-Jan-11	7-Sep-11	30-Apr-12	46-003(c)	MPS	CAM5	30-Jul-12	In Process	—
					46-004(d2)	MPS	CAM5	30-Jul-12	In Process	—
					46-004(f)	MPS	CAM5	30-Jul-12	In Process	—
					46-004(t)	MPS	CAM5	30-Jul-12	In Process	—
					46-004(w)	MPS	CAM5	30-Jul-12	In Process	—
					46-008(g)	MPS	CAM5	30-Jul-12	In Process	—
					46-009(a)	MPS	CAM5	30-Jul-12	In Process	—
					C-46-001	MPS	CACompD	30-Jul-12	In Process	29-Nov-12
C005	CDB-SMA-1.15	1-Dec-10	In Process	—	46-004(b)	MPS	—	—	—	—
					46-004(y)	MPS	—	—	—	—
					46-004(z)	MPS	—	—	—	—
					46-006(d)	MPS	—	—	—	—
C006	CDB-SMA-1.35	1-Dec-10	In Process	—	46-004(a2)	MPS	—	—	—	—
					46-004(u)	MPS	—	—	—	—
					46-004(v)	MPS	—	—	—	—
					46-004(x)	MPS	—	—	—	—
					46-006(d)	MPS	—	—	—	—
					46-008(f)	MPS	—	—	—	—
C007	CDB-SMA-1.54	1-Dec-10	In Process	—	46-004(h)	MPS	—	—	—	—
					46-004(q)	MPS	—	—	—	—
					46-006(d)	MPS	—	—	—	—
C008	CDB-SMA-1.55	1-Dec-10	In Process	—	46-003(e)	MPS	—	—	—	—
C009	CDB-SMA-1.65	1-Dec-10	In Process	—	46-003(b)	MPS	—	—	—	—
C010	CDB-SMA-4	16-Dec-10	25-Jul-13	27-Aug-13	54-017	HPS	CAI	In Planning	—	—
					54-018	HPS	CAI	In Planning	—	—
					54-020	HPS	CAI	In Planning	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
M001	M-SMA-1	1-Dec-10	7-Sep-11	2-Nov-11	03-050(a)	MPS	CAM5	27-Nov-12	In Process	—
					03-054(e)	MPS	CAM5	27-Nov-12	In Process	—
				13-Aug-13	03-050(a)	MPS	CAI2	In Planning	—	—
					03-054(e)	MPS	CAI2	In Planning	—	—
M002	M-SMA-1.2	16-Dec-10	13-Sep-13	30-Oct-13	03-049(a)	MPS	CAI	In Planning	—	—
M002A	M-SMA-1.21	16-Dec-10	In Process	—	03-049(e)	MPS	—	—	—	—
M002B	M-SMA-1.22	11-Feb-11	15-Sep-11	1-May-12	03-045(h)	MPS	CAM5	2-May-13	In Process	—
M003	M-SMA-3	16-May-11	12-Jul-13	13-Aug-13	48-001	MPS	CAI	In Planning	—	—
					48-005	MPS	CAI	In Planning	—	—
					48-007(c)	MPS	CAI	In Planning	—	—
M004	M-SMA-3.1	16-Dec-10	In Process	—	48-001	MPS	—	—	—	—
					48-007(b)	MPS	—	—	—	—
M005	M-SMA-3.5	16-May-11	In Process	—	48-001	MPS	—	—	—	—
					48-003	HPS	—	—	—	—
M006	M-SMA-4	1-Dec-10	19-Aug-11	31-Oct-11	48-001	MPS	CAI	In Planning	—	—
					48-005	MPS	CAI	In Planning	—	—
					48-007(a)	MPS	CACompD	29-Nov-12	—	29-Nov-12
					48-007(d)	MPS	CACompD	29-Nov-12	—	29-Nov-12
					48-010	MPS	CACompD	29-Nov-12	—	29-Nov-12
M007	M-SMA-5	16-May-11	In Process	—	42-001(a)	MPS	—	—	—	—
					42-001(b)	MPS	—	—	—	—
					42-001(c)	MPS	—	—	—	—
					42-002(a)	MPS	—	—	—	—
					42-002(b)	MPS	—	—	—	—
M008	M-SMA-6	16-Dec-10	12-Oct-12	15-Nov-12	35-016(h)	MPS	CAI	In Planning	—	—
M009	M-SMA-7	16-Dec-10	7-Jul-12	22-Aug-12	35-016(g)	MPS	CAI	In Planning	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
M010	M-SMA-7.9	16-Dec-10	13-Sep-13	25-Oct-13	50-006(d)	HPS	CAI	In Planning	—	—
M011	M-SMA-9.1	11-Feb-11	In Process	—	35-016(f)	MPS	—	—	—	—
M012	M-SMA-10	16-Dec-10	30-Jun-13	13-Aug-13	35-008	MPS	CAI	In Planning	—	—
					35-014(e)	MPS	CAI	In Planning	—	—
M012A	M-SMA-10.01	16-Dec-10	15-Sep-11	15-Nov-11	35-016(e)	MPS	CAM5	25-Sep-12	In Process	—
M013	M-SMA-10.3	16-May-11	19-Aug-11	24-Oct-11	35-014(e2)	HPS	CACompD	30-Oct-13	—	30-Oct-13
					35-016(i)	HPS	CACompD	30-Oct-13	—	30-Oct-13
M014	M-SMA-11.1	16-Dec-10	In Process	—	35-016(o)	MPS	—	—	—	—
M015	M-SMA-12	28-Apr-11	In Process	—	35-016(p)	MPS	—	—	—	—
M016	M-SMA-12.5	1-Dec-10	In Process	—	05-005(b)	MPS	—	—	—	—
					05-006(c)	MPS	—	—	—	—
M017	M-SMA-12.6	16-May-11	13-Sep-13	22-Oct-13	05-004	MPS	CAI	In Planning	—	—
M018	M-SMA-12.7	16-Dec-10	In Process	—	05-002	MPS	—	—	—	—
					05-005(a)	MPS	—	—	—	—
					05-006(b)	MPS	—	—	—	—
					05-006(e)	MPS	—	—	—	—
M019	M-SMA-12.8	16-Dec-10	In Process	—	05-001(a)	MPS	—	—	—	—
					05-002	MPS	—	—	—	—
M020	M-SMA-12.9	16-Dec-10	In Process	—	05-001(b)	MPS	—	—	—	—
					05-002	MPS	—	—	—	—
M021	M-SMA-12.92	1-Dec-10	In Process	—	00-001	MPS	—	—	—	—
M022	M-SMA-13	16-Dec-10	13-Sep-13	<TAL	05-001(c)	MPS	—	—	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
T001	Pratt-SMA-1.05	16-Dec-10	13-Sep-13	30-Oct-13	35-003(h)	HPS	CAI	In Planning	—	—
					35-003(p)	HPS	CAI	In Planning	—	—
					35-003(r)	HPS	CAI	In Planning	—	—
					35-004(h)	HPS	CAI	In Planning	—	—
					35-009(d)	HPS	CAI	In Planning	—	—
					35-016(k)	HPS	CAI	In Planning	—	—
					35-016(l)	HPS	CAI	In Planning	—	—
					35-016(m)	HPS	CAI	In Planning	—	—
T002	T-SMA-1	16-Dec-10	15-Aug-11	21-Oct-11	50-006(a)	HPS	CAI	In Planning	—	—
					50-009	HPS	CAI	In Planning	—	—
				—	50-006(a)	HPS	FM	23-Sep-13	—	—
				—	50-009	HPS	CACompC <sup>1</sup>	31-Oct-13	—	31-Oct-13
T003	T-SMA-2.5	16-Dec-10	In Process	—	35-014(g3)	MPS	—	—	—	
T004	T-SMA-2.85	16-Dec-10	12-Jul-13	21-Aug-13	35-014(g)	MPS	CAI	In Planning	—	—
					35-016(n)	MPS	CAI	In Planning	—	—
T005	T-SMA-3	16-Dec-10	10-Sep-12	19-Oct-12	35-016(b)	MPS	CAI	In Planning	—	—
T006	T-SMA-4	16-Dec-10	13-Sep-13	25-Oct-13	35-004(a)	MPS	CAI	In Planning	—	—
					35-009(a)	MPS	CAI	In Planning	—	—
					35-016(c)	MPS	CAI	In Planning	—	—
					35-016(d)	MPS	CAI	In Planning	—	—
T007	T-SMA-5	16-Dec-10	In Process	—	35-004(a)	MPS	—	—	—	—
					35-009(a)	MPS	—	—	—	—
					35-016(a)	MPS	—	—	—	—
					35-016(q)	MPS	—	—	—	—
T008	T-SMA-6.8	16-Dec-10	In Process	—	35-010(e)	MPS	—	—	—	
T009	T-SMA-7	16-Dec-10	In Process	—	04-003(b)	MPS	—	—	—	

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
T010	T-SMA-7.1	16-Dec-10	In Process	—	04-001	MPS	—	—	—	—
					04-002	MPS	—	—	—	—
E001	2M-SMA-1	1-Dec-10	20-Aug-11	18-Oct-11	03-010(a)	MPS	CAM5	20-Jul-12	In Process	—
				19-Oct-12	03-010(a)	MPS	CAI2	In Planning	—	—
E002	2M-SMA-1.42	12-Jan-11	15-Sep-11	10-Nov-11	06-001(a)	MPS	CAM5	27-Jun-12	In Process	—
E003	2M-SMA-1.43	1-Dec-10	12-Jul-13	21-Aug-13	22-014(a)	MPS	CAI	In Planning	—	—
					22-015(a)	MPS	CAI	In Planning	—	—
E004	2M-SMA-1.44	12-Jan-11	21-Aug-11	30-Apr-12	06-001(b)	MPS	CAM5	27-Jun-12	In Process	—
E005	2M-SMA-1.45	12-Jan-11	7-Sep-11	1-May-12	06-006	MPS	CAM5	20-Aug-12	In Process	—
E006	2M-SMA-1.5	1-Dec-10	In Process	—	22-014(b)	MPS	—	—	—	—
E007	2M-SMA-1.65	12-Jan-11	21-Aug-11	1-May-12	40-005	MPS	CAM5	19-Jul-12	In Process	—
E008	2M-SMA-1.67	28-Apr-11	15-Sep-11	—	06-003(h)	MPS	—	—	—	—
E009	2M-SMA-1.7	12-Jan-11	9-Sep-11	3-Nov-11	03-055(a)	MPS	CAM5	27-Jul-12	In Process	—
E010	2M-SMA-1.8	12-Jan-11	9-Sep-11	3-Nov-11	03-001(k)	MPS	CAI	In Planning	—	—
E011	2M-SMA-1.9	12-Jan-11	11-Jul-12	23-Aug-12	03-003(a)	MPS	CAI	In Planning	—	—
E012	2M-SMA-2	12-Jan-11	4-Sep-11	3-Nov-11	03-050(d)	MPS	CAM5	2-May-13	In Process	—
					03-054(b)	MPS	CAM5	2-May-13	In Process	—
				24-Sep-13	03-050(d)	MPS	CAI2	In Planning	—	—
					03-054(b)	MPS	CAI2	In Planning	—	—
E013	2M-SMA-2.2	1-Dec-10	4-Sep-11	3-Nov-11	03-003(k)	MPS	CAI	In Planning	—	—
E014	2M-SMA-3	12-Jan-11	12-Jul-13	16-Aug-13	07-001(a)	MPS	CAI	In Planning	—	—
					07-001(b)	MPS	CAI	In Planning	—	—
					07-001(c)	MPS	CAI	In Planning	—	—
					07-001(d)	MPS	CAI	In Planning	—	—
E015	2M-SMA-2.5	12-Jan-11	9-Sep-12	<TAL	40-001(c)	MPS	—	—	—	—
H001	3M-SMA-0.2	1-Dec-10	In Process	—	15-010(b)	MPS	—	—	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
H002	3M-SMA-0.4	12-Jan-11	12-Jul-13	27-Aug-13	15-006(b)	MPS	CAI	In Planning	—	—
H003	3M-SMA-0.5	12-Jan-11	In Process	—	15-006(c)	MPS	—	—	—	—
					15-009(c)	MPS	—	—	—	—
H004	3M-SMA-0.6	12-Jan-11	In Process	—	15-008(b)	MPS	—	—	—	—
H005	3M-SMA-2.6	28-Apr-11	In Process	—	36-008	MPS	—	—	—	—
					C-36-003	MPS	—	—	—	—
H006	3M-SMA-4	12-Jan-11	In Process	—	18-002(b)	MPS	—	—	—	—
					18-003(c)	MPS	—	—	—	—
					18-010(f)	MPS	—	—	—	—
J001	PJ-SMA-1.05	1-Dec-10	13-Sep-13	3-Nov-13	09-013	MPS	CAI	In Planning	—	—
J002	PJ-SMA-2	1-Dec-10	In Process	—	09-009	MPS	—	—	—	—
J003	PJ-SMA-3.05	11-Feb-11	19-Aug-11	30-Apr-12	09-004(o)	MPS	CAM5	18-Jul-12	In Process	—
J004	PJ-SMA-4.05	1-Dec-10	13-Sep-13	30-Oct-13	09-004(g)	MPS	CAI	In Planning	—	—
J005	PJ-SMA-5	1-Dec-10	12-Oct-12	15-Nov-12	22-015(c)	MPS	CAI	In Planning	—	—
J006	PJ-SMA-5.1	12-Jan-11	7-Sep-11	31-Oct-11	[22-010(b)]	MPS	CAM5	18-Jul-12	In Process	—
					22-016	MPS	CAM5	18-Jul-12	In Process	—
J007	PJ-SMA-6	1-Dec-10	In Process	—	40-010	MPS	—	—	—	—
J008	PJ-SMA-7	1-Dec-10	In Process	—	40-006(c)	MPS	—	—	—	—
J009	PJ-SMA-8	1-Dec-10	In Process	—	40-006(b)	MPS	—	—	—	—
J010	PJ-SMA-9	1-Dec-10	In Process	—	40-009	MPS	—	—	—	—
J012	PJ-SMA-10	12-Jan-11	In Process	—	40-006(a)	MPS	—	—	—	—
J013	PJ-SMA-11	12-Jan-11	13-Sep-13	30-Oct-13	40-003(a)	MPS	CAI	In Planning	—	—
J014	PJ-SMA-11.1	12-Jan-11	13-Sep-13	30-Oct-13	40-003(b)	MPS	CAI	In Planning	—	—
J015	PJ-SMA-13	28-Apr-11	In Process	—	18-002(a)	MPS	—	—	—	—
J016	PJ-SMA-13.7	12-Jan-11	1-Sep-11	1-May-12	18-010(b)	MPS	CAM5	8-Jul-13	In Process	—
J017	PJ-SMA-14	28-Apr-11	In Process	—	54-004	MPS	—	—	—	—



Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
J018	PJ-SMA-14.2	1-Dec-10	In Process	—	18-012(b)	MPS	—	—	—	—
J019	PJ-SMA-14.3	1-Dec-10	In Process	—	18-003(e)	MPS	—	—	—	—
J020	PJ-SMA-14.4	28-Apr-11	In Process	—	18-010(d)	MPS	—	—	—	—
J021	PJ-SMA-14.6	1-Dec-10	In Process	—	18-010(e)	MPS	—	—	—	—
J022	PJ-SMA-14.8	12-Jan-11	18-Aug-11	<TAL	18-012(a)	MPS	—	—	—	—
J023	PJ-SMA-16	1-Dec-10	8-Aug-13	<TAL	27-002	MPS	—	—	—	—
J024	PJ-SMA-17	1-Dec-10	25-Jul-13	5-Sep-13	54-018	HPS	CAI	In Planning	—	—
J026	PJ-SMA-18	1-Dec-10	25-Jul-13	3-Sep-13	54-014(d)	MPS	CAI	In Planning	—	—
					54-017	HPS	CAI	In Planning	—	—
J025	PJ-SMA-19	1-Dec-10	8-Aug-13	12-Sep-13	54-013(b)	HPS	CAI	In Planning	—	—
					54-017	HPS	CAI	In Planning	—	—
					54-020	HPS	CAI	In Planning	—	—
J027	PJ-SMA-20	16-Dec-10	29-Jul-11	1-May-12	54-017	HPS	CACompC	25-Oct-13	—	25-Oct-13
J028	STRM-SMA-1.05	1-Dec-10	26-Aug-11	17-Oct-11	08-009(f)	MPS	CAM5	2-May-13	In Process	—
				10-Sep-13	08-009(f)	MPS	CAI2	In Planning	—	—
J029	STRM-SMA-1.5	1-Dec-10	11-Jul-12	27-Aug-12	08-009(d)	MPS	CAM5	8-Jul-13	In Process	—
J030	STRM-SMA-4.2	1-Dec-10	9-Sep-11	10-Nov-11	09-008(b)	MPS	CAM5	21-Aug-12	In Process	—
J031	STRM-SMA-5.05	1-Dec-10	21-Aug-11	31-Oct-11	09-013	MPS	CAM5	27-Jun-12	In Process	—
V001	CDV-SMA-1.2	12-Jan-11	12-Sep-13	<TAL	16-017(b)-99	MPS	—	—	—	—
					16-029(k)	MPS	—	—	—	—
V002	CDV-SMA-1.3	12-Jan-11	13-Sep-13	25-Oct-13	16-017(a)-99	MPS	CAI	In Planning	—	—
					16-026(m)	MPS	CAI	In Planning	—	—
V003	CDV-SMA-1.4	12-Jan-11	10-Sep-12	18-Oct-12	16-020	MPS	CAI	In Planning	—	—
					16-026(l)	MPS	CAI	In Planning	—	—
					16-028(c)	MPS	CAI	In Planning	—	—
					16-030(c)	MPS	CACompD	29-Nov-12	—	29-Nov-12

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
V004	CDV-SMA-1.45	12-Jan-11	21-Aug-11	30-Apr-12	16-026(i)	MPS	CAM5	18-Jul-12	In Process	—
V005	CDV-SMA-1.7	12-Jan-11	13-Sep-13	25-Oct-13	16-019	MPS	CAI	In Planning	—	—
V006	CDV-SMA-2	16-May-11	12-Jul-13	20-Aug-13	16-021(c)	MPS	CAI	In Planning	—	—
V007	CDV-SMA-2.3	12-Jan-11	In Process	—	13-001	MPS	—	—	—	—
					13-002	MPS	—	—	—	—
					16-003(n)	MPS	—	—	—	—
					16-003(o)	MPS	—	—	—	—
					16-029(h)	MPS	—	—	—	—
					16-031(h)	MPS	—	—	—	—
V008	CDV-SMA-2.41	12-Jan-11	21-Aug-11	1-May-12	16-018	MPS	CAI	In Planning	—	—
V008A	CDV-SMA-2.42	12-Jan-11	12-Jul-13	26-Aug-13	16-010(b)	MPS	CAI	In Planning	—	—
V009	CDV-SMA-2.5	12-Jan-11	26-Jul-13	<TAL	16-010(c)	MPS	—	—	—	—
					16-010(d)	MPS	—	—	—	—
					16-028(a)	MPS	—	—	—	—
V009A	CDV-SMA-2.51	12-Jan-11	13-Sep-13	25-Oct-13	16-010(i)	MPS	CAI	In Planning	—	—
V010	CDV-SMA-3	11-Feb-11	21-Aug-11	30-Apr-12	14-009	MPS	CAM5	18-Jul-12	In Process	—
V011	CDV-SMA-4	11-Feb-11	In Process	—	14-010	MPS	—	—	—	—
V012	CDV-SMA-6.01	11-Feb-11	In Process	—	14-001(g)	MPS	—	—	—	—
					14-006	MPS	—	—	—	—
V012A	CDV-SMA-6.02	11-Feb-11	1-Sep-11	31-Oct-11	(14-002(c))	MPS	CAM5	18-Jul-12	In Process	—
					14-002(d)	MPS	CAM5	18-Jul-12	In Process	—
					14-002(e)	MPS	CAM5	18-Jul-12	In Process	—
V013	CDV-SMA-7	12-Jan-11	13-Sep-13	30-Oct-13	15-008(d)	MPS	CAI	In Planning	—	—
V014	CDV-SMA-8	12-Jan-11	In Process	—	15-011(c)	MPS	—	—	—	—
V015	CDV-SMA-8.5	12-Jan-11	In Process	—	15-014(a)	MPS	—	—	—	—
V016	CDV-SMA-9.05	12-Jan-11	In Process	—	15-007(b)	MPS	—	—	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
F001	F-SMA-2	12-Jan-11	15-Aug-11	1-May-12	36-004(c)	MPS	CAI	In Planning	—	—
I001	PT-SMA-0.5	28-Apr-11	1-Sep-11	1-May-12	15-009(e)	MPS	CAM5	27-Nov-12	In Process	—
					C-15-004	MPS	CAM5	27-Nov-12	In Process	—
I002	PT-SMA-1	28-Apr-11	1-Sep-11	30-Apr-12	15-004(f)	MPS	CAM5	3-Aug-12	In Process	—
					15-008(a)	MPS	CAM5	3-Aug-12	In Process	—
I003	PT-SMA-1.7	28-Apr-11	10-Sep-12	18-Oct-12	15-006(a)	MPS	CAI	In Planning	—	—
I004	PT-SMA-2	28-Apr-11	In Process	—	15-008(f)	MPS	—	—	—	—
					36-003(b)	MPS	—	—	—	—
					36-004(e)	MPS	—	—	—	—
I004A	PT-SMA-2.01	28-Apr-11	18-Aug-11	30-Apr-12	C-36-001	MPS	CAM5	3-Aug-12	In Process	—
					C-36-006(e)	MPS	CAM5	3-Aug-12	In Process	—
I005	PT-SMA-3	1-Dec-10	In Process	—	36-004(a)	MPS	—	—	—	—
					36-006	MPS	—	—	—	—
I007	PT-SMA-4.2	1-Dec-10	In Process	—	36-004(d)	MPS	—	—	—	—
W001	W-SMA-1	1-Dec-10	9-Sep-11	8-Nov-11	16-017(j)-99	MPS	CAM5	2-May-13	In Process	—
					16-026(c2)	MPS	CAM5	2-May-13	In Process	—
					16-026(v)	MPS	CAM5	2-May-13	In Process	—
W002	W-SMA-1.5	12-Jan-11	1-Sep-11	8-Nov-11	16-026(b2)	MPS	CAM5	25-Sep-12	In Process	—
					16-028(d)	MPS	CAM5	25-Sep-12	In Process	—
W003	W-SMA-2.05	12-Jan-11	21-Aug-11	1-May-12	16-028(e)	MPS	CAM5	25-Sep-12	In Process	—
W004	W-SMA-3.5	12-Jan-11	In Process	—	16-026(y)	MPS	—	—	—	—
W005	W-SMA-4.1	12-Jan-11	In Process	—	16-003(a)	MPS	—	—	—	—
W006	W-SMA-5	12-Jan-11	3-Jul-12	18-Sep-12	16-001(e)	MPS	CAI	In Planning	—	—
					16-003(f)	MPS	CAI	In Planning	—	—
					16-026(b)	MPS	CAI	In Planning	—	—
					16-026(c)	MPS	CAI	In Planning	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
					16-026(d)	MPS	CAI	In Planning	—	—
					16-026(e)	MPS	CAI	In Planning	—	—
W007	W-SMA-6	12-Jan-11	In Process	—	11-001(c)	MPS	—	—	—	—
W008	W-SMA-7	12-Jan-11	In Process	—	[16-029(e)]16-026(h2)	MPS	—	—	—	—
W009	W-SMA-7.8	12-Jan-11	In Process	—	16-031(a)	MPS	—	—	—	—
W010	W-SMA-7.9	12-Jan-11	In Process	—	16-006(c)	MPS	—	—	—	—
W011	W-SMA-8	12-Jan-11	12-Sep-13	25-Oct-13	16-016(g)	MPS	CAI	In Planning	—	—
					16-028(b)	MPS	CAI	In Planning	—	—
W012	W-SMA-8.7	12-Jan-11	12-Sep-13	25-Oct-13	13-001	MPS	CAI	In Planning	—	—
					13-002	MPS	CAI	In Planning	—	—
					16-004(a)	MPS	CAI	In Planning	—	—
					16-026(j2)	MPS	CAI	In Planning	—	—
					16-029(h)	MPS	CAI	In Planning	—	—
					16-035	MPS	CAI	In Planning	—	—
W012A	W-SMA-8.71	12-Jan-11	21-Aug-11	1-May-12	16-004(c)	MPS	CAM5	27-Nov-12	In Process	—
W013	W-SMA-9.05	12-Jan-11	13-Sep-13	<TAL	16-030(g)	MPS	—	—	—	—
W014	W-SMA-9.5	1-Dec-10	In Process	—	11-012(c)	MPS	—	—	—	—
W015	W-SMA-9.7	12-Jan-11	13-Sep-13	30-Oct-13	11-011(a)	MPS	CAI	In Planning	—	—
					11-011(b)	MPS	CAI	In Planning	—	—
W016	W-SMA-9.8	12-Jan-11	In Process	—	11-005(c)	MPS	—	—	—	—
W017	W-SMA-9.9	12-Jan-11	21-Aug-11	30-Apr-12	11-006(b)	MPS	CAM5	27-Jun-12	In Process	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
W018	W-SMA-10	12-Jan-11	21-Aug-11	1-May-12	11-002	MPS	CAM5	23-Aug-12	In Process	—
					11-003(b)	MPS	CAM5	23-Aug-12	In Process	—
					11-005(a)	MPS	CAM5	23-Aug-12	In Process	—
					11-005(b)	MPS	CAM5	23-Aug-12	In Process	—
					11-006(c)	MPS	CAM5	23-Aug-12	In Process	—
					11-006(d)	MPS	CAM5	23-Aug-12	In Process	—
					11-011(d)	MPS	CAM5	23-Aug-12	In Process	—
W019	W-SMA-11.7	12-Jan-11	1-Sep-11	1-May-12	49-008(c)	MPS	CAM5	23-Oct-12	In Process	—
W020	W-SMA-12.05	12-Jan-11	In Process	—	49-001(g)	MPS	—	—	—	—
W021	W-SMA-14.1	28-Apr-11	18-Aug-11	17-Oct-11	15-004(h)	MPS	CAM5	25-Sep-12	In Process	—
					15-014(l)	MPS	CAM5	25-Sep-12	In Process	—
W022	W-SMA-15.1	12-Jan-11	1-Sep-11	1-May-12	49-005(a)	MPS	CAM5	23-Oct-12	In Process	—
A001	A-SMA-1.1	1-Dec-10	In Process	—	39-004(a)	MPS	—	—	—	—
					39-004(d)	MPS	—	—	—	—
A002	A-SMA-2	11-Feb-11	12-Sep-13	22-Oct-13	39-004(b)	MPS	CAI	In Planning	—	—
					39-004(e)	MPS	CAI	In Planning	—	—
A003	A-SMA-2.5	11-Feb-11	In Process	—	39-010	MPS	—	—	—	—
A004	A-SMA-2.7	11-Feb-11	4-Sep-11	27-Oct-11	39-002(c)	MPS	CACompD	29-Nov-12	—	29-Nov-12
					39-008	MPS	CAM5	23-Aug-12	In Process	—
A005	A-SMA-2.8	11-Feb-11	In Process	—	39-001(b)	MPS	—	—	—	—
A006	A-SMA-3	1-Dec-10	25-Jul-13	29-Aug-13	39-002(b)	MPS	CAI	In Planning	—	—
					39-004(c)	MPS	CAI	In Planning	—	—
A007	A-SMA-3.5	11-Feb-11	25-Jul-13	<TAL	39-006(a)	MPS	—	—	—	—
A008	A-SMA-4	11-Feb-11	In Process	—	33-010(d)	MPS	—	—	—	—

Table 8-3 (continued)

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
A009	A-SMA-6	11-Feb-11	4-Aug-13	4-Sep-13	33-004(k)	MPS	CAI	In Planning	—	—
					33-007(a)	MPS	CAI	In Planning	—	—
					33-010(a)	MPS	CAI	In Planning	—	—
Q001	CHQ-SMA-0.5	11-Feb-11	In Process	—	33-004(g)	MPS	—	—	—	—
					33-007(c)	MPS	—	—	—	—
					33-009	MPS	—	—	—	—
Q002	CHQ-SMA-1.01	11-Feb-11	In Process	—	33-002(d)	MPS	—	—	—	—
Q002A	CHQ-SMA-1.02	11-Feb-11	21-Aug-11	1-May-12	33-004(h)	MPS	CAM5	24-Oct-12	In Process	—
					33-008(c)	MPS	CAM5	24-Oct-12	In Process	—
					33-011(d)	MPS	CAM5	24-Oct-12	In Process	—
					33-015	MPS	CAM5	24-Oct-12	In Process	—
				3-Nov-13	33-004(h)	MPS	CAI2	In Planning	—	—
					33-008(c)	MPS	CAI2	In Planning	—	—
					33-011(d)	MPS	CAI2	In Planning	—	—
					33-015	MPS	CAI2	In Planning	—	—
Q002B	CHQ-SMA-1.03	11-Feb-11	4-Jul-12	27-Aug-12	33-008(c)	MPS	CAI	In Planning	—	—
					33-012(a)	MPS	CAI	In Planning	—	—
					33-017	MPS	CAI	In Planning	—	—
					C-33-001	MPS	CAI	In Planning	—	—
					C-33-003	MPS	CAI	In Planning	—	—
Q003	CHQ-SMA-2	11-Feb-11	4-Jul-12	27-Aug-12	33-004(d)	MPS	CAI	In Planning	—	—
					33-007(c)	MPS	CAI	In Planning	—	—
					C-33-003	MPS	CAI	In Planning	—	—
Q004	CHQ-SMA-3.05	11-Feb-11	10-Sep-13	23-Oct-13	33-010(f)	MPS	CAI	In Planning	—	—
Q005	CHQ-SMA-4	11-Feb-11	In Process	—	33-011(e)	MPS	—	—	—	—
Q006	CHQ-SMA-4.1	11-Feb-11	13-Sep-13	22-Oct-13	33-016	MPS	CAI	In Planning	—	—

**Table 8-3 (continued)**

Permitted Feature	SMA	Certify Baseline Controls	Completion of Baseline Monitoring	Initiation of Corrective Action	Site Number	Priority	Corrective Action Response	Corrective Action Certification	Completion of Enhanced Control Monitoring	Completion of Corrective Action
Q007	CHQ-SMA-4.5	11-Feb-11	25-Jul-13	5-Sep-13	33-011(b)	MPS	CAI	In Planning	—	—
Q008	CHQ-SMA-5.05	1-Dec-10	In Process	—	33-007(b)	MPS	—	—	—	—
Q009	CHQ-SMA-6	11-Feb-11	25-Jul-13	29-Aug-13	33-004(j)	MPS	CAI	In Planning	—	—
					33-006(a)	MPS	CAI	In Planning	—	—
					33-007(b)	MPS	CAI	In Planning	—	—
					33-010(c)	MPS	CAI	In Planning	—	—
					33-010(g)	MPS	CAI	In Planning	—	—
					33-010(h)	MPS	CAI	In Planning	—	—
					33-014	MPS	CAI	In Planning	—	—
Q010	CHQ-SMA-7.1	11-Feb-11	In Process	—	33-010(g)	MPS	—	—	—	

<sup>a</sup> MPS = Moderate Priority Site.

<sup>b</sup> CACompD = Corrective action is complete under the Permit with a certificate of completion under NMED's Consent Order.

<sup>c</sup> — = Corrective action has not been initiated.

<sup>d</sup> CAI = Corrective action is initiated after a TAL exceedance is observed during baseline monitoring.

<sup>e</sup> <TAL = All baseline confirmation monitoring results are less than TALs

<sup>f</sup> HPS = High Priority Site.

<sup>g</sup> CAM5 = Monitoring following installation of enhanced control measures at SMAs associated with Moderate Priority Sites.

<sup>h</sup> CAI2 = Corrective action is re-initiated after a TAL exceedance is observed during monitoring following installation of enhanced control measures.

<sup>i</sup> AltCompR = Alternative compliance requested.

<sup>j</sup> FM = Force majeure requested to extend the deadline for completion of corrective action.

<sup>k</sup> CAM3 = Monitoring following installation of enhanced control measures at SMAs associated with High Priority Sites.

<sup>l</sup> CACompC = Corrective action is complete under the Permit with a certification of no exposure.

# **Appendix A**

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*Acronyms and Abbreviations,  
Glossary, and Metric Conversion Table*





## **A-1.0 ACRONYMS AND ABBREVIATIONS**

AOC	area of concern
ATAL	average target action level
BCM	baseline control monitoring
BMP	best management practice
CFR	Code of Federal Regulations
COC	chain of custody
Consent Order	Compliance Order on Consent
CRDL	contract-required detection limit
DER	duplicate error ratio
DOE	Department of Energy (U.S.)
EC	erosion control
EIM	Environmental Information Management
EISA	Energy Independence and Security Act of 2007
EPA	Environmental Protection Agency (U.S.)
F	filtered
Hexp	high explosives
HPS	High Priority Site
IDL	instrument detection limit
Individual Permit	National Pollutant Discharge Elimination System Permit No. NM0030759
LAL	lower acceptance level
LANL	Los Alamos National Laboratory
MDC	minimum detectable concentration
MDL	method detection limit
MPS	Moderate Priority Site
MQL	maximum quantitation limit
MTAL	maximum target action level
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NPDES	National Pollutant Discharge Elimination System
PCB	polychlorinated biphenyl
Permit	NPDES Permit No. NM0030759
PPT	Pollution Prevention Team

PQL	practical quantitation limit
RCRA	Resource Conservation and Recovery Act
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RER	relative error ratio
RL	reporting limit
ROFF	runoff (control)
RON	run-on (control)
RPD	relative percent difference
SC	sediment control
SDPPP	Site Discharge Pollution Prevention Plan
SMA	site monitoring area
SSL	soil screening level
SVOA	semivolatile organic analyte
SWMU	solid waste management unit
SWQB	Surface Water Quality Bureau (NMED)
TAL	target action level
TBD	to be determined
TPU	total propagated uncertainty
UAL	upper acceptance limit
UF	unfiltered
WAD	weak acid dissociable

## A-2.0 GLOSSARY

*Baseline Confirmation Complete*—All confirmation monitoring results for all pollutants of concern at the SMA are at or below TALs, and corrective action is not required at the Sites. No further sampling is required.

*Baseline Monitoring Extended*—Baseline confirmation monitoring is in progress, and no storm water from a measurable storm event has been collected. There has been no TAL exceedance.

*Corrective Action Initiated*—A sample was collected during baseline confirmation monitoring and analytical results show at least one pollutant concentration is above TAL, resulting in the initiation of corrective action. Corrective action may include installing enhanced control measures, installing control measures that totally retain storm water, installing control measures that totally eliminate the exposure of pollutants, or receiving a Certificate of Completion from NMED.

*Enhanced Control Corrective Action Monitoring*—Confirmation monitoring at an SMA is initiated to determine how well enhanced controls are performing. This monitoring occurs after certification that the enhanced control measures have been installed and are complete.

**Corrective Action Complete**—Completion of corrective action is demonstrated by one of the following:

- Analytical results from enhanced control monitoring show pollutant concentrations for all pollutants of concern at the Site to be at or below applicable TALs; or
- Control measures that totally retain and prevent the discharge of storm water have been installed at the Site; or
- Control measures that totally eliminate exposure of pollutants to storm water have been installed at the Site; or
- The Site has achieved RCRA “no further action” status or a Certificate of Completion from NMED.

**A-3.0 METRIC CONVERSION TABLE**

Multiply SI (Metric) Unit	by	To Obtain U.S. Customary Unit
kilometers (km)	0.622	miles (mi)
kilometers (km)	3281	feet (ft)
meters (m)	3.281	feet (ft)
meters (m)	39.37	inches (in.)
centimeters (cm)	0.03281	feet (ft)
centimeters (cm)	0.394	inches (in.)
millimeters (mm)	0.0394	inches (in.)
micrometers or microns (µm)	0.0000394	inches (in.)
square kilometers (km <sup>2</sup> )	0.3861	square miles (mi <sup>2</sup> )
hectares (ha)	2.5	acres
square meters (m <sup>2</sup> )	10.764	square feet (ft <sup>2</sup> )
cubic meters (m <sup>3</sup> )	35.31	cubic feet (ft <sup>3</sup> )
kilograms (kg)	2.2046	pounds (lb)
grams (g)	0.0353	ounces (oz)
grams per cubic centimeter (g/cm <sup>3</sup> )	62.422	pounds per cubic foot (lb/ft <sup>3</sup> )
milligrams per kilogram (mg/kg)	1	parts per million (ppm)
micrograms per gram (µg/g)	1	parts per million (ppm)
liters (L)	0.26	gallons (gal.)
milligrams per liter (mg/L)	1	parts per million (ppm)
degrees Celsius (°C)	9/5 + 32	degrees Fahrenheit (°F)



# **Appendix B**

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*Analytical Monitoring Results*



## PART I. OVERVIEW

Part I.H.2(c) of the National Pollutant Discharge Elimination System Permit No. NM0030759 (hereafter, the Individual Permit or the Permit) issued to Los Alamos National Laboratory (LANL) requires that the annual report for activities provides monitoring results available during the reporting period. The validated analytical results for the Permit compliance monitoring samples collected by LANL in 2013 are presented in Part I.

The results for metals, general inorganics, radioactivity, total polychlorinated biphenyls (PCBs), semivolatile organic analytes, and high explosives are provided in separate tables in Part II. All analytical results for the Permit storm water monitoring samples are available electronically in the Intellus NM database, available at <http://intellusnm.com/>.

### Sampler Operations

Monitoring was initiated at 215 site monitoring areas (SMAs) by the activation of samplers beginning on March 26, 2013. All samplers were deactivated as of November 26, 2013. Samplers were activated through the year as enhanced control measures were certified. Samplers were deactivated during the year as sampling requirements were fulfilled. The samplers at the remaining SMAs were deactivated in November because of the arrival of freezing temperatures. The Permit does not allow snowmelt runoff samples to be collected for confirmation purposes.

Section 7 of this annual report describes samplers that were relocated at SMAs during calendar year 2013.

### Sample Analysis

Part III.C.5(a) of the Permit states that monitoring must be conducted according to test procedures approved at Title 40 Code of Federal Regulations (CFR) Part 136 unless other test procedures have been specified in the Permit or approved by the U.S. Environmental Protection Agency (EPA) regional administrator. The following considerations apply in planning sample collection and preparing the monitoring data set for reporting.

- To determine the activity of the sum of the radium isotopes Ra-226 + Ra-228, the analytical laboratory measures each isotope separately and then sums the individual results. The result returned by the analytical laboratory is the activity of Radium-226 + Radium-228, expressed as picocuries per liter (pCi/L).
- The State of New Mexico Standards for Interstate and Intrastate Surface Water (New Mexico Administrative Code [NMAC] 20.6.4, effective December 2010) contain numeric criteria for the protection of surface waters that have a designated use of Livestock Watering, including a standard for “Adjusted Gross Alpha,” where
  - Adjusted gross alpha** means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample, including radium-226, but excluding radon-222 and uranium. Also excluded are source, special nuclear and by-product material as defined by the Atomic Energy Act of 1954 (NMAC 20.6.4.7.B).
- The analytical laboratory measures and reports the gross-alpha radioactivity. The Permittees, Los Alamos National Security, LLC, and the U.S. Department of Energy, have elected not to adjust the reported gross-alpha result for the 2013 baseline confirmation monitoring results.



- The results reported for total PCBs are calculated from the sum of detected PCB congeners measured using EPA Method 1668. Supporting documentation for the calculation of the total PCBs result is provided in Attachment 2 to this Annual Report, as required by Appendix C of the Permit.

## Data Analysis

Upon receipt from the analytical laboratory, storm water analytical results undergo automatic data validation by the Environmental Information Management (EIM) database. Data validation is used to determine whether the analytical data results received from the analytical laboratory were generated according to contractual specifications and contain the information necessary to determine if the data are sufficient for decision-making. Analytical data validation procedures are concerned with determining whether individual results should be qualified because of the potential impact of flaws in the data quality on the decision-making process.

Data qualifiers (letter codes attached to data results) are used in the data validation process to designate potential deficiencies associated with individual sample results. The data validation qualifier flags used for reporting the storm water data are defined in Table B-1. Analytical results that have been qualified as rejected (“R” flag) because of serious noncompliance with quality control acceptance criteria are not used for confirmation purposes. Table B-2 provides the data validation summary for the complete Permit compliance data set.

The validated analytical monitoring results from compliance samples are compared with the applicable target action levels (TALs) or with the applicable minimum quantification level (MQL) value, whichever is greater, established in Part I.C of the Permit. The pollutant-specific maximum TAL (MTAL), average TAL (ATAL), and MQL values are listed in Table B-3.

- Individual sample results are compared with the applicable MTAL, if available, or the applicable MQL, whichever is greater.
- For comparison with the ATAL values, the average result from two or more samples may be used. Part II.D of the Permit defines the average as the geometric mean of applicable monitoring results at the SMA.
  - ❖ If all analytical results are below analytical method detect level, a value of zero (0) may be reported. If one or more data are above detect level, a value of one-half of the detect level shall be assigned to those below detect level for calculation purpose.
  - ❖ If the average value of a specific pollutant is below its MQL, a value of zero (0) may be reported for the average.
  - ❖ Further, if a new or an enhanced control measure is installed, the average is calculated based on analytical results from samples taken after the control measure is installed.
- In Part I.C of the Permit, note 1 to the table of pollutant-specific TAL and MQL values states that if an individual analytical test result is smaller than the MQL listed, a value of zero (0) or “ND” (not detected) may be used for reporting and action purpose. Four pollutants do not have a Permit-specified MQL value: Radium-226 + Radium-228, gross-alpha radiation, RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine), and 2,4,6-trinitrotoluene. For these four pollutants that do not have a specified MQL value, individual results that are less than the laboratory reporting level are reported as “<.”

**Table B-1  
Data Qualifier Definitions**

Code	Description
<b>Laboratory Data Qualifier Definitions</b>	
*	(Inorganic)—Duplicate Analysis (relative percent difference) not within control limits.
B	(Inorganic)—Reported value was obtained from a reading that was less than the contract-required detection limit (CRDL) but greater than or equal to the instrument detection limit (IDL). (Organic)—Analyte present in the blank and the sample.
D	The result for this analyte was reported from a dilution.
E	(Inorganic)—The serial dilution range was exceeded. (Organic)—Analyte exceeded the calibration concentration range.
H	The required extraction or analysis holding time for this result was exceeded.
J	(Inorganic)—The associated numerical value is an estimated quantity. (Organic)—The associated numerical value is an estimated quantity.
N	(Inorganic)—Spiked sample recovery not within control limits.
P	(Organic)—Percent difference between the results on the two columns during the analysis differed by more than 40%.
U	The material was analyzed for but was not detected above the level of the associated numeric value.
UJ	Material was analyzed for but not detected. (Inorganic)—Value is an estimate. (Organic)—Quantitation limit is an estimate.
UN	(Inorganic)—Compound was analyzed for but was not detected, and spiked sample recovery not within control limits.
X	Laboratory suspects result is a nondetect despite positive quantification results.
<b>LANL Validation Qualifier Definitions</b>	
J	The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual.
J+	The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential positive bias.
J-	The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential negative bias.
R	The reported sample result is classified as rejected due to serious noncompliances regarding quality control acceptance criteria. The presence or absence of the analyte cannot be verified based on routine validation alone.
U	The analyte is classified as not detected.
UJ	The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual.
I	(PCBs)—The calculated sums are considered incomplete due to lack of one or more congener results.

**Table B-2  
Data Validation Summary**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte	
2M-SMA-1.43	7/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the practical quantitation limit (PQL) but greater than the method detection limit (MDL).	2013-1266	WT_IPC-13-32394	Cobalt, Vanadium, Zinc	
			EPA:200.8						Lead, Nickel	
			EPA:245.2					WT_IPC-13-32260	Mercury	
2M-SMA-2	6/14/2013	Cyanide	ASTM:D2036	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1018	WT_IPC-13-34607	Cyanide, weak acid dissociable	
		Metals	EPA:200.7					WT_IPC-13-34609	Boron, Cobalt, Vanadium	
			EPA:200.8					WT_IPC-13-34609	Aluminum, Antimony	
	8/18/2013	Rad	Calculation	EPA:903.1	J	R10	Associated duplicate sample has a duplicate error ratio (DER) or relative error ratio (RER) greater than the analytical laboratory's acceptance limits.	2013-1018	WT_IPC-13-34607	Radium-226
				EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1725	WT_IPC-13-34610	Boron
										EPA:200.8
U	R5	Analyte is not detected because the amount reported is less than the minimum detectable concentration (MDC).	2013-1725	WT_IPC-13-34608	Radium-226 and Radium-228					

Table B-2 (continued)

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
2M-SMA-2	8/18/2013	Rad	EPA:900	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.	2013-1725	WT_IPC-13-34608	Gross alpha
			EPA:903.1	U	R11	The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3 times the 1 sigma total propagated uncertainty (TPU).			Radium-226
			EPA:904	U	R5	Analyte is not detected because the amount reported is less than the MDC.			Radium-228
2M-SMA-3	7/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1176	WT_IPC-13-32525	Boron, Vanadium, Zinc
				U	I4	The sample result is ≤5 times the concentration of related analyte in the method blank.	2013-1176		WT_IPC-13-32525
			EPA:200.8	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1176	WT_IPC-13-32525	Arsenic, Lead
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.	2013-1176	WT_IPC-13-32040	Radium-226 and Radium-228
			EPA:903.1						Radium-226
			EPA:904						Radium-228

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
3M-SMA-0.4	7/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1239	WT_IPC-13-32417	Boron, Cobalt
			EPA:200.8						Arsenic
A-SMA-2	9/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2007	WT_IPC-13-32528	Cobalt, Zinc
			EPA:200.8						Arsenic, Lead, Nickel
			EPA:245.2					WT_IPC-13-32042	Mercury
A-SMA-2.7	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2007	WT_IPC-13-32490	Boron, Vanadium
			EPA:200.8					WT_IPC-13-32036	Selenium, Nickel
			EPA:245.2						Mercury
A-SMA-3	7/25/2013	Hexp	SW-846:8321A	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1416	WT_IPC-13-39423	RDX
		Metals	EPA:200.7					2013-1426	WT_IPC-13-39424
EPA:200.8			Arsenic, Cadmium						
A-SMA-3.5	7/25/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1479	WT_IPC-13-32343	Cobalt, Vanadium, Zinc
			EPA:200.8						Nickel
			EPA:245.2					WT_IPC-13-32194	Mercury

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte		
A-SMA-6	8/4/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1515	WT_IPC-13-32530	Boron, Cobalt, Vanadium		
			EPA:200.8						Antimony, Arsenic, Cadmium, Lead		
		Rad	EPA:900	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.	2013-1515	WT_IPC-13-32044	Gross alpha		
			EPA:904						Radium-228		
B-SMA-0.5	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2126	WT_IPC-13-32406	Cobalt, Vanadium		
			EPA:200.8						2013-2125	WT_IPC-13-32265	Selenium
									2013-2126	WT_IPC-13-32406	Arsenic, Nickel
		Rad	EPA:903.1	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.	2013-2125	WT_IPC-13-32265	Radium-226		
B-SMA-1	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1920	WT_IPC-13-32320	Cobalt, Vanadium, Zinc		
			EPA:200.8						Lead, Nickel		
			EPA:245.2					WT_IPC-13-32051	Mercury		
CDB-SMA-0.25	7/26/2013	PCBs	EPA:1668A	U	CB4	The sample result is ≤5 times the concentration of the related analyte in the method blank.	2013-1431	WT_IPC-13-39427	Total tetraCB		
	9/10/2013	SVOA	EPA:625	UJ	SV3a	The surrogate is < the lower acceptance level (LAL) but ≥10%R.	2013-1882	WT_IPC-13-32514	Benzo(a)pyrene, Hexachlorobenzene, Pentachlorophenol		

Table B-2 (continued)

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte	
CDB-SMA-0.55	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2059	WT_IPC-13-32368	Vanadium, Zinc	
			EPA:200.8					WT_IPC-13-32368	Antimony, Arsenic, Chromium	
			EPA:245.2					WT_IPC-13-32159	Mercury	
		PCBs	EPA:1668A	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2074	WT_IPC-13-32159	Total PCB	
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.	2013-2059	WT_IPC-13-32159	Radium-226 and Radium-228	
EPA:903.1	Radium-226									
CDB-SMA-4	7/25/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1377	WT_IPC-13-32416	Boron, Cobalt, Vanadium	
			EPA:200.8						Lead	
CDV-SMA-1.2	9/12/2013	Hexp	SW-846:8321A	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2021	WT_IPC-13-32062	RDX	
		Metals	EPA:200.7					2013-2059	WT_IPC-13-32407	Boron, Cobalt, Vanadium
			EPA:200.8						WT_IPC-13-32407	Nickel
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.	2013-2059	WT_IPC-13-32062	Radium-226 and Radium-228	
			EPA:903.1						Radium-226	
			EPA:904						Radium-228	

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
CDV-SMA-1.3	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2059	WT_IPC-13-32408	Cobalt, Vanadium
			EPA:200.8						Antimony, Nickel
CDV-SMA-1.7	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2059	WT_IPC-13-32531	Vanadium
			EPA:200.8						Lead, Nickel, Silver
			EPA:245.2					WT_IPC-13-32045	Mercury
CDV-SMA-2	7/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1218	WT_IPC-13-32532	Boron, Vanadium
				U	I4	The sample result is ≤5 times the concentration of related analyte in the method blank.			Cobalt
			J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	Arsenic, Nickel			
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.	2013-1218	WT_IPC-13-32175	Radium-226 and Radium-228
			EPA:904						Radium-228



Table B-2 (continued)

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
CDV-SMA-2.42	7/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1239	WT_IPC-13-32344	Boron, Cobalt, Vanadium
			EPA:200.8						Antimony, Nickel
			EPA:245.2					Mercury	
		Rad	EPA:904	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.	2013-1239	WT_IPC-13-32195	Radium-228
CDV-SMA-2.51	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2059	WT_IPC-13-32345	Vanadium, Zinc
			EPA:200.8						Nickel
CDV-SMA-6.02	9/13/2013	Inorganic	EPA:300.0	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2059	WT_IPC-13-40966	Chloride
		Metals	EPA:200.7						Cobalt
			EPA:200.8						Lead, Nickel
CDV-SMA-7	9/13/2013	Cyanide	ASTM:D2036	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2128	WT_IPC-13-32218	Cyanide, weak acid dissociable
		Metals	EPA:200.7						Boron, Vanadium, Zinc
			EPA:200.8						Antimony, Arsenic, Lead
CHQ-SMA-1.02	7/25/2013	PCBs	EPA:1668A	U	CB4	The sample result is ≤5 times the concentration of the related analyte in the method blank.	2013-1483	WT_IPC-13-32459	PCB-31

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**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
CHQ-SMA-3.05	9/10/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the PQL.	2013-1970	WT_IPC-13-32351	Cobalt, Vanadium
			EPA:200.8						Nickel
			EPA:245.2					WT_IPC-13-32149	Mercury
		Rad	EPA:903.1	U	R5	Analyte is not detected because the amount reported is less than the MDC.			Radium-226
CHQ-SMA-4.1	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1970	WT_IPC-13-32409	Cobalt, Vanadium
			EPA:200.8						Nickel
			EPA:245.2					WT_IPC-13-32034	Mercury
CHQ-SMA-4.5	7/25/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1488	WT_IPC-13-32537	Boron, Vanadium, Zinc
				U	I4	The sample result is ≤5 times the concentration of related analyte in the method blank.			Sodium
			EPA:200.8	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.			WT_IPC-13-32219
								WT_IPC-13-32537	Arsenic, Lead
								WT_IPC-13-32219	Mercury

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Table B-2 (continued)

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
CHQ-SMA-6	7/25/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1426	WT_IPC-13-32538	Boron, Cobalt, Vanadium, Zinc
			EPA:200.8					WT_IPC-13-32047	Selenium
								WT_IPC-13-32538	Lead, Nickel
DP-SMA-0.3	9/13/2013	Rad	EPA:903.1	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.	2013-2103	WT_IPC-13-39146	Radium-226
DP-SMA-0.4	9/13/2013	Cyanide	ASTM:D2036	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2122	WT_IPC-13-32236	Cyanide, weak acid dissociable
		Metals	EPA:200.7					WT_IPC-13-32335	Cobalt
			EPA:200.8						Antimony, Cadmium, Chromium
			EPA:245.2						
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.	2013-2125	WT_IPC-13-32236	Mercury
	EPA:904			Radium-226 and Radium-228					
								Radium-228	
DP-SMA-2.35	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2128	WT_IPC-13-32382	Boron, Vanadium, Zinc
			EPA:200.8						Nickel

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
LA-SMA-0.85	11/9/2012	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-354	WT_IPL-13-24804	Boron, Cobalt
			EPA:200.8						Antimony, Chromium, Lead
		Rad	Calculation	U	R11	The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3 times the 1 sigma TPU.		WT_IPL-13-24803	Radium-226 and Radium-228
		EPA:900	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.	Gross alpha			
		EPA:903.1	U	R5	Analyte is not detected because the amount reported is less than the MDC.	Radium-226			
		EPA:904	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.	Radium-228			

Table B-2 (continued)

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
LA-SMA-0.85	5/15/2013	Cyanide	ASTM:D2036	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-869	WT_IPC-13-32171	Cyanide, weak acid dissociable
		Metals	EPA:200.7					WT_IPC-13-32499	Boron, Cobalt
			EPA:200.8	Arsenic, Chromium, Lead					
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-32171	Radium-226 and Radium-228
			EPA:900	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.			Gross alpha
		EPA:903.1 EPA:904	U	R5	Analyte is not detected because the amount reported is less than the MDC.	Radium-226			
Radium-228									
LA-SMA-1	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2098	WT_IPC-13-32488	Boron, Cobalt, Vanadium, Zinc
			EPA:200.8					WT_IPC-13-32154	Selenium
			WT_IPC-13-32488	Chromium, Nickel					
LA-SMA-2.1	9/13/2013	Cyanide	ASTM:D2036	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2122	WT_IPC-13-32192	Cyanide, weak acid dissociable
		Metals	EPA:200.7					WT_IPC-13-32326	Boron, Vanadium
			EPA:200.8	Arsenic, Cadmium, Lead, Nickel					

Table B-2 (continued)

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte	
LA-SMA-5.51	7/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1263	WT_IPC-13-32358	Boron, Cobalt, Vanadium	
			EPA:200.8					WT_IPC-13-32200	Selenium	
								WT_IPC-13-32358	Arsenic, Lead, Nickel	
LA-SMA-5.54	9/13/2013	Cyanide	ASTM:D2036	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2122	WT_IPC-13-32203	Cyanide, weak acid dissociable	
		Metals	EPA:200.7					2013-2126	WT_IPC-13-32361	Boron, Vanadium
			EPA:200.8					2013-2125	WT_IPC-13-32203	Selenium
								2013-2126	WT_IPC-13-32361	Arsenic, Nickel
LA-SMA-5.92	7/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1264	WT_IPC-13-32362	Boron, Vanadium, Zinc	
			EPA:200.8					WT_IPC-13-32245	Selenium	
								WT_IPC-13-32362	Antimony, Arsenic	
LA-SMA-6.395	9/13/2013	Cyanide	ASTM:D2036	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2060	WT_IPC-13-32244	Cyanide, weak acid dissociable	
		Metals	EPA:200.7					WT_IPC-13-32355	Boron, Cobalt, Vanadium, Zinc	
			EPA:200.8					WT_IPC-13-32244	Selenium	
								WT_IPC-13-32355	Lead, Nickel	

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte		
M-SMA-1	6/14/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1018	WT_IPC-13-32501	Cobalt		
			EPA:200.8						Cadmium, Lead		
		Rad	Calculation	U	R11			The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3 times the 1 sigma TPU.	2013-1018	WT_IPC-13-32157	Radium-226 and Radium-228
			EPA:904	U	R5			Analyte is not detected because the amount reported is less than the MDC.			Radium-228
	7/2/2013	Metals	EPA:200.8	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1086	WT_IPC-13-38616	Nickel		
			Rad	Calculation	U	R5			Analyte is not detected because the amount reported is less than the MDC.	WT_IPC-13-38617	Radium-226 and Radium-228
		EPA:903.1		J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.		Radium-226			
		EPA:904	U	R5	Analyte is not detected because the amount reported is less than the MDC.	Radium-228					

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte	
M-SMA-1.2	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2098	WT_IPC-13-32364	Boron	
			EPA:200.8	J	I10a	The sample and the duplicate sample results were $\geq 5$ times the reporting limit (RL) and the duplicate relative percent difference (RPD) was $> 20\%$ .			Aluminum	
					J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.			Lead	
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-32247	Radium-226 and Radium-228	
									EPA:903.1	Radium-226
									EPA:904	Radium-228
M-SMA-10	6/30/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1105	WT_IPC-13-32297	Cobalt, Vanadium, Zinc	
			EPA:200.8						Arsenic, Lead, Nickel	
		Rad	EPA:900	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.	2013-1105	WT_IPC-13-32222	Gross alpha	



Table B-2 (continued)

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
M-SMA-12.6	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2007	WT_IPC-13-41871	Cobalt, Vanadium, Zinc
			EPA:200.8						Arsenic
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-41870	Radium-226 and Radium-228
			EPA:904						Radium-228
M-SMA-13	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2007	WT_IPC-13-32304	Boron, Cobalt, Sodium, Vanadium, Zinc
			EPA:200.8						Nickel
			EPA:245.2						
		Rad	EPA:900	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-32049	Mercury Gross alpha
M-SMA-3	7/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1151	WT_IPC-13-32305	Vanadium
				U	I4	The sample result is ≤5 times the concentration of related analyte in the method blank.			Cobalt
			EPA:200.8	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.			Lead, Nickel
		Rad	EPA:900	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.		WT_IPC-13-32183	Gross alpha

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
M-SMA-7.9	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2060	WT_IPC-13-32309	Boron, Cobalt, Vanadium
			EPA:200.8						Nickel
		Rad	EPA:900	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.		WT_IPC-13-32187	Gross alpha
PJ-SMA-1.05	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2126	WT_IPC-13-32388	Boron, Cobalt, Vanadium
			EPA:200.8						Antimony, Arsenic
PJ-SMA-11	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2103	WT_IPC-13-32422	Vanadium
			EPA:200.8						Selenium
		Rad	EPA:904	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-32267	Radium-228
PJ-SMA-11.1	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2103	WT_IPC-13-32423	Boron, Cobalt, Vanadium, Zinc
			EPA:200.8					WT_IPC-13-32268	Selenium
			EPA:245.2					WT_IPC-13-32423	Lead, Nickel
		Rad	EPA:904	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.		WT_IPC-13-32268	Mercury Radium-228

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
PJ-SMA-16	8/8/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1594	WT_IPC-13-32387	Cobalt, Magnesium, Vanadium, Zinc
			EPA:200.8						Lead, Nickel
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-32055	Radium-226 and Radium-228
			EPA:900						Gross alpha
EPA:903.1	Radium-226								
EPA:904	Radium-228								
PJ-SMA-17	7/25/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1488	WT_IPC-13-39439	Boron, Cobalt, Vanadium, Zinc
			EPA:200.8					WT_IPC-13-39438	Selenium
PJ-SMA-18	7/25/2013	Metals	EPA:200.7	J	I10a	The sample and the duplicate sample results were $\geq 5$ times the RL and the duplicate RPD was $>20\%$ .	2013-1458	WT_IPC-13-32390	Vanadium
			EPA:200.8		J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.			WT_IPC-13-32209
		PCBs	EPA:1668A	U	CB4	The sample result is $\leq 5$ times the concentration of the related analyte in the method blank.	2013-1460	WT_IPC-13-32209	Total PCB
			Rad						EPA:903.1

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
PJ-SMA-19	8/8/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1618	WT_IPC-13-32391	Cobalt, Zinc
			EPA:200.8					WT_IPC-13-32210	Selenium
								WT_IPC-13-32391	Lead, Nickel
PJ-SMA-4.05	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2128	WT_IPC-13-42056	Boron, Cobalt
			EPA:200.8						Nickel
Pratt-SMA-1.05	9/13/2013	Cyanide	ASTM:D2036	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2103	WT_IPC-13-32212	Cyanide, weak acid dissociable
		Metals	EPA:200.7						Boron, Cobalt, Vanadium, Zinc
			EPA:200.8						Lead, Nickel
P-SMA-0.3	7/25/2013	Cyanide	ASTM:D2036	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1479	WT_IPC-13-32227	Cyanide, weak acid dissociable
		Metals	EPA:200.7						Boron, Zinc
			EPA:200.8						Lead
P-SMA-3.05	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1919	WT_IPC-13-32353	Boron, Cobalt, Vanadium, Zinc
			EPA:200.8						Nickel
			Rad						Calculation
		EPA:903.1	Radium-226						
		EPA:904	Radium-228						

Table B-2 (continued)

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
R-SMA-2.3	6/14/2013	Hexp	SW-846:8321A	UJ	HE12e	The matrix spike/matrix spike duplicate percent recovery was > 10% but < 70%.	2013-988	WT_IPC-13-32052	RDX, Trinitrotoluene[2,4,6-]
		Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1006	WT_IPC-13-32338	Boron, Cobalt
			EPA:200.8						Cadmium, Lead
Rad	EPA:900	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.		WT_IPC-13-32052	Gross alpha		
S-SMA-2	7/11/2013	Metals	EPA:200.7	J+	I6b	The associated matrix spike recovery was above the upper acceptance limit (UAL).	2013-1239	WT_IPC-13-39143	Sodium
	8/1/2013						2013-1547	WT_IPC-13-39144	
	PCBs	EPA:1668A	U	CB4	The sample result is ≤5 times the concentration of the related analyte in the method blank.	2013-1551	WT_IPC-13-39142	PCB-31	
S-SMA-3.95	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2059	WT_IPC-13-32376	Cobalt, Magnesium, Zinc
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-32088	Radium-226 and Radium-228
			EPA:903.1	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.			Radium-226
			EPA:904	U	R5	Analyte is not detected because the amount reported is less than the MDC.			Radium-228

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Table B-2 (continued)

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
STRM-SMA-1.5	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than MDL.	2013-1965	WT_IPC-13-34681	Vanadium
			EPA:200.8						Nickel
			EPA:245.2						
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-34679	Radium-226 and Radium-228
			EPA:904						Radium-228
T-SMA-2.85	7/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-1267	WT_IPC-13-32396	Boron, Cobalt, Vanadium, Zinc
			EPA:200.8				2013-1267	WT_IPC-13-32396	Nickel
		Rad	EPA:903.1	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.	2013-1267	WT_IPC-13-32261	Radium-226
T-SMA-4	9/13/2013	Metals	EPA:200.7 EPA:200.8	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2060	WT_IPC-13-32437	Boron, Cobalt, Vanadium Arsenic, Lead, Nickel
W-SMA-1	9/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2126	WT_IPC-13-32495	Boron, Cobalt
			EPA:200.8						Lead
			EPA:245.2						
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.	2013-2125	WT_IPC-13-32167	Mercury
			EPA:904						Radium-226 and Radium-228 Radium-228
W-SMA-14.1	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2008	WT_IPC-13-32492	Vanadium
			EPA:200.8						Arsenic, Nickel

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte		
W-SMA-8	9/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2059	WT_IPC-13-32443	Cobalt		
			EPA:200.8						Cadmium		
		Rad	Calculation	U	R5			Analyte is not detected because the amount reported is less than the MDC.	WT_IPC-13-32181	Radium-226 and Radium-228	
			EPA:903.1							Radium-226	
EPA:904	Radium-228										
W-SMA-8.7	9/12/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2008			WT_IPC-13-32433	Boron, Cobalt, Vanadium, Zinc
			EPA:200.8					Lead			
W-SMA-8.71	9/13/2013	Metals	EPA:200.7	J	J_LAB			The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2125	WT_IPC-13-32496	Cobalt
			EPA:200.8								Antimony, Cadmium, Chromium
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.	WT_IPC-13-32168			Radium-226 and Radium-228	
			EPA:900							Gross alpha	
EPA:904	Radium-228										

**Table B-2 (continued)**

SMA	Sample Date	Suite	Method	Val Qual	Val Reason Code	Explanation	Chain of Custody	Sample	Analyte
W-SMA-9.05	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2008	WT_IPC-13-32397	Boron, Vanadium
			EPA:200.8						Arsenic, Lead, Nickel
		Rad	EPA:900	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-32057	Gross alpha
			EPA:903.1	J	R10	Associated duplicate sample has a DER or RER greater than the analytical laboratory's acceptance limits.			Radium-226
			EPA:904	U	R5	Analyte is not detected because the amount reported is less than the MDC.			Radium-228
W-SMA-9.7	9/13/2013	Metals	EPA:200.7	J	J_LAB	The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL but greater than the MDL.	2013-2103	WT_IPC-13-32399	Boron, Vanadium
			EPA:200.8						Lead, Nickel
		Rad	Calculation	U	R5	Analyte is not detected because the amount reported is less than the MDC.		WT_IPC-13-32263	Radium-226 and Radium-228
			EPA:904						Radium-228



**Table B-3  
Target Action Levels**

Pollutant (Total Unless Indicated)	Chemical Abstracts Service Number	STORET Code <sup>a</sup>	MQL (µg/L)	ATAL (µg/L)	MTAL (µg/L)
<b>Radioactivity</b>					
Adjusted Gross Alpha <sup>b</sup> (pCi/L)	— <sup>c</sup>	80029	—	15	—
Ra-226 and Ra-228 (pCi/L)	—	11503	—	30	—
<b>Metals</b>					
Aluminum, dissolved	7429-90-5	01106	2.5	—	750
Antimony, dissolved	7440-36-0	01095	60	640	—
Arsenic, dissolved	7440-38-2	01000	0.5	9	340
Boron, dissolved	7440-42-8	01020	100	5000	—
Cadmium, dissolved	7440-43-9	01025	1	—	0.6
Chromium, dissolved	7440-47-3	01030	10	—	210
Cobalt, dissolved	7440-48-4	01035	50	1000	—
Copper, dissolved	7440-50-8	01040	0.5	—	4.3
Lead, dissolved	7439-92-1	01049	0.5	—	17
Mercury	7439-97-6	71900	0.005	0.77	1.4
Nickel, dissolved	7440-02-0	01067	0.5	—	170
Selenium	7782-49-2	01147	5	5	20
Silver, dissolved	7440-22-4	01075	0.5	—	0.4
Thallium, dissolved	7440-28-0	01057	0.5	6.3	—
Vanadium, dissolved	7440-62-2	01085	50	100	—
Zinc, dissolved	7440-66-6	01090	20	—	42
<b>Cyanide</b>					
Cyanide, weak acid dissociable	57-12-5	00718	10	5.2	22
<b>Dioxin</b>					
2,3,7,8-TCDD [tetrachlorodibenzo-p-dioxin(2,3,7,8-)]	1746-01-6	34675	0.00001	5.1E-08	—
<b>Semivolatile Analytes</b>					
Benzo(a)pyrene	50-32-8	34247	5	0.18	—
Hexachlorobenzene	118-74-1	39700	5	0.0029	—
Pentachlorophenol	87-86-5	39032	5	—	19

Table B-3 (continued)

Pollutant (Total Unless Indicated)	Chemical Abstracts Service Number	STORET Code <sup>a</sup>	MQL (µg/L)	ATAL (µg/L)	MTAL (µg/L)
<b>Pesticides</b>					
4,4'-DDT (dichlorodiphenyltrichloroethane) and derivatives	50-29-3	39300	0.02	0.001	1.1
Aldrin	309-00-2	39330	0.01	0.0005	3
Alpha-Endosulfan	959-98-8	34361	0.01	—	0.22
Beta-Endosulfan	33213-65-9	34356	0.02	—	0.22
Chlordane	57-74-9	39350	0.2	0.0081	2.4
Dieldrin	60-57-1	39380	0.02	0.00054	0.24
Endrin	72-20-8	39390	0.02	—	0.086
Gamma-benzene hexachloride (BHC)	58-89-9	39340	0.05	—	0.95
Heptachlor	76-44-8	39410	0.01	—	0.52
Heptachlor Epoxide	1024-57-3	39420	0.01	—	0.52
Mercury	7439-97-6	71900	0.005	0.77	1.4
Toxaphene	8001-35-2	39400	0.3	—	0.73
<b>PCBs</b>					
PCBs	1336-36-3	39516	—	0.00064	—
<b>High Explosives</b>					
TNT (2,4,6-Trinitrotoluene)	118-96-7	81307	—	20	—
RDX	121-82-4	81364	—	200	—

<sup>a</sup> STORET code is the ID used by the EPA STORET database to identify each chemical constituent.

<sup>b</sup> "Adjusted gross alpha" means the total radioactivity from alpha particle emission as inferred from measurements on a dry sample, including radium-226, but excluding radon-222 and uranium. Also excluded are source, special nuclear, and by-product material as defined by the Atomic Energy Act of 1954 (NMAC 20.6.4.7.B). LANL reports the gross-alpha radiation result returned by the analytical laboratory without adjustment.

<sup>c</sup> — = Not applicable.

### Data Quality Issues

As an outcome of the EIM automatic data validation, analytical results for specific analytes may be rejected ("R" qualifier flag) because of quality control failures. No sample results collected during 2013 for the Individual Permit were rejected by LANL data validation. Sample results rejected because of quality-control failures cannot be used to confirm that pollutants of concern are present at concentrations above or below applicable TAL values.

Compliance samples must be analyzed for the pollutants of concern specified in Appendix B of the Permit. In some instances, analytical results were not returned or were not useable for certain requested pollutants of concern because of errors or failures in quality control at the analytical laboratory. Required pollutants of concern for which results were not received are summarized in Table B-4.

- Analysis of pesticide was requested for the sample collected at CHQ-SMA-3.05 on September 10, 2013, but the analytical laboratory did not receive the sample bottle containing the sample for pesticide analysis. Pesticide analysis could not be performed with sample volume received.

**Table B-4  
Missing Pollutants of Concern**

SMA	Chain of Custody	Sample	Sample Collection Date	Analyte	Comment
CHQ-SMA-3.05	2013-1970	WT_IPC-13-32149	Sep-10, 2013	4,4'-DDT and derivatives Aldrin Alpha-Endosulfan Beta-Endosulfan Chlordane Dieldrin Endrin Gamma-BHC Heptachlor Heptachlor Epoxide Mercury Toxaphene	The analytical laboratory did not receive the sample bottle containing sample for pesticide analysis.

The 40 CFR Part 136 requirements for Clean Water Act compliance samples include maximum holding times between the time of sample collection and the time of sample extraction and between sample extraction and sample analysis for organic analysis and between the time of sample collection and the time of analysis for inorganic analysis. Extraction holding times were missed for two samples analyzed for semivolatile organic and five samples analyzed for high explosives. The analytical holding time was missed for one sample receiving weak acid dissociable cyanide analysis.

The analytical results from samples extracted or analyzed beyond the appropriate holding time may have a low bias and therefore could potentially underreport the concentration present in the sample. Consequently, the results of analyses where holding times were exceeded cannot be used to confirm that pollutants of concern are present at concentrations below applicable TAL values.

**Table B-5  
Cyanide and Mercury Holding Times**

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Analysis Holding Time (Days)	Required Analysis Holding Time (Days)	Exceeds (Y/N)
2M-SMA-1.43	General Inorganic	Cyanide, weak acid dissociable	2013-1266	WT_IPC-13-32260	7/12/2013	7/26/2013	14	14	N
2M-SMA-1.43	Metals	Mercury	2013-1266	WT_IPC-13-32260	7/12/2013	8/1/2013	20	28	N
2M-SMA-2	General Inorganic	Cyanide, weak acid dissociable	2013-1018	WT_IPC-13-34607	6/14/2013	6/28/2013	14	14	N
2M-SMA-2	Metals	Mercury	2013-1018	WT_IPC-13-34607	6/14/2013	7/9/2013	25	28	N
2M-SMA-2	General Inorganic	Cyanide, weak acid dissociable	2013-1725	WT_IPC-13-34608	8/18/2013	8/27/2013	9	14	N
2M-SMA-2	Metals	Mercury	2013-1725	WT_IPC-13-34608	8/18/2013	9/12/2013	25	28	N
2M-SMA-3	General Inorganic	Cyanide, weak acid dissociable	2013-1176	WT_IPC-13-32040	7/12/2013	7/26/2013	14	14	N
2M-SMA-3	Metals	Mercury	2013-1176	WT_IPC-13-32040	7/12/2013	8/1/2013	20	28	N
3M-SMA-0.4	General Inorganic	Cyanide, weak acid dissociable	2013-1239	WT_IPC-13-32065	7/12/2013	7/26/2013	14	14	N
3M-SMA-0.4	Metals	Mercury	2013-1239	WT_IPC-13-32065	7/12/2013	8/1/2013	20	28	N
A-SMA-2	General Inorganic	Cyanide, weak acid dissociable	2013-2007	WT_IPC-13-32042	9/12/2013	9/24/2013	12	14	N
A-SMA-2	Metals	Mercury	2013-2007	WT_IPC-13-32042	9/12/2013	10/4/2013	22	28	N
A-SMA-2.7	General Inorganic	Cyanide, weak acid dissociable	2013-2007	WT_IPC-13-32036	9/13/2013	9/24/2013	11	14	N
A-SMA-2.7	Metals	Mercury	2013-2007	WT_IPC-13-32036	9/13/2013	10/4/2013	21	28	N
A-SMA-3	General Inorganic	Cyanide, weak acid dissociable	2013-1426	WT_IPC-13-39423	7/25/2013	8/8/2013	14	14	N
A-SMA-3	Metals	Mercury	2013-1426	WT_IPC-13-39423	7/25/2013	8/15/2013	21	28	N
A-SMA-3.5	General Inorganic	Cyanide, weak acid dissociable	2013-1479	WT_IPC-13-32194	7/25/2013	8/8/2013	14	14	N
A-SMA-3.5	Metals	Mercury	2013-1479	WT_IPC-13-32194	7/25/2013	8/19/2013	25	28	N
A-SMA-6	General Inorganic	Cyanide, weak acid dissociable	2013-1515	WT_IPC-13-32044	8/4/2013	8/8/2013	4	14	N
A-SMA-6	Metals	Mercury	2013-1515	WT_IPC-13-32044	8/4/2013	8/27/2013	23	28	N

Table B-5 (continued)

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Analysis Holding Time (Days)	Required Analysis Holding Time (Days)	Exceeds (Y/N)
B-SMA-0.5	General Inorganic	Cyanide, weak acid dissociable	2013-2122	WT_IPC-13-32265	9/13/2013	9/26/2013	13	14	N
B-SMA-0.5	Metals	Mercury	2013-2125	WT_IPC-13-32265	9/13/2013	10/4/2013	21	28	N
B-SMA-1	General Inorganic	Cyanide, weak acid dissociable	2013-1920	WT_IPC-13-32051	9/13/2013	9/24/2013	11	14	N
B-SMA-1	Metals	Mercury	2013-1920	WT_IPC-13-32051	9/13/2013	10/4/2013	21	28	N
CDB-SMA-0.55	General Inorganic	Cyanide, weak acid dissociable	2013-2059	WT_IPC-13-32159	9/13/2013	9/26/2013	13	14	N
CDB-SMA-0.55	Metals	Mercury	2013-2059	WT_IPC-13-32159	9/13/2013	10/4/2013	21	28	N
CDB-SMA-4	General Inorganic	Cyanide, weak acid dissociable	2013-1377	WT_IPC-13-32138	7/25/2013	8/8/2013	14	14	N
CDB-SMA-4	Metals	Mercury	2013-1377	WT_IPC-13-32138	7/25/2013	8/14/2013	20	28	N
CDV-SMA-1.2	General Inorganic	Cyanide, weak acid dissociable	2013-2059	WT_IPC-13-32062	9/12/2013	9/26/2013	14	14	N
CDV-SMA-1.2	Metals	Mercury	2013-2059	WT_IPC-13-32062	9/12/2013	10/4/2013	22	28	N
CDV-SMA-1.3	General Inorganic	Cyanide, weak acid dissociable	2013-2059	WT_IPC-13-32063	9/13/2013	9/26/2013	13	14	N
CDV-SMA-1.3	Metals	Mercury	2013-2059	WT_IPC-13-32063	9/13/2013	10/4/2013	21	28	N
CDV-SMA-1.7	General Inorganic	Cyanide, weak acid dissociable	2013-2059	WT_IPC-13-32045	9/13/2013	9/26/2013	13	14	N
CDV-SMA-1.7	Metals	Mercury	2013-2059	WT_IPC-13-32045	9/13/2013	10/4/2013	21	28	N
CDV-SMA-2	General Inorganic	Cyanide, weak acid dissociable	2013-1218	WT_IPC-13-32175	7/12/2013	7/26/2013	14	14	N
CDV-SMA-2	Metals	Mercury	2013-1218	WT_IPC-13-32175	7/12/2013	8/1/2013	20	28	N
CDV-SMA-2.42	General Inorganic	Cyanide, weak acid dissociable	2013-1239	WT_IPC-13-32195	7/12/2013	7/26/2013	14	14	N
CDV-SMA-2.42	Metals	Mercury	2013-1239	WT_IPC-13-32195	7/12/2013	8/1/2013	20	28	N
CDV-SMA-2.51	General Inorganic	Cyanide, weak acid dissociable	2013-2059	WT_IPC-13-32087	9/13/2013	9/26/2013	13	14	N
CDV-SMA-2.51	Metals	Mercury	2013-2059	WT_IPC-13-32087	9/13/2013	10/4/2013	21	28	N
CDV-SMA-6.02	General Inorganic	Cyanide, weak acid dissociable	2013-2059	WT_IPC-13-40964	9/13/2013	9/26/2013	13	14	N
CDV-SMA-6.02	Metals	Mercury	2013-2059	WT_IPC-13-40964	9/13/2013	10/4/2013	21	28	N

Table B-5 (continued)

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Analysis Holding Time (Days)	Required Analysis Holding Time (Days)	Exceeds (Y/N)
CDV-SMA-7	General Inorganic	Cyanide, weak acid dissociable	2013-2128	WT_IPC-13-32218	9/13/2013	9/27/2013	14	14	N
CDV-SMA-7	Metals	Mercury	2013-2128	WT_IPC-13-32218	9/13/2013	10/4/2013	21	28	N
CHQ-SMA-1.02	General Inorganic	Cyanide, weak acid dissociable	2013-1479	WT_IPC-13-32459	7/25/2013	8/8/2013	14	14	N
CHQ-SMA-1.02	General Inorganic	Cyanide, weak acid dissociable	2013-2122	WT_IPC-13-32460	9/15/2013	9/26/2013	11	14	N
CHQ-SMA-3.05	General Inorganic	Cyanide, weak acid dissociable	2013-1970	WT_IPC-13-32149	9/10/2013	9/24/2013	14	14	N
CHQ-SMA-3.05	Metals	Mercury	2013-1970	WT_IPC-13-32149	9/10/2013	10/2/2013	22	28	N
CHQ-SMA-4.1	General Inorganic	Cyanide, weak acid dissociable	2013-1970	WT_IPC-13-32034	9/13/2013	9/24/2013	11	14	N
CHQ-SMA-4.1	Metals	Mercury	2013-1970	WT_IPC-13-32034	9/13/2013	10/2/2013	19	28	N
CHQ-SMA-4.5	General Inorganic	Cyanide, weak acid dissociable	2013-1488	WT_IPC-13-32219	7/25/2013	8/8/2013	14	14	N
CHQ-SMA-4.5	Metals	Mercury	2013-1488	WT_IPC-13-32219	7/25/2013	8/19/2013	25	28	N
CHQ-SMA-6	General Inorganic	Cyanide, weak acid dissociable	2013-1426	WT_IPC-13-32047	7/25/2013	8/8/2013	14	14	N
CHQ-SMA-6	Metals	Mercury	2013-1426	WT_IPC-13-32047	7/25/2013	8/15/2013	21	28	N
DP-SMA-0.4	General Inorganic	Cyanide, weak acid dissociable	2013-2122	WT_IPC-13-32236	9/13/2013	9/26/2013	13	14	N
DP-SMA-0.4	Metals	Mercury	2013-2125	WT_IPC-13-32236	9/13/2013	10/4/2013	21	28	N
DP-SMA-2.35	General Inorganic	Cyanide, weak acid dissociable	2013-2128	WT_IPC-13-32254	9/13/2013	9/27/2013	14	14	N
DP-SMA-2.35	Metals	Mercury	2013-2128	WT_IPC-13-32254	9/13/2013	10/4/2013	21	28	N
LA-SMA-0.85	General Inorganic	Cyanide, weak acid dissociable	2013-354	WT_IPL-13-24803	11/9/2012	11/21/2012	11	14	N
LA-SMA-0.85	Metals	Mercury	2013-354	WT_IPL-13-24803	11/9/2012	11/26/2012	16	28	N
LA-SMA-0.85	General Inorganic	Cyanide, weak acid dissociable	2013-869	WT_IPC-13-32171	5/15/2013	5/28/2013	13	14	N
LA-SMA-0.85	Metals	Mercury	2013-869	WT_IPC-13-32171	5/15/2013	5/31/2013	16	28	N
LA-SMA-1	General Inorganic	Cyanide, weak acid dissociable	2013-2098	WT_IPC-13-32154	9/13/2013	9/26/2013	13	14	N
LA-SMA-1	Metals	Mercury	2013-2098	WT_IPC-13-32154	9/13/2013	10/4/2013	21	28	N

Table B-5 (continued)

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Analysis Holding Time (Days)	Required Analysis Holding Time (Days)	Exceeds (Y/N)
LA-SMA-10.12	General Inorganic	Cyanide, weak acid dissociable	2013-1970	WT_IPC-13-32140	9/12/2013	9/24/2013	12	14	N
LA-SMA-2.1	General Inorganic	Cyanide, weak acid dissociable	2013-2122	WT_IPC-13-32192	9/13/2013	9/26/2013	13	14	N
LA-SMA-2.1	Metals	Mercury	2013-2125	WT_IPC-13-32192	9/13/2013	10/7/2013	24	28	N
LA-SMA-5.51	General Inorganic	Cyanide, weak acid dissociable	2013-1263	WT_IPC-13-32200	7/12/2013	7/26/2013	14	14	N
LA-SMA-5.51	Metals	Mercury	2013-1263	WT_IPC-13-32200	7/12/2013	8/2/2013	21	28	N
LA-SMA-5.54	General Inorganic	Cyanide, weak acid dissociable	2013-2122	WT_IPC-13-32203	9/13/2013	9/26/2013	13	14	N
LA-SMA-5.54	Metals	Mercury	2013-2125	WT_IPC-13-32203	9/13/2013	10/4/2013	21	28	N
LA-SMA-5.92	General Inorganic	Cyanide, weak acid dissociable	2013-1264	WT_IPC-13-32245	7/12/2013	7/26/2013	14	14	N
LA-SMA-5.92	Metals	Mercury	2013-1264	WT_IPC-13-32245	7/12/2013	8/1/2013	20	28	N
LA-SMA-6.395	General Inorganic	Cyanide, weak acid dissociable	2013-2060	WT_IPC-13-32244	9/13/2013	9/26/2013	13	14	N
LA-SMA-6.395	Metals	Mercury	2013-2060	WT_IPC-13-32244	9/13/2013	10/4/2013	21	28	N
M-SMA-1	General Inorganic	Cyanide, weak acid dissociable	2013-1018	WT_IPC-13-32157	6/14/2013	6/28/2013	14	14	N
M-SMA-1	Metals	Mercury	2013-1018	WT_IPC-13-32157	6/14/2013	7/9/2013	25	28	N
M-SMA-1	General Inorganic	Cyanide, weak acid dissociable	2013-1086	WT_IPC-13-38617	7/2/2013	7/15/2013	13	14	N
M-SMA-1	Metals	Mercury	2013-1086	WT_IPC-13-38617	7/2/2013	7/23/2013	21	28	N
M-SMA-1.2	General Inorganic	Cyanide, weak acid dissociable	2013-2098	WT_IPC-13-32247	9/13/2013	9/26/2013	13	14	N
M-SMA-1.2	Metals	Mercury	2013-2098	WT_IPC-13-32247	9/13/2013	10/4/2013	21	28	N
M-SMA-10	General Inorganic	Cyanide, weak acid dissociable	2013-1105	WT_IPC-13-32222	6/30/2013	7/15/2013	15	14	Y
M-SMA-10	Metals	Mercury	2013-1105	WT_IPC-13-32222	6/30/2013	7/23/2013	23	28	N
M-SMA-12.6	General Inorganic	Cyanide, weak acid dissociable	2013-2007	WT_IPC-13-41870	9/13/2013	9/24/2013	11	14	N
M-SMA-12.6	Metals	Mercury	2013-2007	WT_IPC-13-41870	9/13/2013	10/4/2013	21	28	N
M-SMA-13	General Inorganic	Cyanide, weak acid dissociable	2013-2007	WT_IPC-13-32049	9/13/2013	9/24/2013	11	14	N

Table B-5 (continued)

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Analysis Holding Time (Days)	Required Analysis Holding Time (Days)	Exceeds (Y/N)
M-SMA-13	Metals	Mercury	2013-2007	WT_IPC-13-32049	9/13/2013	10/4/2013	21	28	N
M-SMA-3	General Inorganic	Cyanide, weak acid dissociable	2013-1151	WT_IPC-13-32183	7/12/2013	7/26/2013	14	14	N
M-SMA-3	Metals	Mercury	2013-1151	WT_IPC-13-32183	7/12/2013	8/1/2013	20	28	N
M-SMA-7.9	General Inorganic	Cyanide, weak acid dissociable	2013-2060	WT_IPC-13-32187	9/13/2013	9/26/2013	13	14	N
M-SMA-7.9	Metals	Mercury	2013-2060	WT_IPC-13-32187	9/13/2013	10/4/2013	21	28	N
PJ-SMA-1.05	General Inorganic	Cyanide, weak acid dissociable	2013-2122	WT_IPC-13-32208	9/13/2013	9/26/2013	13	14	N
PJ-SMA-1.05	Metals	Mercury	2013-2125	WT_IPC-13-32208	9/13/2013	10/4/2013	21	28	N
PJ-SMA-11	General Inorganic	Cyanide, weak acid dissociable	2013-2103	WT_IPC-13-32267	9/13/2013	9/26/2013	13	14	N
PJ-SMA-11	Metals	Mercury	2013-2103	WT_IPC-13-32267	9/13/2013	10/4/2013	21	28	N
PJ-SMA-11.1	General Inorganic	Cyanide, weak acid dissociable	2013-2103	WT_IPC-13-32268	9/13/2013	9/26/2013	13	14	N
PJ-SMA-11.1	Metals	Mercury	2013-2103	WT_IPC-13-32268	9/13/2013	10/4/2013	21	28	N
PJ-SMA-16	General Inorganic	Cyanide, weak acid dissociable	2013-1594	WT_IPC-13-32055	8/8/2013	8/15/2013	7	14	N
PJ-SMA-16	Metals	Mercury	2013-1594	WT_IPC-13-32055	8/8/2013	8/28/2013	20	28	N
PJ-SMA-17	General Inorganic	Cyanide, weak acid dissociable	2013-1488	WT_IPC-13-39438	7/25/2013	8/8/2013	14	14	N
PJ-SMA-17	Metals	Mercury	2013-1488	WT_IPC-13-39438	7/25/2013	8/19/2013	25	28	N
PJ-SMA-18	General Inorganic	Cyanide, weak acid dissociable	2013-1458	WT_IPC-13-32209	7/25/2013	8/8/2013	14	14	N
PJ-SMA-18	Metals	Mercury	2013-1458	WT_IPC-13-32209	7/25/2013	8/15/2013	21	28	N
PJ-SMA-19	General Inorganic	Cyanide, weak acid dissociable	2013-1618	WT_IPC-13-32210	8/8/2013	8/15/2013	7	14	N
PJ-SMA-19	Metals	Mercury	2013-1618	WT_IPC-13-32210	8/8/2013	8/28/2013	20	28	N
PJ-SMA-4.05	General Inorganic	Cyanide, weak acid dissociable	2013-2128	WT_IPC-13-42057	9/13/2013	9/27/2013	14	14	N
PJ-SMA-4.05	Metals	Mercury	2013-2128	WT_IPC-13-42057	9/13/2013	10/4/2013	22	28	N
Pratt-SMA-1.05	General Inorganic	Cyanide, weak acid dissociable	2013-2103	WT_IPC-13-32212	9/13/2013	9/26/2013	13	14	N



Table B-5 (continued)

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Analysis Holding Time (Days)	Required Analysis Holding Time (Days)	Exceeds (Y/N)
Pratt-SMA-1.05	Metals	Mercury	2013-2103	WT_IPC-13-32212	9/13/2013	10/4/2013	21	28	N
P-SMA-0.3	General Inorganic	Cyanide, weak acid dissociable	2013-1479	WT_IPC-13-32227	7/25/2013	8/8/2013	14	14	N
P-SMA-0.3	Metals	Mercury	2013-1479	WT_IPC-13-32227	7/25/2013	8/19/2013	25	28	N
P-SMA-3.05	General Inorganic	Cyanide, weak acid dissociable	2013-1919	WT_IPC-13-32197	9/13/2013	9/24/2013	11	14	N
P-SMA-3.05	Metals	Mercury	2013-1919	WT_IPC-13-32197	9/13/2013	10/4/2013	21	28	N
R-SMA-2.3	General Inorganic	Cyanide, weak acid dissociable	2013-1006	WT_IPC-13-32052	6/14/2013	6/28/2013	14	14	N
R-SMA-2.3	Metals	Mercury	2013-1006	WT_IPC-13-32052	6/14/2013	7/3/2013	19	28	N
S-SMA-3.95	General Inorganic	Cyanide, weak acid dissociable	2013-2059	WT_IPC-13-32088	9/13/2013	9/26/2013	13	14	N
S-SMA-3.95	Metals	Mercury	2013-2059	WT_IPC-13-32088	9/13/2013	10/4/2013	21	28	N
STRM-SMA-1.5	General Inorganic	Cyanide, weak acid dissociable	2013-1965	WT_IPC-13-34679	9/13/2013	9/24/2013	11	14	N
STRM-SMA-1.5	Metals	Mercury	2013-1965	WT_IPC-13-34679	9/13/2013	10/4/2013	21	28	N
T-SMA-2.85	General Inorganic	Cyanide, weak acid dissociable	2013-1267	WT_IPC-13-32261	7/12/2013	7/26/2013	14	14	N
T-SMA-2.85	Metals	Mercury	2013-1267	WT_IPC-13-32261	7/12/2013	8/1/2013	20	28	N
T-SMA-4	General Inorganic	Cyanide, weak acid dissociable	2013-2060	WT_IPC-13-32274	9/13/2013	9/26/2013	13	14	N
T-SMA-4	Metals	Mercury	2013-2060	WT_IPC-13-32274	9/13/2013	10/4/2013	21	28	N
W-SMA-1	General Inorganic	Cyanide, weak acid dissociable	2013-2122	WT_IPC-13-32167	9/12/2013	9/26/2013	14	14	N
W-SMA-1	Metals	Mercury	2013-2125	WT_IPC-13-32167	9/12/2013	10/4/2013	22	28	N
W-SMA-14.1	General Inorganic	Cyanide, weak acid dissociable	2013-2008	WT_IPC-13-32037	9/13/2013	9/24/2013	11	14	N
W-SMA-14.1	Metals	Mercury	2013-2008	WT_IPC-13-32037	9/13/2013	10/4/2013	21	28	N
W-SMA-8	General Inorganic	Cyanide, weak acid dissociable	2013-2059	WT_IPC-13-32181	9/12/2013	9/26/2013	14	14	N
W-SMA-8	Metals	Mercury	2013-2059	WT_IPC-13-32181	9/12/2013	10/4/2013	22	28	N
W-SMA-8.7	General Inorganic	Cyanide, weak acid dissociable	2013-2008	WT_IPC-13-32071	9/12/2013	9/24/2013	12	14	N

**Table B-5 (continued)**

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Analysis Holding Time (Days)	Required Analysis Holding Time (Days)	Exceeds (Y/N)
W-SMA-8.7	Metals	Mercury	2013-2008	WT_IPC-13-32071	9/12/2013	10/4/2013	22	28	N
W-SMA-8.71	General Inorganic	Cyanide, weak acid dissociable	2013-2122	WT_IPC-13-32168	9/13/2013	9/26/2013	13	14	N
W-SMA-8.71	Metals	Mercury	2013-2125	WT_IPC-13-32168	9/13/2013	10/4/2013	21	28	N
W-SMA-9.05	General Inorganic	Cyanide, weak acid dissociable	2013-2008	WT_IPC-13-32057	9/13/2013	9/24/2013	11	14	N
W-SMA-9.05	Metals	Mercury	2013-2008	WT_IPC-13-32057	9/13/2013	10/4/2013	21	28	N
W-SMA-9.7	General Inorganic	Cyanide, weak acid dissociable	2013-2103	WT_IPC-13-32263	9/13/2013	9/26/2013	13	14	N
W-SMA-9.7	Metals	Mercury	2013-2103	WT_IPC-13-32263	9/13/2013	10/4/2013	21	28	N
W-SMA-9.9	General Inorganic	Cyanide, weak acid dissociable	2013-2122	WT_IPC-13-32142	9/13/2013	9/26/2013	13	14	N

Note: Shading indicates analyses performed beyond the required analysis holding time.

**Table B-6  
Organic Compound Holding Times**

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Extraction Hold Time (Days)	Required Extraction Hold Time (Days)	Exceeds (Y/N)
2M-SMA-3	Hexp <sup>a</sup>	RDX	2013-1176	WT_IPC-13-32040	7/12/2013	7/19/2013	7	7	N
2M-SMA-3	Hexp	Trinitrotoluene[2,4,6-]	2013-1176	WT_IPC-13-32040	7/12/2013	7/19/2013	7	7	N
3M-SMA-0.4	Hexp	RDX	2013-1239	WT_IPC-13-32065	7/12/2013	7/23/2013	11	7	Y
3M-SMA-0.4	Hexp	Trinitrotoluene[2,4,6-]	2013-1239	WT_IPC-13-32065	7/12/2013	7/23/2013	11	7	Y
A-SMA-2	Hexp	RDX	2013-1982	WT_IPC-13-32042	9/12/2013	9/19/2013	7	7	N
A-SMA-2	Hexp	Trinitrotoluene[2,4,6-]	2013-1982	WT_IPC-13-32042	9/12/2013	9/19/2013	7	7	N
A-SMA-2.7	Hexp	RDX	2013-1982	WT_IPC-13-32036	9/13/2013	9/19/2013	6	7	N
A-SMA-2.7	Hexp	Trinitrotoluene[2,4,6-]	2013-1982	WT_IPC-13-32036	9/13/2013	9/19/2013	6	7	N
A-SMA-3	Hexp	RDX	2013-1416	WT_IPC-13-39423	7/25/2013	8/1/2013	7	7	N
A-SMA-3	Hexp	Trinitrotoluene[2,4,6-]	2013-1416	WT_IPC-13-39423	7/25/2013	8/1/2013	7	7	N
A-SMA-6	Hexp	RDX	2013-1515	WT_IPC-13-32044	8/4/2013	8/9/2013	4	7	N
A-SMA-6	Hexp	Trinitrotoluene[2,4,6-]	2013-1515	WT_IPC-13-32044	8/4/2013	8/9/2013	4	7	N
B-SMA-1	Hexp	RDX	2013-1920	WT_IPC-13-32051	9/13/2013	9/19/2013	6	7	N
B-SMA-1	Hexp	Trinitrotoluene[2,4,6-]	2013-1920	WT_IPC-13-32051	9/13/2013	9/19/2013	6	7	N
CDB-SMA-0.25	SVOA <sup>b</sup>	Benzo(a)pyrene	2013-1416	WT_IPC-13-39427	7/26/2013	8/1/2013	6	7	N
CDB-SMA-0.25	SVOA	Benzo(a)pyrene	2013-1882	WT_IPC-13-32514	9/10/2013	9/17/2013	7	7	N
CDB-SMA-0.25	SVOA	Hexachlorobenzene	2013-1416	WT_IPC-13-39427	7/26/2013	8/1/2013	6	7	N
CDB-SMA-0.25	SVOA	Hexachlorobenzene	2013-1882	WT_IPC-13-32514	9/10/2013	9/17/2013	7	7	N
CDB-SMA-0.25	SVOA	Pentachlorophenol	2013-1416	WT_IPC-13-39427	7/26/2013	8/1/2013	6	7	N
CDB-SMA-0.25	SVOA	Pentachlorophenol	2013-1882	WT_IPC-13-32514	9/10/2013	9/17/2013	7	7	N

Table B-6 (continued)

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Extraction Hold Time Days	Required Extraction Hold Time Days	Exceeds (Y/N)
CDB-SMA-0.55	SVOA	Benzo(a)pyrene	2013-2021	WT_IPC-13-32159	9/13/2013	9/20/2013	7	7	N
CDB-SMA-0.55	SVOA	Hexachlorobenzene	2013-2021	WT_IPC-13-32159	9/13/2013	9/20/2013	7	7	N
CDB-SMA-0.55	SVOA	Pentachlorophenol	2013-2021	WT_IPC-13-32159	9/13/2013	9/20/2013	7	7	N
CDB-SMA-4	SVOA	Benzo(a)pyrene	2013-1377	WT_IPC-13-32138	7/25/2013	8/1/2013	6	7	N
CDB-SMA-4	SVOA	Hexachlorobenzene	2013-1377	WT_IPC-13-32138	7/25/2013	8/1/2013	6	7	N
CDB-SMA-4	SVOA	Pentachlorophenol	2013-1377	WT_IPC-13-32138	7/25/2013	8/1/2013	6	7	N
CDV-SMA-1.2	Hexp	RDX	2013-2021	WT_IPC-13-32062	9/12/2013	9/20/2013	8	7	Y
CDV-SMA-1.2	Hexp	Trinitrotoluene[2,4,6-]	2013-2021	WT_IPC-13-32062	9/12/2013	9/20/2013	8	7	Y
CDV-SMA-1.3	Hexp	RDX	2013-2021	WT_IPC-13-32063	9/13/2013	9/20/2013	7	7	N
CDV-SMA-1.3	Hexp	Trinitrotoluene[2,4,6-]	2013-2021	WT_IPC-13-32063	9/13/2013	9/20/2013	7	7	N
CDV-SMA-1.7	Hexp	RDX	2013-2021	WT_IPC-13-32045	9/13/2013	9/20/2013	7	7	N
CDV-SMA-1.7	Hexp	Trinitrotoluene[2,4,6-]	2013-2021	WT_IPC-13-32045	9/13/2013	9/20/2013	7	7	N
CDV-SMA-2	SVOA	Benzo(a)pyrene	2013-1196	WT_IPC-13-32175	7/12/2013	7/19/2013	7	7	N
CDV-SMA-2	SVOA	Hexachlorobenzene	2013-1196	WT_IPC-13-32175	7/12/2013	7/19/2013	7	7	N
CDV-SMA-2	SVOA	Pentachlorophenol	2013-1196	WT_IPC-13-32175	7/12/2013	7/19/2013	7	7	N
CDV-SMA-2.5	SVOA	Benzo(a)pyrene	2013-1416	WT_IPC-13-32515	7/26/2013	8/1/2013	6	7	N
CDV-SMA-2.5	SVOA	Hexachlorobenzene	2013-1416	WT_IPC-13-32515	7/26/2013	8/1/2013	6	7	N
CDV-SMA-2.5	SVOA	Pentachlorophenol	2013-1416	WT_IPC-13-32515	7/26/2013	8/1/2013	6	7	N
CDV-SMA-2.51	Hexp	RDX	2013-2021	WT_IPC-13-32087	9/13/2013	9/20/2013	7	7	N
CDV-SMA-2.51	Hexp	Trinitrotoluene[2,4,6-]	2013-2021	WT_IPC-13-32087	9/13/2013	9/20/2013	7	7	N
CDV-SMA-2.51	SVOA	Benzo(a)pyrene	2013-2021	WT_IPC-13-32087	9/13/2013	9/20/2013	7	7	N
CDV-SMA-2.51	SVOA	Hexachlorobenzene	2013-2021	WT_IPC-13-32087	9/13/2013	9/20/2013	7	7	N
CDV-SMA-2.51	SVOA	Pentachlorophenol	2013-2021	WT_IPC-13-32087	9/13/2013	9/20/2013	7	7	N

Table B-6 (continued)

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Extraction Hold Time Days	Required Extraction Hold Time Days	Exceeds (Y/N)
CDV-SMA-6.02	Hexp	RDX	2013-2021	WT_IPC-13-40964	9/13/2013	9/20/2013	7	7	N
CDV-SMA-6.02	Hexp	Trinitrotoluene[2,4,6-]	2013-2021	WT_IPC-13-40964	9/13/2013	9/20/2013	7	7	N
CHQ-SMA-4.1	Hexp	RDX	2013-1970	WT_IPC-13-32034	9/13/2013	9/20/2013	7	7	N
CHQ-SMA-4.1	Hexp	Trinitrotoluene[2,4,6-]	2013-1970	WT_IPC-13-32034	9/13/2013	9/20/2013	7	7	N
CHQ-SMA-6	Hexp	RDX	2013-1416	WT_IPC-13-32047	7/25/2013	8/1/2013	7	7	N
CHQ-SMA-6	Hexp	Trinitrotoluene[2,4,6-]	2013-1416	WT_IPC-13-32047	7/25/2013	8/1/2013	7	7	N
M-SMA-12.6	Hexp	RDX	2013-1982	WT_IPC-13-41870	9/13/2013	9/19/2013	6	7	N
M-SMA-12.6	Hexp	Trinitrotoluene[2,4,6-]	2013-1982	WT_IPC-13-41870	9/13/2013	9/19/2013	6	7	N
M-SMA-12.6	SVOA	Benzo(a)pyrene	2013-2007	WT_IPC-13-41870	9/13/2013	9/20/2013	7	7	N
M-SMA-12.6	SVOA	Hexachlorobenzene	2013-2007	WT_IPC-13-41870	9/13/2013	9/20/2013	7	7	N
M-SMA-12.6	SVOA	Pentachlorophenol	2013-2007	WT_IPC-13-41870	9/13/2013	9/20/2013	7	7	N
M-SMA-13	Hexp	RDX	2013-1982	WT_IPC-13-32049	9/13/2013	9/19/2013	6	7	N
M-SMA-13	Hexp	Trinitrotoluene[2,4,6-]	2013-1982	WT_IPC-13-32049	9/13/2013	9/19/2013	6	7	N
PJ-SMA-16	Hexp	RDX	2013-1594	WT_IPC-13-32055	8/8/2013	8/15/2013	7	7	N
PJ-SMA-16	Hexp	Trinitrotoluene[2,4,6-]	2013-1594	WT_IPC-13-32055	8/8/2013	8/15/2013	7	7	N
R-SMA-2.3	Hexp	RDX	2013-988	WT_IPC-13-32052	6/14/2013	6/21/2013	7	7	N
R-SMA-2.3	Hexp	Trinitrotoluene[2,4,6-]	2013-988	WT_IPC-13-32052	6/14/2013	6/21/2013	7	7	N
S-SMA-3.6	Hexp	RDX	2013-987	WT_IPC-13-32094	6/14/2013	6/21/2013	7	7	N
S-SMA-3.6	Hexp	Trinitrotoluene[2,4,6-]	2013-987	WT_IPC-13-32094	6/14/2013	6/21/2013	7	7	N
S-SMA-3.6	Hexp	RDX	2013-1086	WT_IPC-13-32095	7/2/2013	7/11/2013	9	7	Y
S-SMA-3.6	Hexp	Trinitrotoluene[2,4,6-]	2013-1086	WT_IPC-13-32095	7/2/2013	7/11/2013	9	7	Y
S-SMA-3.95	Hexp	RDX	2013-2059	WT_IPC-13-32088	9/13/2013	9/26/2013	13	7	Y
S-SMA-3.95	Hexp	Trinitrotoluene[2,4,6-]	2013-2059	WT_IPC-13-32088	9/13/2013	9/26/2013	13	7	Y

Table B-6 (continued)

SMA	Suite	Analyte	Chain of Custody	Sample	Sample Date	Prep Date	Extraction Hold Time Days	Required Extraction Hold Time Days	Exceeds (Y/N)
S-SMA-3.95	SVOA	Benzo(a)pyrene	2013-2059	WT_IPC-13-32088	9/13/2013	9/26/2013	13	7	Y
S-SMA-3.95	SVOA	Hexachlorobenzene	2013-2059	WT_IPC-13-32088	9/13/2013	9/26/2013	13	7	Y
S-SMA-3.95	SVOA	Pentachlorophenol	2013-2059	WT_IPC-13-32088	9/13/2013	9/26/2013	13	7	Y
STRM-SMA-1.5	SVOA	Benzo(a)pyrene	2013-1965	WT_IPC-13-34679	9/13/2013	9/20/2013	7	7	N
STRM-SMA-1.5	SVOA	Hexachlorobenzene	2013-1965	WT_IPC-13-34679	9/13/2013	9/20/2013	7	7	N
STRM-SMA-1.5	SVOA	Pentachlorophenol	2013-1965	WT_IPC-13-34679	9/13/2013	9/20/2013	7	7	N
W-SMA-14.1	Hexp	RDX	2013-2008	WT_IPC-13-32037	9/13/2013	9/20/2013	7	7	N
W-SMA-14.1	Hexp	Trinitrotoluene[2,4,6-]	2013-2008	WT_IPC-13-32037	9/13/2013	9/20/2013	7	7	N
W-SMA-8	SVOA	Benzo(a)pyrene	2013-2059	WT_IPC-13-32181	9/12/2013	9/26/2013	14	7	Y
W-SMA-8	SVOA	Hexachlorobenzene	2013-2059	WT_IPC-13-32181	9/12/2013	9/26/2013	14	7	Y
W-SMA-8	SVOA	Pentachlorophenol	2013-2059	WT_IPC-13-32181	9/12/2013	9/26/2013	14	7	Y
W-SMA-8.7	Hexp	RDX	2013-2008	WT_IPC-13-32071	9/12/2013	9/20/2013	8	7	Y
W-SMA-8.7	Hexp	Trinitrotoluene[2,4,6-]	2013-2008	WT_IPC-13-32071	9/12/2013	9/20/2013	8	7	Y
W-SMA-9.05	Hexp	RDX	2013-2008	WT_IPC-13-32057	9/13/2013	9/20/2013	7	7	N
W-SMA-9.05	Hexp	Trinitrotoluene[2,4,6-]	2013-2008	WT_IPC-13-32057	9/13/2013	9/20/2013	7	7	N

Note: Shading indicates analyses performed beyond the required extraction holding time.

<sup>a</sup> Hexp = High explosives.

<sup>b</sup> SVOA = Semivolatile organic analytes.



**PART II. COMPLIANCE MONITORING RESULTS**





**Table B-7**  
**Compliance Samples Collected during 2013**

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	Sample	Sample Date	Field Prep	Aluminum (Dissolved)	Copper (Dissolved)	Copper and Zinc (Dissolved)	Cyanide (wad <sup>a</sup> )	Gross Alpha	Hex <sup>b</sup>	Radium-226/228	Selenium and Mercury (Total)	SVOA <sup>c</sup>	Dissolved Metals <sup>d</sup>	Total PCBs	Dioxin
E003	2M-SMA-1.43	SS093204	10/31/11	8/21/13	MEx <sup>e</sup>	WT_IPC-13-32394	07/12/13	F <sup>f</sup>	— <sup>g</sup>	—	—	—	—	—	—	—	—	1	—	—
E003	2M-SMA-1.43	SS093204	10/31/11	8/21/13	MEx	WT_IPC-13-32260	07/12/13	UF <sup>h</sup>	—	—	—	1	1	—	1	1	—	—	—	—
E004	2M-SMA-1.44	SS093205	6/27/12	—	CAM5 Sample 1 <sup>i</sup>	WT_IPC-13-32120	09/12/13	F	—	1	—	—	—	—	—	—	—	—	—	—
E004	2M-SMA-1.44	SS093205	6/27/12	—	CAM5 Sample 1	WT_IPC-13-32474	09/12/13	UF	—	—	—	—	1	—	—	—	—	—	—	—
E007	2M-SMA-1.65	SS093209	7/20/12	—	CAM5 Sample 1	WT_IPC-13-32462	09/13/13	UF	—	—	—	—	1	—	—	—	—	—	—	—
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 1	WT_IPC-13-34609	06/14/13	F	—	—	—	—	—	—	—	—	—	1	—	—
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 1	WT_IPC-13-34607	06/14/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 2 <sup>j</sup>	WT_IPC-13-34610	08/18/13	F	—	—	—	—	—	—	—	—	—	1	—	—
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 2	WT_IPC-13-34608	08/18/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
E014	2M-SMA-3	SS2439	4/30/12	8/16/13	MEx	WT_IPC-13-32525	07/12/13	F	—	—	—	—	—	—	—	—	—	1	—	—
E014	2M-SMA-3	SS2439	4/30/12	8/16/13	MEx	WT_IPC-13-32040	07/12/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
H002	3M-SMA-0.4	SS101502	4/30/12	8/27/13	MEx	WT_IPC-13-32417	07/12/13	F	—	—	—	—	—	—	—	—	—	1	—	—
H002	3M-SMA-0.4	SS101502	4/30/12	8/27/13	MEx	WT_IPC-13-32065	07/12/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
A002	A-SMA-2	SS2732	4/30/12	10/22/13	MEx	WT_IPC-13-32528	09/12/13	F	—	—	—	—	—	—	—	—	—	1	—	—
A002	A-SMA-2	SS2732	4/30/12	10/22/13	MEx	WT_IPC-13-32042	09/12/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
A004	A-SMA-2.7	SS120211	8/23/12	—	CAM5 Sample 1	WT_IPC-13-32490	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
A004	A-SMA-2.7	SS120211	8/23/12	—	CAM5 Sample 1	WT_IPC-13-32036	09/13/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
A006	A-SMA-3	SS100210	10/31/11	8/29/13	MEx	WT_IPC-13-39424	07/25/13	F	—	—	—	—	—	—	—	—	—	1	—	—
A006	A-SMA-3	SS100210	10/31/11	8/29/13	MEx	WT_IPC-13-39423	07/25/13	UF	—	—	—	1	1	1	1	1	—	—	1	—
A007	A-SMA-3.5	SS090208	4/30/12	9/6/13	MEx	WT_IPC-13-32343	07/25/13	F	—	—	—	—	—	—	—	—	—	1	—	—
A007	A-SMA-3.5	SS090208	4/30/12	9/6/13	MEx	WT_IPC-13-32194	07/25/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
A009	A-SMA-6	SS310	4/30/12	9/4/13	MEx	WT_IPC-13-32530	08/04/13	F	—	—	—	—	—	—	—	—	—	1	—	—
A009	A-SMA-6	SS310	4/30/12	9/4/13	MEx	WT_IPC-13-32044	08/04/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
B001	B-SMA-0.5	SS100302	4/30/12	10/30/13	MEx	WT_IPC-13-32406	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
B001	B-SMA-0.5	SS100302	4/30/12	10/30/13	MEx	WT_IPC-13-32265	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
B002	B-SMA-1	SS080301	4/30/12	10/22/13	MEx	WT_IPC-13-32320	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
B002	B-SMA-1	SS080301	4/30/12	10/22/13	MEx	WT_IPC-13-32051	09/13/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13	CAM5 Sample 1	WT_IPC-13-39426	07/26/13	F	1	1	—	—	—	—	—	—	—	—	—	—
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13	CAM5 Sample 1	WT_IPC-13-39427	07/26/13	UF	—	—	—	—	—	—	—	—	1	—	1	—
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13	CAM5 Sample 2	WT_IPC-13-32113	09/10/13	F	1	1	—	—	—	—	—	—	—	—	—	—
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13	CAM5 Sample 2	WT_IPC-13-32514	09/10/13	UF	—	—	—	—	—	—	—	—	1	—	1	—

Table B-7 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	Sample	Sample Date	Field Prep	Aluminum (Dissolved)	Copper (Dissolved)	Copper and Zinc (Dissolved)	Cyanide (wad <sup>a</sup> )	Gross Alpha	Hex <sup>b</sup>	Radium-226/228	Selenium and Mercury (Total)	SVOA <sup>c</sup>	Dissolved Metals <sup>d</sup>	Total PCBs	Dioxin
C003	CDB-SMA-0.55	SS091312	4/30/12	10/25/13	MEx	WT_IPC-13-32368	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
C003	CDB-SMA-0.55	SS091312	4/30/12	10/25/13	MEx	WT_IPC-13-32159	09/13/13	UF	—	—	—	1	1	—	1	1	1	—	1	—
C004	CDB-SMA-1	SS2185	7/27/12	—	CAM5 Sample 1	WT_IPC-13-32108	09/13/13	F	1	1	—	—	—	—	—	—	—	—	—	—
C004	CDB-SMA-1	SS2185	7/27/12	—	CAM5 Sample 1	WT_IPC-13-32481	09/13/13	UF	—	—	—	—	1	—	—	—	—	—	1	—
C010	CDB-SMA-4	SS101317	4/30/12	8/27/13	MEx	WT_IPC-13-32416	07/25/13	F	—	—	—	—	—	—	—	—	—	1	—	—
C010	CDB-SMA-4	SS101317	4/30/12	8/27/13	MEx	WT_IPC-13-32138	07/25/13	UF	—	—	—	1	1	—	1	1	1	—	1	1
V001	CDV-SMA-1.2	SS100421	4/30/12	10/24/13	MEx	WT_IPC-13-32407	09/12/13	F	—	—	—	—	—	—	—	—	—	1	—	—
V001	CDV-SMA-1.2	SS100421	4/30/12	10/24/13	MEx	WT_IPC-13-32062	09/12/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
V002	CDV-SMA-1.3	SS100422	4/30/12	10/25/13	MEx	WT_IPC-13-32408	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
V002	CDV-SMA-1.3	SS100422	4/30/12	10/25/13	MEx	WT_IPC-13-32063	09/13/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
V005	CDV-SMA-1.7	SS2547	4/30/12	10/25/13	MEx	WT_IPC-13-32531	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
V005	CDV-SMA-1.7	SS2547	4/30/12	10/25/13	MEx	WT_IPC-13-32045	09/13/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
V006	CDV-SMA-2	SS255	4/30/12	8/20/13	MEx	WT_IPC-13-32532	07/12/13	F	—	—	—	—	—	—	—	—	—	1	—	—
V006	CDV-SMA-2	SS255	4/30/12	8/20/13	MEx	WT_IPC-13-32175	07/12/13	UF	—	—	—	1	1	—	1	1	1	—	—	—
V008A	CDV-SMA-2.42	SS090408	4/30/12	8/26/13	MEx	WT_IPC-13-32344	07/12/13	F	—	—	—	—	—	—	—	—	—	1	—	—
V008A	CDV-SMA-2.42	SS090408	4/30/12	8/26/13	MEx	WT_IPC-13-32195	07/12/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
V009	CDV-SMA-2.5	SS090420	4/30/12	8/29/13	MEx	WT_IPC-13-32515	07/26/13	UF	—	—	—	—	—	—	—	—	1	—	—	—
V009A	CDV-SMA-2.51	SS090409	4/30/12	10/25/13	MEx	WT_IPC-13-32345	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
V009A	CDV-SMA-2.51	SS090409	4/30/12	10/25/13	MEx	WT_IPC-13-32087	09/13/13	UF	—	—	—	1	1	1	1	1	1	—	—	—
V012A	CDV-SMA-6.02	SS130423	7/18/12	—	CAM5 Sample 1	WT_IPC-13-40966	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
V012A	CDV-SMA-6.02	SS130423	7/18/12	—	CAM5 Sample 1	WT_IPC-13-40964	09/13/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
V013	CDV-SMA-7	SS252625	4/30/12	10/30/13	MEx	WT_IPC-13-32534	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
V013	CDV-SMA-7	SS252625	4/30/12	10/30/13	MEx	WT_IPC-13-32218	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/3/13	CAM5 Sample 1	WT_IPC-13-32118	07/25/13	F	—	1	—	—	—	—	—	—	—	—	—	—
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/3/13	CAM5 Sample 1	WT_IPC-13-32459	07/25/13	UF	—	—	—	1	—	—	—	—	—	—	1	—
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/30/13	CAM5 Sample 2	WT_IPC-13-32123	09/15/13	F	—	1	—	—	—	—	—	—	—	—	—	—
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/30/13	CAM5 Sample 2	WT_IPC-13-32460	09/15/13	UF	—	—	—	1	—	—	—	—	—	—	1	—
Q004	CHQ-SMA-3.05	SS090615	4/30/12	10/23/13	MEx	WT_IPC-13-32351	09/10/13	F	—	—	—	—	—	—	—	—	—	1	—	—
Q004	CHQ-SMA-3.05	SS090615	4/30/12	10/23/13	MEx	WT_IPC-13-32149	09/10/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
Q006	CHQ-SMA-4.1	SS100617	4/30/12	10/22/13	MEx	WT_IPC-13-32409	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
Q006	CHQ-SMA-4.1	SS100617	4/30/12	10/22/13	MEx	WT_IPC-13-32034	09/13/13	UF	—	—	—	1	1	1	1	1	—	—	1	—
Q007	CHQ-SMA-4.5	SS341	4/30/12	9/5/2013	MEx	WT_IPC-13-32537	07/25/13	F	—	—	—	—	—	—	—	—	—	1	—	—
Q007	CHQ-SMA-4.5	SS341	4/30/12	9/5/2013	MEx	WT_IPC-13-32219	07/25/13	UF	—	—	—	1	1	—	1	1	—	—	—	—

Table B-7 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	Sample	Sample Date	Field Prep	Aluminum (Dissolved)	Copper (Dissolved)	Copper and Zinc (Dissolved)	Cyanide (wad <sup>a</sup> )	Gross Alpha	Hex <sup>b</sup>	Radium-226/228	Selenium and Mercury (Total)	SVOA <sup>c</sup>	Dissolved Metals <sup>d</sup>	Total PCBs	Dioxin
Q009	CHQ-SMA-6	SS3377	4/30/12	8/29/13	MEx	WT_IPC-13-32538	07/25/13	F	—	—	—	—	—	—	—	—	—	1	—	—
Q009	CHQ-SMA-6	SS3377	4/30/12	8/29/13	MEx	WT_IPC-13-32047	07/25/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
D001	DP-SMA-0.3	SS0375	7/8/13	10/30/13	CAM5 Sample 1	WT_IPC-13-39145	07/12/13	UF	—	—	—	—	1	—	1	—	—	—	—	—
D001	DP-SMA-0.3	SS0375	7/8/13	10/30/13	CAM5 Sample 2	WT_IPC-13-39146	09/13/13	UF	—	—	—	—	1	—	1	—	—	—	—	—
D002	DP-SMA-0.4	SS081901	4/30/12	10/26/13	MEx	WT_IPC-13-32335	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
D002	DP-SMA-0.4	SS081901	4/30/12	10/26/13	MEx	WT_IPC-13-32236	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
D006	DP-SMA-2.35	SS091901	4/30/12	10/30/13	MEx	WT_IPC-13-32382	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
D006	DP-SMA-2.35	SS091901	4/30/12	10/30/13	MEx	WT_IPC-13-32254	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 2	WT_IPC-13-32499	05/15/13	F	—	—	—	—	—	—	—	—	—	1	—	—
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 2	WT_IPC-13-32171	05/15/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
L003	LA-SMA-1	SS121044	11/27/12	—	CAM5 Sample 1	WT_IPC-13-32488	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
L003	LA-SMA-1	SS121044	11/27/12	—	CAM5 Sample 1	WT_IPC-13-32154	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
L006	LA-SMA-2.1	SS081005	4/30/12	11/3/13	MEx	WT_IPC-13-32326	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
L006	LA-SMA-2.1	SS081005	4/30/12	11/3/13	MEx	WT_IPC-13-32192	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
L018	LA-SMA-5.51	SS091015	4/30/12	8/21/13	MEx	WT_IPC-13-32358	07/12/13	F	—	—	—	—	—	—	—	—	—	1	—	—
L018	LA-SMA-5.51	SS091015	4/30/12	8/21/13	MEx	WT_IPC-13-32200	07/12/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
L018C	LA-SMA-5.54	SS091018	4/30/12	11/3/13	MEx	WT_IPC-13-32361	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
L018C	LA-SMA-5.54	SS091018	4/30/12	11/3/13	MEx	WT_IPC-13-32203	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
L019	LA-SMA-5.91	SS091019	7/8/13	—	CAM5 Sample 1	WT_IPC-13-40974	09/12/13	UF	—	—	—	—	1	—	—	—	—	—	—	—
L019A	LA-SMA-5.92	SS091020	10/31/11	8/27/13	MEx	WT_IPC-13-32362	07/12/13	F	—	—	—	—	—	—	—	—	—	1	—	—
L019A	LA-SMA-5.92	SS091020	10/31/11	8/27/13	MEx	WT_IPC-13-32245	07/12/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
L027	LA-SMA-6.395	SS091002	4/30/12	10/25/13	MEx	WT_IPC-13-32355	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
L027	LA-SMA-6.395	SS091002	4/30/12	10/25/13	MEx	WT_IPC-13-32244	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
L030A	LA-SMA-10.12	SS091021	11/30/12	—	CAM5 Sample 1	WT_IPC-13-32140	09/12/13	UF	—	—	—	1	1	—	—	—	—	—	—	—
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 1	WT_IPC-13-32501	06/14/13	F	—	—	—	—	—	—	—	—	—	1	—	—
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 1	WT_IPC-13-32157	06/14/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 2	WT_IPC-13-38616	07/02/13	F	—	—	—	—	—	—	—	—	—	1	—	—
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 2	WT_IPC-13-38617	07/02/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
M002	M-SMA-1.2	SS091202	4/30/12	10/30/13	MEx	WT_IPC-13-32364	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
M002	M-SMA-1.2	SS091202	4/30/12	10/30/13	MEx	WT_IPC-13-32247	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
M002B	M-SMA-1.22	SS091228	5/2/13	—	CAM5 Sample 1	WT_IPC-13-34611	09/12/13	F	1	1	—	—	—	—	—	—	—	—	—	—
M012	M-SMA-10	SS2002	4/30/12	8/13/13	MEx	WT_IPC-13-32297	06/30/13	F	—	—	—	—	—	—	—	—	—	1	—	—
M012	M-SMA-10	SS2002	4/30/12	8/13/13	MEx	WT_IPC-13-32222	06/30/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
M017	M-SMA-12.6	SS2058	4/30/12	10/22/13	MEx	WT_IPC-13-41871	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—

Table B-7 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	Sample	Sample Date	Field Prep	Aluminum (Dissolved)	Copper (Dissolved)	Copper and Zinc (Dissolved)	Cyanide (wad <sup>a</sup> )	Gross Alpha	Hex <sup>b</sup>	Radium-226/228	Selenium and Mercury (Total)	SVOA <sup>c</sup>	Dissolved Metals <sup>d</sup>	Total PCBs	Dioxin
M017	M-SMA-12.6	SS2058	4/30/12	10/22/13	MEx	WT_IPC-13-41870	09/13/13	UF	—	—	—	1	1	1	1	1	1	—	—	—
M022	M-SMA-13	SS205	4/30/12	10/21/13	MEx	WT_IPC-13-32304	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
M022	M-SMA-13	SS205	4/30/12	10/21/13	MEx	WT_IPC-13-32049	09/13/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
M003	M-SMA-3	SS1985	4/30/12	8/13/13	MEx	WT_IPC-13-32305	07/12/13	F	—	—	—	—	—	—	—	—	—	1	—	—
M003	M-SMA-3	SS1985	4/30/12	8/13/13	MEx	WT_IPC-13-32183	07/12/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
M010	M-SMA-7.9	SS121237	4/30/12	8/13/13	MEx	WT_IPC-13-32309	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
M010	M-SMA-7.9	SS121237	4/30/12	8/13/13	MEx	WT_IPC-13-32187	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
J001	PJ-SMA-1.05	SS092327	10/3/11	11/3/13	MEx	WT_IPC-13-32388	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
J001	PJ-SMA-1.05	SS092327	10/3/11	11/3/13	MEx	WT_IPC-13-32208	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
J004	PJ-SMA-4.05	SS092328	10/3/11	10/30/13	MEx	WT_IPC-13-42056	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
J004	PJ-SMA-4.05	SS092328	10/3/11	10/30/13	MEx	WT_IPC-13-42057	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
J013	PJ-SMA-11	SS102333	4/30/12	10/30/13	MEx	WT_IPC-13-32422	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
J013	PJ-SMA-11	SS102333	4/30/12	10/30/13	MEx	WT_IPC-13-32267	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
J014	PJ-SMA-11.1	SS102334	4/30/12	10/30/13	MEx	WT_IPC-13-32423	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
J014	PJ-SMA-11.1	SS102334	4/30/12	10/30/13	MEx	WT_IPC-13-32268	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
J023	PJ-SMA-16	SS092325	10/3/11	9/11/13	MEx	WT_IPC-13-32387	08/08/13	F	—	—	—	—	—	—	—	—	—	1	—	—
J023	PJ-SMA-16	SS092325	10/3/11	9/11/13	MEx	WT_IPC-13-32055	08/08/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
J024	PJ-SMA-17	SS092331	10/3/11	9/5/13	MEx	WT_IPC-13-39439	07/25/13	F	—	—	—	—	—	—	—	—	—	1	—	—
J024	PJ-SMA-17	SS092331	10/3/11	9/5/13	MEx	WT_IPC-13-39438	07/25/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
J026	PJ-SMA-18	SS092329	10/3/11	9/3/13	MEx	WT_IPC-13-32390	07/25/13	F	—	—	—	—	—	—	—	—	—	1	—	—
J026	PJ-SMA-18	SS092329	10/3/11	9/3/13	MEx	WT_IPC-13-32209	07/25/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
J025	PJ-SMA-19	SS092330	10/3/11	9/12/13	MEx	WT_IPC-13-32391	08/08/13	F	—	—	—	—	—	—	—	—	—	1	—	—
J025	PJ-SMA-19	SS092330	10/3/11	9/12/13	MEx	WT_IPC-13-32210	08/08/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
P004	P-SMA-0.3	SS080801	4/30/12	9/16/13	MEx	WT_IPC-13-32322	07/25/13	F	—	—	—	—	—	—	—	—	—	1	—	—
P004	P-SMA-0.3	SS080801	4/30/12	9/16/13	MEx	WT_IPC-13-32227	07/25/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
P009	P-SMA-3.05	SS090802	4/30/12	10/22/13	MEx	WT_IPC-13-32353	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
P009	P-SMA-3.05	SS090802	4/30/12	10/22/13	MEx	WT_IPC-13-32197	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
T001	PRATT-SMA-1.05	SS093401	4/30/12	10/30/13	MEx	WT_IPC-13-32395	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
T001	PRATT-SMA-1.05	SS093401	4/30/12	10/30/13	MEx	WT_IPC-13-32212	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	1	—
R005	R-SMA-2.3	SS082704	10/31/11	7/23/13	MEx	WT_IPC-13-32338	06/14/13	F	—	—	—	—	—	—	—	—	—	1	—	—
R005	R-SMA-2.3	SS082704	10/31/11	7/23/13	MEx	WT_IPC-13-32052	06/14/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
S003	S-SMA-2	SS101626	7/8/13	9/10/13	CAM3 Sample 1 <sup>k</sup>	WT_IPC-13-39143	07/11/13	F	—	—	1	—	—	—	—	—	—	—	—	—
S003	S-SMA-2	SS101626	7/8/13	9/10/13	CAM3 Sample 1	WT_IPC-13-39141	07/11/13	UF	—	—	—	—	—	—	—	—	—	—	1	—
S003	S-SMA-2	SS101626	7/8/13	9/10/13	CAM3 Sample 2 <sup>l</sup>	WT_IPC-13-39144	08/01/13	F	—	—	1	—	—	—	—	—	—	—	—	—

Table B-7 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	Sample	Sample Date	Field Prep	Aluminum (Dissolved)	Copper (Dissolved)	Copper and Zinc (Dissolved)	Cyanide (wad <sup>a</sup> )	Gross Alpha	Hex <sup>b</sup>	Radium-226/228	Selenium and Mercury (Total)	SVOA <sup>c</sup>	Dissolved Metals <sup>d</sup>	Total PCBs	Dioxin
S003	S-SMA-2	SS101626	7/8/13	9/10/13	CAM3 Sample 2	WT_IPC-13-39142	08/01/13	UF	—	—	—	—	—	—	—	—	—	—	1	—
S003A	S-SMA-2.01	SS091602	11/27/12	—	CAM3 Sample 1	WT_IPC-13-32114	09/13/13	F	—	1	—	—	—	—	—	—	—	—	—	—
S003A	S-SMA-2.01	SS091602	11/27/12	—	CAM3 Sample 1	WT_IPC-13-32511	09/13/13	UF	—	—	—	—	—	—	—	—	—	—	1	—
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13	CAM3 Sample 1	WT_IPC-13-32126	06/14/13	F	—	—	1	—	—	—	—	—	—	—	—	—
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13	CAM3 Sample 1	WT_IPC-13-32094	06/14/13	UF	—	—	—	—	—	1	—	—	—	—	1	—
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13	CAM3 Sample 2	WT_IPC-13-32127	07/02/13	F	—	—	1	—	—	—	—	—	—	—	—	—
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13	CAM3 Sample 2	WT_IPC-13-32095	07/02/13	UF	—	—	—	—	—	1	—	—	—	—	1	—
S010	S-SMA-3.95	SS091606	4/30/12	10/25/13	MEx	WT_IPC-13-32376	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
S010	S-SMA-3.95	SS091606	4/30/12	10/25/13	MEx	WT_IPC-13-32088	09/13/13	UF	—	—	—	1	1	1	1	1	1	—	—	—
S011	S-SMA-4.1	SS101623	9/25/12	10/28/13	CAM3 Sample 1	WT_IPC-13-32509	09/13/13	UF	—	—	—	—	—	—	—	—	—	—	1	—
J028	STRM-SMA-1.05	SS093001	5/2/13	9/10/13	CAM5 Sample 1	WT_IPC-13-34615	07/12/13	F	—	1	—	—	—	—	—	—	—	—	—	—
J028	STRM-SMA-1.05	SS093001	5/2/13	9/10/13	CAM5 Sample 2	WT_IPC-13-34616	08/01/13	F	—	1	—	—	—	—	—	—	—	—	—	—
J029	STRM-SMA-1.5	SS133007	7/8/13	—	CAM5 Sample 1	WT_IPC-13-34681	09/13/13	F	—	—	—	—	—	—	—	—	—	—	1	—
J029	STRM-SMA-1.5	SS133007	7/8/13	—	CAM5 Sample 1	WT_IPC-13-34679	09/13/13	UF	—	—	—	1	1	—	1	1	1	—	—	—
T004	T-SMA-2.85	SS093714	4/30/12	8/21/13	MEx	WT_IPC-13-32396	07/12/13	F	—	—	—	—	—	—	—	—	—	—	1	—
T004	T-SMA-2.85	SS093714	4/30/12	8/21/13	MEx	WT_IPC-13-32261	07/12/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
T006	T-SMA-4	SS20136	4/30/12	10/25/13	MEx	WT_IPC-13-32437	09/13/13	F	—	—	—	—	—	—	—	—	—	—	1	—
T006	T-SMA-4	SS20136	4/30/12	10/25/13	MEx	WT_IPC-13-32274	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
W001	W-SMA-1	SS133939	5/2/13	—	CAM5 Sample 1	WT_IPC-13-32495	09/12/13	F	—	—	—	—	—	—	—	—	—	—	1	—
W001	W-SMA-1	SS133939	5/2/13	—	CAM5 Sample 1	WT_IPC-13-32167	09/12/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
W019	W-SMA-11.7	SS103935	10/23/12	—	CAM5 Sample 1	WT_IPC-13-32101	09/13/13	F	1	—	—	—	—	—	—	—	—	—	—	—
W019	W-SMA-11.7	SS103935	10/23/12	—	CAM5 Sample 1	WT_IPC-13-32468	09/13/13	UF	—	—	—	—	1	—	—	—	—	—	—	—
W021	W-SMA-14.1	SS133939	9/25/12	—	CAM5 Sample 1	WT_IPC-13-32492	09/13/13	F	—	—	—	—	—	—	—	—	—	—	1	—
W021	W-SMA-14.1	SS133939	9/25/12	—	CAM5 Sample 1	WT_IPC-13-32037	09/13/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
W011	W-SMA-8	SS2523	4/30/12	10/25/13	MEx	WT_IPC-13-32443	09/12/13	F	—	—	—	—	—	—	—	—	—	—	1	—
W011	W-SMA-8	SS2523	4/30/12	10/25/13	MEx	WT_IPC-13-32181	09/12/13	UF	—	—	—	1	1	—	1	1	1	—	—	—
W012	W-SMA-8.7	SS103933	4/30/12	10/25/13	MEx	WT_IPC-13-32433	09/12/13	F	—	—	—	—	—	—	—	—	—	—	1	—
W012	W-SMA-8.7	SS103933	4/30/12	10/25/13	MEx	WT_IPC-13-32071	09/12/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
W012A	W-SMA-8.71	SS123938	11/27/12	—	CAM5 Sample 1	WT_IPC-13-32496	09/13/13	F	—	—	—	—	—	—	—	—	—	—	1	—
W012A	W-SMA-8.71	SS123938	11/27/12	—	CAM5 Sample 1	WT_IPC-13-32168	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
W013	W-SMA-9.05	SS093914	4/30/12	10/21/13	MEx	WT_IPC-13-32397	09/13/13	F	—	—	—	—	—	—	—	—	—	—	1	—

Table B-7 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	Sample	Sample Date	Field Prep	Aluminum (Dissolved)	Copper (Dissolved)	Copper and Zinc (Dissolved)	Cyanide (wad <sup>a</sup> )	Gross Alpha	Hexp <sup>b</sup>	Radium-226/228	Selenium and Mercury (Total)	SVOA <sup>c</sup>	Dissolved Metals <sup>d</sup>	Total PCBs	Dioxin
W013	W-SMA-9.05	SS093914	4/30/12	10/21/13	MEx	WT_IPC-13-32057	09/13/13	UF	—	—	—	1	1	1	1	1	—	—	—	—
W015	W-SMA-9.7	SS093916	4/30/12	10/30/13	MEx	WT_IPC-13-32399	09/13/13	F	—	—	—	—	—	—	—	—	—	1	—	—
W015	W-SMA-9.7	SS093916	4/30/12	10/30/13	MEx	WT_IPC-13-32263	09/13/13	UF	—	—	—	1	1	—	1	1	—	—	—	—
W017	W-SMA-9.9	SS103934	6/27/12	—	CAM5 Sample 1	WT_IPC-13-32100	09/13/13	F	1	—	—	—	—	—	—	—	—	—	—	—
W017	W-SMA-9.9	SS103934	6/27/12	—	CAM5 Sample 1	WT_IPC-13-32142	09/13/13	UF	—	—	—	1	1	—	—	—	—	—	—	—

<sup>a</sup> wad = Weak acid dissociable.

<sup>b</sup> Hexp = High explosives.

<sup>c</sup> SVOA = Semivolatile organic analyte.

<sup>d</sup> Dissolved Metals = Aluminum, antimony, arsenic, boron, cadmium, chromium, cobalt, copper, lead, nickel, silver, thallium, vanadium, zinc.

<sup>e</sup> MEx = Extended Baseline Monitoring: One confirmation monitoring sample is collected to determine if corrective action is required.

<sup>f</sup> F = Filtered.

<sup>g</sup> — = Not applicable.

<sup>h</sup> UF = Unfiltered.

<sup>i</sup> CAM5 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>j</sup> CAM5 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>k</sup> CAM3 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

<sup>l</sup> CAM3 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

**Table B-8  
Results for Metals**

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Aluminum EPA:200.8 (µg/L)	Antimony EPA:200.8 (µg/L)	Arsenic EPA:200.8 (µg/L)	Boron EPA:200.7 (µg/L)	Cadmium EPA:200.8 (µg/L)	Chromium EPA:200.8 (µg/L)	Cobalt EPA:200.7 (µg/L)	Copper EPA:200.8 (µg/L)	Lead EPA:200.8 (µg/L)	Mercury EPA:245.2 (µg/L)	Nickel EPA:200.8 (µg/L)	Selenium EPA:200.8 (µg/L)	Silver EPA:200.8 (µg/L)	Thallium EPA:200.8 (µg/L)	Vanadium EPA:200.7 (µg/L)	Zinc EPA:200.7 (µg/L)
A002	A-SMA-2	SS2732	4/30/12	10/22/13	MEx <sup>b</sup>	2013-2007	WT_IPC-13-32042	9/12/13	UF <sup>c</sup>	— <sup>d</sup>	—	—	—	—	—	—	—	—	0.189	—	<5 <sup>e</sup>	—	—	—	—
A002	A-SMA-2	SS2732	4/30/12	10/22/13	MEx	2013-2007	WT_IPC-13-32528	9/12/13	F <sup>f</sup>	1310	<3	1.93	<50	<1	<10	1.81	23.9	1.58	—	1.43	—	<1	<2	5.62	8.22
A004	A-SMA-2.7	SS120211	8/23/12	—	CAM5 Sample 1 <sup>g</sup>	2013-2007	WT_IPC-13-32036	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.162	—	1.6	—	—	—	—
A004	A-SMA-2.7	SS120211	8/23/12	—	CAM5 Sample 1	2013-2007	WT_IPC-13-32490	9/13/13	F	185	<3	<5	19.5	<1	<10	<5	2.88	<2	—	1.02	—	<1	<2	1.32	<10
A006	A-SMA-3	SS100210	10/31/11	8/29/13	MEx	2013-1426	WT_IPC-13-39423	7/25/13	UF	—	—	—	—	—	—	—	—	—	9.04	—	12.1	—	—	—	—
A006	A-SMA-3	SS100210	10/31/11	8/29/13	MEx	2013-1426	WT_IPC-13-39424	7/25/13	F	997	3.52	3.78	41.8	0.183	<10	7.25	245	14.2	—	5.28	—	<1	<2	4.51	13.2
A007	A-SMA-3.5	SS090208	4/30/12	9/6/13	MEx	2013-1479	WT_IPC-13-32194	7/25/13	UF	—	—	—	—	—	—	—	—	—	0.161	—	<5	—	—	—	—
A007	A-SMA-3.5	SS090208	4/30/12	9/6/13	MEx	2013-1479	WT_IPC-13-32343	7/25/13	F	347	<3	<5	<50	<1	<10	2.27	2.15	<2	—	1.4	—	<1	<2	2.16	4.77
A009	A-SMA-6	SS310	4/30/12	9/4/13	MEx	2013-1515	WT_IPC-13-32044	8/4/13	UF	—	—	—	—	—	—	—	—	—	0.419	—	<5	—	—	—	—
A009	A-SMA-6	SS310	4/30/12	9/4/13	MEx	2013-1515	WT_IPC-13-32530	8/4/13	F	187	1.49	2.79	31.1	0.128	<10	4.92	5.86	0.752	—	3.18	—	<1	<2	3.28	<10
B001	B-SMA-0.5	SS100302	4/30/12	10/30/13	MEx	2013-2125	WT_IPC-13-32265	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.464	—	4.03	—	—	—	—
B001	B-SMA-0.5	SS100302	4/30/12	10/30/13	MEx	2013-2126	WT_IPC-13-32406	9/13/13	F	485	<3	2.08	<50	<1	<10	3.28	1.71	<2	—	1.88	—	<1	<2	3.02	<10
B002	B-SMA-1	SS080301	4/30/12	10/22/13	MEx	2013-1920	WT_IPC-13-32051	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.114	—	<5	—	—	—	—
B002	B-SMA-1	SS080301	4/30/12	10/22/13	MEx	2013-1920	WT_IPC-13-32320	9/13/13	F	502	<3	<5	<50	<1	<10	1	2.26	0.663	—	1.2	—	<1	<2	2.65	4.41
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13	CAM5 Sample 1	2013-1426	WT_IPC-13-39426	7/26/13	F	218	—	—	—	—	—	—	15.2	—	—	—	—	—	—	—	—
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13	CAM5 Sample 2 <sup>h</sup>	2013-1882	WT_IPC-13-32113	9/10/13	F	329	—	—	—	—	—	—	15.2	—	—	—	—	—	—	—	—
C003	CDB-SMA-0.55	SS091312	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32159	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.147	—	<5	—	—	—	—
C003	CDB-SMA-0.55	SS091312	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32368	9/13/13	F	406	1.34	2.97	64.1	<1	3	<5	16.3	<2	—	4.81	—	<1	<2	4.21	8.31
C004	CDB-SMA-1	SS2185	7/27/12	—	CAM5 Sample 1	2013-2125	WT_IPC-13-32108	9/13/13	F	367	—	—	—	—	—	—	2.81	—	—	—	—	—	—	—	—
C010	CDB-SMA-4	SS101317	4/30/12	8/27/13	MEx	2013-1377	WT_IPC-13-32138	7/25/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
C010	CDB-SMA-4	SS101317	4/30/12	8/27/13	MEx	2013-1377	WT_IPC-13-32416	7/25/13	F	384	5.64	<5	38	<1	<10	4.62	8.14	0.656	—	2.33	—	<1	<2	4.76	23
D002	DP-SMA-0.4	SS081901	4/30/12	10/26/13	MEx	2013-2125	WT_IPC-13-32236	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.075	—	<5	—	—	—	—
D002	DP-SMA-0.4	SS081901	4/30/12	10/26/13	MEx	2013-2126	WT_IPC-13-32335	9/13/13	F	3540	2.53	5.04	135	0.135	2.98	1.55	10.7	3.13	—	7.19	—	<1	<2	10.5	20.6
D006	DP-SMA-2.35	SS091901	4/30/12	10/30/13	MEx	2013-2128	WT_IPC-13-32254	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
D006	DP-SMA-2.35	SS091901	4/30/12	10/30/13	MEx	2013-2128	WT_IPC-13-32382	9/13/13	F	120	<3	<5	15.7	<1	<10	<5	1.76	<2	—	0.791	—	<1	<2	2.33	4.81
E003	2M-SMA-1.43	SS093204	10/31/11	8/21/13	MEx	2013-1266	WT_IPC-13-32260	7/12/13	UF	—	—	—	—	—	—	—	—	—	0.08	—	<5	—	—	—	—
E003	2M-SMA-1.43	SS093204	10/31/11	8/21/13	MEx	2013-1266	WT_IPC-13-32394	7/12/13	F	1500	<3	<5	<50	<1	<10	4.46	3.74	1.12	—	1.25	—	<1	<2	3.5	3.47
E004	2M-SMA-1.44	SS093205	6/27/12	—	CAM5 Sample 1	2013-2128	WT_IPC-13-32120	9/12/13	F	—	—	—	—	—	—	—	39.5	—	—	—	—	—	—	—	—



Table B-8 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Aluminum EPA:200.8 (µg/L)	Antimony EPA:200.8 (µg/L)	Arsenic EPA:200.8 (µg/L)	Boron EPA:200.7 (µg/L)	Cadmium EPA:200.8 (µg/L)	Chromium EPA:200.8 (µg/L)	Cobalt EPA:200.7 (µg/L)	Copper EPA:200.8 (µg/L)	Lead EPA:200.8 (µg/L)	Mercury EPA:245.2 (µg/L)	Nickel EPA:200.8 (µg/L)	Selenium EPA:200.8 (µg/L)	Silver EPA:200.8 (µg/L)	Thallium EPA:200.8 (µg/L)	Vanadium EPA:200.7 (µg/L)	Zinc EPA:200.7 (µg/L)
R001	R-SMA-0.5	SS082701	5/1/12	9/11/12	MEx	2012-2168	WT_IPLAP-12-13126	8/3/12	F	287	<1	<1.7	17.4	<0.11	<2	2.66	1.12	<0.5	—	0.755	—	<0.2	<0.45	1.15	<3.3
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 1	2013-1018	WT_IPC-13-34607	6/14/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 1	2013-1018	WT_IPC-13-34609	6/14/13	F	17.6	1.84	<5	36.1	<1	<10	2.43	18.5	<2	—	2.4	—	<1	<2	1.8	102
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 2	2013-1725	WT_IPC-13-34608	8/18/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 2	2013-1725	WT_IPC-13-34610	8/18/13	F	70.2	1.25	<5	29.5	<1	<10	<5	19.9	0.891	—	2.03	—	<1	<2	2.18	123
E014	2M-SMA-3	SS2439	4/30/12	8/16/13	MEx	2013-1176	WT_IPC-13-32040	7/12/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
E014	2M-SMA-3	SS2439	4/30/12	8/16/13	MEx	2013-1176	WT_IPC-13-32525	7/12/13	F	3750	<3	2.24	25.1	<1	<10	<4.06	6.05	1.74	—	3.83	—	<1	<2	4.38	6.83
H002	3M-SMA-0.4	SS101502	4/30/12	8/27/13	MEx	2013-1239	WT_IPC-13-32065	7/12/13	UF	—	—	—	—	—	—	—	—	—	0.363	—	<5	—	—	—	—
H002	3M-SMA-0.4	SS101502	4/30/12	8/27/13	MEx	2013-1239	WT_IPC-13-32417	7/12/13	F	175	<3	3.06	32.3	<1	<10	1.46	3.56	<2	—	2.89	—	<1	<2	13.9	<10
J001	PJ-SMA-1.05	SS092327	10/3/11	11/3/13	MEx	2013-2125	WT_IPC-13-32208	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
J001	PJ-SMA-1.05	SS092327	10/3/11	11/3/13	MEx	2013-2126	WT_IPC-13-32388	9/13/13	F	189	1.18	3.47	38.2	<1	<10	1.99	3.7	<2	—	2.67	—	<1	<2	3.7	<10
J004	PJ-SMA-4.05	SS092328	10/3/11	10/30/13	MEx	2013-2128	WT_IPC-13-42056	9/13/13	F	536	<3	<5	38.2	<1	<10	1.26	3.18	<2	—	1.27	—	<1	<2	11.9	34.8
J004	PJ-SMA-4.05	SS092328	10/3/11	10/30/13	MEx	2013-2128	WT_IPC-13-42057	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
J013	PJ-SMA-11	SS102333	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32267	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.25	—	3.12	—	—	—	—
J013	PJ-SMA-11	SS102333	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32422	9/13/13	F	80.3	<3	<5	<50	<1	<10	<5	42.9	<2	—	<2	—	<1	<2	2.67	<10
J014	PJ-SMA-11.1	SS102334	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32268	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.143	—	3.17	—	—	—	—
J014	PJ-SMA-11.1	SS102334	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32423	9/13/13	F	1040	<3	<5	16.2	<1	<10	1.83	20.9	0.908	—	0.832	—	<1	<2	3.42	6.36
J023	PJ-SMA-16	SS092325	10/3/11	9/11/13	MEx	2013-1594	WT_IPC-13-32055	8/8/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
J023	PJ-SMA-16	SS092325	10/3/11	9/11/13	MEx	2013-1594	WT_IPC-13-32387	8/8/2013	F	162	<3	<5	<50	<1	<10	2.49	2.31	1.38	—	1.04	—	<1	<2	2.29	8.9
J024	PJ-SMA-17	SS092331	10/3/11	9/5/13	MEx	2013-1488	WT_IPC-13-39438	7/25/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	1.7	—	—	—	—
J024	PJ-SMA-17	SS092331	10/3/11	9/5/13	MEx	2013-1488	WT_IPC-13-39439	7/25/13	F	130	7.31	<5	28.3	<1	<10	2.76	5.13	<2	—	2.32	—	<1	<2	3.08	3.46
J025	PJ-SMA-19	SS092330	10/3/11	9/12/13	MEx	2013-1618	WT_IPC-13-32210	8/8/13	UF	—	—	—	—	—	—	—	—	—	1.67	—	3.15	—	—	—	—
J025	PJ-SMA-19	SS092330	10/3/11	9/12/13	MEx	2013-1618	WT_IPC-13-32391	8/8/13	F	761	<3	<5	<50	<1	<10	2.94	4.12	0.566	—	1.33	—	<1	<2	5.82	5.69
J026	PJ-SMA-18	SS092329	10/3/11	9/3/13	MEx	2013-1458	WT_IPC-13-32209	7/25/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	2.27	—	—	—	—
J026	PJ-SMA-18	SS092329	10/3/11	9/3/13	MEx	2013-1458	WT_IPC-13-32390	7/25/13	F	209	<3	1.93	19.7	<1	<10	2	2.36	<2	—	1.49	—	<1	<2	5.87	<10
J028	STRM-SMA-1.05	SS093001	5/2/13	9/10/13	CAM5 Sample 1	2013-1239	WT_IPC-13-34615	7/12/13	F	—	—	—	—	—	—	—	10.8	—	—	—	—	—	—	—	—
J028	STRM-SMA-1.05	SS093001	5/2/13	9/10/13	CAM5 Sample 2	2013-1547	WT_IPC-13-34616	8/1/13	F	—	—	—	—	—	—	—	9.92	—	—	—	—	—	—	—	—
J029	STRM-SMA-1.5	SS133007	7/8/13	—	CAM5 Sample 1	2013-1965	WT_IPC-13-34679	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.072	—	<5	—	—	—	—
J029	STRM-SMA-1.5	SS133007	7/8/13	—	CAM5 Sample 1	2013-1965	WT_IPC-13-34681	9/13/13	F	104	4.61	<5	<50	<1	<10	<5	2.72	<2	—	0.594	—	4.02	<2	1.45	<10
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 1	2013-354	WT_IPL-13-24803	11/9/12	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 1	2013-354	WT_IPL-13-24804	11/9/12	F	462	1.28	<5	28.4	<1	3.04	1.73	26.4	1.48	—	3.44	—	<1	<2	6.4	56.1
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 2	2013-869	WT_IPC-13-32171	5/15/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 2	2013-869	WT_IPC-13-32499	5/15/13	F	302	<3	1.71	26.4	<1	2.67	3.35	22.8	1.65	—	3.44	—	<1	<2	8.37	78.2

Table B-8 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Aluminum EPA:200.8 (µg/L)	Antimony EPA:200.8 (µg/L)	Arsenic EPA:200.8 (µg/L)	Boron EPA:200.7 (µg/L)	Cadmium EPA:200.8 (µg/L)	Chromium EPA:200.8 (µg/L)	Cobalt EPA:200.7 (µg/L)	Copper EPA:200.8 (µg/L)	Lead EPA:200.8 (µg/L)	Mercury EPA:245.2 (µg/L)	Nickel EPA:200.8 (µg/L)	Selenium EPA:200.8 (µg/L)	Silver EPA:200.8 (µg/L)	Thallium EPA:200.8 (µg/L)	Vanadium EPA:200.7 (µg/L)	Zinc EPA:200.7 (µg/L)
L003	LA-SMA-1	SS121044	11/27/12	—	CAM5 Sample 1	2013-2098	WT_IPC-13-32154	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.376	—	4.94	—	—	—	—
L003	LA-SMA-1	SS121044	11/27/12	—	CAM5 Sample 1	2013-2098	WT_IPC-13-32488	9/13/13	F	800	<3	<5	19.3	<1	2.77	2.18	3.03	4.19	—	1.36	—	<1	<2	4.85	6.43
L006	LA-SMA-2.1	SS081005	4/30/12	11/3/13	MEx	2013-2125	WT_IPC-13-32192	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
L006	LA-SMA-2.1	SS081005	4/30/12	11/3/13	MEx	2013-2125	WT_IPC-13-32326	9/13/13	F	359	<3	4.31	45.5	0.201	<10	<5	11.1	0.808	—	1.43	—	<1	<2	4.81	26.4
L018	LA-SMA-5.51	SS091015	4/30/12	8/21/13	MEx	2013-1263	WT_IPC-13-32200	7/12/13	UF	—	—	—	—	—	—	—	—	—	2.39	—	3.55	—	—	—	—
L018	LA-SMA-5.51	SS091015	4/30/12	8/21/13	MEx	2013-1263	WT_IPC-13-32358	7/12/13	F	306	<3	2.62	27.1	<1	<10	1.02	4.19	0.738	—	1.43	—	<1	<2	3.92	<10
L018C	LA-SMA-5.54	SS091018	4/30/12	11/3/13	MEx	2013-2125	WT_IPC-13-32203	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.337	—	2.62	—	—	—	—
L018C	LA-SMA-5.54	SS091018	4/30/12	11/3/13	MEx	2013-2126	WT_IPC-13-32361	9/13/13	F	115	<3	1.75	16.7	<1	<10	<5	1.56	<2	—	1.07	—	<1	<2	2.75	<10
L019A	LA-SMA-5.92	SS091020	10/31/11	8/27/13	MEx	2013-1264	WT_IPC-13-32245	7/12/13	UF	—	—	—	—	—	—	—	—	—	2.89	—	2.2	—	—	—	—
L019A	LA-SMA-5.92	SS091020	10/31/11	8/27/13	MEx	2013-1264	WT_IPC-13-32362	7/12/13	F	244	1.75	2.87	32.9	<1	<10	7.42	8.32	<2	—	5.5	—	<1	<2	4.02	3.45
L027	LA-SMA-6.395	SS091002	4/30/12	10/25/13	MEx	2013-2060	WT_IPC-13-32244	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.63	—	3.66	—	—	—	—
L027	LA-SMA-6.395	SS091002	4/30/12	10/25/13	MEx	2013-2060	WT_IPC-13-32355	9/13/13	F	637	<3	<5	22.7	<1	<10	3.4	2.66	1.33	—	1.52	—	<1	<2	1.28	6.03
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 1	2013-1018	WT_IPC-13-32157	6/14/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 1	2013-1018	WT_IPC-13-32501	6/14/13	F	173	<3	<5	<50	0.944	<10	3.23	31.2	0.717	—	2.54	—	<1	<2	<5	264
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 2	2013-1086	WT_IPC-13-38616	7/2/13	F	91.2	<3	<5	<50	<1	<10	<5	9.66	<2	—	0.817	—	<1	<2	<5	53.4
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 2	2013-1086	WT_IPC-13-38617	7/2/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
M002	M-SMA-1.2	SS091202	4/30/12	10/30/13	MEx	2013-2098	WT_IPC-13-32247	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
M002	M-SMA-1.2	SS091202	4/30/12	10/30/13	MEx	2013-2098	WT_IPC-13-32364	9/13/13	F	628	<3	10.6	49.4	<1	33.2	<5	38.4	0.984	—	4.43	—	<1	<2	42.5	28.1
M002B	M-SMA-1.22	SS091228	5/2/13	—	CAM5 Sample 1	2013-2007	WT_IPC-13-34611	9/12/13	F	419	—	—	—	—	—	—	5.96	—	—	—	—	—	—	—	—
M003	M-SMA-3	SS1985	4/30/12	8/13/13	MEx	2013-1151	WT_IPC-13-32183	7/12/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
M003	M-SMA-3	SS1985	4/30/12	8/13/13	MEx	2013-1151	WT_IPC-13-32305	7/12/13	F	592	<3	<5	<50	<1	<10	<3.96	2.76	0.539	—	0.693	—	<1	<2	1.64	23.6
M010	M-SMA-7.9	SS121237	4/30/12	8/13/13	MEx	2013-2060	WT_IPC-13-32187	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
M010	M-SMA-7.9	SS121237	4/30/12	8/13/13	MEx	2013-2060	WT_IPC-13-32309	9/13/13	F	224	<3	<5	18	<1	<10	1.52	3.47	<2	—	1.28	—	<1	<2	3.62	<10
M012	M-SMA-10	SS2002	4/30/12	8/13/13	MEx	2013-1105	WT_IPC-13-32222	6/30/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
M012	M-SMA-10	SS2002	4/30/12	8/13/13	MEx	2013-1105	WT_IPC-13-32297	6/30/13	F	325	<3	2.11	<50	<1	<10	4.56	1.29	0.657	—	1.62	—	<1	<2	1.7	7.13
M017	M-SMA-12.6	SS2058	4/30/12	10/22/13	MEx	2013-2007	WT_IPC-13-41870	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
M017	M-SMA-12.6	SS2058	4/30/12	10/22/13	MEx	2013-2007	WT_IPC-13-41871	9/13/13	F	164	<3	2.01	57.4	<1	<10	1	3.99	<2	—	2.61	—	<1	<2	2.09	4.03
M022	M-SMA-13	SS205	4/30/12	10/21/13	MEx	2013-2007	WT_IPC-13-32049	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.17	—	<5	—	—	—	—
M022	M-SMA-13	SS205	4/30/12	10/21/13	MEx	2013-2007	WT_IPC-13-32304	9/13/13	F	371	<3	<5	15.1	<1	<10	1.48	3.29	<2	—	1.1	—	<1	<2	1.38	3.96
P004	P-SMA-0.3	SS080801	4/30/12	9/16/13	MEx	2013-1479	WT_IPC-13-32227	7/25/13	UF	—	—	—	—	—	—	—	—	—	39.3	—	10.7	—	—	—	—
P004	P-SMA-0.3	SS080801	4/30/12	9/16/13	MEx	2013-1479	WT_IPC-13-32322	7/25/13	F	299	<3	7.76	41.7	<1	<10	5.35	9.01	0.805	—	4.67	—	<1	<2	11.3	8.36
P009	P-SMA-3.05	SS090802	4/30/12	10/22/13	MEx	2013-1919	WT_IPC-13-32197	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.216	—	<5	—	—	—	—
P009	P-SMA-3.05	SS090802	4/30/12	10/22/13	MEx	2013-1919	WT_IPC-13-32353	9/13/13	F	75.6	<3	<5	18.1	<1	<10	2.87	5.2	<2	—	0.914	—	<1	<2	3.87	4.73
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/3/13	CAM5 Sample 1	2013-1479	WT_IPC-13-32118	7/25/13	F	—	—	—	—	—	—	—	4.46	—	—	—	—	—	—	—	—

Table B-8 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Aluminum EPA:200.8 (µg/L)	Antimony EPA:200.8 (µg/L)	Arsenic EPA:200.8 (µg/L)	Boron EPA:200.7 (µg/L)	Cadmium EPA:200.8 (µg/L)	Chromium EPA:200.8 (µg/L)	Cobalt EPA:200.7 (µg/L)	Copper EPA:200.8 (µg/L)	Lead EPA:200.8 (µg/L)	Mercury EPA:245.2 (µg/L)	Nickel EPA:200.8 (µg/L)	Selenium EPA:200.8 (µg/L)	Silver EPA:200.8 (µg/L)	Thallium EPA:200.8 (µg/L)	Vanadium EPA:200.7 (µg/L)	Zinc EPA:200.7 (µg/L)	
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/30/13	CAM5 Sample 2	2013-2126	WT_IPC-13-32123	9/15/13	F	—	—	—	—	—	—	—	1.82	—	—	—	—	—	—	—	—	—
Q004	CHQ-SMA-3.05	SS090615	4/30/12	10/23/13	MEx	2013-1970	WT_IPC-13-32149	9/10/13	UF	—	—	—	—	—	—	—	—	—	0.072	—	<5	—	—	—	—	—
Q004	CHQ-SMA-3.05	SS090615	4/30/12	10/23/13	MEx	2013-1970	WT_IPC-13-32351	9/10/13	F	123	<3	<5	<50	<1	<10	2.93	2.19	<2	—	1.42	—	<1	<2	3.9	<10	—
Q006	CHQ-SMA-4.1	SS100617	4/30/12	10/22/13	MEx	2013-1970	WT_IPC-13-32034	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.097	—	<5	—	—	—	—	—
Q006	CHQ-SMA-4.1	SS100617	4/30/12	10/22/13	MEx	2013-1970	WT_IPC-13-32409	9/13/13	F	268	<3	<5	<50	<1	<10	2.06	2.21	<2	—	0.702	—	<1	<2	1.54	<10	—
Q007	CHQ-SMA-4.5	SS341	4/30/12	9/5/13	MEx	2013-1488	WT_IPC-13-32219	7/25/13	UF	—	—	—	—	—	—	—	—	—	0.134	—	2.02	—	—	—	—	—
Q007	CHQ-SMA-4.5	SS341	4/30/12	9/5/13	MEx	2013-1488	WT_IPC-13-32537	7/25/13	F	237	<3	4.02	21.9	<1	<10	5.11	2.04	0.825	—	2.29	—	<1	<2	1.43	3.46	—
Q009	CHQ-SMA-6	SS3377	4/30/12	8/29/13	MEx	2013-1426	WT_IPC-13-32047	7/25/13	UF	—	—	—	—	—	—	—	—	—	0.214	—	2.78	—	—	—	—	—
Q009	CHQ-SMA-6	SS3377	4/30/12	8/29/13	MEx	2013-1426	WT_IPC-13-32538	7/25/13	F	641	<3	<5	25.5	<1	<10	2.91	87.6	0.509	—	1.66	—	<1	<2	2.89	5.01	—
R005	R-SMA-2.3	SS082704	10/31/11	7/23/13	MEx	2013-1006	WT_IPC-13-32052	6/14/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—	—
R005	R-SMA-2.3	SS082704	10/31/11	7/23/13	MEx	2013-1006	WT_IPC-13-32338	6/14/13	F	303	<3	<5	25.1	0.353	<10	3.28	2.5	1.29	—	3	—	<1	<2	<5	26.2	—
S003	S-SMA-2	SS101626	7/8/13	9/10/13	CAM3 Sample 1 <sup>1</sup>	2013-1239	WT_IPC-13-39143	7/11/13	F	—	—	—	—	—	—	—	4.43	—	—	—	—	—	—	—	—	54
S003	S-SMA-2	SS101626	7/8/13	9/10/13	CAM3 Sample 2 <sup>2</sup>	2013-1547	WT_IPC-13-39144	8/1/13	F	—	—	—	—	—	—	—	5.08	—	—	—	—	—	—	—	—	44.2
S003A	S-SMA-2.01	SS091602	11/27/12	—	CAM3 Sample 1	2013-2060	WT_IPC-13-32114	9/13/13	F	—	—	—	—	—	—	—	3.66	—	—	—	—	—	—	—	—	—
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13	CAM3 Sample 1	2013-1003	WT_IPC-13-32126	6/14/13	F	—	—	—	—	—	—	—	20.8	—	—	—	—	—	—	—	—	135
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13	CAM3 Sample 2	2013-1086	WT_IPC-13-32127	7/2/13	F	—	—	—	—	—	—	—	15.4	—	—	—	—	—	—	—	—	108
S010	S-SMA-3.95	SS091606	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32088	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—	—
S010	S-SMA-3.95	SS091606	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32376	9/13/13	F	119	<3	<5	<50	<1	<10	1.37	1.8	<2	—	<2	—	<1	<2	<5	8.07	—
T001	Pratt-SMA-1.05	SS093401	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32212	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.91	—	<5	—	—	—	—	—
T001	Pratt-SMA-1.05	SS093401	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32395	9/13/13	F	943	<3	<5	17.8	<1	<10	1.98	2.67	0.942	—	1.23	—	<1	<2	4.5	5.98	—
T004	T-SMA-2.85	SS093714	4/30/12	8/21/13	MEx	2013-1267	WT_IPC-13-32261	7/12/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—	—
T004	T-SMA-2.85	SS093714	4/30/12	8/21/13	MEx	2013-1267	WT_IPC-13-32396	7/12/13	F	297	<3	<5	49.8	<1	<10	2.75	5.64	<2	—	1.02	—	<1	<2	1.28	6.28	—
T006	T-SMA-4	SS20136	4/30/12	10/25/13	MEx	2013-2060	WT_IPC-13-32274	9/13/13	UF	—	—	—	—	—	—	—	—	—	2.14	—	<5	—	—	—	—	—
T006	T-SMA-4	SS20136	4/30/12	10/25/13	MEx	2013-2060	WT_IPC-13-32437	9/13/13	F	514	<3	1.98	20.1	<1	<10	1.94	6.61	0.727	—	1.19	—	<1	<2	2.82	10.4	—
V001	CDV-SMA-1.2	SS100421	4/30/12	10/24/13	MEx	2013-2059	WT_IPC-13-32062	9/12/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—	—
V001	CDV-SMA-1.2	SS100421	4/30/12	10/24/13	MEx	2013-2059	WT_IPC-13-32407	9/12/13	F	233	<3	<5	29.2	<1	<10	1.68	3.95	<2	—	1.35	—	<1	<2	2.66	<10	—
V002	CDV-SMA-1.3	SS100422	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32063	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—	—
V002	CDV-SMA-1.3	SS100422	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32408	9/13/13	F	157	1.21	<5	<50	<1	<10	1.51	1.68	<2	—	0.665	—	<1	<2	1.03	<10	—
V005	CDV-SMA-1.7	SS2547	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32045	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.183	—	<5	—	—	—	—	—
V005	CDV-SMA-1.7	SS2547	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32531	9/13/13	F	205	<3	<5	<50	<1	<10	<5	11	1.57	—	0.659	—	0.21	<2	1.38	<10	—
V006	CDV-SMA-2	SS255	4/30/12	8/20/13	MEx	2013-1218	WT_IPC-13-32175	7/12/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—	—
V006	CDV-SMA-2	SS255	4/30/12	8/20/13	MEx	2013-1218	WT_IPC-13-32532	7/12/13	F	743	<3	1.77	33.7	<1	<10	<5.1	2.44	<2	—	1.52	—	<1	<2	2.64	<10	—
V008A	CDV-SMA-2.42	SS090408	4/30/12	8/26/13	MEx	2013-1239	WT_IPC-13-32195	7/12/13	UF	—	—	—	—	—	—	—	—	—	0.143	—	<5	—	—	—	—	—
V008A	CDV-SMA-2.42	SS090408	4/30/12	8/26/13	MEx	2013-1239	WT_IPC-13-32344	7/12/13	F	356	2.61	<5	17.5	<1	<10	2.95	4.37	<2	—	0.816	—	<1	<2	3.44	<10	—

Table B-8 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Aluminum EPA:200.8 (µg/L)	Antimony EPA:200.8 (µg/L)	Arsenic EPA:200.8 (µg/L)	Boron EPA:200.7 (µg/L)	Cadmium EPA:200.8 (µg/L)	Chromium EPA:200.8 (µg/L)	Cobalt EPA:200.7 (µg/L)	Copper EPA:200.8 (µg/L)	Lead EPA:200.8 (µg/L)	Mercury EPA:245.2 (µg/L)	Nickel EPA:200.8 (µg/L)	Selenium EPA:200.8 (µg/L)	Silver EPA:200.8 (µg/L)	Thallium EPA:200.8 (µg/L)	Vanadium EPA:200.7 (µg/L)	Zinc EPA:200.7 (µg/L)
V009A	CDV-SMA-2.51	SS090409	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32087	9/13/13	UF	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—	—
V009A	CDV-SMA-2.51	SS090409	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32345	9/13/13	F	491	<3	<5	<50	<1	<10	<5	1.66	<2	—	0.736	—	<1	<2	1.34	4.56
V012A	CDV-SMA-6.02	SS130423	7/18/12	—	CAM5 Sample 1	2013-2059	WT_IPC-13-40964	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
V012A	CDV-SMA-6.02	SS130423	7/18/12	—	CAM5 Sample 1	2013-2059	WT_IPC-13-40966	9/13/13	F	309	<3	<5	<50	<1	<10	1.54	1.16	0.596	—	0.621	—	<1	<2	<5	<10
V013	CDV-SMA-7	SS252625	4/30/12	10/30/13	MEx	2013-2128	WT_IPC-13-32218	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.36	—	5.33	—	—	—	—
V013	CDV-SMA-7	SS252625	4/30/12	10/30/13	MEx	2013-2128	WT_IPC-13-32534	9/13/13	F	956	1.23	2.31	30.9	<1	<10	6.28	4.05	0.831	—	3.04	—	<1	<2	4.15	6.58
W001	W-SMA-1	SS133939	5/2/13	—	CAM5 Sample 1	2013-2125	WT_IPC-13-32167	9/12/13	UF	—	—	—	—	—	—	—	—	—	0.124	—	<5	—	—	—	—
W001	W-SMA-1	SS133939	5/2/13	—	CAM5 Sample 1	2013-2126	WT_IPC-13-32495	9/12/13	F	1010	<3	<5	18.8	<1	<10	1.45	4.01	0.806	—	2.28	—	<1	<2	5.01	12.8
W011	W-SMA-8	SS2523	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32181	9/12/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
W011	W-SMA-8	SS2523	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32443	9/12/13	F	823	<3	<5	65.2	0.353	<10	1.19	28.1	2.47	—	6.47	—	<1	<2	5.08	32.3
W012	W-SMA-8.7	SS103933	4/30/12	10/25/13	MEx	2013-2008	WT_IPC-13-32071	9/12/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
W012	W-SMA-8.7	SS103933	4/30/12	10/25/13	MEx	2013-2008	WT_IPC-13-32433	9/12/13	F	1920	<3	<5	16.1	<1	<10	1.32	3.72	1.12	—	2.06	—	<1	<2	2.62	8.47
W012A	W-SMA-8.71	SS123938	11/27/12	—	CAM5 Sample 1	2013-2125	WT_IPC-13-32168	9/13/13	UF	—	—	—	—	—	—	—	—	—	1.51	—	<5	—	—	—	—
W012A	W-SMA-8.71	SS123938	11/27/12	—	CAM5 Sample 1	2013-2125	WT_IPC-13-32496	9/13/13	F	424	1.34	5.01	61.3	0.499	2	1.06	19.8	<2	—	4.54	—	<1	<2	17.2	55.4
W013	W-SMA-9.05	SS093914	4/30/12	10/21/13	MEx	2013-2008	WT_IPC-13-32057	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
W013	W-SMA-9.05	SS093914	4/30/12	10/21/13	MEx	2013-2008	WT_IPC-13-32397	9/13/13	F	537	<3	1.9	26.8	<1	<10	<5	3.49	0.501	—	1.66	—	<1	<2	3.17	<10
W015	W-SMA-9.7	SS093916	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32263	9/13/13	UF	—	—	—	—	—	—	—	—	—	0.352	—	<5	—	—	—	—
W015	W-SMA-9.7	SS093916	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32399	9/13/13	F	344	<3	<5	43.2	<1	<10	<5	9.74	1.48	—	0.738	—	<1	<2	4.1	11.4
W017	W-SMA-9.9	SS103934	6/27/12	—	CAM5 Sample 1	2013-2126	WT_IPC-13-32100	9/13/13	F	199	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
W019	W-SMA-11.7	SS103935	10/23/12	—	CAM5 Sample 1	2013-2126	WT_IPC-13-32101	9/13/13	F	151	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
W021	W-SMA-14.1	SS133939	9/25/12	—	CAM5 Sample 1	2013-2008	WT_IPC-13-32037	9/13/13	UF	—	—	—	—	—	—	—	—	—	<0.2	—	<5	—	—	—	—
W021	W-SMA-14.1	SS133939	9/25/12	—	CAM5 Sample 1	2013-2008	WT_IPC-13-32492	9/13/13	F	233	<3	1.9	<50	<1	<10	<5	2.66	<2	—	0.569	—	<1	<2	2.23	<10

<sup>a</sup> COC = Chain of custody.

<sup>b</sup> MEx = Extended Baseline Monitoring: One confirmation monitoring sample is collected to determine if corrective action is required.

<sup>c</sup> UF = Unfiltered.

<sup>d</sup> — = Not applicable.

<sup>e</sup> < = The analyte was not detected in the sample; the reported value is the laboratory reporting limit.

<sup>f</sup> F = Filtered.

<sup>g</sup> CAM5 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>h</sup> CAM5 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>i</sup> CAM3 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

<sup>j</sup> CAM3 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

**Table B-9**  
**Results for General Inorganics**

Permitted Feature	SMA	Station Name	Stage Initiate Date	Stage Complete Date	Stage Number	COCa	Sample	Sample Date	Field Prep	CN(wad) <sup>b</sup> ASTM:D2036 (mg/L)
A002	A-SMA-2	SS2732	4/30/12	10/22/13	MEx <sup>c</sup>	2013-2007	WT_IPC-13-32042	9/12/13	UF <sup>d</sup>	<0.005 <sup>e</sup>
A004	A-SMA-2.7	SS120211	8/23/12	— <sup>f</sup>	CAM5 Sample 1 <sup>g</sup>	2013-2007	WT_IPC-13-32036	9/13/13	UF	<0.005
A006	A-SMA-3	SS100210	10/31/11	8/29/13	MEx	2013-1426	WT_IPC-13-39423	7/25/13	UF	0.00648
A007	A-SMA-3.5	SS090208	4/30/12	9/6/13	MEx	2013-1479	WT_IPC-13-32194	7/25/13	UF	<0.005
A009	A-SMA-6	SS310	4/30/12	9/4/13	MEx	2013-1515	WT_IPC-13-32044	8/4/13	UF	<0.005
B001	B-SMA-0.5	SS100302	4/30/12	10/30/13	MEx	2013-2122	WT_IPC-13-32265	9/13/13	UF	<0.005
B002	B-SMA-1	SS080301	4/30/12	10/22/13	MEx	2013-1920	WT_IPC-13-32051	9/13/13	UF	<0.005
C003	CDB-SMA-0.55	SS091312	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32159	9/13/13	UF	<0.005
C010	CDB-SMA-4	SS101317	4/30/12	8/27/13	MEx	2013-1377	WT_IPC-13-32138	7/25/13	UF	<0.005
D002	DP-SMA-0.4	SS081901	4/30/12	10/26/13	MEx	2013-2122	WT_IPC-13-32236	9/13/13	UF	0.00203
D006	DP-SMA-2.35	SS091901	4/30/12	10/30/13	MEx	2013-2128	WT_IPC-13-32254	9/13/13	UF	<0.005
E003	2M-SMA-1.43	SS093204	10/31/11	8/21/13	MEx	2013-1266	WT_IPC-13-32260	7/12/13	UF	<0.005
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 1	2013-1018	WT_IPC-13-34607	6/14/13	UF	0.00207
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 2 <sup>h</sup>	2013-1725	WT_IPC-13-34608	8/18/13	UF	<0.005
E014	2M-SMA-3	SS2439	4/30/12	8/16/13	MEx	2013-1176	WT_IPC-13-32040	7/12/13	UF	<0.005
H002	3M-SMA-0.4	SS101502	4/30/12	8/27/13	MEx	2013-1239	WT_IPC-13-32065	7/12/13	UF	<0.005
J001	PJ-SMA-1.05	SS092327	10/3/11	11/3/13	MEx	2013-2122	WT_IPC-13-32208	9/13/13	UF	<0.005
J004	PJ-SMA-4.05	SS092328	10/3/11	10/30/13	MEx	2013-2128	WT_IPC-13-42057	9/13/13	UF	<0.005
J013	PJ-SMA-11	SS102333	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32267	9/13/13	UF	<0.005
J014	PJ-SMA-11.1	SS102334	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32268	9/13/13	UF	<0.005
J023	PJ-SMA-16	SS092325	10/3/11	9/11/13	MEx	2013-1594	WT_IPC-13-32055	8/8/13	UF	<0.005
J024	PJ-SMA-17	SS092331	10/3/11	9/5/13	MEx	2013-1488	WT_IPC-13-39438	7/25/13	UF	<0.005
J025	PJ-SMA-19	SS092330	10/3/11	9/12/13	MEx	2013-1618	WT_IPC-13-32210	8/8/13	UF	<0.005
J026	PJ-SMA-18	SS092329	10/3/11	9/3/13	MEx	2013-1458	WT_IPC-13-32209	7/25/13	UF	<0.005
J029	STRM-SMA-1.5	SS133007	7/8/13	—	CAM5 Sample 1	2013-1965	WT_IPC-13-34679	9/13/13	UF	<0.005
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 1	2013-354	WT_IPL-13-24803	11/9/12	UF	<0.005
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 2	2013-869	WT_IPC-13-32171	5/15/13	UF	0.00286
L003	LA-SMA-1	SS121044	11/27/12	—	CAM5 Sample 1	2013-2098	WT_IPC-13-32154	9/13/13	UF	<0.005
L006	LA-SMA-2.1	SS081005	4/30/12	11/3/13	MEx	2013-2122	WT_IPC-13-32192	9/13/13	UF	0.00206
L018	LA-SMA-5.51	SS091015	4/30/12	8/21/13	MEx	2013-1263	WT_IPC-13-32200	7/12/13	UF	<0.005
L018C	LA-SMA-5.54	SS091018	4/30/12	11/3/13	MEx	2013-2122	WT_IPC-13-32203	9/13/13	UF	0.0019
L019A	LA-SMA-5.92	SS091020	10/31/11	8/27/13	MEx	2013-1264	WT_IPC-13-32245	7/12/13	UF	<0.005
L027	LA-SMA-6.395	SS091002	4/30/12	10/25/13	MEx	2013-2060	WT_IPC-13-32244	9/13/13	UF	0.0033
L030A	LA-SMA-10.12	SS091021	11/30/12	—	CAM5 Sample 1	2013-1970	WT_IPC-13-32140	9/12/13	UF	<0.005
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 1	2013-1018	WT_IPC-13-32157	6/14/13	UF	<0.005
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 2	2013-1086	WT_IPC-13-38617	7/2/13	UF	<0.005
M002	M-SMA-1.2	SS091202	4/30/12	10/30/13	MEx	2013-2098	WT_IPC-13-32247	9/13/13	UF	<0.005
M003	M-SMA-3	SS1985	4/30/12	8/13/13	MEx	2013-1151	WT_IPC-13-32183	7/12/13	UF	<0.005

Table B-9 (continued)

Permitted Feature	SMA	Station Name	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	CN(wad) ASTM:D2036 (mg/L)
M010	M-SMA-7.9	SS121237	4/30/12	8/13/13	MEx	2013-2060	WT_IPC-13-32187	9/13/13	UF	<0.005
M012	M-SMA-10	SS2002	4/30/12	8/13/13	MEx	2013-1105	WT_IPC-13-32222	6/30/13	UF	<0.005
M017	M-SMA-12.6	SS2058	4/30/12	10/22/13	MEx	2013-2007	WT_IPC-13-41870	9/13/13	UF	<0.005
M022	M-SMA-13	SS205	4/30/12	10/21/13	MEx	2013-2007	WT_IPC-13-32049	9/13/13	UF	<0.005
P004	P-SMA-0.3	SS080801	4/30/12	9/16/13	MEx	2013-1479	WT_IPC-13-32227	7/25/13	UF	0.0042
P009	P-SMA-3.05	SS090802	4/30/12	10/22/13	MEx	2013-1919	WT_IPC-13-32197	9/13/13	UF	<0.005
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/3/13	CAM5 Sample 1	2013-1479	WT_IPC-13-32459	7/25/13	UF	<0.005
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/30/13	CAM5 Sample 2	2013-2122	WT_IPC-13-32460	9/15/13	UF	<0.005
Q004	CHQ-SMA-3.05	SS090615	4/30/12	10/23/13	MEx	2013-1970	WT_IPC-13-32149	9/10/13	UF	<0.005
Q006	CHQ-SMA-4.1	SS100617	4/30/12	10/22/13	MEx	2013-1970	WT_IPC-13-32034	9/13/13	UF	<0.005
Q007	CHQ-SMA-4.5	SS341	4/30/12	9/5/13	MEx	2013-1488	WT_IPC-13-32219	7/25/13	UF	<0.005
Q009	CHQ-SMA-6	SS3377	4/30/12	8/29/13	MEx	2013-1426	WT_IPC-13-32047	7/25/13	UF	<0.005
R005	R-SMA-2.3	SS082704	10/31/11	7/23/13	MEx	2013-1006	WT_IPC-13-32052	6/14/13	UF	<0.005
S010	S-SMA-3.95	SS091606	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32088	9/13/13	UF	<0.005
T001	Pratt-SMA-1.05	SS093401	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32212	9/13/13	UF	0.00175
T004	T-SMA-2.85	SS093714	4/30/12	8/21/13	MEx	2013-1267	WT_IPC-13-32261	7/12/13	UF	<0.005
T006	T-SMA-4	SS20136	4/30/12	10/25/13	MEx	2013-2060	WT_IPC-13-32274	9/13/13	UF	<0.005
V001	CDV-SMA-1.2	SS100421	4/30/12	10/24/13	MEx	2013-2059	WT_IPC-13-32062	9/12/13	UF	<0.005
V002	CDV-SMA-1.3	SS100422	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32063	9/13/13	UF	<0.005
V005	CDV-SMA-1.7	SS2547	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32045	9/13/13	UF	0.0175
V006	CDV-SMA-2	SS255	4/30/12	8/20/13	MEx	2013-1218	WT_IPC-13-32175	7/12/13	UF	0.00726
V008A	CDV-SMA-2.42	SS090408	4/30/12	8/26/13	MEx	2013-1239	WT_IPC-13-32195	7/12/13	UF	<0.005
V009A	CDV-SMA-2.51	SS090409	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32087	9/13/13	UF	<0.005
V012A	CDV-SMA-6.02	SS130423	7/18/12	—	CAM5 Sample 1	2013-2059	WT_IPC-13-40964	9/13/13	UF	<0.005
V013	CDV-SMA-7	SS252625	4/30/12	10/30/13	MEx	2013-2128	WT_IPC-13-32218	9/13/13	UF	0.00281
W001	W-SMA-1	SS133939	5/2/13	—	CAM5 Sample 1	2013-2122	WT_IPC-13-32167	9/12/13	UF	<0.005
W011	W-SMA-8	SS2523	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32181	9/12/13	UF	<0.005

**Table B-9 (continued)**

Permitted Feature	SMA	Station Name	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	CN(wad) ASTM:D2036 (mg/L)
W012	W-SMA-8.7	SS103933	4/30/12	10/25/13	MEx	2013-2008	WT_IPC-13-32071	9/12/13	UF	<0.005
W012A	W-SMA-8.71	SS123938	11/27/12	—	CAM5 Sample 1	2013-2122	WT_IPC-13-32168	9/13/13	UF	<0.005
W013	W-SMA-9.05	SS093914	4/30/12	10/21/13	MEx	2013-2008	WT_IPC-13-32057	9/13/13	UF	<0.005
W015	W-SMA-9.7	SS093916	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32263	9/13/13	UF	<0.005
W017	W-SMA-9.9	SS103934	6/27/12	—	CAM5 Sample 1	2013-2122	WT_IPC-13-32142	9/13/13	UF	<0.005
W021	W-SMA-14.1	SS133939	9/25/12	—	CAM5 Sample 1	2013-2008	WT_IPC-13-32037	9/13/13	UF	<0.005

<sup>a</sup> COC = Chain of custody.

<sup>b</sup> CN(wad) = Cyanide (weak acid dissociable).

<sup>c</sup> MEx = Extended Baseline Monitoring: One confirmation monitoring sample is collected to determine if corrective action is required.

<sup>d</sup> UF = Unfiltered.

<sup>e</sup> < = The analyte was not detected in the sample; the reported value is the laboratory reporting limit.

<sup>f</sup> — = Not applicable.

<sup>g</sup> CAM5 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>h</sup> CAM5 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

**Table B-10  
Results for Radioactivity**

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Gross Alpha EPA:900 (pCi/L)	Radium-226 and Radium-228 EPA:903 EPA:904 (pCi/L)
A002	A-SMA-2	SS2732	4/30/12	10/22/13	MEx <sup>b</sup>	2013-2007	WT_IPC-13-32042	12-Sep-13	UF <sup>c</sup>	23.7	4.78
A004	A-SMA-2.7	SS120211	8/23/12	— <sup>d</sup>	CAM5 Sample 1 <sup>e</sup>	2013-2007	WT_IPC-13-32036	13-Sep-13	UF	175	5.24
A006	A-SMA-3	SS100210	10/31/11	8/29/13	MEx	2013-1426	WT_IPC-13-39423	25-Jul-13	UF	136	17.7
A007	A-SMA-3.5	SS090208	4/30/12	9/6/13	MEx	2013-1479	WT_IPC-13-32194	25-Jul-13	UF	9.37	4.49
A009	A-SMA-6	SS310	4/30/12	9/4/13	MEx	2013-1515	WT_IPC-13-32044	04-Aug-13	UF	29.6	8.39
B001	B-SMA-0.5	SS100302	4/30/12	10/30/13	MEx	2013-2125	WT_IPC-13-32265	13-Sep-13	UF	486	20.9
B002	B-SMA-1	SS080301	4/30/12	10/22/13	MEx	2013-1920	WT_IPC-13-32051	13-Sep-13	UF	126	5.27
C003	CDB-SMA-0.55	SS091312	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32159	13-Sep-13	UF	7.57	<0.915 <sup>f</sup>
C004	CDB-SMA-1	SS2185	7/27/12	—	CAM5 Sample 1	2013-2125	WT_IPC-13-32481	13-Sep-13	UF	71.5	—
C010	CDB-SMA-4	SS101317	4/30/12	8/27/13	MEx	2013-1377	WT_IPC-13-32138	25-Jul-13	UF	54.8	5.19
D001	DP-SMA-0.3	SS0375	7/8/13	10/30/13	CAM5 Sample 1	2013-1239	WT_IPC-13-39145	12-Jul-13	UF	87.8	16.5
D001	DP-SMA-0.3	SS0375	7/8/13	10/30/13	CAM5 Sample 2 <sup>g</sup>	2013-2103	WT_IPC-13-39146	13-Sep-13	UF	68.7	7.52
D002	DP-SMA-0.4	SS081901	4/30/12	10/26/13	MEx	2013-2125	WT_IPC-13-32236	13-Sep-13	UF	8.71	<0.854
D006	DP-SMA-2.35	SS091901	4/30/12	10/30/13	MEx	2013-2128	WT_IPC-13-32254	13-Sep-13	UF	25	1.7
E003	2M-SMA-1.43	SS093204	10/31/11	8/21/13	MEx	2013-1266	WT_IPC-13-32260	12-Jul-13	UF	52	4.13
E004	2M-SMA-1.44	SS093205	6/27/12	—	CAM5 Sample 1	2013-2128	WT_IPC-13-32474	12-Sep-13	UF	4	—
E007	2M-SMA-1.65	SS093209	7/20/12	—	CAM5 Sample 1	2013-2060	WT_IPC-13-32462	13-Sep-13	UF	22.6	-
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 1	2013-1018	WT_IPC-13-34607	14-Jun-13	UF	13.7	1.62

Table B-10 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Gross Alpha EPA:900 (pCi/L)	Radium-226 and Radium-228 EPA:903 EPA:904 (pCi/L)
E012	2M-SMA-2	SS123221	5/2/13	9/4/13	CAM5 Sample 2	2013-1725	WT_IPC-13-34608	18-Aug-13	UF	9.51	<0.554
E014	2M-SMA-3	SS2439	4/30/12	8/16/13	MEx	2013-1176	WT_IPC-13-32040	12-Jul-13	UF	8.27	<0.487
H002	3M-SMA-0.4	SS101502	4/30/12	8/27/13	MEx	2013-1239	WT_IPC-13-32065	12-Jul-13	UF	120	9.86
J001	PJ-SMA-1.05	SS092327	10/3/11	11/3/13	MEx	2013-2125	WT_IPC-13-32208	13-Sep-13	UF	11.5	5.29
J004	PJ-SMA-4.05	SS092328	10/3/11	10/30/13	MEx	2013-2128	WT_IPC-13-42057	13-Sep-13	UF	47.2	5.98
J013	PJ-SMA-11	SS102333	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32267	13-Sep-13	UF	65.4	2.09
J014	PJ-SMA-11.1	SS102334	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32268	13-Sep-13	UF	89.4	9.2
J023	PJ-SMA-16	SS092325	10/3/11	9/11/13	MEx	2013-1594	WT_IPC-13-32055	08-Aug-13	UF	<1.84	<0.93
J024	PJ-SMA-17	SS092331	10/3/11	9/5/13	MEx	2013-1488	WT_IPC-13-39438	25-Jul-13	UF	61.6	6.52
J025	PJ-SMA-19	SS092330	10/3/11	9/12/13	MEx	2013-1618	WT_IPC-13-32210	08-Aug-13	UF	51.2	43.7
J026	PJ-SMA-18	SS092329	10/3/11	9/3/13	MEx	2013-1458	WT_IPC-13-32209	25-Jul-13	UF	23.6	13.1
J029	STRM-SMA-1.5	SS133007	7/8/13	—	CAM5 Sample 1	2013-1965	WT_IPC-13-34679	13-Sep-13	UF	16.1	<1.13
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 1	2013-354	WT_IPL-13-24803	09-Nov-12	UF	22.9	<1.37
L001	LA-SMA-0.85	SS121043	10/23/12	6/24/13	CAM5 Sample 2	2013-869	WT_IPC-13-32171	15-May-13	UF	9.1	<0.4
L003	LA-SMA-1	SS121044	11/27/12	—	CAM5 Sample 1	2013-2098	WT_IPC-13-32154	13-Sep-13	UF	434	8.65
L006	LA-SMA-2.1	SS081005	4/30/12	11/3/13	MEx	2013-2125	WT_IPC-13-32192	13-Sep-13	UF	125	1.59
L018	LA-SMA-5.51	SS091015	4/30/12	8/21/13	MEx	2013-1263	WT_IPC-13-32200	12-Jul-13	UF	92.3	14.3
L018C	LA-SMA-5.54	SS091018	4/30/12	11/3/13	MEx	2013-2125	WT_IPC-13-32203	13-Sep-13	UF	356	4.81
L019	LA-SMA-5.91	SS091019	7/8/13	—	CAM5 Sample 1	2013-2128	WT_IPC-13-40974	12-Sep-13	UF	15.7	—
L019A	LA-SMA-5.92	SS091020	10/31/11	8/27/13	MEx	2013-1264	WT_IPC-13-32245	12-Jul-13	UF	264	24.2
L027	LA-SMA-6.395	SS091002	4/30/12	10/25/13	MEx	2013-2060	WT_IPC-13-32244	13-Sep-13	UF	300	20.3
L030A	LA-SMA-10.12	SS091021	11/30/12	—	CAM5 Sample 1	2013-1970	WT_IPC-13-32140	12-Sep-13	UF	4.07	—
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 1	2013-1018	WT_IPC-13-32157	14-Jun-13	UF	32.5	<1.99
M001	M-SMA-1	SS121238	11/27/12	8/13/13	CAM5 Sample 2	2013-1086	WT_IPC-13-38617	02-Jul-13	UF	11.3	<0.614
M002	M-SMA-1.2	SS091202	4/30/12	10/30/13	MEx	2013-2098	WT_IPC-13-32247	13-Sep-13	UF	4.4	<1.56
M003	M-SMA-3	SS1985	4/30/12	8/13/13	MEx	2013-1151	WT_IPC-13-32183	12-Jul-13	UF	25.4	2.59
M010	M-SMA-7.9	SS121237	4/30/12	8/13/13	MEx	2013-2060	WT_IPC-13-32187	13-Sep-13	UF	51.4	4.04
M012	M-SMA-10	SS2002	4/30/12	8/13/13	MEx	2013-1105	WT_IPC-13-32222	30-Jun-13	UF	32.2	1.61
M017	M-SMA-12.6	SS2058	4/30/12	10/22/13	MEx	2013-2007	WT_IPC-13-41870	13-Sep-13	UF	19.2	<0.796
M022	M-SMA-13	SS205	4/30/12	10/21/13	MEx	2013-2007	WT_IPC-13-32049	13-Sep-13	UF	<1.29	2.59
P004	P-SMA-0.3	SS080801	4/30/12	9/16/13	MEx	2013-1479	WT_IPC-13-32227	25-Jul-13	UF	28.6	55.6
P009	P-SMA-3.05	SS090802	4/30/12	10/22/13	MEx	2013-1919	WT_IPC-13-32197	13-Sep-13	UF	6.64	<0.638
Q004	CHQ-SMA-3.05	SS090615	4/30/12	10/23/13	MEx	2013-1970	WT_IPC-13-32149	10-Sep-13	UF	60.3	2.29
Q006	CHQ-SMA-4.1	SS100617	4/30/12	10/22/13	MEx	2013-1970	WT_IPC-13-32034	13-Sep-13	UF	34.5	3.49
Q007	CHQ-SMA-4.5	SS341	4/30/12	9/5/13	MEx	2013-1488	WT_IPC-13-32219	25-Jul-13	UF	103	19.2
Q009	CHQ-SMA-6	SS3377	4/30/12	8/29/13	MEx	2013-1426	WT_IPC-13-32047	25-Jul-13	UF	157	7.83



Table B-10 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Gross Alpha EPA:900 (pCi/L)	Radium-226 and Radium-228 EPA:903 EPA:904 (pCi/L)
R005	R-SMA-2.3	SS082704	10/31/11	7/23/13	MEx	2013-1006	WT_IPC-13-32052	14-Jun-13	UF	8.37	1.46
S010	S-SMA-3.95	SS091606	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32088	13-Sep-13	UF	15.4	<1.39
T001	PRATT-SMA-1.05	SS093401	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32212	13-Sep-13	UF	96.5	5.67
T004	T-SMA-2.85	SS093714	4/30/12	8/21/13	MEx	2013-1267	WT_IPC-13-32261	12-Jul-13	UF	36.6	3.34
T006	T-SMA-4	SS20136	4/30/12	10/25/13	MEx	2013-2060	WT_IPC-13-32274	13-Sep-13	UF	94.8	5.38
V001	CDV-SMA-1.2	SS100421	4/30/12	10/24/13	MEx	2013-2059	WT_IPC-13-32062	12-Sep-13	UF	4.7	<0.236
V002	CDV-SMA-1.3	SS100422	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32063	13-Sep-13	UF	34.7	9.1
V005	CDV-SMA-1.7	SS2547	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32045	13-Sep-13	UF	36.9	5.8
V006	CDV-SMA-2	SS255	4/30/12	8/20/13	MEx	2013-1218	WT_IPC-13-32175	12-Jul-13	UF	18.2	<0.879
V008A	CDV-SMA-2.42	SS090408	4/30/12	8/26/13	MEx	2013-1239	WT_IPC-13-32195	12-Jul-13	UF	89.3	5.14
V009A	CDV-SMA-2.51	SS090409	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32087	13-Sep-13	UF	16.4	1.95
V012A	CDV-SMA-6.02	SS130423	7/18/12	—	CAM5 Sample 1	2013-2059	WT_IPC-13-40964	13-Sep-13	UF	6.97	1.64
V013	CDV-SMA-7	SS252625	4/30/12	10/30/13	MEx	2013-2128	WT_IPC-13-32218	13-Sep-13	UF	191	12.1
W001	W-SMA-1	SS133939	5/2/13	—	CAM5 Sample 1	2013-2125	WT_IPC-13-32167	12-Sep-13	UF	314	<0.953
W011	W-SMA-8	SS2523	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32181	12-Sep-13	UF	5.31	<0
W012	W-SMA-8.7	SS103933	4/30/12	10/25/13	MEx	2013-2008	WT_IPC-13-32071	12-Sep-13	UF	8	1.77
W012A	W-SMA-8.71	SS123938	11/27/12	—	CAM5 Sample 1	2013-2125	WT_IPC-13-32168	13-Sep-13	UF	<2.99	<0.557
W013	W-SMA-9.05	SS093914	4/30/12	10/21/13	MEx	2013-2008	WT_IPC-13-32057	13-Sep-13	UF	<3.12	1.46
W015	W-SMA-9.7	SS093916	4/30/12	10/30/13	MEx	2013-2103	WT_IPC-13-32263	13-Sep-13	UF	3.55	<1.24
W017	W-SMA-9.9	SS103934	6/27/12	—	CAM5 Sample 1	2013-2125	WT_IPC-13-32142	13-Sep-13	UF	74.4	—
W019	W-SMA-11.7	SS103935	10/23/12	—	CAM5 Sample 1	2013-2126	WT_IPC-13-32468	13-Sep-13	UF	39.6	—
W021	W-SMA-14.1	SS133939	9/25/12	—	CAM5 Sample 1	2013-2008	WT_IPC-13-32037	13-Sep-13	UF	38.7	1.97

<sup>a</sup> COC = Chain of custody.

<sup>b</sup> MEx = Extended Baseline Monitoring: One confirmation monitoring sample is collected to determine if corrective action is required.

<sup>c</sup> UF = Unfiltered.

<sup>d</sup> — = Not applicable.

<sup>e</sup> CAM5 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>f</sup> < = The analyte was not detected in the sample; the reported value is the laboratory reporting limit.

<sup>g</sup> CAM5 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

**Table B-11  
Results for Total PCBs**

Permitted Feature	SMA	Station Name	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Total PCBs EPA:1668A (µg/L)	
A006	A-SMA-3	SS100210	10/31/11	8/29/13		MEx <sup>b</sup>	2013-1431	WT_IPC-13-39423	7/25/13	UF <sup>c</sup>	3.06
A007	A-SMA-3.5	SS090208	4/30/12	9/6/13		MEx	2013-1483	WT_IPC-13-32194	7/25/13	UF	0.000176
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13		CAM5 Sample 1 <sup>d</sup>	2013-1431	WT_IPC-13-39427	7/26/13	UF	0.00282
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13		CAM5 Sample 2 <sup>e</sup>	2013-1907	WT_IPC-13-32514	9/10/13	UF	0.00474
C003	CDB-SMA-0.55	SS091312	4/30/12	10/25/13		MEx	2013-2074	WT_IPC-13-32159	9/13/13	UF	0.000711
C004	CDB-SMA-1	SS2185	7/27/12	— <sup>f</sup>		CAM5 Sample 1	2013-2136	WT_IPC-13-32481	9/13/13	UF	0.0721
C010	CDB-SMA-4	SS101317	4/30/12	8/27/13		MEx	2013-1380	WT_IPC-13-32138	7/25/13	UF	0.00437
E012	2M-SMA-2	SS123221	5/2/13	9/4/13		CAM5 Sample 1	2013-1020	WT_IPC-13-34607	6/14/13	UF	0.0497
E012	2M-SMA-2	SS123221	5/2/13	9/4/13		CAM5 Sample 2	2013-1728	WT_IPC-13-34608	8/18/13	UF	0.0148
J001	PJ-SMA-1.05	SS092327	10/3/11	11/3/13		MEx	2013-2136	WT_IPC-13-32208	9/13/13	UF	0.00872
J024	PJ-SMA-17	SS092331	10/3/11	9/5/13		MEx	2013-1490	WT_IPC-13-39438	7/25/13	UF	<0 <sup>g</sup>
J025	PJ-SMA-19	SS092330	10/3/11	9/12/13		MEx	2013-1624	WT_IPC-13-32210	8/8/13	UF	0.0204
J026	PJ-SMA-18	SS092329	10/3/11	9/3/13		MEx	2013-1460	WT_IPC-13-32209	7/25/13	UF	<0.000267
L003	LA-SMA-1	SS121044	11/27/12	—		CAM5 Sample 1	2013-2104	WT_IPC-13-32154	9/13/13	UF	0.0175
L006	LA-SMA-2.1	SS081005	4/30/12	11/3/13		MEx	2013-2136	WT_IPC-13-32192	9/13/13	UF	21.1
L018	LA-SMA-5.51	SS091015	4/30/12	8/21/13		MEx	2013-1274	WT_IPC-13-32200	7/12/13	UF	0.0591
L018C	LA-SMA-5.54	SS091018	4/30/12	11/3/13		MEx	2013-2136	WT_IPC-13-32203	9/13/13	UF	0.0598
M001	M-SMA-1	SS121238	11/27/12	8/13/13		CAM5 Sample 1	2013-1020	WT_IPC-13-32157	6/14/13	UF	0.0102
M001	M-SMA-1	SS121238	11/27/12	8/13/13		CAM5 Sample 2	2013-1087	WT_IPC-13-38617	7/2/13	UF	0.0105
M003	M-SMA-3	SS1985	4/30/12	8/13/13		MEx	2013-1154	WT_IPC-13-32183	7/12/13	UF	0.0181
M010	M-SMA-7.9	SS121237	4/30/12	8/13/13		MEx	2013-2074	WT_IPC-13-32187	9/13/13	UF	0.00215
P009	P-SMA-3.05	SS090802	4/30/12	10/22/13		MEx	2013-1922	WT_IPC-13-32197	9/13/13	UF	0.0868
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/3/13		CAM5 Sample 1	2013-1483	WT_IPC-13-32459	7/25/13	UF	0.016
Q002A	CHQ-SMA-1.02	SS090613	10/24/12	11/30/13		CAM5 Sample 2	2013-2136	WT_IPC-13-32460	9/15/13	UF	0.0066
Q004	CHQ-SMA-3.05	SS090615	4/30/12	10/23/13		MEx	2013-2014	WT_IPC-13-32149	9/10/13	UF	0.000851
Q006	CHQ-SMA-4.1	SS100617	4/30/12	10/22/13		MEx	2013-2014	WT_IPC-13-32034	9/13/13	UF	<0
S003	S-SMA-2	SS101626	7/8/13	9/10/13		CAM3 Sample 1 <sup>h</sup>	2013-1271	WT_IPC-13-39141	7/11/13	UF	0.22
S003	S-SMA-2	SS101626	7/8/13	9/10/13		CAM3 Sample 2 <sup>i</sup>	2013-1551	WT_IPC-13-39142	8/1/13	UF	0.049
S003A	S-SMA-2.01	SS091602	11/27/12	—		CAM3 Sample 1	2013-2074	WT_IPC-13-32511	9/13/13	UF	0.164
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13		CAM3 Sample 1	2013-1007	WT_IPC-13-32094	6/14/13	UF	0.00745

Table B-11 (continued)

Permitted Feature	SMA	Station Name	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Total PCBs EPA:1668A (µg/L)
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13	CAM3 Sample 2	2013-1087	WT_IPC-13-32095	7/2/13	UF	0.0016
S011	S-SMA-4.1	SS101623	9/25/12	10/28/13	CAM3 Sample 1	2013-2014	WT_IPC-13-32509	9/13/13	UF	0.00155
T001	Pratt-SMA-1.05	SS093401	4/30/12	10/30/13	MEx	2013-2104	WT_IPC-13-32212	9/13/13	UF	0.447
V008A	CDV-SMA-2.42	SS090408	4/30/12	8/26/13	MEx	2013-1271	WT_IPC-13-32195	7/12/13	UF	0.0332
P003	ACID-SMA-2.1	SS100104	11/1/11	9/6/12	MEx	2012-2149	WT_IPLAP-12-13100	8/3/12	UF	0.0249
Q002B	CHQ-SMA-1.03	SS090614	5/1/12	8/26/12	MEx	2012-2066	WT_IPCHA-12-13027	7/4/12	UF	0.0155

<sup>a</sup> COC = Chain of custody.

<sup>b</sup> MEx = Extended Baseline Monitoring: One confirmation monitoring sample is collected to determine if corrective action is required.

<sup>c</sup> UF = Unfiltered.

<sup>d</sup> CAM5 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>e</sup> CAM5 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>f</sup> — = Not applicable.

<sup>g</sup> < = The analyte was not detected in the sample; the reported value is the laboratory reporting limit.

<sup>h</sup> CAM3 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

<sup>i</sup> CAM3 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

Table B-12  
Results for Organic Analytes

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Benzo(a)pyrene EPA:625 (µg/L)	Hexachlorobenzene EPA:625 (µg/L)	Pentachlorophenol EPA:625 (µg/L)	RDX SW-846:8321 (µg/L)	2,4,6-Trinitrotoluene SW-846:8321 (µg/L)	Tetrachlorodibenzodioxin(2,3,7,8-) EPA:1613B (µg/L)
A002	A-SMA-2	SS2732	4/30/12	10/22/13	Mex <sup>b</sup>	2013-1982	WT_IPC-13-32042	9/12/13	UF <sup>c</sup>	— <sup>d</sup>	—	—	0.411	<0.307 <sup>e</sup>	—
A004	A-SMA-2.7	SS120211	8/23/12	—	CAM5 Sample 1 <sup>f</sup>	2013-1982	WT_IPC-13-32036	9/13/13	UF	—	—	—	<0.267	<0.267	—
A006	A-SMA-3	SS100210	10/31/11	8/29/13	Mex	2013-1416	WT_IPC-13-39423	7/25/13	UF	—	—	—	0.192	<0.323	—
A009	A-SMA-6	SS310	4/30/12	9/4/13	MEx	2013-1515	WT_IPC-13-32044	8/4/13	UF	—	—	—	<0.278	<0.278	—
B002	B-SMA-1	SS080301	4/30/12	10/22/13	MEx	2013-1920	WT_IPC-13-32051	9/13/13	UF	—	—	—	<0.272	<0.272	—
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13	CAM5 Sample 2 <sup>g</sup>	2013-1416	WT_IPC-13-39427	7/26/13	UF	<1.19	<11.9	<11.9	—	—	—
C002	CDB-SMA-0.25	SS091311	7/20/12	10/22/13	CAM5 Sample 2	2013-1882	WT_IPC-13-32514	9/10/13	UF	<1	<10	<10	—	—	—
C003	CDB-SMA-0.55	SS091312	4/30/12	10/25/13	MEx	2013-2021	WT_IPC-13-32159	9/13/13	UF	<1.06	<10.6	<10.6	—	—	—
C010	CDB-SMA-4	SS101317	4/30/12	8/27/13	MEx	2013-1377	WT_IPC-13-32138	7/25/13	UF	<1	<10	<10	—	—	—
C010	CDB-SMA-4	SS101317	4/30/12	8/27/13	MEx	2013-1380	WT_IPC-13-32138	7/25/13	UF	—	—	—	—	—	<0.0000105

Table B-12 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Benzo(a)pyrene EPA:625 (µg/L)	Hexachlorobenzene EPA:625 (µg/L)	Pentachlorophenol EPA:625 (µg/L)	RDX SW-846:8321 (µg/L)	2,4,6-Trinitrotoluene SW-846:8321 (µg/L)	Tetrachlorodibenzodioxin(2,3,7,8-) EPA:1613B (µg/L)
E014	2M-SMA-3	SS2439	4/30/12	8/16/13	MEx	2013-1176	WT_IPC-13-32040	7/12/13	UF	—	—	—	<0.282	<0.282	—
H002	3M-SMA-0.4	SS101502	4/30/12	8/27/13	MEx	2013-1239	WT_IPC-13-32065	7/12/13	UF	—	—	—	<0.357	<0.357	—
J023	PJ-SMA-16	SS092325	10/3/11	9/11/13	MEx	2013-1594	WT_IPC-13-32055	8/8/13	UF	—	—	—	<0.263	<0.263	—
J029	STRM-SMA-1.5	SS133007	7/8/13	—	CAM5 Sample 1	2013-1965	WT_IPC-13-34679	9/13/13	UF	<1	<10	<10	—	—	—
M017	M-SMA-12.6	SS2058	4/30/12	10/22/13	MEx	2013-1982	WT_IPC-13-41870	9/13/13	UF	—	—	—	<0.267	<0.267	—
M017	M-SMA-12.6	SS2058	4/30/12	10/22/13	MEx	2013-2007	WT_IPC-13-41870	9/13/13	UF	<1.06	<10.6	<10.6	—	—	—
M022	M-SMA-13	SS205	4/30/12	10/21/13	MEx	2013-1982	WT_IPC-13-32049	9/13/13	UF	—	—	—	<0.266	<0.266	—
Q006	CHQ-SMA-4.1	SS100617	4/30/12	10/22/13	MEx	2013-1970	WT_IPC-13-32034	9/13/13	UF	—	—	—	<0.272	<0.272	—
Q009	CHQ-SMA-6	SS3377	4/30/12	8/29/13	MEx	2013-1416	WT_IPC-13-32047	7/25/13	UF	—	—	—	<0.272	<0.272	—
R005	R-SMA-2.3	SS082704	10/31/11	7/23/13	MEx	2013-988	WT_IPC-13-32052	6/14/13	UF	—	—	—	<0.278	<0.278	—
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13	CAM3 Sample 1 <sup>h</sup>	2013-987	WT_IPC-13-32094	6/14/13	UF	—	—	—	<0.284	<0.284	—
S006	S-SMA-3.6	SS12255	11/27/12	8/13/13	CAM3 Sample 2 <sup>i</sup>	2013-1086	WT_IPC-13-32095	7/2/13	UF	—	—	—	<0.278	<0.278	—
S010	S-SMA-3.95	SS091606	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32088	9/13/13	UF	—	—	—	<0.266	<0.266	—
S010	S-SMA-3.95	SS091606	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32088	9/13/13	UF	<1	<10	<10	—	—	—
V001	CDV-SMA-1.2	SS100421	4/30/12	10/24/13	MEx	2013-2021	WT_IPC-13-32062	9/12/13	UF	—	—	—	0.153	<0.347	—
V002	CDV-SMA-1.3	SS100422	4/30/12	10/25/13	MEx	2013-2021	WT_IPC-13-32063	9/13/13	UF	—	—	—	<0.269	<0.269	—
V005	CDV-SMA-1.7	SS2547	4/30/12	10/25/13	MEx	2013-2021	WT_IPC-13-32045	9/13/13	UF	—	—	—	908	2.93	—
V006	CDV-SMA-2	SS255	4/30/12	8/20/13	MEx	2013-1196	WT_IPC-13-32175	7/12/13	UF	<1	<10	<10	—	—	—
V009	CDV-SMA-2.5	SS090420	4/30/12	8/29/13	MEx	2013-1416	WT_IPC-13-32515	7/26/13	UF	<1.19	<11.9	<11.9	—	—	—
V009A	CDV-SMA-2.51	SS090409	4/30/12	10/25/13	MEx	2013-2021	WT_IPC-13-32087	9/13/13	UF	—	—	—	0.277	<0.27	—
V009A	CDV-SMA-2.51	SS090409	4/30/12	10/25/13	MEx	2013-2021	WT_IPC-13-32087	9/13/13	UF	<1.05	<10.5	<10.5	—	—	—

Table B-12 (continued)

Permitted Feature	SMA	Station Number	Stage Initiate Date	Stage Complete Date	Stage Number	COC <sup>a</sup>	Sample	Sample Date	Field Prep	Benzo(a)pyrene EPA:625 (µg/L)	Hexachlorobenzene EPA:625 (µg/L)	Pentachlorophenol EPA:625 (µg/L)	RDX SW-846:8321 (µg/L)	2,4,6-Trinitrotoluene SW-846:8321 (µg/L)	Tetrachlorodibenzodioxin(2,3,7,8-) EPA:1613B (µg/L)
V012A	CDV-SMA-6.02	SS130423	7/18/12	—	CAM5 Sample 1	2013-2021	WT_IPC-13-40964	9/13/13	UF	—	—	—	0.368	<0.282	—
W011	W-SMA-8	SS2523	4/30/12	10/25/13	MEx	2013-2059	WT_IPC-13-32181	9/12/13	UF	<1	<10	<10	—	—	—
W012	W-SMA-8.7	SS103933	4/30/12	10/25/13	MEx	2013-2008	WT_IPC-13-32071	9/12/13	UF	—	—	—	<0.27	<0.27	—
W013	W-SMA-9.05	SS093914	4/30/12	10/21/13	MEx	2013-2008	WT_IPC-13-32057	9/13/13	UF	—	—	—	0.847	<0.275	—
W021	W-SMA-14.1	SS133939	9/25/12	—	CAM5 Sample 1	2013-2008	WT_IPC-13-32037	9/13/13	UF	—	—	—	<0.281	<0.281	—

<sup>a</sup> COC = Chain of custody.

<sup>b</sup> MEx = Extended Baseline Monitoring: One confirmation monitoring sample is collected to determine if corrective action is required.

<sup>c</sup> UF = Unfiltered.

<sup>d</sup> — = Not applicable.

<sup>e</sup> < = The analyte was not detected in the sample; the reported value is the laboratory reporting limit.

<sup>f</sup> CAM5 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>g</sup> CAM5 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>h</sup> CAM3 Sample 1 = Corrective Action Enhanced Control Monitoring: First confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

<sup>i</sup> CAM3 Sample 2 = Corrective Action Enhanced Control Monitoring: Second confirmation monitoring samples collected following completion of corrective action control measures at High Priority Sites.

**Table B-13**  
**2013 Compliance Results Screened to TALs**

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
2M-SMA-1.43	Metals	MEx <sup>a</sup>	Aluminum	µg/L	1	1	100%	n/a <sup>b</sup>	n/a	n/a	750	1	100%	1500
2M-SMA-1.43	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1 <sup>c</sup>	n/a	n/a	n/a	(3) <sup>d</sup>
2M-SMA-1.43	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
2M-SMA-1.43	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
2M-SMA-1.43	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
2M-SMA-1.43	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
2M-SMA-1.43	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	4.46	0.00446	n/a	n/a	n/a	4.46
2M-SMA-1.43	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.74
2M-SMA-1.43	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
2M-SMA-1.43	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	52	3.47	n/a	n/a	n/a	52
2M-SMA-1.43	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	1.12
2M-SMA-1.43	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.08	0.104	1.4	0	0%	0.08
2M-SMA-1.43	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.25
2M-SMA-1.43	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	4.13	0.138	n/a	n/a	n/a	4.13
2M-SMA-1.43	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
2M-SMA-1.43	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
2M-SMA-1.43	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
2M-SMA-1.43	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.5	0.035	n/a	n/a	n/a	3.5
2M-SMA-1.43	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	3.47
2M-SMA-1.44	Metals	CAM5 <sup>e</sup>	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	39.5
2M-SMA-1.44	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	4	0.267	n/a	n/a	n/a	4
2M-SMA-1.65	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	22.6	1.51	n/a	n/a	n/a	22.6
2M-SMA-2	Metals	CAM5	Aluminum	µg/L	2	2	100%	n/a	n/a	n/a	750	0	0%	17.6 to 70.2
2M-SMA-2	Metals	CAM5	Antimony	µg/L	2	2	100%	640	0	0	n/a	n/a	n/a	1.25 to 1.84
2M-SMA-2	Metals	CAM5	Arsenic	µg/L	2	0	0%	9	0	0	340	0	0%	(5) to (5)
2M-SMA-2	Metals	CAM5	Boron	µg/L	2	2	100%	5000	0	0	n/a	n/a	n/a	29.5 to 36.1
2M-SMA-2	Metals	CAM5	Cadmium	µg/L	2	0	0%	n/a	n/a	n/a	1	0	0%	(1) to (1)
2M-SMA-2	Metals	CAM5	Chromium	µg/L	2	0	0%	n/a	n/a	n/a	210	0	0%	(10) to (10)
2M-SMA-2	Metals	CAM5	Cobalt	µg/L	2	1	50%	1000	0	0	n/a	n/a	n/a	2.43 to (5)
2M-SMA-2	Metals	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	18.5 to 19.9
2M-SMA-2	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	2	1	50%	0.01	0	0	0.022	0	0%	0.00207 to (0.005)
2M-SMA-2	Radionuclides	CAM5	Gross alpha	pCi/L	2	2	100%	15	11.4	0.761	n/a	n/a	n/a	9.51 to 13.7
2M-SMA-2	Metals	CAM5	Lead	µg/L	2	1	50%	n/a	n/a	n/a	17	0	0%	0.891 to (2)
2M-SMA-2	Metals	CAM5	Mercury	µg/L	2	0	0%	0.77	0	0	1.4	0	0%	(0.2) to (0.2)
2M-SMA-2	Metals	CAM5	Nickel	µg/L	2	2	100%	n/a	n/a	n/a	170	0	0%	2.03 to 2.4
2M-SMA-2	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	2	1	50%	30	0.856	0.0285	n/a	n/a	n/a	(0.554) to 1.62
2M-SMA-2	Metals	CAM5	Selenium	µg/L	2	0	0%	5	0	0	20	0	0%	(5) to (5)
2M-SMA-2	Metals	CAM5	Silver	µg/L	2	0	0%	n/a	n/a	n/a	0.5	0	0%	(1) to (1)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
2M-SMA-2	Metals	CAM5	Thallium	µg/L	2	0	0%	6.3	0	0	n/a	n/a	n/a	(2) to (2)
2M-SMA-2	PCBs	CAM5	Total PCB	µg/L	2	2	100%	0.00064	0.0271	42.4	n/a	n/a	n/a	0.0148 to 0.0497
2M-SMA-2	Metals	CAM5	Vanadium	µg/L	2	2	100%	100	0	0	n/a	n/a	n/a	1.8 to 2.18
2M-SMA-2	Metals	CAM5	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	102 to 123
2M-SMA-3	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	3750
2M-SMA-3	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
2M-SMA-3	Metals	MEx	Arsenic	µg/L	1	1	100%	9	2.24	0.249	340	0	0%	2.24
2M-SMA-3	Metals	MEx	Boron	µg/L	1	1	100%	5000	25.1	0.00502	n/a	n/a	n/a	25.1
2M-SMA-3	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
2M-SMA-3	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
2M-SMA-3	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(4.06)
2M-SMA-3	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	6.05
2M-SMA-3	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
2M-SMA-3	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	8.27	0.551	n/a	n/a	n/a	8.27
2M-SMA-3	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	1.74
2M-SMA-3	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
2M-SMA-3	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	3.83
2M-SMA-3	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.487)
2M-SMA-3	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.282)
2M-SMA-3	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
2M-SMA-3	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
2M-SMA-3	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
2M-SMA-3	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.282)
2M-SMA-3	Metals	MEx	Vanadium	µg/L	1	1	100%	100	4.38	0.0438	n/a	n/a	n/a	4.38
2M-SMA-3	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	6.83
3M-SMA-0.4	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	175
3M-SMA-0.4	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
3M-SMA-0.4	Metals	MEx	Arsenic	µg/L	1	1	100%	9	3.06	0.34	340	0	0%	3.06
3M-SMA-0.4	Metals	MEx	Boron	µg/L	1	1	100%	5000	32.3	0.00646	n/a	n/a	n/a	32.3
3M-SMA-0.4	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
3M-SMA-0.4	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
3M-SMA-0.4	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.46	0.00146	n/a	n/a	n/a	1.46
3M-SMA-0.4	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.56
3M-SMA-0.4	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
3M-SMA-0.4	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	120	8	n/a	n/a	n/a	120
3M-SMA-0.4	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
3M-SMA-0.4	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.363	0.471	1.4	0	0%	0.363
3M-SMA-0.4	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	2.89
3M-SMA-0.4	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	9.86	0.329	n/a	n/a	n/a	9.86

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
3M-SMA-0.4	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.357)
3M-SMA-0.4	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
3M-SMA-0.4	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
3M-SMA-0.4	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
3M-SMA-0.4	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.357)
3M-SMA-0.4	Metals	MEx	Vanadium	µg/L	1	1	100%	100	13.9	0.139	n/a	n/a	n/a	13.9
3M-SMA-0.4	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
A-SMA-2	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	1310
A-SMA-2	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
A-SMA-2	Metals	MEx	Arsenic	µg/L	1	1	100%	9	1.93	0.214	340	0	0%	1.93
A-SMA-2	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
A-SMA-2	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
A-SMA-2	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
A-SMA-2	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.81	0.00181	n/a	n/a	n/a	1.81
A-SMA-2	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	23.9
A-SMA-2	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
A-SMA-2	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	23.7	1.58	n/a	n/a	n/a	23.7
A-SMA-2	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	1.58
A-SMA-2	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.189	0.245	1.4	0	0%	0.189
A-SMA-2	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.43
A-SMA-2	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	4.78	0.159	n/a	n/a	n/a	4.78
A-SMA-2	High Explosives	MEx	RDX	µg/L	1	1	100%	200	0.411	0.00206	n/a	n/a	n/a	0.411
A-SMA-2	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
A-SMA-2	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
A-SMA-2	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
A-SMA-2	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.307)
A-SMA-2	Metals	MEx	Vanadium	µg/L	1	1	100%	100	5.62	0.0562	n/a	n/a	n/a	5.62
A-SMA-2	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	8.22
A-SMA-2.7	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	185
A-SMA-2.7	Metals	CAM5	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
A-SMA-2.7	Metals	CAM5	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
A-SMA-2.7	Metals	CAM5	Boron	µg/L	1	1	100%	5000	19.5	0.0039	n/a	n/a	n/a	19.5
A-SMA-2.7	Metals	CAM5	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
A-SMA-2.7	Metals	CAM5	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
A-SMA-2.7	Metals	CAM5	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
A-SMA-2.7	Metals	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.88
A-SMA-2.7	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
A-SMA-2.7	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	175	11.7	n/a	n/a	n/a	175
A-SMA-2.7	Metals	CAM5	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)



Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
A-SMA-2.7	Metals	CAM5	Mercury	µg/L	1	1	100%	0.77	0.162	0.21	1.4	0	0%	0.162
A-SMA-2.7	Metals	CAM5	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.02
A-SMA-2.7	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	1	1	100%	30	5.24	0.175	n/a	n/a	n/a	5.24
A-SMA-2.7	High Explosives	CAM5	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.267)
A-SMA-2.7	Metals	CAM5	Selenium	µg/L	1	1	100%	5	1.6	0.32	20	0	0%	1.6
A-SMA-2.7	Metals	CAM5	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
A-SMA-2.7	Metals	CAM5	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
A-SMA-2.7	High Explosives	CAM5	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.267)
A-SMA-2.7	Metals	CAM5	Vanadium	µg/L	1	1	100%	100	1.32	0.0132	n/a	n/a	n/a	1.32
A-SMA-2.7	Metals	CAM5	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
A-SMA-3	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	997
A-SMA-3	Metals	MEx	Antimony	µg/L	1	1	100%	640	3.52	0.0055	n/a	n/a	n/a	3.52
A-SMA-3	Metals	MEx	Arsenic	µg/L	1	1	100%	9	3.78	0.42	340	0	0%	3.78
A-SMA-3	Metals	MEx	Boron	µg/L	1	1	100%	5000	41.8	0.00836	n/a	n/a	n/a	41.8
A-SMA-3	Metals	MEx	Cadmium	µg/L	1	1	100%	n/a	n/a	n/a	1	0	0%	0.183
A-SMA-3	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
A-SMA-3	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	7.25	0.00725	n/a	n/a	n/a	7.25
A-SMA-3	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	245
A-SMA-3	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.00648	0.648	0.022	0	0%	0.00648
A-SMA-3	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	136	9.07	n/a	n/a	n/a	136
A-SMA-3	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	14.2
A-SMA-3	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	9.04	11.7	1.4	1	100%	9.04
A-SMA-3	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	5.28
A-SMA-3	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	17.7	0.59	n/a	n/a	n/a	17.7
A-SMA-3	High Explosives	MEx	RDX	µg/L	1	1	100%	200	0.192	0.00096	n/a	n/a	n/a	0.192
A-SMA-3	Metals	MEx	Selenium	µg/L	1	1	100%	5	12.1	2.42	20	0	0%	12.1
A-SMA-3	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
A-SMA-3	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
A-SMA-3	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	3.06	4780	n/a	n/a	n/a	3.06
A-SMA-3	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.323)
A-SMA-3	Metals	MEx	Vanadium	µg/L	1	1	100%	100	4.51	0.0451	n/a	n/a	n/a	4.51
A-SMA-3	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	13.2
A-SMA-3.5	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	347
A-SMA-3.5	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
A-SMA-3.5	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
A-SMA-3.5	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
A-SMA-3.5	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
A-SMA-3.5	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
A-SMA-3.5	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.27	0.00227	n/a	n/a	n/a	2.27

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
A-SMA-3.5	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.15
A-SMA-3.5	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
A-SMA-3.5	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	9.37	0.625	n/a	n/a	n/a	9.37
A-SMA-3.5	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
A-SMA-3.5	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.161	0.209	1.4	0	0%	0.161
A-SMA-3.5	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.4
A-SMA-3.5	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	4.49	0.15	n/a	n/a	n/a	4.49
A-SMA-3.5	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
A-SMA-3.5	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
A-SMA-3.5	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
A-SMA-3.5	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.000176	0.275	n/a	n/a	n/a	0.000176
A-SMA-3.5	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.16	0.0216	n/a	n/a	n/a	2.16
A-SMA-3.5	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	4.77
A-SMA-6	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	187
A-SMA-6	Metals	MEx	Antimony	µg/L	1	1	100%	640	1.49	0.00233	n/a	n/a	n/a	1.49
A-SMA-6	Metals	MEx	Arsenic	µg/L	1	1	100%	9	2.79	0.31	340	0	0%	2.79
A-SMA-6	Metals	MEx	Boron	µg/L	1	1	100%	5000	31.1	0.00622	n/a	n/a	n/a	31.1
A-SMA-6	Metals	MEx	Cadmium	µg/L	1	1	100%	n/a	n/a	n/a	1	0	0%	0.128
A-SMA-6	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
A-SMA-6	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	4.92	0.00492	n/a	n/a	n/a	4.92
A-SMA-6	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.86
A-SMA-6	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
A-SMA-6	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	29.6	1.97	n/a	n/a	n/a	29.6
A-SMA-6	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.752
A-SMA-6	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.419	0.544	1.4	0	0%	0.419
A-SMA-6	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	3.18
A-SMA-6	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	8.39	0.28	n/a	n/a	n/a	8.39
A-SMA-6	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.278)
A-SMA-6	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
A-SMA-6	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
A-SMA-6	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
A-SMA-6	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.278)
A-SMA-6	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.28	0.0328	n/a	n/a	n/a	3.28
A-SMA-6	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
B-SMA-0.5	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	485
B-SMA-0.5	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
B-SMA-0.5	Metals	MEx	Arsenic	µg/L	1	1	100%	9	2.08	0.231	340	0	0%	2.08
B-SMA-0.5	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
B-SMA-0.5	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
B-SMA-0.5	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
B-SMA-0.5	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	3.28	0.00328	n/a	n/a	n/a	3.28
B-SMA-0.5	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	1.71
B-SMA-0.5	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
B-SMA-0.5	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	486	32.4	n/a	n/a	n/a	486
B-SMA-0.5	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
B-SMA-0.5	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.464	0.603	1.4	0	0%	0.464
B-SMA-0.5	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.88
B-SMA-0.5	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	20.9	0.697	n/a	n/a	n/a	20.9
B-SMA-0.5	Metals	MEx	Selenium	µg/L	1	1	100%	5	4.03	0.806	20	0	0%	4.03
B-SMA-0.5	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
B-SMA-0.5	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
B-SMA-0.5	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.02	0.0302	n/a	n/a	n/a	3.02
B-SMA-0.5	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
B-SMA-1	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	502
B-SMA-1	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
B-SMA-1	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
B-SMA-1	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
B-SMA-1	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
B-SMA-1	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
B-SMA-1	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1	0.001	n/a	n/a	n/a	1
B-SMA-1	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.26
B-SMA-1	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
B-SMA-1	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	126	8.4	n/a	n/a	n/a	126
B-SMA-1	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.663
B-SMA-1	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.114	0.148	1.4	0	0%	0.114
B-SMA-1	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.2
B-SMA-1	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	5.27	0.176	n/a	n/a	n/a	5.27
B-SMA-1	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.272)
B-SMA-1	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
B-SMA-1	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
B-SMA-1	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
B-SMA-1	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.272)
B-SMA-1	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.65	0.0265	n/a	n/a	n/a	2.65
B-SMA-1	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	4.41
CDB-SMA-0.25	Metals	CAM5	Aluminum	µg/L	2	2	100%	n/a	n/a	n/a	750	0	0%	218 to 329
CDB-SMA-0.25	Semivolatiles	CAM5	Benzo(a)pyrene	µg/L	2	0	0%	5	0	0	n/a	n/a	n/a	(1) to (1.19)
CDB-SMA-0.25	Metals	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	15.2 to 15.2
CDB-SMA-0.25	Semivolatiles	CAM5	Hexachlorobenzene	µg/L	2	0	0%	5	0	0	n/a	n/a	n/a	(10) to (11.9)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
CDB-SMA-0.25	Semivolatiles	CAM5	Pentachlorophenol	µg/L	2	0	0%	n/a	n/a	n/a	19	0	0%	(10) to (11.9)
CDB-SMA-0.25	PCBs	CAM5	Total PCB	µg/L	2	2	100%	0.00064	0.00366	5.71	n/a	n/a	n/a	0.00282 to 0.00474
CDB-SMA-0.55	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	406
CDB-SMA-0.55	Metals	MEx	Antimony	µg/L	1	1	100%	640	1.34	0.00209	n/a	n/a	n/a	1.34
CDB-SMA-0.55	Metals	MEx	Arsenic	µg/L	1	1	100%	9	2.97	0.33	340	0	0%	2.97
CDB-SMA-0.55	Semivolatiles	MEx	Benzo(a)pyrene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(1.06)
CDB-SMA-0.55	Metals	MEx	Boron	µg/L	1	1	100%	5000	64.1	0.0128	n/a	n/a	n/a	64.1
CDB-SMA-0.55	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDB-SMA-0.55	Metals	MEx	Chromium	µg/L	1	1	100%	n/a	n/a	n/a	210	0	0%	3
CDB-SMA-0.55	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
CDB-SMA-0.55	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	16.3
CDB-SMA-0.55	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CDB-SMA-0.55	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	7.57	0.505	n/a	n/a	n/a	7.57
CDB-SMA-0.55	Semivolatiles	MEx	Hexachlorobenzene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(10.6)
CDB-SMA-0.55	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
CDB-SMA-0.55	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.147	0.191	1.4	0	0%	0.147
CDB-SMA-0.55	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	4.81
CDB-SMA-0.55	Semivolatiles	MEx	Pentachlorophenol	µg/L	1	0	0%	n/a	n/a	n/a	19	0	0%	(10.6)
CDB-SMA-0.55	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.915)
CDB-SMA-0.55	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CDB-SMA-0.55	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CDB-SMA-0.55	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDB-SMA-0.55	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.000711	1.11	n/a	n/a	n/a	0.000711
CDB-SMA-0.55	Metals	MEx	Vanadium	µg/L	1	1	100%	100	4.21	0.0421	n/a	n/a	n/a	4.21
CDB-SMA-0.55	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	8.31
CDB-SMA-1	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	367
CDB-SMA-1	Metals	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.81
CDB-SMA-1	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	71.5	4.77	n/a	n/a	n/a	71.5
CDB-SMA-1	PCBs	CAM5	Total PCB	µg/L	1	1	100%	0.00064	0.0721	113	n/a	n/a	n/a	0.0721
CDB-SMA-4	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	384
CDB-SMA-4	Metals	MEx	Antimony	µg/L	1	1	100%	640	5.64	0.00881	n/a	n/a	n/a	5.64
CDB-SMA-4	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CDB-SMA-4	Semivolatiles	MEx	Benzo(a)pyrene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(1)
CDB-SMA-4	Metals	MEx	Boron	µg/L	1	1	100%	5000	38	0.0076	n/a	n/a	n/a	38
CDB-SMA-4	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDB-SMA-4	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CDB-SMA-4	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	4.62	0.00462	n/a	n/a	n/a	4.62
CDB-SMA-4	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	8.14
CDB-SMA-4	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
CDB-SMA-4	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	54.8	3.65	n/a	n/a	n/a	54.8
CDB-SMA-4	Semivolatiles	MEx	Hexachlorobenzene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(10)
CDB-SMA-4	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.656
CDB-SMA-4	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
CDB-SMA-4	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	2.33
CDB-SMA-4	Semivolatiles	MEx	Pentachlorophenol	µg/L	1	0	0%	n/a	n/a	n/a	19	0	0%	(10)
CDB-SMA-4	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	5.19	0.173	n/a	n/a	n/a	5.19
CDB-SMA-4	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CDB-SMA-4	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CDB-SMA-4	Dioxin Furans	MEx	Tetrachlorodibenzodioxin[2,3,7,8-]	µg/L	1	0	0%	0.00001	Nondetect	<1	n/a	n/a	n/a	(0.0000105)
CDB-SMA-4	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDB-SMA-4	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.00437	6.83	n/a	n/a	n/a	0.00437
CDB-SMA-4	Metals	MEx	Vanadium	µg/L	1	1	100%	100	4.76	0.0476	n/a	n/a	n/a	4.76
CDB-SMA-4	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	23
CDV-SMA-1.2	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	233
CDV-SMA-1.2	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
CDV-SMA-1.2	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CDV-SMA-1.2	Metals	MEx	Boron	µg/L	1	1	100%	5000	29.2	0.00584	n/a	n/a	n/a	29.2
CDV-SMA-1.2	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDV-SMA-1.2	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CDV-SMA-1.2	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.68	0.00168	n/a	n/a	n/a	1.68
CDV-SMA-1.2	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.95
CDV-SMA-1.2	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CDV-SMA-1.2	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	4.7	0.313	n/a	n/a	n/a	4.7
CDV-SMA-1.2	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
CDV-SMA-1.2	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
CDV-SMA-1.2	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.35
CDV-SMA-1.2	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.236)
CDV-SMA-1.2	High Explosives	MEx	RDX	µg/L	1	1	100%	200	0.153	0.000765	n/a	n/a	n/a	0.153
CDV-SMA-1.2	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CDV-SMA-1.2	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CDV-SMA-1.2	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDV-SMA-1.2	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.347)
CDV-SMA-1.2	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.66	0.0266	n/a	n/a	n/a	2.66
CDV-SMA-1.2	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
CDV-SMA-1.3	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	157
CDV-SMA-1.3	Metals	MEx	Antimony	µg/L	1	1	100%	640	1.21	0.00189	n/a	n/a	n/a	1.21
CDV-SMA-1.3	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CDV-SMA-1.3	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
CDV-SMA-1.3	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDV-SMA-1.3	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CDV-SMA-1.3	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.51	0.00151	n/a	n/a	n/a	1.51
CDV-SMA-1.3	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	1.68
CDV-SMA-1.3	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CDV-SMA-1.3	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	34.7	2.31	n/a	n/a	n/a	34.7
CDV-SMA-1.3	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
CDV-SMA-1.3	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
CDV-SMA-1.3	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.665
CDV-SMA-1.3	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	9.1	0.303	n/a	n/a	n/a	9.1
CDV-SMA-1.3	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.269)
CDV-SMA-1.3	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CDV-SMA-1.3	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CDV-SMA-1.3	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDV-SMA-1.3	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.269)
CDV-SMA-1.3	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.03	0.0103	n/a	n/a	n/a	1.03
CDV-SMA-1.3	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
CDV-SMA-1.7	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	205
CDV-SMA-1.7	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
CDV-SMA-1.7	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CDV-SMA-1.7	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
CDV-SMA-1.7	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDV-SMA-1.7	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CDV-SMA-1.7	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
CDV-SMA-1.7	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	11
CDV-SMA-1.7	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.0175	1.75	0.022	0	0%	0.0175
CDV-SMA-1.7	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	36.9	2.46	n/a	n/a	n/a	36.9
CDV-SMA-1.7	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	1.57
CDV-SMA-1.7	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.183	0.238	1.4	0	0%	0.183
CDV-SMA-1.7	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.659
CDV-SMA-1.7	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	5.8	0.193	n/a	n/a	n/a	5.8
CDV-SMA-1.7	High Explosives	MEx	RDX	µg/L	1	1	100%	200	908	4.54	n/a	n/a	n/a	908
CDV-SMA-1.7	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CDV-SMA-1.7	Metals	MEx	Silver	µg/L	1	1	100%	n/a	n/a	n/a	0.5	0	0%	0.21
CDV-SMA-1.7	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDV-SMA-1.7	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	1	100%	20	2.93	0.147	n/a	n/a	n/a	2.93
CDV-SMA-1.7	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.38	0.0138	n/a	n/a	n/a	1.38
CDV-SMA-1.7	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
CDV-SMA-2	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	743

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
CDV-SMA-2	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
CDV-SMA-2	Metals	MEx	Arsenic	µg/L	1	1	100%	9	1.77	0.197	340	0	0%	1.77
CDV-SMA-2	Semivolatiles	MEx	Benzo(a)pyrene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(1)
CDV-SMA-2	Metals	MEx	Boron	µg/L	1	1	100%	5000	33.7	0.00674	n/a	n/a	n/a	33.7
CDV-SMA-2	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDV-SMA-2	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CDV-SMA-2	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5.1)
CDV-SMA-2	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.44
CDV-SMA-2	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.00726	0.726	0.022	0	0%	0.00726
CDV-SMA-2	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	18.2	1.21	n/a	n/a	n/a	18.2
CDV-SMA-2	Semivolatiles	MEx	Hexachlorobenzene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(10)
CDV-SMA-2	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
CDV-SMA-2	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
CDV-SMA-2	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.52
CDV-SMA-2	Semivolatiles	MEx	Pentachlorophenol	µg/L	1	0	0%	n/a	n/a	n/a	19	0	0%	(10)
CDV-SMA-2	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.879)
CDV-SMA-2	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CDV-SMA-2	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CDV-SMA-2	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDV-SMA-2	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.64	0.0264	n/a	n/a	n/a	2.64
CDV-SMA-2	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
CDV-SMA-2.42	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	356
CDV-SMA-2.42	Metals	MEx	Antimony	µg/L	1	1	100%	640	2.61	0.00408	n/a	n/a	n/a	2.61
CDV-SMA-2.42	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CDV-SMA-2.42	Metals	MEx	Boron	µg/L	1	1	100%	5000	17.5	0.0035	n/a	n/a	n/a	17.5
CDV-SMA-2.42	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDV-SMA-2.42	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CDV-SMA-2.42	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.95	0.00295	n/a	n/a	n/a	2.95
CDV-SMA-2.42	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	4.37
CDV-SMA-2.42	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CDV-SMA-2.42	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	89.3	5.95	n/a	n/a	n/a	89.3
CDV-SMA-2.42	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
CDV-SMA-2.42	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.143	0.186	1.4	0	0%	0.143
CDV-SMA-2.42	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.816
CDV-SMA-2.42	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	5.14	0.171	n/a	n/a	n/a	5.14
CDV-SMA-2.42	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CDV-SMA-2.42	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CDV-SMA-2.42	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDV-SMA-2.42	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0332	51.9	n/a	n/a	n/a	0.0332

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
CDV-SMA-2.42	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.44	0.0344	n/a	n/a	n/a	3.44
CDV-SMA-2.42	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
CDV-SMA-2.5	Semivolatiles	MEx	Benzo(a)pyrene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(1.19)
CDV-SMA-2.5	Semivolatiles	MEx	Hexachlorobenzene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(11.9)
CDV-SMA-2.5	Semivolatiles	MEx	Pentachlorophenol	µg/L	1	0	0%	n/a	n/a	n/a	19	0	0%	(11.9)
CDV-SMA-2.51	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	491
CDV-SMA-2.51	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
CDV-SMA-2.51	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CDV-SMA-2.51	Semivolatiles	MEx	Benzo(a)pyrene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(1.05)
CDV-SMA-2.51	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
CDV-SMA-2.51	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDV-SMA-2.51	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CDV-SMA-2.51	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
CDV-SMA-2.51	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	1.66
CDV-SMA-2.51	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CDV-SMA-2.51	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	16.4	1.09	n/a	n/a	n/a	16.4
CDV-SMA-2.51	Semivolatiles	MEx	Hexachlorobenzene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(10.5)
CDV-SMA-2.51	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
CDV-SMA-2.51	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
CDV-SMA-2.51	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.736
CDV-SMA-2.51	Semivolatiles	MEx	Pentachlorophenol	µg/L	1	0	0%	n/a	n/a	n/a	19	0	0%	(10.5)
CDV-SMA-2.51	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	1.95	0.065	n/a	n/a	n/a	1.95
CDV-SMA-2.51	High Explosives	MEx	RDX	µg/L	1	1	100%	200	0.277	0.00139	n/a	n/a	n/a	0.277
CDV-SMA-2.51	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CDV-SMA-2.51	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CDV-SMA-2.51	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDV-SMA-2.51	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.27)
CDV-SMA-2.51	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.34	0.0134	n/a	n/a	n/a	1.34
CDV-SMA-2.51	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	4.56
CDV-SMA-6.02	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	309
CDV-SMA-6.02	Metals	CAM5	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
CDV-SMA-6.02	Metals	CAM5	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CDV-SMA-6.02	Metals	CAM5	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
CDV-SMA-6.02	Metals	CAM5	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDV-SMA-6.02	Metals	CAM5	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CDV-SMA-6.02	Metals	CAM5	Cobalt	µg/L	1	1	100%	1000	1.54	0.00154	n/a	n/a	n/a	1.54
CDV-SMA-6.02	Metals	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	1.16
CDV-SMA-6.02	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CDV-SMA-6.02	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	6.97	0.465	n/a	n/a	n/a	6.97



Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
CDV-SMA-6.02	Metals	CAM5	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.596
CDV-SMA-6.02	Metals	CAM5	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
CDV-SMA-6.02	Metals	CAM5	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.621
CDV-SMA-6.02	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	1	1	100%	30	1.64	0.0547	n/a	n/a	n/a	1.64
CDV-SMA-6.02	High Explosives	CAM5	RDX	µg/L	1	1	100%	200	0.368	0.00184	n/a	n/a	n/a	0.368
CDV-SMA-6.02	Metals	CAM5	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CDV-SMA-6.02	Metals	CAM5	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CDV-SMA-6.02	Metals	CAM5	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDV-SMA-6.02	High Explosives	CAM5	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.282)
CDV-SMA-6.02	Metals	CAM5	Vanadium	µg/L	1	0	0%	100	Nondetect	<1	n/a	n/a	n/a	(5)
CDV-SMA-6.02	Metals	CAM5	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
CDV-SMA-7	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	956
CDV-SMA-7	Metals	MEx	Antimony	µg/L	1	1	100%	640	1.23	0.00192	n/a	n/a	n/a	1.23
CDV-SMA-7	Metals	MEx	Arsenic	µg/L	1	1	100%	9	2.31	0.257	340	0	0%	2.31
CDV-SMA-7	Metals	MEx	Boron	µg/L	1	1	100%	5000	30.9	0.00618	n/a	n/a	n/a	30.9
CDV-SMA-7	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CDV-SMA-7	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CDV-SMA-7	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	6.28	0.00628	n/a	n/a	n/a	6.28
CDV-SMA-7	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	4.05
CDV-SMA-7	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.00281	0.281	0.022	0	0%	0.00281
CDV-SMA-7	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	191	12.7	n/a	n/a	n/a	191
CDV-SMA-7	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.831
CDV-SMA-7	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.36	0.468	1.4	0	0%	0.36
CDV-SMA-7	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	3.04
CDV-SMA-7	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	12.1	0.403	n/a	n/a	n/a	12.1
CDV-SMA-7	Metals	MEx	Selenium	µg/L	1	1	100%	5	5.33	1.07	20	0	0%	5.33
CDV-SMA-7	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CDV-SMA-7	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CDV-SMA-7	Metals	MEx	Vanadium	µg/L	1	1	100%	100	4.15	0.0415	n/a	n/a	n/a	4.15
CDV-SMA-7	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	6.58
CHQ-SMA-1.02	Metals	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	1	50%	1.82 to 4.46
CHQ-SMA-1.02	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	2	0	0%	0.01	0	0	0.022	0	0%	(0.005) to (0.005)
CHQ-SMA-1.02	PCBs	CAM5	Total PCB	µg/L	2	2	100%	0.00064	0.0103	16.1	n/a	n/a	n/a	0.0066 to 0.016
CHQ-SMA-3.05	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	123
CHQ-SMA-3.05	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
CHQ-SMA-3.05	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CHQ-SMA-3.05	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
CHQ-SMA-3.05	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CHQ-SMA-3.05	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
CHQ-SMA-3.05	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.93	0.00293	n/a	n/a	n/a	2.93
CHQ-SMA-3.05	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.19
CHQ-SMA-3.05	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CHQ-SMA-3.05	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	60.3	4.02	n/a	n/a	n/a	60.3
CHQ-SMA-3.05	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
CHQ-SMA-3.05	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.072	0.0935	1.4	0	0%	0.072
CHQ-SMA-3.05	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.42
CHQ-SMA-3.05	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	2.29	0.0763	n/a	n/a	n/a	2.29
CHQ-SMA-3.05	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CHQ-SMA-3.05	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CHQ-SMA-3.05	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CHQ-SMA-3.05	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.000851	1.33	n/a	n/a	n/a	0.000851
CHQ-SMA-3.05	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.9	0.039	n/a	n/a	n/a	3.9
CHQ-SMA-3.05	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
CHQ-SMA-4.1	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	268
CHQ-SMA-4.1	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
CHQ-SMA-4.1	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CHQ-SMA-4.1	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
CHQ-SMA-4.1	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CHQ-SMA-4.1	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CHQ-SMA-4.1	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.06	0.00206	n/a	n/a	n/a	2.06
CHQ-SMA-4.1	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.21
CHQ-SMA-4.1	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CHQ-SMA-4.1	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	34.5	2.3	n/a	n/a	n/a	34.5
CHQ-SMA-4.1	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
CHQ-SMA-4.1	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.097	0.126	1.4	0	0%	0.097
CHQ-SMA-4.1	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.702
CHQ-SMA-4.1	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	3.49	0.116	n/a	n/a	n/a	3.49
CHQ-SMA-4.1	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.272)
CHQ-SMA-4.1	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
CHQ-SMA-4.1	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CHQ-SMA-4.1	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CHQ-SMA-4.1	PCBs	MEx	Total PCB	µg/L	1	0	0%	0.00064	Nondetect	<1	n/a	n/a	n/a	(0)
CHQ-SMA-4.1	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.272)
CHQ-SMA-4.1	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.54	0.0154	n/a	n/a	n/a	1.54
CHQ-SMA-4.1	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
CHQ-SMA-4.5	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	237
CHQ-SMA-4.5	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
CHQ-SMA-4.5	Metals	MEx	Arsenic	µg/L	1	1	100%	9	4.02	0.447	340	0	0%	4.02

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
CHQ-SMA-4.5	Metals	MEx	Boron	µg/L	1	1	100%	5000	21.9	0.00438	n/a	n/a	n/a	21.9
CHQ-SMA-4.5	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CHQ-SMA-4.5	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CHQ-SMA-4.5	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	5.11	0.00511	n/a	n/a	n/a	5.11
CHQ-SMA-4.5	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.04
CHQ-SMA-4.5	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CHQ-SMA-4.5	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	103	6.87	n/a	n/a	n/a	103
CHQ-SMA-4.5	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.825
CHQ-SMA-4.5	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.134	0.174	1.4	0	0%	0.134
CHQ-SMA-4.5	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	2.29
CHQ-SMA-4.5	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	19.2	0.64	n/a	n/a	n/a	19.2
CHQ-SMA-4.5	Metals	MEx	Selenium	µg/L	1	1	100%	5	2.02	0.404	20	0	0%	2.02
CHQ-SMA-4.5	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CHQ-SMA-4.5	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CHQ-SMA-4.5	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.43	0.0143	n/a	n/a	n/a	1.43
CHQ-SMA-4.5	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	3.46
CHQ-SMA-6	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	641
CHQ-SMA-6	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
CHQ-SMA-6	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
CHQ-SMA-6	Metals	MEx	Boron	µg/L	1	1	100%	5000	25.5	0.0051	n/a	n/a	n/a	25.5
CHQ-SMA-6	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
CHQ-SMA-6	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
CHQ-SMA-6	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.91	0.00291	n/a	n/a	n/a	2.91
CHQ-SMA-6	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	87.6
CHQ-SMA-6	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
CHQ-SMA-6	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	157	10.5	n/a	n/a	n/a	157
CHQ-SMA-6	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.509
CHQ-SMA-6	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.214	0.278	1.4	0	0%	0.214
CHQ-SMA-6	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.66
CHQ-SMA-6	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	7.83	0.261	n/a	n/a	n/a	7.83
CHQ-SMA-6	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.272)
CHQ-SMA-6	Metals	MEx	Selenium	µg/L	1	1	100%	5	2.78	0.556	20	0	0%	2.78
CHQ-SMA-6	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
CHQ-SMA-6	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
CHQ-SMA-6	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.272)
CHQ-SMA-6	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.89	0.0289	n/a	n/a	n/a	2.89
CHQ-SMA-6	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	5.01
DP-SMA-0.3	Radionuclides	CAM5	Gross alpha	pCi/L	2	2	100%	15	77.7	5.18	n/a	n/a	n/a	68.7 to 87.8
DP-SMA-0.3	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	2	2	100%	30	11.1	0.371	n/a	n/a	n/a	7.52 to 16.5

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
DP-SMA-0.4	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	3540
DP-SMA-0.4	Metals	MEx	Antimony	µg/L	1	1	100%	640	2.53	0.00395	n/a	n/a	n/a	2.53
DP-SMA-0.4	Metals	MEx	Arsenic	µg/L	1	1	100%	9	5.04	0.56	340	0	0%	5.04
DP-SMA-0.4	Metals	MEx	Boron	µg/L	1	1	100%	5000	135	0.027	n/a	n/a	n/a	135
DP-SMA-0.4	Metals	MEx	Cadmium	µg/L	1	1	100%	n/a	n/a	n/a	1	0	0%	0.135
DP-SMA-0.4	Metals	MEx	Chromium	µg/L	1	1	100%	n/a	n/a	n/a	210	0	0%	2.98
DP-SMA-0.4	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.55	0.00155	n/a	n/a	n/a	1.55
DP-SMA-0.4	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	10.7
DP-SMA-0.4	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.00203	0.203	0.022	0	0%	0.00203
DP-SMA-0.4	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	8.71	0.581	n/a	n/a	n/a	8.71
DP-SMA-0.4	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	3.13
DP-SMA-0.4	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.075	0.0974	1.4	0	0%	0.075
DP-SMA-0.4	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	7.19
DP-SMA-0.4	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.854)
DP-SMA-0.4	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
DP-SMA-0.4	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
DP-SMA-0.4	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
DP-SMA-0.4	Metals	MEx	Vanadium	µg/L	1	1	100%	100	10.5	0.105	n/a	n/a	n/a	10.5
DP-SMA-0.4	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	20.6
DP-SMA-2.35	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	120
DP-SMA-2.35	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
DP-SMA-2.35	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
DP-SMA-2.35	Metals	MEx	Boron	µg/L	1	1	100%	5000	15.7	0.00314	n/a	n/a	n/a	15.7
DP-SMA-2.35	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
DP-SMA-2.35	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
DP-SMA-2.35	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
DP-SMA-2.35	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	1.76
DP-SMA-2.35	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
DP-SMA-2.35	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	25	1.67	n/a	n/a	n/a	25
DP-SMA-2.35	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
DP-SMA-2.35	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
DP-SMA-2.35	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.791
DP-SMA-2.35	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	1.7	0.0567	n/a	n/a	n/a	1.7
DP-SMA-2.35	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
DP-SMA-2.35	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
DP-SMA-2.35	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
DP-SMA-2.35	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.33	0.0233	n/a	n/a	n/a	2.33
DP-SMA-2.35	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	4.81
LA-SMA-0.85	Metals	CAM5	Aluminum	µg/L	2	2	100%	n/a	n/a	n/a	750	0	0%	302 to 462

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
LA-SMA-0.85	Metals	CAM5	Antimony	µg/L	2	1	50%	640	0	0	n/a	n/a	n/a	1.28 to (3)
LA-SMA-0.85	Metals	CAM5	Arsenic	µg/L	2	1	50%	9	1.21	0.134	340	0	0%	1.71 to (5)
LA-SMA-0.85	Metals	CAM5	Boron	µg/L	2	2	100%	5000	0	0	n/a	n/a	n/a	26.4 to 28.4
LA-SMA-0.85	Metals	CAM5	Cadmium	µg/L	2	0	0%	n/a	n/a	n/a	1	0	0%	(1) to (1)
LA-SMA-0.85	Metals	CAM5	Chromium	µg/L	2	2	100%	n/a	n/a	n/a	210	0	0%	2.67 to 3.04
LA-SMA-0.85	Metals	CAM5	Cobalt	µg/L	2	2	100%	1000	0	0	n/a	n/a	n/a	1.73 to 3.35
LA-SMA-0.85	Metals	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	22.8 to 26.4
LA-SMA-0.85	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	2	1	50%	0.01	0	0	0.022	0	0%	0.00286 to (0.005)
LA-SMA-0.85	Radionuclides	CAM5	Gross alpha	pCi/L	2	2	100%	15	14.4	0.962	n/a	n/a	n/a	9.1 to 22.9
LA-SMA-0.85	Metals	CAM5	Lead	µg/L	2	2	100%	n/a	n/a	n/a	17	0	0%	1.48 to 1.65
LA-SMA-0.85	Metals	CAM5	Mercury	µg/L	2	0	0%	0.77	0	0	1.4	0	0%	(0.2) to (0.2)
LA-SMA-0.85	Metals	CAM5	Nickel	µg/L	2	2	100%	n/a	n/a	n/a	170	0	0%	3.44 to 3.44
LA-SMA-0.85	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	2	0	0%	30	0	0	n/a	n/a	n/a	(0.4) to (1.37)
LA-SMA-0.85	Metals	CAM5	Selenium	µg/L	2	0	0%	5	0	0	20	0	0%	(5) to (5)
LA-SMA-0.85	Metals	CAM5	Silver	µg/L	2	0	0%	n/a	n/a	n/a	0.5	0	0%	(1) to (1)
LA-SMA-0.85	Metals	CAM5	Thallium	µg/L	2	0	0%	6.3	0	0	n/a	n/a	n/a	(2) to (2)
LA-SMA-0.85	Metals	CAM5	Vanadium	µg/L	2	2	100%	100	0	0	n/a	n/a	n/a	6.4 to 8.37
LA-SMA-0.85	Metals	CAM5	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	56.1 to 78.2
LA-SMA-1	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	800
LA-SMA-1	Metals	CAM5	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
LA-SMA-1	Metals	CAM5	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
LA-SMA-1	Metals	CAM5	Boron	µg/L	1	1	100%	5000	19.3	0.00386	n/a	n/a	n/a	19.3
LA-SMA-1	Metals	CAM5	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
LA-SMA-1	Metals	CAM5	Chromium	µg/L	1	1	100%	n/a	n/a	n/a	210	0	0%	2.77
LA-SMA-1	Metals	CAM5	Cobalt	µg/L	1	1	100%	1000	2.18	0.00218	n/a	n/a	n/a	2.18
LA-SMA-1	Metals	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.03
LA-SMA-1	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
LA-SMA-1	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	434	28.9	n/a	n/a	n/a	434
LA-SMA-1	Metals	CAM5	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	4.19
LA-SMA-1	Metals	CAM5	Mercury	µg/L	1	1	100%	0.77	0.376	0.488	1.4	0	0%	0.376
LA-SMA-1	Metals	CAM5	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.36
LA-SMA-1	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	1	1	100%	30	8.65	0.288	n/a	n/a	n/a	8.65
LA-SMA-1	Metals	CAM5	Selenium	µg/L	1	1	100%	5	4.94	0.988	20	0	0%	4.94
LA-SMA-1	Metals	CAM5	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
LA-SMA-1	Metals	CAM5	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
LA-SMA-1	PCBs	CAM5	Total PCB	µg/L	1	1	100%	0.00064	0.0175	27.3	n/a	n/a	n/a	0.0175
LA-SMA-1	Metals	CAM5	Vanadium	µg/L	1	1	100%	100	4.85	0.0485	n/a	n/a	n/a	4.85
LA-SMA-1	Metals	CAM5	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	6.43
LA-SMA-10.12	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
LA-SMA-10.12	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	4.07	0.271	n/a	n/a	n/a	4.07
LA-SMA-2.1	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	359
LA-SMA-2.1	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
LA-SMA-2.1	Metals	MEx	Arsenic	µg/L	1	1	100%	9	4.31	0.479	340	0	0%	4.31
LA-SMA-2.1	Metals	MEx	Boron	µg/L	1	1	100%	5000	45.5	0.0091	n/a	n/a	n/a	45.5
LA-SMA-2.1	Metals	MEx	Cadmium	µg/L	1	1	100%	n/a	n/a	n/a	1	0	0%	0.201
LA-SMA-2.1	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
LA-SMA-2.1	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
LA-SMA-2.1	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	11.1
LA-SMA-2.1	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.00206	0.206	0.022	0	0%	0.00206
LA-SMA-2.1	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	125	8.33	n/a	n/a	n/a	125
LA-SMA-2.1	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.808
LA-SMA-2.1	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
LA-SMA-2.1	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.43
LA-SMA-2.1	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	1.59	0.053	n/a	n/a	n/a	1.59
LA-SMA-2.1	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
LA-SMA-2.1	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
LA-SMA-2.1	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
LA-SMA-2.1	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	21.1	33000	n/a	n/a	n/a	21.1
LA-SMA-2.1	Metals	MEx	Vanadium	µg/L	1	1	100%	100	4.81	0.0481	n/a	n/a	n/a	4.81
LA-SMA-2.1	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	26.4
LA-SMA-5.51	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	306
LA-SMA-5.51	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
LA-SMA-5.51	Metals	MEx	Arsenic	µg/L	1	1	100%	9	2.62	0.291	340	0	0%	2.62
LA-SMA-5.51	Metals	MEx	Boron	µg/L	1	1	100%	5000	27.1	0.00542	n/a	n/a	n/a	27.1
LA-SMA-5.51	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
LA-SMA-5.51	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
LA-SMA-5.51	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.02	0.00102	n/a	n/a	n/a	1.02
LA-SMA-5.51	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	4.19
LA-SMA-5.51	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
LA-SMA-5.51	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	92.3	6.15	n/a	n/a	n/a	92.3
LA-SMA-5.51	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.738
LA-SMA-5.51	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	2.39	3.1	1.4	1	100%	2.39
LA-SMA-5.51	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.43
LA-SMA-5.51	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	14.3	0.477	n/a	n/a	n/a	14.3
LA-SMA-5.51	Metals	MEx	Selenium	µg/L	1	1	100%	5	3.55	0.71	20	0	0%	3.55
LA-SMA-5.51	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
LA-SMA-5.51	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
LA-SMA-5.51	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0591	92.3	n/a	n/a	n/a	0.0591

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
LA-SMA-5.51	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.92	0.0392	n/a	n/a	n/a	3.92
LA-SMA-5.51	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
LA-SMA-5.54	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	115
LA-SMA-5.54	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
LA-SMA-5.54	Metals	MEx	Arsenic	µg/L	1	1	100%	9	1.75	0.194	340	0	0%	1.75
LA-SMA-5.54	Metals	MEx	Boron	µg/L	1	1	100%	5000	16.7	0.00334	n/a	n/a	n/a	16.7
LA-SMA-5.54	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
LA-SMA-5.54	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
LA-SMA-5.54	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
LA-SMA-5.54	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	1.56
LA-SMA-5.54	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.0019	0.19	0.022	0	0%	0.0019
LA-SMA-5.54	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	356	23.7	n/a	n/a	n/a	356
LA-SMA-5.54	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
LA-SMA-5.54	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.337	0.438	1.4	0	0%	0.337
LA-SMA-5.54	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.07
LA-SMA-5.54	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	4.81	0.16	n/a	n/a	n/a	4.81
LA-SMA-5.54	Metals	MEx	Selenium	µg/L	1	1	100%	5	2.62	0.524	20	0	0%	2.62
LA-SMA-5.54	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
LA-SMA-5.54	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
LA-SMA-5.54	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0598	93.4	n/a	n/a	n/a	0.0598
LA-SMA-5.54	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.75	0.0275	n/a	n/a	n/a	2.75
LA-SMA-5.54	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
LA-SMA-5.91	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	15.7	1.05	n/a	n/a	n/a	15.7
LA-SMA-5.92	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	244
LA-SMA-5.92	Metals	MEx	Antimony	µg/L	1	1	100%	640	1.75	0.00273	n/a	n/a	n/a	1.75
LA-SMA-5.92	Metals	MEx	Arsenic	µg/L	1	1	100%	9	2.87	0.319	340	0	0%	2.87
LA-SMA-5.92	Metals	MEx	Boron	µg/L	1	1	100%	5000	32.9	0.00658	n/a	n/a	n/a	32.9
LA-SMA-5.92	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
LA-SMA-5.92	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
LA-SMA-5.92	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	7.42	0.00742	n/a	n/a	n/a	7.42
LA-SMA-5.92	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	8.32
LA-SMA-5.92	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
LA-SMA-5.92	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	264	17.6	n/a	n/a	n/a	264
LA-SMA-5.92	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
LA-SMA-5.92	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	2.89	3.75	1.4	1	100%	2.89
LA-SMA-5.92	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	5.5
LA-SMA-5.92	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	24.2	0.807	n/a	n/a	n/a	24.2
LA-SMA-5.92	Metals	MEx	Selenium	µg/L	1	1	100%	5	2.2	0.44	20	0	0%	2.2
LA-SMA-5.92	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
LA-SMA-5.92	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
LA-SMA-5.92	Metals	MEx	Vanadium	µg/L	1	1	100%	100	4.02	0.0402	n/a	n/a	n/a	4.02
LA-SMA-5.92	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	3.45
LA-SMA-6.395	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	637
LA-SMA-6.395	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
LA-SMA-6.395	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
LA-SMA-6.395	Metals	MEx	Boron	µg/L	1	1	100%	5000	22.7	0.00454	n/a	n/a	n/a	22.7
LA-SMA-6.395	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
LA-SMA-6.395	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
LA-SMA-6.395	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	3.4	0.0034	n/a	n/a	n/a	3.4
LA-SMA-6.395	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.66
LA-SMA-6.395	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.0033	0.33	0.022	0	0%	0.0033
LA-SMA-6.395	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	300	20	n/a	n/a	n/a	300
LA-SMA-6.395	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	1.33
LA-SMA-6.395	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.63	0.818	1.4	0	0%	0.63
LA-SMA-6.395	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.52
LA-SMA-6.395	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	20.3	0.677	n/a	n/a	n/a	20.3
LA-SMA-6.395	Metals	MEx	Selenium	µg/L	1	1	100%	5	3.66	0.732	20	0	0%	3.66
LA-SMA-6.395	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
LA-SMA-6.395	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
LA-SMA-6.395	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.28	0.0128	n/a	n/a	n/a	1.28
LA-SMA-6.395	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	6.03
M-SMA-1	Metals	CAM5	Aluminum	µg/L	2	2	100%	n/a	n/a	n/a	750	0	0%	91.2 to 173
M-SMA-1	Metals	CAM5	Antimony	µg/L	2	0	0%	640	0	0	n/a	n/a	n/a	(3) to (3)
M-SMA-1	Metals	CAM5	Arsenic	µg/L	2	0	0%	9	0	0	340	0	0%	(5) to (5)
M-SMA-1	Metals	CAM5	Boron	µg/L	2	0	0%	5000	0	0	n/a	n/a	n/a	(50) to (50)
M-SMA-1	Metals	CAM5	Cadmium	µg/L	2	1	50%	n/a	n/a	n/a	1	0	0%	0.944 to (1)
M-SMA-1	Metals	CAM5	Chromium	µg/L	2	0	0%	n/a	n/a	n/a	210	0	0%	(10) to (10)
M-SMA-1	Metals	CAM5	Cobalt	µg/L	2	1	50%	1000	0	0	n/a	n/a	n/a	3.23 to (5)
M-SMA-1	Metals	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	9.66 to 31.2
M-SMA-1	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	2	0	0%	0.01	0	0	0.022	0	0%	(0.005) to (0.005)
M-SMA-1	Radionuclides	CAM5	Gross alpha	pCi/L	2	2	100%	15	19.2	1.28	n/a	n/a	n/a	11.3 to 32.5
M-SMA-1	Metals	CAM5	Lead	µg/L	2	1	50%	n/a	n/a	n/a	17	0	0%	0.717 to (2)
M-SMA-1	Metals	CAM5	Mercury	µg/L	2	0	0%	0.77	0	0	1.4	0	0%	(0.2) to (0.2)
M-SMA-1	Metals	CAM5	Nickel	µg/L	2	2	100%	n/a	n/a	n/a	170	0	0%	0.817 to 2.54
M-SMA-1	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	2	0	0%	30	0	0	n/a	n/a	n/a	(0.614) to (1.99)
M-SMA-1	Metals	CAM5	Selenium	µg/L	2	0	0%	5	0	0	20	0	0%	(5) to (5)
M-SMA-1	Metals	CAM5	Silver	µg/L	2	0	0%	n/a	n/a	n/a	0.5	0	0%	(1) to (1)
M-SMA-1	Metals	CAM5	Thallium	µg/L	2	0	0%	6.3	0	0	n/a	n/a	n/a	(2) to (2)



Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
M-SMA-1	PCBs	CAM5	Total PCB	µg/L	2	2	100%	0.00064	0.0103	16.2	n/a	n/a	n/a	0.0102 to 0.0105
M-SMA-1	Metals	CAM5	Vanadium	µg/L	2	0	0%	100	0	0	n/a	n/a	n/a	(5) to (5)
M-SMA-1	Metals	CAM5	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	53.4 to 264
M-SMA-1.2	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	628
M-SMA-1.2	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
M-SMA-1.2	Metals	MEx	Arsenic	µg/L	1	1	100%	9	10.6	1.18	340	0	0%	10.6
M-SMA-1.2	Metals	MEx	Boron	µg/L	1	1	100%	5000	49.4	0.00988	n/a	n/a	n/a	49.4
M-SMA-1.2	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
M-SMA-1.2	Metals	MEx	Chromium	µg/L	1	1	100%	n/a	n/a	n/a	210	0	0%	33.2
M-SMA-1.2	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
M-SMA-1.2	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	38.4
M-SMA-1.2	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
M-SMA-1.2	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	4.4	0.293	n/a	n/a	n/a	4.4
M-SMA-1.2	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.984
M-SMA-1.2	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
M-SMA-1.2	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	4.43
M-SMA-1.2	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(1.56)
M-SMA-1.2	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
M-SMA-1.2	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
M-SMA-1.2	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
M-SMA-1.2	Metals	MEx	Vanadium	µg/L	1	1	100%	100	42.5	0.425	n/a	n/a	n/a	42.5
M-SMA-1.2	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	28.1
M-SMA-1.22	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	419
M-SMA-1.22	Metals	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.96
M-SMA-10	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	325
M-SMA-10	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
M-SMA-10	Metals	MEx	Arsenic	µg/L	1	1	100%	9	2.11	0.234	340	0	0%	2.11
M-SMA-10	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
M-SMA-10	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
M-SMA-10	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
M-SMA-10	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	4.56	0.00456	n/a	n/a	n/a	4.56
M-SMA-10	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	1.29
M-SMA-10	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
M-SMA-10	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	32.2	2.15	n/a	n/a	n/a	32.2
M-SMA-10	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.657
M-SMA-10	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
M-SMA-10	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.62
M-SMA-10	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	1.61	0.0537	n/a	n/a	n/a	1.61
M-SMA-10	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
M-SMA-10	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
M-SMA-10	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
M-SMA-10	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.7	0.017	n/a	n/a	n/a	1.7
M-SMA-10	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	7.13
M-SMA-12.6	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	164
M-SMA-12.6	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
M-SMA-12.6	Metals	MEx	Arsenic	µg/L	1	1	100%	9	2.01	0.223	340	0	0%	2.01
M-SMA-12.6	Semivolatiles	MEx	Benzo(a)pyrene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(1.06)
M-SMA-12.6	Metals	MEx	Boron	µg/L	1	1	100%	5000	57.4	0.0115	n/a	n/a	n/a	57.4
M-SMA-12.6	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
M-SMA-12.6	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
M-SMA-12.6	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1	0.001	n/a	n/a	n/a	1
M-SMA-12.6	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.99
M-SMA-12.6	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
M-SMA-12.6	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	19.2	1.28	n/a	n/a	n/a	19.2
M-SMA-12.6	Semivolatiles	MEx	Hexachlorobenzene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(10.6)
M-SMA-12.6	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
M-SMA-12.6	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
M-SMA-12.6	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	2.61
M-SMA-12.6	Semivolatiles	MEx	Pentachlorophenol	µg/L	1	0	0%	n/a	n/a	n/a	19	0	0%	(10.6)
M-SMA-12.6	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.796)
M-SMA-12.6	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.267)
M-SMA-12.6	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
M-SMA-12.6	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
M-SMA-12.6	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
M-SMA-12.6	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.267)
M-SMA-12.6	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.09	0.0209	n/a	n/a	n/a	2.09
M-SMA-12.6	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	4.03
M-SMA-13	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	371
M-SMA-13	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
M-SMA-13	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
M-SMA-13	Metals	MEx	Boron	µg/L	1	1	100%	5000	15.1	0.00302	n/a	n/a	n/a	15.1
M-SMA-13	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
M-SMA-13	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
M-SMA-13	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.48	0.00148	n/a	n/a	n/a	1.48
M-SMA-13	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.29
M-SMA-13	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
M-SMA-13	Radionuclides	MEx	Gross alpha	pCi/L	1	0	0%	15	Nondetect	<1	n/a	n/a	n/a	(1.29)
M-SMA-13	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
M-SMA-13	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.17	0.221	1.4	0	0%	0.17
M-SMA-13	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.1
M-SMA-13	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	2.59	0.0863	n/a	n/a	n/a	2.59
M-SMA-13	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.266)
M-SMA-13	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
M-SMA-13	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
M-SMA-13	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
M-SMA-13	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.266)
M-SMA-13	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.38	0.0138	n/a	n/a	n/a	1.38
M-SMA-13	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	3.96
M-SMA-3	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	592
M-SMA-3	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
M-SMA-3	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
M-SMA-3	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
M-SMA-3	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
M-SMA-3	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
M-SMA-3	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(3.96)
M-SMA-3	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.76
M-SMA-3	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
M-SMA-3	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	25.4	1.69	n/a	n/a	n/a	25.4
M-SMA-3	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.539
M-SMA-3	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
M-SMA-3	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.693
M-SMA-3	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	2.59	0.0863	n/a	n/a	n/a	2.59
M-SMA-3	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
M-SMA-3	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
M-SMA-3	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
M-SMA-3	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0181	28.3	n/a	n/a	n/a	0.0181
M-SMA-3	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.64	0.0164	n/a	n/a	n/a	1.64
M-SMA-3	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	23.6
M-SMA-7.9	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	224
M-SMA-7.9	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
M-SMA-7.9	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
M-SMA-7.9	Metals	MEx	Boron	µg/L	1	1	100%	5000	18	0.0036	n/a	n/a	n/a	18
M-SMA-7.9	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
M-SMA-7.9	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
M-SMA-7.9	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.52	0.00152	n/a	n/a	n/a	1.52
M-SMA-7.9	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.47
M-SMA-7.9	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
M-SMA-7.9	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	51.4	3.43	n/a	n/a	n/a	51.4
M-SMA-7.9	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
M-SMA-7.9	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
M-SMA-7.9	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.28
M-SMA-7.9	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	4.04	0.135	n/a	n/a	n/a	4.04
M-SMA-7.9	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
M-SMA-7.9	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
M-SMA-7.9	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
M-SMA-7.9	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.00215	3.36	n/a	n/a	n/a	0.00215
M-SMA-7.9	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.62	0.0362	n/a	n/a	n/a	3.62
M-SMA-7.9	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
PJ-SMA-1.05	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	189
PJ-SMA-1.05	Metals	MEx	Antimony	µg/L	1	1	100%	640	1.18	0.00184	n/a	n/a	n/a	1.18
PJ-SMA-1.05	Metals	MEx	Arsenic	µg/L	1	1	100%	9	3.47	0.386	340	0	0%	3.47
PJ-SMA-1.05	Metals	MEx	Boron	µg/L	1	1	100%	5000	38.2	0.00764	n/a	n/a	n/a	38.2
PJ-SMA-1.05	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
PJ-SMA-1.05	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
PJ-SMA-1.05	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.99	0.00199	n/a	n/a	n/a	1.99
PJ-SMA-1.05	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.7
PJ-SMA-1.05	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
PJ-SMA-1.05	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	11.5	0.767	n/a	n/a	n/a	11.5
PJ-SMA-1.05	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
PJ-SMA-1.05	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
PJ-SMA-1.05	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	2.67
PJ-SMA-1.05	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	5.29	0.176	n/a	n/a	n/a	5.29
PJ-SMA-1.05	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
PJ-SMA-1.05	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
PJ-SMA-1.05	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
PJ-SMA-1.05	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.00872	13.6	n/a	n/a	n/a	0.00872
PJ-SMA-1.05	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.7	0.037	n/a	n/a	n/a	3.7
PJ-SMA-1.05	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
PJ-SMA-11	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	80.3
PJ-SMA-11	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
PJ-SMA-11	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
PJ-SMA-11	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
PJ-SMA-11	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
PJ-SMA-11	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
PJ-SMA-11	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
PJ-SMA-11	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	42.9

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
PJ-SMA-11	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
PJ-SMA-11	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	65.4	4.36	n/a	n/a	n/a	65.4
PJ-SMA-11	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
PJ-SMA-11	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.25	0.325	1.4	0	0%	0.25
PJ-SMA-11	Metals	MEx	Nickel	µg/L	1	0	0%	n/a	n/a	n/a	170	0	0%	(2)
PJ-SMA-11	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	2.09	0.0697	n/a	n/a	n/a	2.09
PJ-SMA-11	Metals	MEx	Selenium	µg/L	1	1	100%	5	3.12	0.624	20	0	0%	3.12
PJ-SMA-11	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
PJ-SMA-11	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
PJ-SMA-11	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.67	0.0267	n/a	n/a	n/a	2.67
PJ-SMA-11	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
PJ-SMA-11.1	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	1040
PJ-SMA-11.1	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
PJ-SMA-11.1	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
PJ-SMA-11.1	Metals	MEx	Boron	µg/L	1	1	100%	5000	16.2	0.00324	n/a	n/a	n/a	16.2
PJ-SMA-11.1	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
PJ-SMA-11.1	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
PJ-SMA-11.1	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.83	0.00183	n/a	n/a	n/a	1.83
PJ-SMA-11.1	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	20.9
PJ-SMA-11.1	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
PJ-SMA-11.1	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	89.4	5.96	n/a	n/a	n/a	89.4
PJ-SMA-11.1	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.908
PJ-SMA-11.1	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.143	0.186	1.4	0	0%	0.143
PJ-SMA-11.1	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.832
PJ-SMA-11.1	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	9.2	0.307	n/a	n/a	n/a	9.2
PJ-SMA-11.1	Metals	MEx	Selenium	µg/L	1	1	100%	5	3.17	0.634	20	0	0%	3.17
PJ-SMA-11.1	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
PJ-SMA-11.1	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
PJ-SMA-11.1	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.42	0.0342	n/a	n/a	n/a	3.42
PJ-SMA-11.1	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	6.36
PJ-SMA-16	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	162
PJ-SMA-16	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
PJ-SMA-16	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
PJ-SMA-16	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
PJ-SMA-16	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
PJ-SMA-16	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
PJ-SMA-16	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.49	0.00249	n/a	n/a	n/a	2.49
PJ-SMA-16	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.31
PJ-SMA-16	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
PJ-SMA-16	Radionuclides	MEx	Gross alpha	pCi/L	1	0	0%	15	Nondetect	<1	n/a	n/a	n/a	(1.84)
PJ-SMA-16	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	1.38
PJ-SMA-16	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
PJ-SMA-16	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.04
PJ-SMA-16	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.93)
PJ-SMA-16	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.263)
PJ-SMA-16	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
PJ-SMA-16	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
PJ-SMA-16	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
PJ-SMA-16	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.263)
PJ-SMA-16	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.29	0.0229	n/a	n/a	n/a	2.29
PJ-SMA-16	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	8.9
PJ-SMA-17	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	130
PJ-SMA-17	Metals	MEx	Antimony	µg/L	1	1	100%	640	7.31	0.0114	n/a	n/a	n/a	7.31
PJ-SMA-17	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
PJ-SMA-17	Metals	MEx	Boron	µg/L	1	1	100%	5000	28.3	0.00566	n/a	n/a	n/a	28.3
PJ-SMA-17	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
PJ-SMA-17	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
PJ-SMA-17	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.76	0.00276	n/a	n/a	n/a	2.76
PJ-SMA-17	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.13
PJ-SMA-17	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
PJ-SMA-17	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	61.6	4.11	n/a	n/a	n/a	61.6
PJ-SMA-17	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
PJ-SMA-17	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
PJ-SMA-17	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	2.32
PJ-SMA-17	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	6.52	0.217	n/a	n/a	n/a	6.52
PJ-SMA-17	Metals	MEx	Selenium	µg/L	1	1	100%	5	1.7	0.34	20	0	0%	1.7
PJ-SMA-17	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
PJ-SMA-17	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
PJ-SMA-17	PCBs	MEx	Total PCB	µg/L	1	0	0%	0.00064	Nondetect	<1	n/a	n/a	n/a	(0)
PJ-SMA-17	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.08	0.0308	n/a	n/a	n/a	3.08
PJ-SMA-17	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	3.46
PJ-SMA-18	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	209
PJ-SMA-18	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
PJ-SMA-18	Metals	MEx	Arsenic	µg/L	1	1	100%	9	1.93	0.214	340	0	0%	1.93
PJ-SMA-18	Metals	MEx	Boron	µg/L	1	1	100%	5000	19.7	0.00394	n/a	n/a	n/a	19.7
PJ-SMA-18	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
PJ-SMA-18	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
PJ-SMA-18	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2	0.002	n/a	n/a	n/a	2

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
PJ-SMA-18	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.36
PJ-SMA-18	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
PJ-SMA-18	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	23.6	1.57	n/a	n/a	n/a	23.6
PJ-SMA-18	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
PJ-SMA-18	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
PJ-SMA-18	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.49
PJ-SMA-18	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	13.1	0.437	n/a	n/a	n/a	13.1
PJ-SMA-18	Metals	MEx	Selenium	µg/L	1	1	100%	5	2.27	0.454	20	0	0%	2.27
PJ-SMA-18	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
PJ-SMA-18	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
PJ-SMA-18	PCBs	MEx	Total PCB	µg/L	1	0	0%	0.00064	Nondetect	<1	n/a	n/a	n/a	(0.000267)
PJ-SMA-18	Metals	MEx	Vanadium	µg/L	1	1	100%	100	5.87	0.0587	n/a	n/a	n/a	5.87
PJ-SMA-18	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
PJ-SMA-19	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	761
PJ-SMA-19	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
PJ-SMA-19	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
PJ-SMA-19	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
PJ-SMA-19	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
PJ-SMA-19	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
PJ-SMA-19	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.94	0.00294	n/a	n/a	n/a	2.94
PJ-SMA-19	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	4.12
PJ-SMA-19	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
PJ-SMA-19	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	51.2	3.41	n/a	n/a	n/a	51.2
PJ-SMA-19	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.566
PJ-SMA-19	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	1.67	2.17	1.4	1	100%	1.67
PJ-SMA-19	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.33
PJ-SMA-19	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	43.7	1.46	n/a	n/a	n/a	43.7
PJ-SMA-19	Metals	MEx	Selenium	µg/L	1	1	100%	5	3.15	0.63	20	0	0%	3.15
PJ-SMA-19	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
PJ-SMA-19	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
PJ-SMA-19	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0204	31.9	n/a	n/a	n/a	0.0204
PJ-SMA-19	Metals	MEx	Vanadium	µg/L	1	1	100%	100	5.82	0.0582	n/a	n/a	n/a	5.82
PJ-SMA-19	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	5.69
PJ-SMA-4.05	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	536
PJ-SMA-4.05	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
PJ-SMA-4.05	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
PJ-SMA-4.05	Metals	MEx	Boron	µg/L	1	1	100%	5000	38.2	0.00764	n/a	n/a	n/a	38.2
PJ-SMA-4.05	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
PJ-SMA-4.05	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
PJ-SMA-4.05	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.26	0.00126	n/a	n/a	n/a	1.26
PJ-SMA-4.05	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.18
PJ-SMA-4.05	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
PJ-SMA-4.05	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	47.2	3.15	n/a	n/a	n/a	47.2
PJ-SMA-4.05	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
PJ-SMA-4.05	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
PJ-SMA-4.05	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.27
PJ-SMA-4.05	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	5.98	0.199	n/a	n/a	n/a	5.98
PJ-SMA-4.05	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
PJ-SMA-4.05	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
PJ-SMA-4.05	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
PJ-SMA-4.05	Metals	MEx	Vanadium	µg/L	1	1	100%	100	11.9	0.119	n/a	n/a	n/a	11.9
PJ-SMA-4.05	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	34.8
Pratt-SMA-1.05	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	943
Pratt-SMA-1.05	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
Pratt-SMA-1.05	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
Pratt-SMA-1.05	Metals	MEx	Boron	µg/L	1	1	100%	5000	17.8	0.00356	n/a	n/a	n/a	17.8
Pratt-SMA-1.05	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
Pratt-SMA-1.05	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
Pratt-SMA-1.05	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.98	0.00198	n/a	n/a	n/a	1.98
Pratt-SMA-1.05	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.67
Pratt-SMA-1.05	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.00175	0.175	0.022	0	0%	0.00175
Pratt-SMA-1.05	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	96.5	6.43	n/a	n/a	n/a	96.5
Pratt-SMA-1.05	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.942
Pratt-SMA-1.05	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.91	1.18	1.4	0	0%	0.91
Pratt-SMA-1.05	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.23
Pratt-SMA-1.05	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	5.67	0.189	n/a	n/a	n/a	5.67
Pratt-SMA-1.05	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
Pratt-SMA-1.05	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
Pratt-SMA-1.05	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
Pratt-SMA-1.05	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.447	698	n/a	n/a	n/a	0.447
Pratt-SMA-1.05	Metals	MEx	Vanadium	µg/L	1	1	100%	100	4.5	0.045	n/a	n/a	n/a	4.5
Pratt-SMA-1.05	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	5.98
P-SMA-0.3	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	299
P-SMA-0.3	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
P-SMA-0.3	Metals	MEx	Arsenic	µg/L	1	1	100%	9	7.76	0.862	340	0	0%	7.76
P-SMA-0.3	Metals	MEx	Boron	µg/L	1	1	100%	5000	41.7	0.00834	n/a	n/a	n/a	41.7
P-SMA-0.3	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
P-SMA-0.3	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)



Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
P-SMA-0.3	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	5.35	0.00535	n/a	n/a	n/a	5.35
P-SMA-0.3	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	9.01
P-SMA-0.3	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	1	100%	0.01	0.0042	0.42	0.022	0	0%	0.0042
P-SMA-0.3	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	28.6	1.91	n/a	n/a	n/a	28.6
P-SMA-0.3	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.805
P-SMA-0.3	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	39.3	51	1.4	1	100%	39.3
P-SMA-0.3	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	4.67
P-SMA-0.3	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	55.6	1.85	n/a	n/a	n/a	55.6
P-SMA-0.3	Metals	MEx	Selenium	µg/L	1	1	100%	5	10.7	2.14	20	0	0%	10.7
P-SMA-0.3	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
P-SMA-0.3	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
P-SMA-0.3	Metals	MEx	Vanadium	µg/L	1	1	100%	100	11.3	0.113	n/a	n/a	n/a	11.3
P-SMA-0.3	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	8.36
P-SMA-3.05	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	75.6
P-SMA-3.05	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
P-SMA-3.05	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
P-SMA-3.05	Metals	MEx	Boron	µg/L	1	1	100%	5000	18.1	0.00362	n/a	n/a	n/a	18.1
P-SMA-3.05	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
P-SMA-3.05	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
P-SMA-3.05	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.87	0.00287	n/a	n/a	n/a	2.87
P-SMA-3.05	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.2
P-SMA-3.05	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
P-SMA-3.05	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	6.64	0.443	n/a	n/a	n/a	6.64
P-SMA-3.05	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
P-SMA-3.05	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.216	0.281	1.4	0	0%	0.216
P-SMA-3.05	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.914
P-SMA-3.05	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.638)
P-SMA-3.05	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
P-SMA-3.05	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
P-SMA-3.05	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
P-SMA-3.05	PCBs	MEx	Total PCB	µg/L	1	1	100%	0.00064	0.0868	136	n/a	n/a	n/a	0.0868
P-SMA-3.05	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.87	0.0387	n/a	n/a	n/a	3.87
P-SMA-3.05	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	4.73
R-SMA-2.3	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	303
R-SMA-2.3	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
R-SMA-2.3	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
R-SMA-2.3	Metals	MEx	Boron	µg/L	1	1	100%	5000	25.1	0.00502	n/a	n/a	n/a	25.1
R-SMA-2.3	Metals	MEx	Cadmium	µg/L	1	1	100%	n/a	n/a	n/a	1	0	0%	0.353
R-SMA-2.3	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
R-SMA-2.3	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	3.28	0.00328	n/a	n/a	n/a	3.28
R-SMA-2.3	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.5
R-SMA-2.3	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
R-SMA-2.3	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	8.37	0.558	n/a	n/a	n/a	8.37
R-SMA-2.3	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	1.29
R-SMA-2.3	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
R-SMA-2.3	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	3
R-SMA-2.3	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	1.46	0.0487	n/a	n/a	n/a	1.46
R-SMA-2.3	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.278)
R-SMA-2.3	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
R-SMA-2.3	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
R-SMA-2.3	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
R-SMA-2.3	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.278)
R-SMA-2.3	Metals	MEx	Vanadium	µg/L	1	0	0%	100	Nondetect	<1	n/a	n/a	n/a	(5)
R-SMA-2.3	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	26.2
S-SMA-2	Metals	CAM3 <sup>f</sup>	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	4.43 to 5.08
S-SMA-2	PCBs	CAM3	Total PCB	µg/L	2	2	100%	0.00064	0.104	162	n/a	n/a	n/a	0.049 to 0.22
S-SMA-2	Metals	CAM3	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	44.2 to 54
S-SMA-2.01	Metals	CAM3	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.66
S-SMA-2.01	PCBs	CAM3	Total PCB	µg/L	1	1	100%	0.00064	0.164	256	n/a	n/a	n/a	0.164
S-SMA-3.6	Metals	CAM3	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	15.4 to 20.8
S-SMA-3.6	High Explosives	CAM3	RDX	µg/L	2	0	0%	200	0	0	n/a	n/a	n/a	(0.278) to (0.284)
S-SMA-3.6	PCBs	CAM3	Total PCB	µg/L	2	2	100%	0.00064	0.00345	5.39	n/a	n/a	n/a	0.0016 to 0.00745
S-SMA-3.6	High Explosives	CAM3	Trinitrotoluene[2,4,6-]	µg/L	2	0	0%	20	0	0	n/a	n/a	n/a	(0.278) to (0.284)
S-SMA-3.6	Metals	CAM3	Zinc	µg/L	2	2	100%	n/a	n/a	n/a	42	2	100%	108 to 135
S-SMA-3.95	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	119
S-SMA-3.95	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
S-SMA-3.95	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
S-SMA-3.95	Semivolatiles	MEx	Benzo(a)pyrene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(1)
S-SMA-3.95	Metals	MEx	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
S-SMA-3.95	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
S-SMA-3.95	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
S-SMA-3.95	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.37	0.00137	n/a	n/a	n/a	1.37
S-SMA-3.95	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	1.8
S-SMA-3.95	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
S-SMA-3.95	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	15.4	1.03	n/a	n/a	n/a	15.4
S-SMA-3.95	Semivolatiles	MEx	Hexachlorobenzene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(10)
S-SMA-3.95	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
S-SMA-3.95	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
S-SMA-3.95	Metals	MEx	Nickel	µg/L	1	0	0%	n/a	n/a	n/a	170	0	0%	(2)
S-SMA-3.95	Semivolatiles	MEx	Pentachlorophenol	µg/L	1	0	0%	n/a	n/a	n/a	19	0	0%	(10)
S-SMA-3.95	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(1.39)
S-SMA-3.95	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.266)
S-SMA-3.95	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
S-SMA-3.95	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
S-SMA-3.95	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
S-SMA-3.95	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.266)
S-SMA-3.95	Metals	MEx	Vanadium	µg/L	1	0	0%	100	Nondetect	<1	n/a	n/a	n/a	(5)
S-SMA-3.95	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	8.07
S-SMA-4.1	PCBs	CAM3	Total PCB	µg/L	1	1	100%	0.00064	0.00155	2.42	n/a	n/a	n/a	0.00155
STRM-SMA-1.05	Metals	CAM5	Copper	µg/L	2	2	100%	n/a	n/a	n/a	4.3	2	100%	9.92 to 10.8
STRM-SMA-1.5	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	104
STRM-SMA-1.5	Metals	CAM5	Antimony	µg/L	1	1	100%	640	4.61	0.0072	n/a	n/a	n/a	4.61
STRM-SMA-1.5	Metals	CAM5	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
STRM-SMA-1.5	Semivolatiles	CAM5	Benzo(a)pyrene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(1)
STRM-SMA-1.5	Metals	CAM5	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
STRM-SMA-1.5	Metals	CAM5	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
STRM-SMA-1.5	Metals	CAM5	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
STRM-SMA-1.5	Metals	CAM5	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
STRM-SMA-1.5	Metals	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.72
STRM-SMA-1.5	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
STRM-SMA-1.5	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	16.1	1.07	n/a	n/a	n/a	16.1
STRM-SMA-1.5	Semivolatiles	CAM5	Hexachlorobenzene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(10)
STRM-SMA-1.5	Metals	CAM5	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
STRM-SMA-1.5	Metals	CAM5	Mercury	µg/L	1	1	100%	0.77	0.072	0.0935	1.4	0	0%	0.072
STRM-SMA-1.5	Metals	CAM5	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.594
STRM-SMA-1.5	Semivolatiles	CAM5	Pentachlorophenol	µg/L	1	0	0%	n/a	n/a	n/a	19	0	0%	(10)
STRM-SMA-1.5	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(1.13)
STRM-SMA-1.5	Metals	CAM5	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
STRM-SMA-1.5	Metals	CAM5	Silver	µg/L	1	1	100%	n/a	n/a	n/a	0.5	1	100%	4.02
STRM-SMA-1.5	Metals	CAM5	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
STRM-SMA-1.5	Metals	CAM5	Vanadium	µg/L	1	1	100%	100	1.45	0.0145	n/a	n/a	n/a	1.45
STRM-SMA-1.5	Metals	CAM5	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
T-SMA-2.85	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	297
T-SMA-2.85	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
T-SMA-2.85	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
T-SMA-2.85	Metals	MEx	Boron	µg/L	1	1	100%	5000	49.8	0.00996	n/a	n/a	n/a	49.8
T-SMA-2.85	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
T-SMA-2.85	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
T-SMA-2.85	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	2.75	0.00275	n/a	n/a	n/a	2.75
T-SMA-2.85	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	5.64
T-SMA-2.85	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
T-SMA-2.85	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	36.6	2.44	n/a	n/a	n/a	36.6
T-SMA-2.85	Metals	MEx	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
T-SMA-2.85	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
T-SMA-2.85	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.02
T-SMA-2.85	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	3.34	0.111	n/a	n/a	n/a	3.34
T-SMA-2.85	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
T-SMA-2.85	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
T-SMA-2.85	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
T-SMA-2.85	Metals	MEx	Vanadium	µg/L	1	1	100%	100	1.28	0.0128	n/a	n/a	n/a	1.28
T-SMA-2.85	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	6.28
T-SMA-4	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	514
T-SMA-4	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
T-SMA-4	Metals	MEx	Arsenic	µg/L	1	1	100%	9	1.98	0.22	340	0	0%	1.98
T-SMA-4	Metals	MEx	Boron	µg/L	1	1	100%	5000	20.1	0.00402	n/a	n/a	n/a	20.1
T-SMA-4	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
T-SMA-4	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
T-SMA-4	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.94	0.00194	n/a	n/a	n/a	1.94
T-SMA-4	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	6.61
T-SMA-4	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
T-SMA-4	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	94.8	6.32	n/a	n/a	n/a	94.8
T-SMA-4	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.727
T-SMA-4	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	2.14	2.78	1.4	1	100%	2.14
T-SMA-4	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.19
T-SMA-4	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	5.38	0.179	n/a	n/a	n/a	5.38
T-SMA-4	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
T-SMA-4	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
T-SMA-4	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
T-SMA-4	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.82	0.0282	n/a	n/a	n/a	2.82
T-SMA-4	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	10.4
W-SMA-1	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	1010
W-SMA-1	Metals	CAM5	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
W-SMA-1	Metals	CAM5	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
W-SMA-1	Metals	CAM5	Boron	µg/L	1	1	100%	5000	18.8	0.00376	n/a	n/a	n/a	18.8
W-SMA-1	Metals	CAM5	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
W-SMA-1	Metals	CAM5	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
W-SMA-1	Metals	CAM5	Cobalt	µg/L	1	1	100%	1000	1.45	0.00145	n/a	n/a	n/a	1.45
W-SMA-1	Metals	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	4.01
W-SMA-1	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
W-SMA-1	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	314	20.9	n/a	n/a	n/a	314
W-SMA-1	Metals	CAM5	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.806
W-SMA-1	Metals	CAM5	Mercury	µg/L	1	1	100%	0.77	0.124	0.161	1.4	0	0%	0.124
W-SMA-1	Metals	CAM5	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	2.28
W-SMA-1	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.953)
W-SMA-1	Metals	CAM5	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
W-SMA-1	Metals	CAM5	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
W-SMA-1	Metals	CAM5	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
W-SMA-1	Metals	CAM5	Vanadium	µg/L	1	1	100%	100	5.01	0.0501	n/a	n/a	n/a	5.01
W-SMA-1	Metals	CAM5	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	12.8
W-SMA-11.7	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	151
W-SMA-11.7	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	39.6	2.64	n/a	n/a	n/a	39.6
W-SMA-14.1	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	233
W-SMA-14.1	Metals	CAM5	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
W-SMA-14.1	Metals	CAM5	Arsenic	µg/L	1	1	100%	9	1.9	0.211	340	0	0%	1.9
W-SMA-14.1	Metals	CAM5	Boron	µg/L	1	0	0%	5000	Nondetect	<1	n/a	n/a	n/a	(50)
W-SMA-14.1	Metals	CAM5	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
W-SMA-14.1	Metals	CAM5	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
W-SMA-14.1	Metals	CAM5	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
W-SMA-14.1	Metals	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	2.66
W-SMA-14.1	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
W-SMA-14.1	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	38.7	2.58	n/a	n/a	n/a	38.7
W-SMA-14.1	Metals	CAM5	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
W-SMA-14.1	Metals	CAM5	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
W-SMA-14.1	Metals	CAM5	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.569
W-SMA-14.1	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	1	1	100%	30	1.97	0.0657	n/a	n/a	n/a	1.97
W-SMA-14.1	High Explosives	CAM5	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.281)
W-SMA-14.1	Metals	CAM5	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
W-SMA-14.1	Metals	CAM5	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
W-SMA-14.1	Metals	CAM5	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
W-SMA-14.1	High Explosives	CAM5	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.281)
W-SMA-14.1	Metals	CAM5	Vanadium	µg/L	1	1	100%	100	2.23	0.0223	n/a	n/a	n/a	2.23
W-SMA-14.1	Metals	CAM5	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
W-SMA-8	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	823
W-SMA-8	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
W-SMA-8	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
W-SMA-8	Semivolatiles	MEx	Benzo(a)pyrene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(1)
W-SMA-8	Metals	MEx	Boron	µg/L	1	1	100%	5000	65.2	0.013	n/a	n/a	n/a	65.2
W-SMA-8	Metals	MEx	Cadmium	µg/L	1	1	100%	n/a	n/a	n/a	1	0	0%	0.353
W-SMA-8	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
W-SMA-8	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.19	0.00119	n/a	n/a	n/a	1.19
W-SMA-8	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	28.1
W-SMA-8	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
W-SMA-8	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	5.31	0.354	n/a	n/a	n/a	5.31
W-SMA-8	Semivolatiles	MEx	Hexachlorobenzene	µg/L	1	0	0%	5	Nondetect	<1	n/a	n/a	n/a	(10)
W-SMA-8	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	2.47
W-SMA-8	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
W-SMA-8	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	6.47
W-SMA-8	Semivolatiles	MEx	Pentachlorophenol	µg/L	1	0	0%	n/a	n/a	n/a	19	0	0%	(10)
W-SMA-8	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0)
W-SMA-8	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
W-SMA-8	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
W-SMA-8	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
W-SMA-8	Metals	MEx	Vanadium	µg/L	1	1	100%	100	5.08	0.0508	n/a	n/a	n/a	5.08
W-SMA-8	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	32.3
W-SMA-8.7	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	1	100%	1920
W-SMA-8.7	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
W-SMA-8.7	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
W-SMA-8.7	Metals	MEx	Boron	µg/L	1	1	100%	5000	16.1	0.00322	n/a	n/a	n/a	16.1
W-SMA-8.7	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
W-SMA-8.7	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
W-SMA-8.7	Metals	MEx	Cobalt	µg/L	1	1	100%	1000	1.32	0.00132	n/a	n/a	n/a	1.32
W-SMA-8.7	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.72
W-SMA-8.7	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
W-SMA-8.7	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	15	8	0.533	n/a	n/a	n/a	8
W-SMA-8.7	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	1.12
W-SMA-8.7	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
W-SMA-8.7	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	2.06
W-SMA-8.7	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	1.77	0.059	n/a	n/a	n/a	1.77
W-SMA-8.7	High Explosives	MEx	RDX	µg/L	1	0	0%	200	Nondetect	<1	n/a	n/a	n/a	(0.27)
W-SMA-8.7	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
W-SMA-8.7	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
W-SMA-8.7	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
W-SMA-8.7	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.27)
W-SMA-8.7	Metals	MEx	Vanadium	µg/L	1	1	100%	100	2.62	0.0262	n/a	n/a	n/a	2.62

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
W-SMA-8.7	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	8.47
W-SMA-8.71	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	424
W-SMA-8.71	Metals	CAM5	Antimony	µg/L	1	1	100%	640	1.34	0.00209	n/a	n/a	n/a	1.34
W-SMA-8.71	Metals	CAM5	Arsenic	µg/L	1	1	100%	9	5.01	0.557	340	0	0%	5.01
W-SMA-8.71	Metals	CAM5	Boron	µg/L	1	1	100%	5000	61.3	0.0123	n/a	n/a	n/a	61.3
W-SMA-8.71	Metals	CAM5	Cadmium	µg/L	1	1	100%	n/a	n/a	n/a	1	0	0%	0.499
W-SMA-8.71	Metals	CAM5	Chromium	µg/L	1	1	100%	n/a	n/a	n/a	210	0	0%	2
W-SMA-8.71	Metals	CAM5	Cobalt	µg/L	1	1	100%	1000	1.06	0.00106	n/a	n/a	n/a	1.06
W-SMA-8.71	Metals	CAM5	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	19.8
W-SMA-8.71	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
W-SMA-8.71	Radionuclides	CAM5	Gross alpha	pCi/L	1	0	0%	15	Nondetect	<1	n/a	n/a	n/a	(2.99)
W-SMA-8.71	Metals	CAM5	Lead	µg/L	1	0	0%	n/a	n/a	n/a	17	0	0%	(2)
W-SMA-8.71	Metals	CAM5	Mercury	µg/L	1	1	100%	0.77	1.51	1.96	1.4	1	100%	1.51
W-SMA-8.71	Metals	CAM5	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	4.54
W-SMA-8.71	Radionuclides	CAM5	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(0.557)
W-SMA-8.71	Metals	CAM5	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
W-SMA-8.71	Metals	CAM5	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
W-SMA-8.71	Metals	CAM5	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
W-SMA-8.71	Metals	CAM5	Vanadium	µg/L	1	1	100%	100	17.2	0.172	n/a	n/a	n/a	17.2
W-SMA-8.71	Metals	CAM5	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	1	100%	55.4
W-SMA-9.05	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	537
W-SMA-9.05	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
W-SMA-9.05	Metals	MEx	Arsenic	µg/L	1	1	100%	9	1.9	0.211	340	0	0%	1.9
W-SMA-9.05	Metals	MEx	Boron	µg/L	1	1	100%	5000	26.8	0.00536	n/a	n/a	n/a	26.8
W-SMA-9.05	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
W-SMA-9.05	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
W-SMA-9.05	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
W-SMA-9.05	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	0	0%	3.49
W-SMA-9.05	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
W-SMA-9.05	Radionuclides	MEx	Gross alpha	pCi/L	1	0	0%	15	Nondetect	<1	n/a	n/a	n/a	(3.12)
W-SMA-9.05	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	0.501
W-SMA-9.05	Metals	MEx	Mercury	µg/L	1	0	0%	0.77	Nondetect	<1	1.4	0	0%	(0.2)
W-SMA-9.05	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	1.66
W-SMA-9.05	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	1	100%	30	1.46	0.0487	n/a	n/a	n/a	1.46
W-SMA-9.05	High Explosives	MEx	RDX	µg/L	1	1	100%	200	0.847	0.00424	n/a	n/a	n/a	0.847
W-SMA-9.05	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
W-SMA-9.05	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
W-SMA-9.05	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
W-SMA-9.05	High Explosives	MEx	Trinitrotoluene[2,4,6-]	µg/L	1	0	0%	20	Nondetect	<1	n/a	n/a	n/a	(0.275)

Table B-13 (continued)

SMA	Suite	Stage	Analyte	Unit of Measure	Total Analyses	No. of Detects	Percent of Detects	ATAL	Geo Mean	Geo Mean/ ATAL Ratio	MTAL	No. of MTAL Exceedances	Percent MTAL Exceedances	Concentration Range
W-SMA-9.05	Metals	MEx	Vanadium	µg/L	1	1	100%	100	3.17	0.0317	n/a	n/a	n/a	3.17
W-SMA-9.05	Metals	MEx	Zinc	µg/L	1	0	0%	n/a	n/a	n/a	42	0	0%	(10)
W-SMA-9.7	Metals	MEx	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	344
W-SMA-9.7	Metals	MEx	Antimony	µg/L	1	0	0%	640	Nondetect	<1	n/a	n/a	n/a	(3)
W-SMA-9.7	Metals	MEx	Arsenic	µg/L	1	0	0%	9	Nondetect	<1	340	0	0%	(5)
W-SMA-9.7	Metals	MEx	Boron	µg/L	1	1	100%	5000	43.2	0.00864	n/a	n/a	n/a	43.2
W-SMA-9.7	Metals	MEx	Cadmium	µg/L	1	0	0%	n/a	n/a	n/a	1	0	0%	(1)
W-SMA-9.7	Metals	MEx	Chromium	µg/L	1	0	0%	n/a	n/a	n/a	210	0	0%	(10)
W-SMA-9.7	Metals	MEx	Cobalt	µg/L	1	0	0%	1000	Nondetect	<1	n/a	n/a	n/a	(5)
W-SMA-9.7	Metals	MEx	Copper	µg/L	1	1	100%	n/a	n/a	n/a	4.3	1	100%	9.74
W-SMA-9.7	Cyanide	MEx	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
W-SMA-9.7	Radionuclides	MEx	Gross alpha	pCi/L	1	1	100%	3.55	3.55	0.237	n/a	n/a	n/a	3.55
W-SMA-9.7	Metals	MEx	Lead	µg/L	1	1	100%	n/a	n/a	n/a	17	0	0%	1.48
W-SMA-9.7	Metals	MEx	Mercury	µg/L	1	1	100%	0.77	0.352	0.457	1.4	0	0%	0.352
W-SMA-9.7	Metals	MEx	Nickel	µg/L	1	1	100%	n/a	n/a	n/a	170	0	0%	0.738
W-SMA-9.7	Radionuclides	MEx	Radium-226 and Radium-228	pCi/L	1	0	0%	30	Nondetect	<1	n/a	n/a	n/a	(1.24)
W-SMA-9.7	Metals	MEx	Selenium	µg/L	1	0	0%	5	Nondetect	<1	20	0	0%	(5)
W-SMA-9.7	Metals	MEx	Silver	µg/L	1	0	0%	n/a	n/a	n/a	0.5	0	0%	(1)
W-SMA-9.7	Metals	MEx	Thallium	µg/L	1	0	0%	6.3	Nondetect	<1	n/a	n/a	n/a	(2)
W-SMA-9.7	Metals	MEx	Vanadium	µg/L	1	1	100%	100	4.1	0.041	n/a	n/a	n/a	4.1
W-SMA-9.7	Metals	MEx	Zinc	µg/L	1	1	100%	n/a	n/a	n/a	42	0	0%	11.4
W-SMA-9.9	Metals	CAM5	Aluminum	µg/L	1	1	100%	n/a	n/a	n/a	750	0	0%	199
W-SMA-9.9	Cyanide	CAM5	Cyanide, weak acid dissociable	mg/L	1	0	0%	0.01	Nondetect	<1	0.022	0	0%	(0.005)
W-SMA-9.9	Radionuclides	CAM5	Gross alpha	pCi/L	1	1	100%	15	74.4	4.96	n/a	n/a	n/a	74.4

Note: Shading indicates TAL exceedance.

<sup>a</sup> MEx = Extended Baseline Monitoring: One confirmation monitoring sample is collected to determine if corrective action is required.

<sup>b</sup> n/a = Not applicable.

<sup>c</sup> < = The analyte was not detected in the sample; the reported value is the laboratory reporting limit.

<sup>d</sup> Parentheses indicate the analyte is not detected.

<sup>e</sup> CAM5 = Corrective Action Enhanced Control Monitoring: Two confirmation monitoring samples are collected following completion of corrective action control measures at Moderate Priority Sites.

<sup>f</sup> CAM3 = Corrective Action Enhanced Control Monitoring: Two confirmation monitoring samples are collected following completion of corrective action control measures at High Priority Sites.





# **Appendix C**

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## *Control Measures*



SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
R-SMA-0.5	Baseline	16-Dec-10	R00103030006	Berm	Log Berm	— <sup>e</sup>	X <sup>f</sup>	—	X
	Additional	n/a <sup>g</sup>	R00102040025	Permanent Vegetation	Established Vegetation	X	—	—	X
			R00103060013	Berm	Straw Wattles	—	X	—	X
			R00103060017	Berm	Straw Wattles	—	X	X	—
			R00103060018	Berm	Straw Wattles	—	X	—	X
			R00103060019	Berm	Straw Wattles	—	X	—	X
			R00103060021	Berm	Straw Wattles	—	X	X	—
			R00103060022	Berm	Straw Wattles	—	X	X	—
			R00103060023	Berm	Straw Wattles	—	X	X	—
			R00103060024	Berm	Straw Wattles	—	X	—	X
			R00103060026	Berm	Straw Wattles	—	X	—	X
R00103060027	Berm	Straw Wattles	—	X	—	X			
R-SMA-1	Baseline	12-May-11	R00204060006	Channel/Swale	Riprap	X	—	X	—
			R00204060007	Channel/Swale	Riprap	X	—	X	—
			R00206010005	Check Dam	Rock Check Dam	—	X	—	X
			R00207010002	Gabion	Gabions	—	X	X	—
			R00207020004	Gabion	Gabion Blanket	X	—	X	—
Additional	n/a	R00202040008	Permanent Vegetation	Established Vegetation	X	—	—	X	
R-SMA-1.95	Enhanced	TBD <sup>h</sup>	R00303140009	Berm	Coir Log	—	X	—	X
			R00303140010	Berm	Coir Log	—	X	—	X
			R00303140011	Berm	Coir Log	—	X	—	X
			R00303140012	Berm	Coir Log	—	X	—	X
			R00303140013	Berm	Coir Log	—	X	—	X
			R00303140014	Berm	Coir Log	—	X	—	X
			R00303140015	Berm	Coir Log	—	X	—	X
			R00303140016	Berm	Coir Log	—	X	—	X
			R00303140017	Berm	Coir Log	—	X	—	X
R00303140018	Berm	Coir Log	—	X	—	X			

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
R-SMA-1.95	Baseline	16-Dec-10	R00303010006	Berm	Earthen Berm	—	X	—	X
			R00303060005	Berm	Straw Wattles	—	X	—	X
			R00304010003	Channel/Swale	Earthen Channel/Swale	X	—	X	—
	Additional	n/a	R00302040008	Permanent Vegetation	Established Vegetation	X	—	—	X
			R00303060007	Berm	Straw Wattles	—	X	—	X
R-SMA-2.05	Baseline	22-Nov-10	R00406030002	Check Dam	Juniper Bales	—	X	—	X
			R00406030003	Check Dam	Juniper Bales	—	X	—	X
	Additional	n/a	R00402040005	Permanent Vegetation	Established Vegetation	X	—	—	X
R-SMA-2.3	Additional	n/a	R00502040004	Permanent Vegetation	Established Vegetation	X	—	—	X
			R00503060005	Berm	Straw Wattles	—	X	—	X
			R00503060006	Berm	Straw Wattles	—	X	—	X
			R00503060007	Berm	Straw Wattles	—	X	—	X
R-SMA-2.5	Baseline	16-Dec-10	R00604060004	Channel/Swale	Riprap	X	—	X	—
			R00606010003	Check Dam	Rock Check Dam	—	X	—	X
			R00606010005	Check Dam	Rock Check Dam	—	X	X	—
			R00606010006	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	R00602040007	Permanent Vegetation	Established Vegetation	X	—	—	X
B-SMA-0.5	Baseline	16-Dec-10	B00103010006	Berm	Earthen Berm	—	X	X	—
			B00103010007	Berm	Earthen Berm	—	X	—	X
			B00104010005	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			B00104040003	Channel/Swale	Culvert	X	—	X	—
			B00106010008	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	B00101010011	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			B00102040012	Permanent Vegetation	Established Vegetation	X	—	—	X
			B00103060010	Berm	Straw Wattles	—	X	X	—
			B00104060009	Channel/Swale	Riprap	X	—	X	—

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
B-SMA-1	Baseline	16-Dec-10	B00206010003	Check Dam	Rock Check Dam	—	X	X	—
			B00206010004	Check Dam	Rock Check Dam	—	X	X	—
			B00206010005	Check Dam	Rock Check Dam	—	X	—	X
			B00206010006	Check Dam	Rock Check Dam	—	X	—	X
			B00206010007	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	B00202040008	Permanent Vegetation	Established Vegetation	X	—	—	X
ACID-SMA-1.05	Baseline	22-Nov-10	P00103010005	Berm	Earthen Berm	—	X	—	X
			P00103090003	Berm	Curbing	—	X	X	—
			P00104040004	Channel/Swale	Culvert	X	—	X	—
ACID-SMA-2	Baseline	22-Nov-10	P00203010004	Berm	Earthen Berm	—	X	—	X
			P00206010002	Check Dam	Rock Check Dam	—	X	X	—
			P00206010013	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	P00202040018	Permanent Vegetation	Established Vegetation	X	—	—	X
			P00203060015	Berm	Straw Wattles	—	X	X	—
			P00203060016	Berm	Straw Wattles	—	X	X	—
P00203060017	Berm	Straw Wattles	—	X	X	—			
ACID-SMA-2.01	Baseline	16-Dec-10	P002A03010004	Berm	Earthen Berm	—	X	X	—
			P002A04060002	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	P002A02040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			P002A03060006	Berm	Straw Wattles	—	X	—	X
ACID-SMA-2.1	Baseline	22-Nov-10	P00302030012	Permanent Vegetation	Vegetative Buffer Strip	X	X	—	X
			P00303010002	Berm	Earthen Berm	—	X	X	—
			P00303010009	Berm	Earthen Berm	—	X	X	—
			P00304060011	Channel/Swale	Riprap	X	—	X	—
			P00306010004	Check Dam	Rock Check Dam	—	X	X	—
			P00306010015	Check Dam	Rock Check Dam	—	X	X	—

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
ACID-SMA-2.1	Additional	n/a	P00303060016	Berm	Straw Wattles	—	X	X	—
			P00303060017	Berm	Straw Wattles	—	X	X	—
			P00303060018	Berm	Straw Wattles	—	X	X	—
			P00302040019	Permanent Vegetation	Established Vegetation	X	—	—	X
P-SMA-0.3	Baseline	16-Dec-10	P00403010002	Berm	Earthen Berm	—	X	X	—
			P00403010006	Berm	Earthen Berm	—	X	—	X
			P00404040003	Channel/Swale	Culvert	X	—	X	—
	Additional	n/a	P00402040008	Permanent Vegetation	Established Vegetation	X	—	—	X
P-SMA-1	Baseline	22-Nov-10	P00503080003	Berm	Retaining Wall	—	X	—	X
			P00504020005	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	—	X
			P00504020009	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			P00504040004	Channel/Swale	Culvert	X	—	X	—
			P00504040016	Channel/Swale	Culvert	X	—	X	—
			P00504060002	Channel/Swale	Riprap	X	—	—	X
			P00504060013	Channel/Swale	Riprap	X	—	—	X
	Additional	n/a	P00501060020	Seed and Mulch	Erosion Control Blanket	X	—	—	—
			P00502040040	Permanent Vegetation	Established Vegetation	X	—	—	X
			P00503010018	Berm	Earthen Berm	—	X	—	X
			P00503010019	Berm	Earthen Berm	—	X	—	X
			P00503060021	Berm	Straw Wattles	—	X	—	X
			P00503060022	Berm	Straw Wattles	—	X	—	X
			P00503060025	Berm	Straw Wattles	—	X	—	X
			P00503060030	Berm	Straw Wattles	—	X	—	X
			P00503060031	Berm	Straw Wattles	—	X	—	X
			P00503060033	Berm	Straw Wattles	—	X	—	X
P00503060034	Berm	Straw Wattles	—	X	—	X			
P00503060035	Berm	Straw Wattles	—	X	—	X			
P00503060036	Berm	Straw Wattles	—	X	—	X			

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P-SMA-1	Additional	n/a	P00503060037	Berm	Straw Wattles	—	X	—	X
			P00503060038	Berm	Straw Wattles	—	X	—	X
			P00503060039	Berm	Straw Wattles	—	X	—	X
			P00503120017	Berm	Rock Berm	—	X	—	X
P-SMA-2	Baseline	22-Nov-10	P00603020009	Berm	Base Course Berm	—	X	X	—
			P00603020010	Berm	Base Course Berm	—	X	X	—
			P00603120008	Berm	Rock Berm	—	X	—	X
			P00604010001	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			P00604020006	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			P00604060002	Channel/Swale	Riprap	X	—	X	—
	P00604060003	Channel/Swale	Riprap	X	—	X	—		
	Additional	n/a	P00602040011	Permanent Vegetation	Established Vegetation	X	—	—	X
P-SMA-2.15	Baseline	16-Dec-10	P00704060003	Channel/Swale	Riprap	X	—	X	—
			P00704060006	Channel/Swale	Riprap	X	—	—	X
			P00706010004	Check Dam	Rock Check Dam	—	X	X	—
	P00706010005	Check Dam	Rock Check Dam	—	X	—	X		
	Additional	n/a	P00702040007	Permanent Vegetation	Established Vegetation	X	—	—	X
P-SMA-2.2	Baseline	12-May-11	P00803020012	Berm	Base Course Berm	—	X	X	—
			P00804020005	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	—	X
			P00804060001	Channel/Swale	Riprap	X	—	X	—
			P00804060006	Channel/Swale	Riprap	X	—	—	X
			P00804080017	Channel/Swale	Turf-Reinforced Matting-Lined Swale	X	—	X	—
			P00806010018	Check Dam	Rock Check Dam	—	X	X	—
			P00806010019	Check Dam	Rock Check Dam	—	X	X	—
			P00806010020	Check Dam	Rock Check Dam	—	X	X	—
			P00806010021	Check Dam	Rock Check Dam	—	X	X	—
P00806010022	Check Dam	Rock Check Dam	—	X	X	—			
P-SMA-2.2	Additional	n/a	P00802040025	Permanent Vegetation	Established Vegetation	X	—	—	X
			P00803060026	Berm	Straw Wattles	—	X	X	—



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P-SMA-3.05	Baseline	16-Dec-10	P00903010008	Berm	Earthen Berm	—	X	—	X
			P00903010009	Berm	Earthen Berm	—	X	—	X
			P00903020007	Berm	Base Course Berm	—	X	—	X
			P00904050005	Channel/Swale	Water Bar	X	—	X	—
			P00904050006	Channel/Swale	Water Bar	X	—	X	—
	Additional	n/a	P00901010011	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			P00902040012	Permanent Vegetation	Established Vegetation	X	—	—	X
P00903010010			Berm	Earthen Berm	—	X	—	X	
LA-SMA-0.85	Baseline	22-Nov-10	L00103090006	Berm	Curbing	—	X	X	—
			L00107010004	Gabion	Gabions	—	X	—	X
	Enhanced	23-Oct-12	L00103010008	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	L00102040009	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-0.9	Baseline	16-Dec-10	L00203090002	Berm	Curbing	—	X	X	—
			L00203090003	Berm	Curbing	—	X	X	—
			L00204040004	Channel/Swale	Culvert	X	—	X	—
	Additional	n/a	L00202040020	Permanent Vegetation	Established Vegetation	X	—	—	X
			L00203010013	Berm	Earthen Berm	—	X	—	X
			L00203010014	Berm	Earthen Berm	—	X	—	X
			L00203010015	Berm	Earthen Berm	—	X	—	X
			L00203010016	Berm	Earthen Berm	—	X	—	X
			L00203010017	Berm	Earthen Berm	—	X	—	X
L00203010018	Berm	Earthen Berm	—	X	—	X			
LA-SMA-1	Baseline	16-Dec-10	L00304020005	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			L00304040004	Channel/Swale	Culvert	X	—	X	—
	Enhanced	27-Nov-12	L00303010019	Berm	Earthen Berm	—	X	—	X
			L00304030020	Channel/Swale	Rock Channel/Swale	X	—	X	—
			L00304040021	Channel/Swale	Culvert	X	—	X	—
L00304060022	Channel/Swale	Riprap	X	—	X	—			

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LA-SMA-1	Additional	n/a	L00302040025	Permanent Vegetation	Established Vegetation	X	—	—	X
			L00303060016	Berm	Straw Wattles	—	X	X	—
			L00303060017	Berm	Straw Wattles	—	X	X	—
			L00303100015	Berm	Gravel Bags	—	X	X	—
			L00303120018	Berm	Rock Berm	—	X	—	X
			L00304060023	Channel/Swale	Riprap	X	—	X	—
			L00304060024	Channel/Swale	Riprap	X	—	X	—
LA-SMA-1.1	Baseline	16-Dec-10	L00404060003	Channel/Swale	Riprap	X	—	—	X
			L00406010004	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	L00402040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			L00404060005	Channel/Swale	Riprap	X	—	X	—
LA-SMA-1.25	Baseline	22-Nov-10	L00503020001	Berm	Base Course Berm	—	X	X	—
	Enhanced	30-Aug-12	L00503010007	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	L00502040008	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-2.1	Baseline	12-May-11	L00603030007	Berm	Log Berm	—	X	—	X
			L00603080002	Berm	Retaining Wall	—	X	X	—
			L00604060006	Channel/Swale	Riprap	X	—	—	X
	Additional	n/a	L00601060009	Seed and Mulch	Erosion Control Blanket	X	—	—	—
			L00602040011	Permanent Vegetation	Established Vegetation	X	—	—	X
			L00604010010	Channel/Swale	Earthen Channel/Swale	X	—	X	—
LA-SMA-2.3	Baseline	16-Dec-10	L00703080002	Berm	Retaining Wall	—	X	X	—
	Additional	n/a	L00702040006	Permanent Vegetation	Established Vegetation	X	—	—	X
			L00703060005	Berm	Straw Wattles	—	X	X	—
			L00703060007	Berm	Straw Wattles	—	X	—	X
LA-SMA-3.1	Baseline	22-Nov-10	L00804040004	Channel/Swale	Culvert	X	—	X	—
	Additional	n/a	L00802040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			L00803060008	Berm	Straw Wattles	—	X	—	X
LA-SMA-3.9	Baseline	16-Dec-10	L00904040002	Channel/Swale	Culvert	X	—	X	—
	Additional	n/a	L00902040005	Permanent Vegetation	Established Vegetation	X	—	—	X
			L00903060004	Berm	Straw Wattles	—	X	—	X

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
LA-SMA-4.1	Baseline	22-Nov-10	L01004060004	Channel/Swale	Riprap	X	—	X	—
			L01004060005	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	L01002040010	Permanent Vegetation	Established Vegetation	X	—	—	X
			L01006010009	Check Dam	Rock Check Dam	—	X	—	X
LA-SMA-4.2	Baseline	22-Nov-10	L01104050003	Channel/Swale	Water Bar	X	—	X	—
			L01104050004	Channel/Swale	Water Bar	X	—	X	—
			L01104050006	Channel/Swale	Water Bar	X	—	X	—
			L01104050007	Channel/Swale	Water Bar	X	—	X	—
			L01106010002	Check Dam	Rock Check Dam	—	X	—	X
	L01106010005	Check Dam	Rock Check Dam	—	X	—	X		
	Additional	n/a	L01102040008	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-5.01	Baseline	16-Dec-10	L01203010004	Berm	Earthen Berm	—	X	—	X
			L01203010007	Berm	Earthen Berm	—	X	X	—
			L01203120010	Berm	Rock Berm	—	X	X	—
			L01204050008	Channel/Swale	Water Bar	X	—	X	—
			L01204050009	Channel/Swale	Water Bar	X	—	X	—
	L01204060006	Channel/Swale	Riprap	X	—	—	X		
	Additional	n/a	L01202040012	Permanent Vegetation	Established Vegetation	X	—	—	X
L01203060011			Berm	Straw Wattles	—	X	X	—	
LA-SMA-5.02	Baseline	12-May-11	L012A03010002	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	L012A02040012	Permanent Vegetation	Established Vegetation	X	—	—	X
			L012A03060016	Berm	Straw Wattles	—	X	—	X
			L012A03060017	Berm	Straw Wattles	—	X	—	X
L012A03060018	Berm	Straw Wattles	—	X	—	X			
LA-SMA-5.2	Additional	n/a	L01302040005	Permanent Vegetation	Established Vegetation	X	—	—	X
			L01306020006	Check Dam	Log Check Dam	—	X	—	X
			L01306020007	Check Dam	Log Check Dam	—	X	—	X

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
LA-SMA-5.31	Enhanced	27-Jul-12	L01503120010	Berm	Rock Berm	—	X	X	—
			L01503120011	Berm	Rock Berm	—	X	—	X
	Additional	n/a	L01501010015	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			L01503010012	Berm	Earthen Berm	—	X	X	—
			L01504040014	Channel/Swale	Culvert	X	—	—	—
			L01504060013	Channel/Swale	Riprap	X	—	X	—
LA-SMA-5.33	Enhanced	30-Jul-12	L01603010009	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	L01602040014	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-5.35	Enhanced	27-Nov-12	L01408030010	Cap	Concrete/Asphalt Cap	X	—	X	—
			L01408030014	Cap	Concrete/Asphalt Cap	X	—	—	X
			L01408040011	Cap	Metal Cap	X	—	X	—
			L01408040012	Cap	Metal Cap	X	—	X	—
			L01408040013	Cap	Metal Cap	X	—	X	—
LA-SMA-5.361	Baseline	27-Apr-11	L01703010002	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	L01702040010	Permanent Vegetation	Established Vegetation	X	—	—	X
			L01706010009	Check Dam	Rock Check Dam	—	X	—	X
LA-SMA-5.362	Baseline	27-Apr-11	L017A03010005	Berm	Earthen Berm	—	X	—	X
			L017A06010006	Check Dam	Rock Check Dam	—	X	—	X
			L017A06030002	Check Dam	Juniper Bales	—	X	X	—
	Additional	n/a	L017A02040010	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-5.51	Baseline	27-Apr-11	L01803010006	Berm	Earthen Berm	—	X	X	—
			L01803010007	Berm	Earthen Berm	—	X	—	X
			L01803010008	Berm	Earthen Berm	—	X	—	X
			L01807010003	Gabion	Gabions	X	—	—	X
	Additional	n/a	L01802040009	Permanent Vegetation	Established Vegetation	X	—	—	X

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LA-SMA-5.52	Baseline	27-Apr-11	L018A01010006	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			L018A03010003	Berm	Earthen Berm	—	X	X	—
			L018A03010004	Berm	Earthen Berm	—	X	—	X
			L018A04060005	Channel/Swale	Riprap	X	—	X	—
			L018A06010002	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	L018A02040007	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-5.53	Baseline	27-Apr-11	L018B01010003	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			L018B03010002	Berm	Earthen Berm	—	X	—	X
			L018B03060004	Berm	Straw Wattles	—	X	X	—
	Additional	n/a	L018B02040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			L018B03060008	Berm	Straw Wattles	—	X	X	—
			L018B03060009	Berm	Straw Wattles	—	X	X	—
LA-SMA-5.54	Baseline	27-Apr-11	L018C03010002	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	L018C02040004	Permanent Vegetation	Established Vegetation	X	—	—	X
			L018C03060005	Berm	Straw Wattles	—	X	X	—
			L018C03060009	Berm	Straw Wattles	—	X	—	X
			L018C03060010	Berm	Straw Wattles	—	X	X	—
LA-SMA-5.91	Enhanced	08-Jul-13	L01905020015	Sediment Trap and Basin	Sediment Basin	—	X	X	—
			L01906020013	Check Dam	Log Check Dam	—	X	—	X
			L01906020014	Check Dam	Log Check Dam	—	X	—	X
	Additional	n/a	L01902040010	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-5.92	Baseline	22-Nov-10	L019A03010005	Berm	Earthen Berm	—	X	X	X
			L019A03030003	Berm	Log Berm	—	X	—	X
			L019A05020006	Sediment Trap and Basin	Sediment Basin	—	X	—	X
	Additional	n/a	L019A02040007	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-6.25	Baseline	22-Nov-10	L02003040002	Berm	Asphalt Berm	—	X	X	—
	Additional	n/a	L02002040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			L02003060009	Berm	Straw Wattles	—	X	—	X
			L02003060010	Berm	Straw Wattles	—	X	—	X

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LA-SMA-6.27	Baseline	22-Nov-10	L02103040001	Berm	Asphalt Berm	—	X	X	—
	Additional	n/a	L02102040011	Permanent Vegetation	Established Vegetation	X	—	—	X
			L02103060012	Berm	Straw Wattles	—	X	—	X
			L02103060013	Berm	Straw Wattles	—	X	—	X
LA-SMA-6.3	Baseline	16-Dec-10	L02203040005	Berm	Asphalt Berm	—	X	X	—
			L02206010001	Check Dam	Rock Check Dam	—	X	—	X
			L02206010004	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	L02202040009	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-6.31	Baseline	16-Dec-10	L022A03040002	Berm	Asphalt Berm	—	X	X	—
			L022A06010005	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	L022A02040008	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-6.32	Baseline	16-Dec-10	L02303040002	Berm	Asphalt Berm	—	X	X	—
			L02303060003	Berm	Straw Wattles	—	X	—	X
	Additional	n/a	L02302040006	Permanent Vegetation	Established Vegetation	X	—	—	X
			L02303060005	Berm	Straw Wattles	—	X	—	X
LA-SMA-6.34	Baseline	16-Dec-10	L02403040003	Berm	Asphalt Berm	—	X	X	—
			L02406010005	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	L02402040006	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-6.36	Baseline	16-Dec-10	L02503010008	Berm	Earthen Berm	—	X	—	X
			L02503010009	Berm	Earthen Berm	—	X	X	—
			L02503090004	Berm	Curbing	—	X	X	—
	Additional	n/a	L02502040010	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-6.38	Baseline	16-Dec-10	L02603060004	Berm	Straw Wattles	—	X	—	X
			L02604060006	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	L02602040011	Permanent Vegetation	Established Vegetation	X	—	—	X
			L02603060009	Berm	Straw Wattles	—	X	X	—
L02603060010	Berm	Straw Wattles	—	X	X	—			

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LA-SMA-6.395	Baseline	16-Dec-10	L02703010004	Berm	Earthen Berm	—	X	—	X
			L02703010005	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	L02702040008	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-6.5	Baseline	16-Dec-10	L02803010004	Berm	Earthen Berm	—	X	X	—
			L02803010006	Berm	Earthen Berm	—	X	X	—
			L02806010002	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	L02802040008	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-9	Baseline	27-Apr-11	L02903010012	Berm	Earthen Berm	—	X	—	X
			L02903010013	Berm	Earthen Berm	—	X	—	X
			L02903010014	Berm	Earthen Berm	—	X	—	X
			L02903080005	Berm	Retaining Wall	—	X	X	—
			L02904050009	Channel/Swale	Water Bar	X	—	X	—
			L02904050010	Channel/Swale	Water Bar	X	—	X	—
			L02904050011	Channel/Swale	Water Bar	X	—	X	—
	Additional	n/a	L02902040015	Permanent Vegetation	Established Vegetation	X	—	—	X
LA-SMA-10.11	Baseline	16-Dec-10	L03004060003	Channel/Swale	Riprap	X	—	—	X
			L03004060009	Channel/Swale	Riprap	X	—	—	X
			L03006010001	Check Dam	Rock Check Dam	—	X	—	X
LA-SMA-10.12	Baseline	12-May-11	L030A03120005	Berm	Rock Berm	—	X	X	—
			L030A03120006	Berm	Rock Berm	—	X	X	—
			L030A03120009	Berm	Rock Berm	—	X	—	X
			L030A03120012	Berm	Rock Berm	—	X	X	—
			L030A03120015	Berm	Rock Berm	—	X	—	X
			L030A03120016	Berm	Rock Berm	—	X	—	X
			L030A03120017	Berm	Rock Berm	—	X	X	—
			L030A03120019	Berm	Rock Berm	—	X	X	—
			L030A03120020	Berm	Rock Berm	—	X	—	X
			L030A03120021	Berm	Rock Berm	—	X	—	X
			L030A04060007	Channel/Swale	Riprap	X	—	—	X

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LA-SMA-10.12	Baseline	12-May-11	L030A06010001	Check Dam	Rock Check Dam	—	X	X	—
			L030A06010002	Check Dam	Rock Check Dam	—	X	X	—
			L030A06010003	Check Dam	Rock Check Dam	—	X	—	X
			L030A06010008	Check Dam	Rock Check Dam	—	X	X	—
			L030A06010011	Check Dam	Rock Check Dam	—	X	—	X
	Enhanced	30-Nov-12	L030A03010026	Berm	Earthen Berm	—	X	X	—
			L030A03010027	Berm	Earthen Berm	—	X	—	X
			L030A03060028	Berm	Straw Wattles	—	X	X	—
			L030A03060029	Berm	Straw Wattles	—	X	—	X
			L030A03120030	Berm	Rock Berm	—	X	—	X
	Additional	n/a	L030A02040032	Permanent Vegetation	Established Vegetation	X	—	—	X
L030A03010025			Berm	Earthen Berm	—	X	—	X	
DP-SMA-0.3	Enhanced	08-Jul-13	D00103010022	Berm	Earthen Berm	—	X	X	—
			D00103010023	Berm	Earthen Berm	—	X	—	X
			D00103120020	Berm	Rock Berm	—	X	X	—
			D00103120021	Berm	Rock Berm	—	X	—	X
			D00106010016	Check Dam	Rock Check Dam	—	X	X	—
			D00106010017	Check Dam	Rock Check Dam	—	X	X	—
			D00106010018	Check Dam	Rock Check Dam	—	X	—	X
			D00106010019	Check Dam	Rock Check Dam	—	X	—	X
			D00106010024	Check Dam	Rock Check Dam	—	X	X	—
			Baseline	27-Apr-11	D00103020011	Berm	Base Course Berm	—	X
	D00103120013	Berm			Rock Berm	—	X	—	X
	D00106010008	Check Dam			Rock Check Dam	—	X	—	X
	D00106010009	Check Dam			Rock Check Dam	—	X	—	X
	D00107010001	Gabion			Gabions	—	X	—	X
	D00107020006	Gabion			Gabion Blanket	X	—	X	—
	Additional	n/a	D00102040025	Permanent Vegetation	Established Vegetation	X	—	—	X



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DP-SMA-0.4	Baseline	16-Dec-10	D00203060005	Berm	Straw Wattles	—	X	X	—	
			D00204040003	Channel/Swale	Culvert	X	—	X	—	
			D00204060006	Channel/Swale	Riprap	—	X	X	—	
			D00206030004	Check Dam	Juniper Bales	—	X	X	—	
	Additional	n/a	D00202040009	Permanent Vegetation	Established Vegetation	X	—	—	X	
			D00203060008	Berm	Straw Wattles	—	X	—	X	
DP-SMA-0.6	Baseline	27-Apr-11	D00303010013	Berm	Earthen Berm	—	X	—	X	
			D00303010014	Berm	Earthen Berm	—	X	—	X	
			D00303020011	Berm	Base Course Berm	—	X	X	—	
			D00304010004	Channel/Swale	Earthen Channel/Swale	X	—	X	—	
			D00304040005	Channel/Swale	Culvert	X	—	X	—	
			D00305020010	Sediment Trap and Basin	Sediment Basin	—	X	—	X	
			D00308020012	Cap	Rock Cap	X	—	—	—	
	Additional	n/a	D00302040015	Permanent Vegetation	Established Vegetation	X	—	—	X	
DP-SMA-1	Baseline	16-Dec-10	D00403010002	Berm	Earthen Berm	—	X	X	—	
			D00403120009	Berm	Rock Berm	—	X	—	X	
			D00404060004	Channel/Swale	Riprap	X	—	X	—	
			D00406030006	Check Dam	Juniper Bales	—	X	—	X	
			D00406030007	Check Dam	Juniper Bales	—	X	—	X	
			D00406030008	Check Dam	Juniper Bales	—	X	—	X	
	Additional	n/a	D00402040015	Permanent Vegetation	Established Vegetation	X	—	—	X	
				D00403010011	Berm	Earthen Berm	—	X	—	X
				D00403020014	Berm	Base Course Berm	—	X	X	—
				D00403060013	Berm	Straw Wattles	—	X	X	—
			D00403120012	Berm	Rock Berm	—	X	—	X	
DP-SMA-2	Baseline	22-Nov-10	D00503020003	Berm	Base Course Berm	—	X	X	—	
			D00506030007	Check Dam	Juniper Bales	—	X	—	X	
			D00506030009	Check Dam	Juniper Bales	—	X	—	X	
	Additional	n/a	D00502040012	Permanent Vegetation	Established Vegetation	X	—	—	X	
				D00503010011	Berm	Earthen Berm	—	X	—	X

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
DP-SMA-2.35	Baseline	16-Dec-10	D00603020002	Berm	Base Course Berm	—	X	—	X
			D00604060004	Channel/Swale	Riprap	X	—	—	X
	Additional	n/a	D00602040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			D00603060006	Berm	Straw Wattles	—	X	X	—
DP-SMA-3	Baseline	09-Feb-11	D00703120015	Berm	Rock Berm	—	X	—	X
			D00706010008	Check Dam	Rock Check Dam	—	X	—	X
			D00706010009	Check Dam	Rock Check Dam	—	X	—	X
			D00706010010	Check Dam	Rock Check Dam	—	X	—	X
			D00706010011	Check Dam	Rock Check Dam	—	X	—	X
			D00706010012	Check Dam	Rock Check Dam	—	X	—	X
	Enhanced	30-Aug-12	D00703010016	Berm	Earthen Berm	—	X	—	X
			D00703010017	Berm	Earthen Berm	—	X	—	X
			D00703010018	Berm	Earthen Berm	—	X	—	X
			D00703010019	Berm	Earthen Berm	—	X	—	X
			D00703010020	Berm	Earthen Berm	—	X	—	X
			D00703010021	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	D00702040023	Permanent Vegetation	Established Vegetation	X	—	—	X
DP-SMA-4	Baseline	16-Dec-10	D00801010002	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			D00803010006	Berm	Earthen Berm	—	X	X	—
			D00803010007	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	D00802040009	Permanent Vegetation	Established Vegetation	X	—	—	X
			D00806010008	Check Dam	Rock Check Dam	—	X	X	—
S-SMA-0.25	Baseline	22-Nov-10	S00104060007	Channel/Swale	Riprap	X	—	X	—
			S00107010008	Gabion	Gabions	—	X	—	X
			S00107020003	Gabion	Gabion Blanket	X	—	—	X
	Additional	n/a	S00102040011	Permanent Vegetation	Established Vegetation	X	—	—	X
			S00104060010	Channel/Swale	Riprap	X	—	—	X

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S-SMA-1.1	Baseline	13-May-11	S00204060006	Channel/Swale	Riprap	X	—	X	—
			S00206010008	Check Dam	Rock Check Dam	—	X	X	—
			S00207010003	Gabion	Gabions	—	X	—	X
			S00207020005	Gabion	Gabion Blanket	X	—	X	—
	Enhanced	27-Nov-12	S00203010018	Berm	Earthen Berm	—	X	—	X
			S00203090017	Berm	Curbing	—	X	X	—
			S00204040016	Channel/Swale	Culvert	X	—	X	—
			S00204060014	Channel/Swale	Riprap	X	—	X	—
			S00204060015	Channel/Swale	Riprap	X	—	X	—
			S00204060019	Channel/Swale	Riprap	X	—	X	—
S00205020013	Sediment Trap and Basin	Sediment Basin	—	X	—	X			
S-SMA-2	Enhanced	08-Jul-13	S00301010013	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			S00301010015	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			S00304060012	Channel/Swale	Riprap	X	—	X	—
			S00304060016	Channel/Swale	Riprap	X	—	X	—
			S00304060021	Channel/Swale	Riprap	X	—	X	—
			S00305040014	Sediment Trap and Basin	Gravel Infiltration Strip	—	X	X	—
			S00306010017	Check Dam	Rock Check Dam	—	X	X	—
			S00306010018	Check Dam	Rock Check Dam	—	X	X	—
			S00306010019	Check Dam	Rock Check Dam	—	X	X	—
	S00306010020	Check Dam	Rock Check Dam	—	X	X	—		
	Baseline	22-Nov-10	S00304060005	Channel/Swale	Riprap	X	—	X	—
			S00304060009	Channel/Swale	Riprap	X	—	X	—
			S00304060010	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	S00302040022	Permanent Vegetation	Established Vegetation	X	—	—	X
S00304060011			Channel/Swale	Riprap	X	—	X	—	

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S-SMA-2.01	Baseline	16-Dec-10	S003A03010004	Berm	Earthen Berm	—	X	X	—
			S003A04060003	Channel/Swale	Riprap	X	—	—	X
	Enhanced	27-Nov-12	S003A05020006	Sediment Trap and Basin	Sediment Basin	—	X	—	X
			S003A05020007	Sediment Trap and Basin	Sediment Basin	—	X	—	X
			S003A05020008	Sediment Trap and Basin	Sediment Basin	—	X	—	X
Additional	n/a	S003A02040009	Permanent Vegetation	Established Vegetation	X	—	—	X	
S-SMA-2.8	Baseline	16-Dec-10	S00403010005	Berm	Earthen Berm	—	X	—	X
			S00403020004	Berm	Base Course Berm	—	X	X	—
	Additional	n/a	S00402040008	Permanent Vegetation	Established Vegetation	X	—	—	X
			S00403060006	Berm	Straw Wattles	—	X	—	X
S-SMA-3.51	Baseline	16-Dec-10	S00503010005	Berm	Earthen Berm	—	X	—	X
			S00506010007	Check Dam	Rock Check Dam	—	X	X	—
			S00506010008	Check Dam	Rock Check Dam	—	X	X	—
			S00506010009	Check Dam	Rock Check Dam	—	X	X	—
			S00506010010	Check Dam	Rock Check Dam	—	X	X	—
			S00506010012	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	S00502040013	Permanent Vegetation	Established Vegetation	X	—	—	X
S-SMA-3.52	Baseline	16-Dec-10	S005A03060003	Berm	Straw Wattles	—	X	—	X
	Additional	n/a	S005A02040005	Permanent Vegetation	Established Vegetation	X	—	—	X
			S005A03010004	Berm	Earthen Berm	—	X	X	—
S-SMA-3.53	Enhanced	02-May-13	S005B04040007	Channel/Swale	Culvert	X	—	X	—
			S005B04060006	Channel/Swale	Riprap	X	—	X	—
			S005B08030008	Cap	Concrete/Asphalt Cap	X	—	—	X
	Baseline	16-Dec-10	S005B03120005	Berm	Rock Berm	—	X	—	X
			S005B06010003	Check Dam	Rock Check Dam	—	X	X	—
			S005B06010004	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	S005B01010010	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
S005B02040009			Permanent Vegetation	Established Vegetation	X	—	—	X	

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S-SMA-3.6	Baseline	22-Nov-10	S00604060002	Channel/Swale	Riprap	X	—	X	—
			S00604060010	Channel/Swale	Riprap	X	—	—	X
			S00604060011	Channel/Swale	Riprap	X	—	X	—
			S00606010001	Check Dam	Rock Check Dam	—	X	—	X
			S00606010012	Check Dam	Rock Check Dam	—	X	—	X
			S00606010013	Check Dam	Rock Check Dam	—	X	—	X
			S00606010014	Check Dam	Rock Check Dam	—	X	—	X
			S00606010015	Check Dam	Rock Check Dam	—	X	X	—
			S00607010007	Gabion	Gabions	—	X	X	—
			S00607010008	Gabion	Gabions	—	X	X	—
	Enhanced	27-Nov-12	S00603010019	Berm	Earthen Berm	—	X	X	—
			S00603010020	Berm	Earthen Berm	—	X	X	—
			S00606010016	Check Dam	Rock Check Dam	—	X	X	—
			S00606010017	Check Dam	Rock Check Dam	—	X	—	X
			S00606010018	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	S00602040021	Permanent Vegetation	Established Vegetation	X	—	—	X
			S00603100030	Berm	Gravel Bags	—	X	X	—
			S00604060028	Channel/Swale	Riprap	X	—	X	—
			S00604060029	Channel/Swale	Riprap	X	—	X	—
			S00606010022	Check Dam	Rock Check Dam	—	X	—	X
			S00606010023	Check Dam	Rock Check Dam	—	X	—	X
			S00607010026	Gabion	Gabions	X	—	X	—
			S00607020024	Gabion	Gabion Blanket	X	—	X	—
			S00607020025	Gabion	Gabion Blanket	X	—	X	—
S-SMA-3.7	Baseline	16-Dec-10	S00703120004	Berm	Rock Berm	—	X	X	—
			S00703120005	Berm	Rock Berm	—	X	—	X
			S00704030003	Channel/Swale	Rock Channel/Swale	X	—	X	—
	Additional	n/a	S00702040006	Permanent Vegetation	Established Vegetation	X	—	—	X

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S-SMA-3.71	Baseline	16-Dec-10	S00804020002	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	—	X
			S00806010008	Check Dam	Rock Check Dam	—	X	—	X
			S00806010009	Check Dam	Rock Check Dam	—	X	—	X
			S00806010010	Check Dam	Rock Check Dam	—	X	—	X
			S00806010011	Check Dam	Rock Check Dam	—	X	—	X
			S00807010001	Gabion	Gabions	—	X	X	—
	Additional	n/a	S00802040015	Permanent Vegetation	Established Vegetation	X	—	—	X
			S00803010013	Berm	Earthen Berm	—	X	X	—
			S00803010014	Berm	Earthen Berm	—	X	—	X
S-SMA-3.72	Baseline	16-Dec-10	S00903120003	Berm	Rock Berm	—	X	X	—
			S00906010005	Check Dam	Rock Check Dam	—	X	—	X
			S00906010006	Check Dam	Rock Check Dam	—	X	—	X
			S00906010007	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	S00902040011	Permanent Vegetation	Established Vegetation	X	—	—	X
			S00903010009	Berm	Earthen Berm	—	X	X	—
			S00903010010	Berm	Earthen Berm	—	X	—	X
S-SMA-3.95	Additional	n/a	S01002040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			S01003060006	Berm	Straw Wattles	—	X	—	X
			S01003060008	Berm	Straw Wattles	—	X	X	—
S-SMA-4.1	Enhanced	25-Sep-12	S01101010007	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			S01103090005	Berm	Curbing	—	X	X	—
			S01103120008	Berm	Rock Berm	—	X	—	X
			S01104020006	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			S01108030009	Cap	Concrete/Asphalt Cap	X	—	X	—
	Additional	n/a	S01103060010	Berm	Straw Wattles	—	X	—	X
			S01103060011	Berm	Straw Wattles	—	X	—	X
S-SMA-4.5	Baseline	13-May-11	S01203010005	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	S01202040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			S01203060008	Berm	Straw Wattles	—	X	X	—

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S-SMA-5	Baseline	13-May-11	S01303010006	Berm	Earthen Berm	—	X	—	X
			S01304060003	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	S01302040007	Permanent Vegetation	Established Vegetation	X	—	—	X
S-SMA-5.2	Baseline	16-Dec-10	S01404060011	Channel/Swale	Riprap	X	—	X	—
			S01406010006	Check Dam	Rock Check Dam	—	X	X	—
			S01406010007	Check Dam	Rock Check Dam	—	X	X	—
			S01406010008	Check Dam	Rock Check Dam	—	X	X	—
			S01406010009	Check Dam	Rock Check Dam	—	X	X	—
			S01406010010	Check Dam	Rock Check Dam	—	X	X	—
			S01406010012	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	S01402040016	Permanent Vegetation	Established Vegetation	X	—	—	X
			S01403060014	Berm	Straw Wattles	—	X	—	X
			S01403060015	Berm	Straw Wattles	—	X	—	X
S-SMA-5.5	Baseline	13-May-11	S01503010004	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	S01502040005	Permanent Vegetation	Established Vegetation	X	—	—	X
S-SMA-6	Baseline	13-May-11	S01603010006	Berm	Earthen Berm	—	X	X	—
			S01603010008	Berm	Earthen Berm	—	X	—	X
			S01603010009	Berm	Earthen Berm	—	X	—	X
			S01603140010	Berm	Coir Log	—	X	—	X
			S01603140011	Berm	Coir Log	—	X	—	X
			S01604060004	Channel/Swale	Riprap	X	—	X	—
			S01606010005	Check Dam	Rock Check Dam	—	X	X	—
			S01606010007	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	S01602040012	Permanent Vegetation	Established Vegetation	X	—	—	X
CDB-SMA-0.15	Baseline	22-Nov-10	C00103120009	Berm	Rock Berm	—	X	X	—
			C00106030003	Check Dam	Juniper Bales	—	X	X	—
			C00106030005	Check Dam	Juniper Bales	—	X	—	X
			C00106030006	Check Dam	Juniper Bales	—	X	—	X
			C00106030007	Check Dam	Juniper Bales	—	X	—	X

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CDB-SMA-0.15	Additional	n/a	C00102040015	Permanent Vegetation	Established Vegetation	X	—	—	X
			C00103010013	Berm	Earthen Berm	—	X	—	X
			C00103060016	Berm	Straw Wattles	—	X	X	—
			C00103060017	Berm	Straw Wattles	—	X	X	—
			C00103060018	Berm	Straw Wattles	—	X	X	—
CDB-SMA-0.25	Enhanced	20-Jul-12	C00203010017	Berm	Earthen Berm	—	X	—	X
			C00203010018	Berm	Earthen Berm	—	X	—	X
	Baseline	22-Nov-10	C00203010013	Berm	Earthen Berm	—	X	—	X
			C00204060009	Channel/Swale	Riprap	X	—	X	—
Additional	n/a	C00202040019	Permanent Vegetation	Established Vegetation	X	—	—	X	
CDB-SMA-0.55	Baseline	10-Jan-11	C00303010011	Berm	Earthen Berm	—	X	—	X
			C00306010006	Check Dam	Rock Check Dam	—	X	X	—
			C00306010013	Check Dam	Rock Check Dam	—	X	X	—
			C00306010015	Check Dam	Rock Check Dam	—	X	X	—
			C00306010016	Check Dam	Rock Check Dam	—	X	X	—
			C00306010017	Check Dam	Rock Check Dam	—	X	X	—
			C00306010018	Check Dam	Rock Check Dam	—	X	X	—
			C00306010019	Check Dam	Rock Check Dam	—	X	X	—
	C00306010020	Check Dam	Rock Check Dam	—	X	X	—		
Additional	n/a	C00302040021	Permanent Vegetation	Established Vegetation	X	—	—	X	
CDB-SMA-1	Baseline	10-Jan-11	C00404060006	Channel/Swale	Riprap	X	—	X	—
			C00404060008	Channel/Swale	Riprap	—	X	—	X
			C00404060009	Channel/Swale	Riprap	—	X	X	—
			C00406010004	Check Dam	Rock Check Dam	—	X	—	X
			C00406010010	Check Dam	Rock Check Dam	—	X	X	—
			C00406010011	Check Dam	Rock Check Dam	—	X	X	—
			C00406010012	Check Dam	Rock Check Dam	—	X	X	—
			C00406010013	Check Dam	Rock Check Dam	—	X	—	X



SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
CDB-SMA-1	Enhanced	30-Jul-12	C00403010014	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	C00402040015	Permanent Vegetation	Established Vegetation	X	—	—	X
CDB-SMA-1.15	Baseline	22-Nov-10	C00503010006	Berm	Earthen Berm	—	X	—	X
			C00504060007	Channel/Swale	Riprap	X	—	X	—
			C00504060008	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	C00502040011	Permanent Vegetation	Established Vegetation	X	—	—	X
CDB-SMA-1.35	Baseline	22-Nov-10	C00603010006	Berm	Earthen Berm	—	X	—	X
			C00604060009	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	C00602040010	Permanent Vegetation	Established Vegetation	X	—	—	X
CDB-SMA-1.54	Baseline	22-Nov-10	C00703010007	Berm	Earthen Berm	—	X	—	X
			C00703010008	Berm	Earthen Berm	—	X	—	X
			C00703010009	Berm	Earthen Berm	—	X	X	—
			C00704050014	Channel/Swale	Water Bar	X	—	—	—
			C00704060006	Channel/Swale	Riprap	X	—	—	X
			C00706020015	Check Dam	Log Check Dam	—	X	—	X
			C00706020016	Check Dam	Log Check Dam	—	X	—	X
	Additional	n/a	C00702040020	Permanent Vegetation	Established Vegetation	X	—	—	X
			C00703010019	Berm	Earthen Berm	—	X	—	X
CDB-SMA-1.55	Baseline	22-Nov-10	C00803010010	Berm	Earthen Berm	—	X	—	X
			C00803120009	Berm	Rock Berm	—	X	X	—
	Additional	n/a	C00802040012	Permanent Vegetation	Established Vegetation	X	—	—	X
CDB-SMA-1.65	Baseline	22-Nov-10	C00904010002	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			C00904060001	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	C00903010004	Berm	Earthen Berm	—	X	—	X

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
CDB-SMA-4	Baseline	16-Dec-10	C01004020005	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	—	X
			C01004060007	Channel/Swale	Riprap	X	—	—	X
			C01005010004	Sediment Trap and Basin	Sediment Trap	—	X	—	X
			C01006010006	Check Dam	Rock Check Dam	—	X	—	X
			C01006010008	Check Dam	Rock Check Dam	—	X	X	—
			C01006010009	Check Dam	Rock Check Dam	—	X	X	—
			C01006010010	Check Dam	Rock Check Dam	—	X	X	—
			C01006010011	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	C01002040012	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-1	Baseline	22-Nov-10	M00107010001	Gabion	Gabions	—	X	X	—
			M00107010006	Gabion	Gabions	—	X	—	X
	Enhanced	27-Nov-12	M00107010008	Gabion	Gabions	—	X	—	X
	Additional	n/a	M00102040009	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-1.2	Baseline	16-Dec-10	M00204060008	Channel/Swale	Riprap	X	—	X	—
			M00206010003	Check Dam	Rock Check Dam	—	X	—	X
			M00206010004	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	M00202040009	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-1.21	Baseline	16-Dec-10	M002A03020002	Berm	Base Course Berm	—	X	X	—
			M002A03120005	Berm	Rock Berm	—	X	—	X
			M002A04060003	Channel/Swale	Riprap	X	—	—	X
			M002A06010004	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	M002A02040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			M002A03010006	Berm	Earthen Berm	—	X	—	X
M-SMA-1.22	Enhanced	02-May-13	M002B03010010	Berm	Earthen Berm	—	X	—	X
			M002B03010011	Berm	Earthen Berm	—	X	—	X
			M002B03010012	Berm	Earthen Berm	—	X	—	X
			M002B05030013	Sediment Trap and Basin	Sand Filter	—	X	—	X

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M-SMA-1.22	Baseline	09-Feb-11	M002B04050002	Channel/Swale	Water Bar	X	—	X	—
			M002B06010008	Check Dam	Rock Check Dam	—	X	—	X
			M002B06010009	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	M002B01010015	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			M002B02040014	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-3	Baseline	12-May-11	M00303120009	Berm	Rock Berm	—	X	X	—
			M00303120010	Berm	Rock Berm	—	X	X	—
			M00303120011	Berm	Rock Berm	—	X	X	—
			M00304050005	Channel/Swale	Water Bar	X	—	X	—
			M00304060001	Channel/Swale	Riprap	X	—	—	X
			M00304060008	Channel/Swale	Riprap	X	—	X	—
			M00305020012	Sediment Trap and Basin	Sediment Basin	—	X	X	—
			M00306010007	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	M00302040013	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-3.1	Baseline	16-Dec-10	M00403040006	Berm	Asphalt Berm	—	X	X	—
			M00404060005	Channel/Swale	Riprap	X	—	—	X
			M00406010004	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	M00402040007	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-3.5	Baseline	12-May-11	M00503010015	Berm	Earthen Berm	—	X	—	X
			M00503010016	Berm	Earthen Berm	—	X	—	X
			M00503120009	Berm	Rock Berm	—	X	—	X
			M00503120010	Berm	Rock Berm	—	X	—	X
			M00503120013	Berm	Rock Berm	—	X	X	—
			M00503120014	Berm	Rock Berm	—	X	X	—
			M00504060011	Channel/Swale	Riprap	X	—	X	—
			M00504060012	Channel/Swale	Riprap	X	—	X	—
			M00504060017	Channel/Swale	Riprap	X	—	—	X
			M00506010004	Check Dam	Rock Check Dam	—	X	X	—
	M00506010005	Check Dam	Rock Check Dam	—	X	X	—		
Additional	n/a	M00502040018	Permanent Vegetation	Established Vegetation	X	—	—	X	

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M-SMA-4	Baseline	22-Nov-10	M00604060002	Channel/Swale	Riprap	X	—	—	X
			M00604060007	Channel/Swale	Riprap	X	—	X	—
			M00604060012	Channel/Swale	Riprap	X	—	X	—
			M00606010005	Check Dam	Rock Check Dam	—	X	X	—
			M00607010006	Gabion	Gabions	X	—	X	—
	Additional	n/a	M00602040014	Permanent Vegetation	Established Vegetation	X	—	—	X
			M00606010013	Check Dam	Rock Check Dam	—	X	X	—
M-SMA-5	Baseline	12-May-11	M00703060015	Berm	Straw Wattles	—	X	X	—
			M00704020012	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			M00704060001	Channel/Swale	Riprap	X	—	—	X
			M00704060008	Channel/Swale	Riprap	X	—	X	—
			M00706010002	Check Dam	Rock Check Dam	—	X	—	X
	M00706010007	Check Dam	Rock Check Dam	—	X	X	—		
Additional	n/a	M00702040016	Permanent Vegetation	Established Vegetation	X	—	—	X	
M-SMA-6	Baseline	16-Dec-10	M00804060001	Channel/Swale	Riprap	X	—	X	—
			M00804060014	Channel/Swale	Riprap	X	—	—	—
			M00805020016	Sediment Trap and Basin	Sediment Basin	—	X	X	—
			M00806010007	Check Dam	Rock Check Dam	—	X	X	—
			M00806010011	Check Dam	Rock Check Dam	—	X	—	X
			M00806010012	Check Dam	Rock Check Dam	—	X	—	X
			M00807020013	Gabion	Gabion Blanket	X	—	X	—
			M00808030002	Cap	Concrete/Asphalt Cap	X	—	X	—
	Additional	n/a	M00802040024	Permanent Vegetation	Established Vegetation	X	—	—	X
			M00803100026	Berm	Gravel Bags	—	—	—	—
			M00804060025	Channel/Swale	Riprap	X	—	X	—
M00806010017			Check Dam	Rock Check Dam	—	X	—	X	
			M00806010020	Check Dam	Rock Check Dam	—	X	X	—
			M00806010027	Check Dam	Rock Check Dam	—	X	X	—
			M00806010028	Check Dam	Rock Check Dam	—	X	X	—

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M-SMA-7	Baseline	16-Dec-10	M00906010003	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	M00902040009	Permanent Vegetation	Established Vegetation	X	—	—	X
			M00903060007	Berm	Straw Wattles	—	X	X	—
			M00903060008	Berm	Straw Wattles	—	X	X	—
M-SMA-7.9	Baseline	16-Dec-10	M01003010004	Berm	Earthen Berm	—	X	X	—
			M01003010010	Berm	Earthen Berm	—	X	X	—
			M01003010011	Berm	Earthen Berm	—	X	X	—
			M01003120005	Berm	Rock Berm	—	X	X	—
			M01003120006	Berm	Rock Berm	—	X	X	—
	Additional	n/a	M01002040013	Permanent Vegetation	Established Vegetation	X	—	—	X
			M01003010012	Berm	Earthen Berm	—	X	—	X
M-SMA-9.1	Baseline	09-Feb-11	M01101020001	Seed and Mulch	Seed and Gravel Mulch	X	—	X	—
			M01104040004	Channel/Swale	Culvert	X	—	X	—
			M01106010005	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	M01102040007	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-10	Baseline	16-Dec-10	M01204060004	Channel/Swale	Riprap	X	—	X	—
			M01204060007	Channel/Swale	Riprap	X	—	—	X
			M01204060008	Channel/Swale	Riprap	X	—	—	X
			M01206010001	Check Dam	Rock Check Dam	—	X	—	X
			M01206010005	Check Dam	Rock Check Dam	—	X	—	X
			M01206010006	Check Dam	Rock Check Dam	—	X	—	X
			M01206010009	Check Dam	Rock Check Dam	—	X	—	X
			M01206010010	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	M01202040012	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-10.01	Baseline	16-Dec-10	M012A06010003	Check Dam	Rock Check Dam	—	X	—	X
	Enhanced	25-Sep-12	M012A03010006	Berm	Earthen Berm	—	X	—	X
			M012A03010007	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	M012A02040008	Permanent Vegetation	Established Vegetation	X	—	—	X

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M-SMA-10.3	Baseline	12-May-11	M01303010011	Berm	Earthen Berm	—	X	X	—
			M01303010012	Berm	Earthen Berm	—	X	—	X
			M01303100013	Berm	Gravel Bags	—	X	X	—
	Additional	n/a	M01302040014	Permanent Vegetation	Established Vegetation	X	—	—	X
			M01306010015	Check Dam	Rock Check Dam	—	X	—	X
M-SMA-11.1	Baseline	16-Dec-10	M01403090005	Berm	Curbing	—	X	X	—
			M01404060001	Channel/Swale	Riprap	X	—	X	—
			M01406020006	Check Dam	Log Check Dam	—	X	—	X
	Additional	n/a	M01402040008	Permanent Vegetation	Established Vegetation	X	—	—	X
			M01403100007	Berm	Gravel Bags	—	X	X	—
M-SMA-12	Baseline	27-Apr-11	M01503090004	Berm	Curbing	—	X	X	—
			M01506020001	Check Dam	Log Check Dam	—	X	—	X
			M01506020006	Check Dam	Log Check Dam	—	X	—	X
			M01506020007	Check Dam	Log Check Dam	—	X	—	X
	Additional	n/a	M01502040008	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-12.5	Additional	n/a	M01601010011	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			M01602040012	Permanent Vegetation	Established Vegetation	X	—	—	X
			M01603010009	Berm	Earthen Berm	—	X	X	—
			M01603010010	Berm	Earthen Berm	—	X	—	X
M-SMA-12.6	Baseline	12-May-11	M01703020005	Berm	Base Course Berm	—	X	X	—
			M01703020006	Berm	Base Course Berm	—	X	X	—
			M01703020007	Berm	Base Course Berm	—	X	X	—
			M01706010008	Check Dam	Rock Check Dam	—	X	—	X
M-SMA-12.6	Additional	n/a	M01701010013	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			M01702040014	Permanent Vegetation	Established Vegetation	X	—	—	X
			M01703010010	Berm	Earthen Berm	—	X	X	—
			M01703060012	Berm	Straw Wattles	—	X	—	X

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M-SMA-12.7	Baseline	16-Dec-10	M01803010008	Berm	Earthen Berm	—	X	X	—
			M01806020009	Check Dam	Log Check Dam	—	X	—	X
	Additional	n/a	M01802040012	Permanent Vegetation	Established Vegetation	X	—	—	X
			M01803060010	Berm	Straw Wattles	—	X	X	—
			M01803060011	Berm	Straw Wattles	—	X	X	—
M-SMA-12.8	Baseline	16-Dec-10	M01903010003	Berm	Earthen Berm	—	X	X	—
			M01906020006	Check Dam	Log Check Dam	—	X	—	X
	Additional	n/a	M01902040010	Permanent Vegetation	Established Vegetation	X	—	—	X
			M01903060009	Berm	Straw Wattles	—	X	—	X
M-SMA-12.9	Baseline	16-Dec-10	M02003010005	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	M02002040012	Permanent Vegetation	Established Vegetation	X	—	—	X
			M02003010008	Berm	Earthen Berm	—	X	X	—
			M02003060010	Berm	Straw Wattles	—	X	—	X
			M02006020013	Check Dam	Log Check Dam	X	—	—	X
M-SMA-12.92	Baseline	22-Nov-10	M02105010001	Sediment Trap and Basin	Sediment Trap	—	X	—	X
			M02105010003	Sediment Trap and Basin	Sediment Trap	—	X	—	X
			M02105010004	Sediment Trap and Basin	Sediment Trap	—	X	X	—
	Additional	n/a	M02102040005	Permanent Vegetation	Established Vegetation	X	—	—	X
M-SMA-13	Baseline	16-Dec-10	M02201010012	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			M02206010008	Check Dam	Rock Check Dam	—	X	X	—
			M02206010009	Check Dam	Rock Check Dam	—	X	X	—
			M02206010010	Check Dam	Rock Check Dam	—	X	X	—
			M02206010011	Check Dam	Rock Check Dam	—	X	X	—
			M02206020001	Check Dam	Log Check Dam	—	X	—	X
			M02206020003	Check Dam	Log Check Dam	—	X	—	X
M-SMA-13	Additional	n/a	M02202040014	Permanent Vegetation	Established Vegetation	X	—	—	X
			M02203010013	Berm	Earthen Berm	—	X	X	—

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PRATT-SMA-1.05	Baseline	16-Dec-10	T00103010002	Berm	Earthen Berm	—	X	—	X
			T00103010017	Berm	Earthen Berm	—	X	X	—
			T00103020013	Berm	Base Course Berm	—	X	X	—
			T00103020014	Berm	Base Course Berm	—	X	X	—
			T00103020015	Berm	Base Course Berm	—	X	X	—
			T00103020016	Berm	Base Course Berm	—	X	X	—
			T00103020018	Berm	Base Course Berm	—	X	X	—
			T00103090004	Berm	Curbing	—	X	X	—
			T00103120008	Berm	Rock Berm	—	X	—	X
			T00104020006	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			T00106010011	Check Dam	Rock Check Dam	—	X	—	X
			T00106010012	Check Dam	Rock Check Dam	—	X	—	X
			T00107010003	Gabion	Gabions	—	X	—	X
	T00108020005	Cap	Rock Cap	X	—	X	—		
	Additional	n/a	T00102040020	Permanent Vegetation	Established Vegetation	X	—	—	X
T-SMA-1	Enhanced	TBD	T00203010013	Berm	Earthen Berm	—	X	X	—
			T00203010014	Berm	Earthen Berm	—	X	X	—
			T00203010015	Berm	Earthen Berm	—	X	—	X
			T00204020016	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			T00204040017	Channel/Swale	Culvert	X	—	X	—
			T00204040018	Channel/Swale	Culvert	X	—	X	—
			T00208010019	Cap	Earth Cap	X	—	X	—
	Baseline	16-Dec-10	T00208010001	Cap	Earth Cap	X	—	X	—
T-SMA-2.5	Baseline	16-Dec-10	T00304010002	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			T00306010003	Check Dam	Rock Check Dam	—	X	—	X
			T00306010004	Check Dam	Rock Check Dam	—	X	—	X
			T00306010005	Check Dam	Rock Check Dam	—	X	—	X
			T00308020001	Cap	Rock Cap	X	—	—	X



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T-SMA-2.85	Baseline	16-Dec-10	T00403090004	Berm	Curbing	—	X	X	—
			T00406010005	Check Dam	Rock Check Dam	—	X	—	X
			T00406010006	Check Dam	Rock Check Dam	X	—	X	—
	Additional	n/a	T00402040007	Permanent Vegetation	Established Vegetation	X	—	—	X
T-SMA-3	Baseline	16-Dec-10	T00504060001	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	T00502040012	Permanent Vegetation	Established Vegetation	X	—	—	X
			T00506020009	Check Dam	Log Check Dam	—	X	—	X
			T00506020010	Check Dam	Log Check Dam	—	X	—	X
			T00506020011	Check Dam	Log Check Dam	—	X	—	X
T-SMA-4	Baseline	16-Dec-10	T00603030009	Berm	Log Berm	—	X	—	X
			T00603030010	Berm	Log Berm	—	X	—	X
			T00603090005	Berm	Curbing	—	X	X	—
			T00604060004	Channel/Swale	Riprap	X	—	—	X
			T00606010006	Check Dam	Rock Check Dam	—	X	X	—
			T00606010007	Check Dam	Rock Check Dam	—	X	X	—
			T00606010008	Check Dam	Rock Check Dam	—	X	X	—
			T00607010003	Gabion	Gabions	—	X	—	X
	Additional	n/a	T00602040011	Permanent Vegetation	Established Vegetation	X	—	—	X
T-SMA-5	Baseline	16-Dec-10	T00703020003	Berm	Base Course Berm	—	X	X	—
			T00703020008	Berm	Base Course Berm	—	X	X	—
			T00703120010	Berm	Rock Berm	—	X	—	X
			T00706010002	Check Dam	Rock Check Dam	—	X	—	X
			T00706010004	Check Dam	Rock Check Dam	—	X	—	X
			T00706010009	Check Dam	Rock Check Dam	—	X	X	—
			T00706010011	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	T00702040012	Permanent Vegetation	Established Vegetation	X	—	—	X
T-SMA-6.8	Baseline	16-Dec-10	T00803060002	Berm	Straw Wattles	—	X	X	—
			T00803100003	Berm	Gravel Bags	—	X	—	X
	Additional	n/a	T00801060004	Seed and Mulch	Erosion Control Blanket	X	—	—	—

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T-SMA-7	Baseline	16-Dec-10	T00903020008	Berm	Base Course Berm	—	X	X	—
			T00906010002	Check Dam	Rock Check Dam	—	X	—	X
			T00906010003	Check Dam	Rock Check Dam	—	X	—	X
			T00906010006	Check Dam	Rock Check Dam	—	X	—	X
			T00906010007	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	T00902040011	Permanent Vegetation	Established Vegetation	X	—	—	X
T-SMA-7.1	Baseline	16-Dec-10	T01003020005	Berm	Base Course Berm	—	X	X	—
			T01006020006	Check Dam	Log Check Dam	—	X	—	X
	Additional	n/a	T01002040009	Permanent Vegetation	Established Vegetation	X	—	—	X
			T01003010007	Berm	Earthen Berm	—	X	—	X
			T01003010008	Berm	Earthen Berm	—	X	—	X
2M-SMA-1	Enhanced	20-Jul-12	E00103010014	Berm	Earthen Berm	—	X	X	—
			E00103110015	Berm	Eco-Block	—	X	X	—
			E00105020013	Sediment Trap and Basin	Sediment Basin	—	X	X	—
			E00106010016	Check Dam	Rock Check Dam	—	X	X	—
			E00106010017	Check Dam	Rock Check Dam	—	X	X	—
			E00106010018	Check Dam	Rock Check Dam	—	X	X	—
			E00106010019	Check Dam	Rock Check Dam	—	X	X	—
			E00106010020	Check Dam	Rock Check Dam	—	X	X	—
			E00106010021	Check Dam	Rock Check Dam	—	X	X	—
			E00106010022	Check Dam	Rock Check Dam	—	X	X	—
			E00106010023	Check Dam	Rock Check Dam	—	X	X	—
			E00106010024	Check Dam	Rock Check Dam	—	X	X	—
			E00106010025	Check Dam	Rock Check Dam	—	X	X	—

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2M-SMA-1	Baseline	22-Nov-10	E00104060010	Channel/Swale	Riprap	X	—	X	—
			E00104060011	Channel/Swale	Riprap	X	—	X	—
			E00106010007	Check Dam	Rock Check Dam	—	X	X	—
			E00106010008	Check Dam	Rock Check Dam	—	X	X	—
			E00106010009	Check Dam	Rock Check Dam	—	X	X	—
			E00107010003	Gabion	Gabions	—	X	—	X
			E00107010004	Gabion	Gabions	—	X	—	X
	Additional	n/a	E00102040026	Permanent Vegetation	Established Vegetation	X	—	—	X
2M-SMA-1.42	Baseline	10-Jan-11	E00203120003	Berm	Rock Berm	—	X	X	—
			E00206010006	Check Dam	Rock Check Dam	—	X	X	—
			E00206010007	Check Dam	Rock Check Dam	—	X	X	—
			E00206010008	Check Dam	Rock Check Dam	—	X	X	—
	Enhanced	27-Jun-12	E00201010013	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			E00203010011	Berm	Earthen Berm	—	X	—	X
			E00203010012	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	E00202040015	Permanent Vegetation	Established Vegetation	X	—	—	X
2M-SMA-1.43	Baseline	22-Nov-10	E00306010003	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	E00302040005	Permanent Vegetation	Established Vegetation	X	—	—	X
			E00304060004	Channel/Swale	Riprap	X	—	—	X
2M-SMA-1.44	Enhanced	27-Jun-12	E00401010007	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			E00403010006	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	E00402040008	Permanent Vegetation	Established Vegetation	X	—	—	X
2M-SMA-1.45	Enhanced	21-Aug-12	E00503010016	Berm	Earthen Berm	—	X	—	X
			E00503010017	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	E00502040018	Permanent Vegetation	Established Vegetation	X	—	—	X
			E00503010014	Berm	Earthen Berm	—	X	—	X
			E00503010015	Berm	Earthen Berm	—	X	X	—

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2M-SMA-1.5	Baseline	22-Nov-10	E00604040002	Channel/Swale	Culvert	X	—	X	—
	Additional	n/a	E00602040005	Permanent Vegetation	Established Vegetation	X	—	—	X
			E00603060004	Berm	Straw Wattles	—	X	X	—
2M-SMA-1.65	Baseline	10-Jan-11	E00703010004	Berm	Earthen Berm	—	X	X	—
			E00703010005	Berm	Earthen Berm	—	X	—	X
	Enhanced	20-Jul-12	E00703010010	Berm	Earthen Berm	—	X	X	—
			E00706010006	Check Dam	Rock Check Dam	—	X	X	—
			E00706010007	Check Dam	Rock Check Dam	—	X	X	—
			E00706010008	Check Dam	Rock Check Dam	—	X	X	—
			E00706010009	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	E00702040011	Permanent Vegetation	Established Vegetation	X	—	—	X
2M-SMA-1.67	Baseline	27-Apr-11	E00801010006	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			E00803060009	Berm	Straw Wattles	—	X	X	—
	Additional	n/a	E00802040016	Permanent Vegetation	Established Vegetation	X	—	—	X
			E00803010014	Berm	Earthen Berm	—	X	—	X
E00803010015	Berm	Earthen Berm	—	X	—	X			
2M-SMA-1.7	Baseline	10-Jan-11	E00903120005	Berm	Rock Berm	—	X	—	X
	Enhanced	27-Jul-12	E00903010008	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	E00902040009	Permanent Vegetation	Established Vegetation	X	—	—	X
2M-SMA-1.8	Enhanced	TBD	E01008030008	Cap	Concrete/Asphalt Cap	X	—	X	—
			E01008030009	Cap	Concrete/Asphalt Cap	X	—	X	—
	Baseline	10-Jan-11	E01003040003	Berm	Asphalt Berm	—	X	X	—
			E01006010004	Check Dam	Rock Check Dam	—	X	—	X
			E01006010005	Check Dam	Rock Check Dam	—	X	—	X
			E01006010006	Check Dam	Rock Check Dam	—	X	—	X
			E01006010007	Check Dam	Rock Check Dam	—	X	—	X
Additional	n/a	E01002040010	Permanent Vegetation	Established Vegetation	X	—	—	X	

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2M-SMA-1.9	Baseline	10-Jan-11	E01103090001	Berm	Curbing	—	X	X	—
			E01103100002	Berm	Gravel Bags	—	X	X	—
			E01103100003	Berm	Gravel Bags	—	X	—	X
2M-SMA-2	Enhanced	02-May-13	E01205020014	Sediment Trap and Basin	Sediment Basin	—	X	—	X
	Baseline	10-Jan-11	E01203090006	Berm	Curbing	—	X	X	—
	Additional	n/a	E01202040015	Permanent Vegetation	Established Vegetation	X	—	—	X
2M-SMA-2.2	Enhanced	TBD	E01308030006	Cap	Concrete/Asphalt Cap	X	—	X	—
	Baseline	22-Nov-10	E01303090002	Berm	Curbing	—	—	X	—
			E01304020003	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	—	X
			E01306010004	Check Dam	Rock Check Dam	—	X	—	X
			E01306010005	Check Dam	Rock Check Dam	—	X	—	X
2M-SMA-3	Additional	n/a	E01402040013	Permanent Vegetation	Established Vegetation	X	—	—	X
			E01403060011	Berm	Straw Wattles	—	X	—	X
			E01403060012	Berm	Straw Wattles	—	X	—	X
			E01403060014	Berm	Straw Wattles	—	X	X	—
			E01403060015	Berm	Straw Wattles	—	X	—	X
			E01403060017	Berm	Straw Wattles	—	X	—	X
			E01403060018	Berm	Straw Wattles	—	X	X	—
2M-SMA-2.5	Baseline	10-Jan-11	E01503010004	Berm	Earthen Berm	—	X	X	—
			E01503010005	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	E01502040006	Permanent Vegetation	Established Vegetation	X	—	—	X
3M-SMA-0.2	Baseline	22-Nov-10	H00106010002	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	H00102040006	Permanent Vegetation	Established Vegetation	X	—	—	X
			H00103010005	Berm	Earthen Berm	—	X	X	—
3M-SMA-0.4	Baseline	10-Jan-11	H00203010003	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	H00202040005	Permanent Vegetation	Established Vegetation	X	—	—	X
			H00203010004	Berm	Earthen Berm	—	X	—	X
			H00208020006	Cap	Rock Cap	X	—	—	—

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3M-SMA-0.5	Baseline	10-Jan-11	H00303010014	Berm	Earthen Berm	—	X	—	X
			H00304060001	Channel/Swale	Riprap	X	—	—	X
			H00304060004	Channel/Swale	Riprap	X	—	—	X
			H00306010002	Check Dam	Rock Check Dam	—	X	—	X
			H00306010005	Check Dam	Rock Check Dam	—	X	X	—
			H00306010006	Check Dam	Rock Check Dam	—	X	X	—
			H00306010007	Check Dam	Rock Check Dam	—	X	X	—
			H00306010008	Check Dam	Rock Check Dam	—	X	X	—
			H00306010009	Check Dam	Rock Check Dam	—	X	X	—
			H00306010010	Check Dam	Rock Check Dam	—	X	X	—
			H00306010011	Check Dam	Rock Check Dam	—	X	X	—
			H00306010012	Check Dam	Rock Check Dam	—	X	X	—
			H00306010013	Check Dam	Rock Check Dam	—	X	—	X
			H00306010016	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	H00302040017	Permanent Vegetation	Established Vegetation	X	—	—	X
3M-SMA-0.6	Baseline	10-Jan-11	H00403060002	Berm	Straw Wattles	—	X	X	—
			H00403060003	Berm	Straw Wattles	—	X	X	—
			H00403060006	Berm	Straw Wattles	—	X	X	—
			H00403060008	Berm	Straw Wattles	—	X	X	—
			H00403060010	Berm	Straw Wattles	—	X	X	—
			H00403060011	Berm	Straw Wattles	—	X	—	X
			H00403060012	Berm	Straw Wattles	—	X	—	X
			H00403060015	Berm	Straw Wattles	—	X	X	—
			H00403060017	Berm	Straw Wattles	—	X	—	X
			H00403060018	Berm	Straw Wattles	—	X	—	X
			H00403060019	Berm	Straw Wattles	—	X	—	X
			H00403060021	Berm	Straw Wattles	—	X	—	X
			H00403060022	Berm	Straw Wattles	—	X	X	—
			H00403060027	Berm	Straw Wattles	—	X	—	X
	Additional	n/a	H00402040029	Permanent Vegetation	Established Vegetation	X	—	—	X

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3M-SMA-2.6	Baseline	27-Apr-11	H00503120005	Berm	Rock Berm	—	X	X	—
			H00504040003	Channel/Swale	Culvert	—	—	X	—
			H00506010006	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	H00502040007	Permanent Vegetation	Established Vegetation	X	—	—	X
3M-SMA-4	Baseline	10-Jan-11	H00603010007	Berm	Earthen Berm	—	X	—	X
			H00603010008	Berm	Earthen Berm	—	X	—	X
			H00604020009	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			H00604060005	Channel/Swale	Riprap	X	—	X	—
			H00604060006	Channel/Swale	Riprap	X	—	—	X
			H00607010002	Gabion	Gabions	—	X	X	—
	Additional	n/a	H00602040010	Permanent Vegetation	Established Vegetation	X	—	—	X
PJ-SMA-1.05	Baseline	22-Nov-10	J00104050008	Channel/Swale	Water Bar	X	—	—	X
			J00104050009	Channel/Swale	Water Bar	X	—	X	—
			J00104060011	Channel/Swale	Riprap	X	—	—	X
	Additional	n/a	J00101010015	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			J00102040019	Permanent Vegetation	Established Vegetation	X	—	—	X
			J00103010017	Berm	Earthen Berm	—	X	—	X
			J00103010018	Berm	Earthen Berm	—	X	—	X
			J00104050012	Channel/Swale	Water Bar	X	—	X	—
			J00104050013	Channel/Swale	Water Bar	X	—	X	—
J00104050014	Channel/Swale	Water Bar	X	—	X	—			
PJ-SMA-2	Baseline	22-Nov-10	J00203010006	Berm	Earthen Berm	—	X	X	—
			J00203010007	Berm	Earthen Berm	—	X	X	—
			J00203010008	Berm	Earthen Berm	—	X	X	—
			J00203010009	Berm	Earthen Berm	—	X	X	—
			J00206010014	Check Dam	Rock Check Dam	—	X	—	X

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PJ-SMA-2	Additional	n/a	J00202040022	Permanent Vegetation	Established Vegetation	X	—	—	X
			J00203010015	Berm	Earthen Berm	—	X	X	—
			J00206010019	Check Dam	Rock Check Dam	—	X	X	—
			J00206010020	Check Dam	Rock Check Dam	—	X	X	—
			J00206010021	Check Dam	Rock Check Dam	—	X	X	—
PJ-SMA-3.05	Enhanced	18-Jul-12	J00303010010	Berm	Earthen Berm	—	X	X	—
			J00303010011	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	J00302040012	Permanent Vegetation	Established Vegetation	X	—	—	X
PJ-SMA-4.05	Baseline	22-Nov-10	J00406010006	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	J00402040008	Permanent Vegetation	Established Vegetation	X	—	—	X
			J00403010007	Berm	Earthen Berm	—	X	X	—
PJ-SMA-5	Baseline	22-Nov-10	J00504010003	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			J00506010008	Check Dam	Rock Check Dam	—	X	X	—
			J00506010009	Check Dam	Rock Check Dam	—	X	X	—
			J00506010010	Check Dam	Rock Check Dam	—	X	X	—
			J00506010011	Check Dam	Rock Check Dam	—	X	—	X
			J00506010012	Check Dam	Rock Check Dam	—	X	—	X
			J00506030004	Check Dam	Juniper Bales	—	X	X	—
	J00506030007	Check Dam	Juniper Bales	—	X	X	—		
	Additional	n/a	J00502040015	Permanent Vegetation	Established Vegetation	X	—	—	X
			J00503060013	Berm	Straw Wattles	—	X	X	—
J00503060014			Berm	Straw Wattles	—	X	X	—	
PJ-SMA-5.1	Enhanced	05-Nov-13	J00603010011	Berm	Earthen Berm	—	X	X	—
			J00608030012	Cap	Concrete/Asphalt Cap	X	—	—	X
	Baseline	10-Jan-11	J00604010004	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			J00606010007	Check Dam	Rock Check Dam	—	X	—	X
	Enhanced	18-Jul-12	J00603010009	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	J00602040010	Permanent Vegetation	Established Vegetation	X	—	—	X



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PJ-SMA-6	Baseline	22-Nov-10	J00706010002	Check Dam	Rock Check Dam	—	X	X	—
			J00706010003	Check Dam	Rock Check Dam	—	X	X	—
			J00706010004	Check Dam	Rock Check Dam	—	X	X	—
			J00706030008	Check Dam	Juniper Bales	—	X	X	—
	Additional	n/a	J00701010017	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			J00702040018	Permanent Vegetation	Established Vegetation	X	—	—	X
			J00703010009	Berm	Earthen Berm	—	X	—	X
			J00703010010	Berm	Earthen Berm	—	X	—	X
			J00703010011	Berm	Earthen Berm	—	X	—	X
			J00703060013	Berm	Straw Wattles	—	X	X	—
			J00703060014	Berm	Straw Wattles	—	X	X	—
			J00703060015	Berm	Straw Wattles	—	X	X	—
J00703060016	Berm	Straw Wattles	—	X	X	—			
J00703120012	Berm	Rock Berm	—	X	X	—			
PJ-SMA-7	Baseline	22-Nov-10	J00803010004	Berm	Earthen Berm	—	X	—	X
			J00804010002	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			J00804040003	Channel/Swale	Culvert	X	—	X	—
	Additional	n/a	J00802040006	Permanent Vegetation	Established Vegetation	X	—	—	X
PJ-SMA-8	Baseline	22-Nov-10	J00903010006	Berm	Earthen Berm	—	X	—	X
			J00903010009	Berm	Earthen Berm	—	X	—	X
			J00904020005	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			J00906010002	Check Dam	Rock Check Dam	—	X	X	—
			J00906010004	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	J00902040010	Permanent Vegetation	Established Vegetation	X	—	—	X
J00906010011			Check Dam	Rock Check Dam	—	X	X	—	

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PJ-SMA-9	Baseline	22-Nov-10	J01003010002	Berm	Earthen Berm	—	X	—	X
			J01004060001	Channel/Swale	Riprap	X	—	X	—
			J01006010006	Check Dam	Rock Check Dam	—	X	—	X
			J01006010007	Check Dam	Rock Check Dam	—	X	X	—
			J01006010008	Check Dam	Rock Check Dam	—	X	X	—
			J01006010009	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	J01002040010	Permanent Vegetation	Established Vegetation	X	—	—	X
PJ-SMA-10	Baseline	10-Jan-11	J01203020001	Berm	Base Course Berm	—	X	X	—
			J01204060004	Channel/Swale	Riprap	X	—	—	X
	Additional	n/a	J01206010008	Check Dam	Rock Check Dam	—	X	—	X
			J01206010009	Check Dam	Rock Check Dam	—	X	—	X
			J01206010010	Check Dam	Rock Check Dam	—	X	—	X
PJ-SMA-11	Baseline	10-Jan-11	J01303010003	Berm	Earthen Berm	—	X	—	X
			J01303010004	Berm	Earthen Berm	—	X	X	—
			J01303060010	Berm	Straw Wattles	—	X	—	X
			J01303060012	Berm	Straw Wattles	—	X	—	X
			J01303060013	Berm	Straw Wattles	—	X	—	X
			J01306010005	Check Dam	Rock Check Dam	—	X	—	X
			J01306010006	Check Dam	Rock Check Dam	—	X	—	X
			J01306010007	Check Dam	Rock Check Dam	—	X	—	X
	J01306010008	Check Dam	Rock Check Dam	—	X	—	X		
	Additional	n/a	J01301010020	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			J01302040018	Permanent Vegetation	Established Vegetation	X	—	—	X
			J01303060016	Berm	Straw Wattles	—	X	—	X
			J01303060017	Berm	Straw Wattles	—	X	—	X
			J01303060019	Berm	Straw Wattles	—	X	X	X
			J01303060021	Berm	Straw Wattles	—	X	—	X

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PJ-SMA-11.1	Baseline	10-Jan-11	J01403010003	Berm	Earthen Berm	—	X	X	—
			J01406010004	Check Dam	Rock Check Dam	—	X	—	X
			J01406010005	Check Dam	Rock Check Dam	—	X	—	X
			J01406010006	Check Dam	Rock Check Dam	—	X	—	X
			J01406010007	Check Dam	Rock Check Dam	—	X	—	X
			J01406010008	Check Dam	Rock Check Dam	—	X	—	X
			J01406010009	Check Dam	Rock Check Dam	—	X	—	X
			J01406010010	Check Dam	Rock Check Dam	—	X	—	X
			J01406010011	Check Dam	Rock Check Dam	—	X	—	X
			J01406010012	Check Dam	Rock Check Dam	—	X	—	X
PJ-SMA-11.1	Additional	n/a	J01402040015	Permanent Vegetation	Established Vegetation	X	—	—	X
			J01403060016	Berm	Straw Wattles	—	X	—	X
PJ-SMA-13	Baseline	27-Apr-11	J01501010004	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			J01503010002	Berm	Earthen Berm	—	X	X	—
			J01503010003	Berm	Earthen Berm	—	X	—	X
PJ-SMA-13	Additional	n/a	J01502040005	Permanent Vegetation	Established Vegetation	X	—	—	X
PJ-SMA-13.7	Enhanced	08-Jul-13	J01605020008	Sediment Trap and Basin	Sediment Basin	—	X	—	X
			J01605020009	Sediment Trap and Basin	Sediment Basin	—	X	—	X
			J01608030010	Cap	Concrete/Asphalt Cap	—	—	—	X
	Baseline	10-Jan-11	J01606010007	Check Dam	Rock Check Dam	—	X	X	—
			J01607010002	Gabion	Gabions	X	—	—	X
PJ-SMA-13.7	Additional	n/a	J01602040011	Permanent Vegetation	Established Vegetation	X	—	—	X
PJ-SMA-14	Baseline	27-Apr-11	J01701010004	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			J01703020002	Berm	Base Course Berm	—	X	X	—
			J01703020003	Berm	Base Course Berm	—	X	—	X
			J01708010001	Cap	Earth Cap	X	—	—	—
	Additional	n/a	J01703010005	Berm	Earthen Berm	—	X	—	X
J01703010006			Berm	Earthen Berm	—	X	—	X	

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PJ-SMA-14.2	Baseline	22-Nov-10	J01803120004	Berm	Rock Berm	—	X	—	X
	Additional	n/a	J01802040005	Permanent Vegetation	Established Vegetation	X	—	—	X
			J01803060006	Berm	Straw Wattles	—	X	X	—
PJ-SMA-14.3	Additional	n/a	J01902040003	Permanent Vegetation	Established Vegetation	X	—	—	X
			J01903060005	Berm	Straw Wattles	—	X	—	X
PJ-SMA-14.4	Baseline	27-Apr-11	J02003010008	Berm	Earthen Berm	—	X	X	—
			J02003040006	Berm	Asphalt Berm	—	X	X	—
	Additional	n/a	J02002040010	Permanent Vegetation	Established Vegetation	X	—	—	X
PJ-SMA-14.6	Additional	n/a	J02102040008	Permanent Vegetation	Established Vegetation	X	—	—	X
			J02103010005	Berm	Earthen Berm	—	X	—	X
			J02104060007	Channel/Swale	Riprap	X	—	X	—
PJ-SMA-14.8	Baseline	10-Jan-11	J02203020005	Berm	Base Course Berm	—	X	X	—
	Additional	n/a	J02202040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			J02203060008	Berm	Straw Wattles	—	X	—	X
PJ-SMA-16	Additional	n/a	J02302040004	Permanent Vegetation	Established Vegetation	X	—	—	X
			J02303060003	Berm	Straw Wattles	—	X	—	X
PJ-SMA-17	Baseline	22-Nov-10	J02404060006	Channel/Swale	Riprap	X	—	—	X
			J02404060007	Channel/Swale	Riprap	X	—	—	X
			J02405010005	Sediment Trap and Basin	Sediment Trap	—	X	—	X
			J02406010004	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	J02402040008	Permanent Vegetation	Established Vegetation	X	—	—	X
PJ-SMA-18	Baseline	22-Nov-10	J02601060002	Seed and Mulch	Erosion Control Blanket	X	—	—	X
			J02604060007	Channel/Swale	Riprap	X	—	—	X
			J02605010005	Sediment Trap and Basin	Sediment Trap	—	X	—	X
			J02606010004	Check Dam	Rock Check Dam	—	X	—	X
			J02606010006	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	J02602040010	Permanent Vegetation	Established Vegetation	X	—	—	X
			J02604010009	Channel/Swale	Earthen Channel/Swale	X	—	X	—

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
PJ-SMA-19	Baseline	22-Nov-10	J02504020004	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			J02504020006	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	X	—
			J02504060010	Channel/Swale	Riprap	X	—	—	X
			J02505020002	Sediment Trap and Basin	Sediment Basin	—	X	—	X
			J02506010005	Check Dam	Rock Check Dam	—	X	—	X
			J02506010008	Check Dam	Rock Check Dam	—	X	—	X
			J02506010009	Check Dam	Rock Check Dam	—	X	—	X
	J02507010001	Gabion	Gabions	—	X	—	X		
	Additional	n/a	J02502040011	Permanent Vegetation	Established Vegetation	X	—	—	X
PJ-SMA-20	Baseline	16-Dec-10	J02703090001	Berm	Curbing	—	X	—	X
			J02704060006	Channel/Swale	Riprap	X	—	—	X
			J02708030005	Cap	Concrete/Asphalt Cap	X	—	X	—
	Additional	n/a	J02702040007	Permanent Vegetation	Established Vegetation	X	—	—	X
STRM-SMA-1.05	Enhanced	02-May-13	J02808030008	Cap	Concrete/Asphalt Cap	—	—	—	—
	Baseline	22-Nov-10	J02804060006	Channel/Swale	Riprap	X	—	—	X
			J02806010004	Check Dam	Rock Check Dam	—	X	X	—
			J02806010005	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	J02802040009	Permanent Vegetation	Established Vegetation	X	—	—	X
J02806010007	Check Dam	Rock Check Dam	—	X	X	—			
STRM-SMA-1.5	Enhanced	08-Jul-13	J02903010013	Berm	Earthen Berm	—	X	X	—
			J02903010014	Berm	Earthen Berm	—	X	—	X
			J02903120015	Berm	Rock Berm	—	X	—	X
			J02904060016	Channel/Swale	Riprap	X	—	—	X
			J02908030017	Cap	Concrete/Asphalt Cap	X	—	—	X
	Additional	n/a	J02902040018	Permanent Vegetation	Established Vegetation	X	—	—	X
			J02903010009	Berm	Earthen Berm	—	X	X	—
			J02903010010	Berm	Earthen Berm	—	X	X	—
J02903010011	Berm	Earthen Berm	—	X	X	—			

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STRM-SMA-4.2	Enhanced	17-Aug-12	J03001010005	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			J03003010004	Berm	Earthen Berm	—	X	—	X
	Baseline	22-Nov-10	J03003010003	Berm	Earthen Berm	—	X	—	X
			J03004010002	Channel/Swale	Earthen Channel/Swale	X	—	X	—
Additional	n/a	J03002040006	Permanent Vegetation	Established Vegetation	X	—	—	X	
STRM-SMA-5.05	Baseline	22-Nov-10	J03103020004	Berm	Base Course Berm	—	X	—	X
	Enhanced	27-Jun-12	J03103010009	Berm	Earthen Berm	—	X	X	—
			J03103010010	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	J03102040013	Permanent Vegetation	Established Vegetation	X	—	—	X
J03103010012			Berm	Earthen Berm	—	X	X	—	
CDV-SMA-1.2	Baseline	10-Jan-11	V00103020008	Berm	Base Course Berm	—	X	—	X
			V00104060001	Channel/Swale	Riprap	X	—	—	X
			V00106010007	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	V00102040012	Permanent Vegetation	Established Vegetation	X	—	—	X
			V00103060009	Berm	Straw Wattles	—	X	X	—
			V00103060010	Berm	Straw Wattles	—	X	X	—
V00103060011	Berm	Straw Wattles	—	X	X	—			
CDV-SMA-1.3	Baseline	10-Jan-11	V00203020002	Berm	Base Course Berm	—	X	—	X
	Additional	n/a	V00202040003	Permanent Vegetation	Established Vegetation	X	—	—	X

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CDV-SMA-1.4	Enhanced	TBD	V00303010070	Berm	Earthen Berm	—	X	X	—
			V00303010071	Berm	Earthen Berm	—	X	—	X
			V00303010072	Berm	Earthen Berm	—	X	—	X
			V00305020073	Sediment Trap and Basin	Sediment Basin	—	X	X	—
			V00305020074	Sediment Trap and Basin	Sediment Basin	—	X	X	—
			V00305020075	Sediment Trap and Basin	Sediment Basin	—	X	X	—
			V00305020076	Sediment Trap and Basin	Sediment Basin	—	X	X	—
	Baseline	10-Jan-11	V00303020017	Berm	Base Course Berm	—	X	X	—
			V00306010012	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	V00302040069	Permanent Vegetation	Established Vegetation	X	—	—	X
			V00303010066	Berm	Earthen Berm	—	X	X	—
			V00303060077	Berm	Straw Wattles	—	X	X	—
			V00303060078	Berm	Straw Wattles	—	X	X	—
			V00303060079	Berm	Straw Wattles	—	X	X	—
			V00303060080	Berm	Straw Wattles	—	X	X	—
			V00303060081	Berm	Straw Wattles	—	X	X	—
			V00305020068	Sediment Trap and Basin	Sediment Basin	—	X	X	—
			V00306010039	Check Dam	Rock Check Dam	—	X	—	X
			V00306010040	Check Dam	Rock Check Dam	—	X	—	X
CDV-SMA-1.4			Additional	n/a	V00306010043	Check Dam	Rock Check Dam	—	X
	V00306010057	Check Dam			Rock Check Dam	—	X	X	—
	V00306010058	Check Dam			Rock Check Dam	—	X	—	X
	V00306010059	Check Dam			Rock Check Dam	—	X	—	X
	V00306010060	Check Dam			Rock Check Dam	—	X	—	X
	V00306010061	Check Dam			Rock Check Dam	—	X	—	X
	V00306010062	Check Dam			Rock Check Dam	—	X	—	X
	V00306010063	Check Dam			Rock Check Dam	—	X	—	X
	V00306010064	Check Dam			Rock Check Dam	—	X	—	X
	V00306010065	Check Dam			Rock Check Dam	—	X	X	—

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CDV-SMA-1.45	Enhanced	18-Jul-12	V00403010004	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	V00402040005	Permanent Vegetation	Established Vegetation	X	—	—	X
CDV-SMA-1.7	Baseline	10-Jan-11	V00501010004	Seed and Mulch	Seed and Wood Mulch	X	—	—	X
			V00504060015	Channel/Swale	Riprap	X	—	—	—
			V00506010005	Check Dam	Rock Check Dam	—	X	—	X
			V00506010006	Check Dam	Rock Check Dam	—	X	—	X
			V00506010007	Check Dam	Rock Check Dam	—	X	—	X
			V00506010008	Check Dam	Rock Check Dam	—	X	X	—
			V00506010009	Check Dam	Rock Check Dam	—	X	X	—
			V00506010010	Check Dam	Rock Check Dam	—	X	X	—
			V00506010011	Check Dam	Rock Check Dam	—	X	—	X
			V00506010012	Check Dam	Rock Check Dam	—	X	—	X
			V00506010013	Check Dam	Rock Check Dam	—	X	X	—
	V00506010014	Check Dam	Rock Check Dam	—	X	X	—		
Additional	n/a	V00502040016	Permanent Vegetation	Established Vegetation	X	—	—	X	
CDV-SMA-2	Baseline	12-May-11	V00603010006	Berm	Earthen Berm	—	X	—	X
			V00603010007	Berm	Earthen Berm	—	X	X	—
			V00603010008	Berm	Earthen Berm	—	X	X	—
			V00603010009	Berm	Earthen Berm	—	X	X	—
			V00603010010	Berm	Earthen Berm	—	X	X	—
			V00603090001	Berm	Curbing	—	X	X	—
			V00604060003	Channel/Swale	Riprap	X	—	—	X
			V00606010002	Check Dam	Rock Check Dam	—	X	—	X
	V00608020012	Cap	Rock Cap	X	—	—	X		
Additional	n/a	V00602040013	Permanent Vegetation	Established Vegetation	X	—	—	X	



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CDV-SMA-2.3	Baseline	10-Jan-11	V00703060009	Berm	Straw Wattles	—	X	—	X
			V00703060010	Berm	Straw Wattles	—	X	—	X
			V00707010002	Gabion	Gabions	—	X	—	X
	Additional	n/a	V00702040021	Permanent Vegetation	Established Vegetation	X	—	—	X
			V00703060022	Berm	Straw Wattles	—	X	X	—
			V00703060023	Berm	Straw Wattles	—	X	—	X
			V00706010016	Check Dam	Rock Check Dam	—	X	—	X
			V00706010019	Check Dam	Rock Check Dam	—	X	X	—
V00706010020	Check Dam	Rock Check Dam	—	X	X	—			
CDV-SMA-2.41	Enhanced	TBD	V00803010013	Berm	Earthen Berm	—	X	—	X
			V00804010014	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			V00806010012	Check Dam	Rock Check Dam	—	X	—	X
	Baseline	10-Jan-11	V00804040011	Channel/Swale	Culvert	X	—	X	—
			V00804060010	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	V00802040015	Permanent Vegetation	Established Vegetation	X	—	—	X
CDV-SMA-2.42	Baseline	10-Jan-11	V008A03010006	Berm	Earthen Berm	—	X	—	X
			V008A03010016	Berm	Earthen Berm	—	X	—	X
			V008A04060002	Channel/Swale	Riprap	X	—	—	X
			V008A04060005	Channel/Swale	Riprap	X	—	—	X
			V008A06010004	Check Dam	Rock Check Dam	—	X	—	X
			V008A07010003	Gabion	Gabions	—	X	—	X
	Additional	n/a	V008A02040020	Permanent Vegetation	Established Vegetation	X	—	—	X
			V008A04060018	Channel/Swale	Riprap	X	—	X	—
			V008A04060019	Channel/Swale	Riprap	X	—	—	X
			V008A06010017	Check Dam	Rock Check Dam	—	X	X	—

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CDV-SMA-2.5	Baseline	10-Jan-11	V00903010011	Berm	Earthen Berm	—	X	—	X
			V00904060005	Channel/Swale	Riprap	X	—	X	—
			V00904060006	Channel/Swale	Riprap	X	—	—	X
			V00904060007	Channel/Swale	Riprap	X	—	X	—
			V00904060009	Channel/Swale	Riprap	X	—	X	—
			V00906010015	Check Dam	Rock Check Dam	—	X	X	—
			V00906010016	Check Dam	Rock Check Dam	—	X	X	—
			V00906010017	Check Dam	Rock Check Dam	—	X	X	—
			V00906010018	Check Dam	Rock Check Dam	—	X	X	—
	V00906010022	Check Dam	Rock Check Dam	—	X	X	—		
	Additional	n/a	V00902040036	Permanent Vegetation	Established Vegetation	X	—	—	X
			V00903120034	Berm	Rock Berm	—	X	—	X
			V00903120035	Berm	Rock Berm	—	X	—	X
			V00906010028	Check Dam	Rock Check Dam	—	X	X	—
			V00906010029	Check Dam	Rock Check Dam	—	X	X	—
			V00906010030	Check Dam	Rock Check Dam	—	X	X	—
			V00906010031	Check Dam	Rock Check Dam	—	X	X	—
			V00906010033	Check Dam	Rock Check Dam	—	X	X	—
CDV-SMA-2.51	Baseline	10-Jan-11	V009A03020005	Berm	Base Course Berm	—	X	X	—
			V009A03020012	Berm	Base Course Berm	—	X	X	—
			V009A06010003	Check Dam	Rock Check Dam	—	X	—	X
			V009A06010004	Check Dam	Rock Check Dam	—	X	—	X
			V009A06010006	Check Dam	Rock Check Dam	—	X	X	—
			V009A06010013	Check Dam	Rock Check Dam	—	X	—	X
			V009A06010014	Check Dam	Rock Check Dam	—	X	—	X
			V009A06010015	Check Dam	Rock Check Dam	—	X	—	X
			V009A06010016	Check Dam	Rock Check Dam	—	X	X	—
			V009A06030017	Check Dam	Juniper Bales	—	X	X	—
			V009A03060030	Berm	Straw Wattles	—	X	X	—
V009A03060031	Berm	Straw Wattles	—	X	X	—			

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CDV-SMA-2.51	Additional	n/a	V009A02040029	Permanent Vegetation	Established Vegetation	X	—	—	X
CDV-SMA-3	Baseline	09-Feb-11	V01003120005	Berm	Rock Berm	—	X	X	—
			V01003120009	Berm	Rock Berm	—	X	—	X
			V01004060007	Channel/Swale	Riprap	X	—	X	—
			V01006010004	Check Dam	Rock Check Dam	—	X	—	X
	Enhanced	18-Jul-12	V01001010012	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			V01003010010	Berm	Earthen Berm	—	X	—	X
			V01003010011	Berm	Earthen Berm	—	X	—	X
Additional	n/a	V01002040013	Permanent Vegetation	Established Vegetation	X	—	—	X	
CDV-SMA-4	Additional	n/a	V01103010008	Berm	Earthen Berm	—	X	—	X
			V01104060007	Channel/Swale	Riprap	X	—	X	—
			V01106010009	Check Dam	Rock Check Dam	—	X	—	X
CDV-SMA-6.01	Baseline	09-Feb-11	V01203010006	Berm	Earthen Berm	—	X	X	—
			V01203020003	Berm	Base Course Berm	—	X	—	X
	Additional	n/a	V01202040013	Permanent Vegetation	Established Vegetation	X	—	—	X
			V01203010016	Berm	Earthen Berm	—	X	—	X
V01203060015	Berm	Straw Wattles	—	X	X	—			
CDV-SMA-6.02	Enhanced	18-Jul-12	V012A01010005	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			V012A03010004	Berm	Earthen Berm	—	X	—	X
			V012A03010006	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	V012A03060007	Berm	Straw Wattles	—	X	—	X
CDV-SMA-7	Baseline	10-Jan-11	V01303010006	Berm	Earthen Berm	—	X	X	—
			V01303010007	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	V01302040008	Permanent Vegetation	Established Vegetation	X	—	—	X

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CDV-SMA-8	Baseline	10-Jan-11	V01406010003	Check Dam	Rock Check Dam	—	X	X	—
			V01406010004	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	V01402040009	Permanent Vegetation	Established Vegetation	X	—	—	X
			V01403010008	Berm	Earthen Berm	—	X	X	—
			V01403010012	Berm	Earthen Berm	—	X	X	—
			V01406010010	Check Dam	Rock Check Dam	—	X	X	—
			V01406010011	Check Dam	Rock Check Dam	—	X	X	—
CDV-SMA-8.5	Baseline	10-Jan-11	V01503010004	Berm	Earthen Berm	—	X	—	X
			V01503010005	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	V01502040006	Permanent Vegetation	Established Vegetation	X	—	—	X
CDV-SMA-9.05	Baseline	10-Jan-11	V01603010002	Berm	Earthen Berm	—	X	—	X
			V01603010003	Berm	Earthen Berm	—	X	—	X
			V01603010004	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	V01602040005	Permanent Vegetation	Established Vegetation	X	—	—	X
F-SMA-2	Enhanced	TBD	F00103010010	Berm	Earthen Berm	—	X	—	X
			F00103010011	Berm	Earthen Berm	—	X	—	X
			F00103010012	Berm	Earthen Berm	—	X	—	X
			F00103010013	Berm	Earthen Berm	—	X	—	X
			F00103010014	Berm	Earthen Berm	—	X	—	X
			F00103010015	Berm	Earthen Berm	—	X	—	X
	Baseline	10-Jan-11	F00104010001	Channel/Swale	Earthen Channel/Swale	X	—	X	—
	Additional	n/a	F00102040018	Permanent Vegetation	Established Vegetation	X	—	—	X
			F00103010017	Berm	Earthen Berm	—	X	—	X
PT-SMA-0.5	Enhanced	27-Nov-12	I00103010007	Berm	Earthen Berm	—	X	—	X
			I00103010008	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	I00102040009	Permanent Vegetation	Established Vegetation	X	—	—	X
			I00103140010	Berm	Coir Log	—	X	—	X
			I00103140011	Berm	Coir Log	—	X	—	X

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PT-SMA-1	Enhanced	03-Aug-12	I00203010023	Berm	Earthen Berm	—	X	—	X
			I00203010024	Berm	Earthen Berm	—	X	—	X
			I00203010025	Berm	Earthen Berm	—	X	—	X
			I00203010026	Berm	Earthen Berm	—	X	—	X
			I00203010027	Berm	Earthen Berm	—	X	—	X
			I00203010028	Berm	Earthen Berm	—	X	—	X
			I00203010029	Berm	Earthen Berm	—	X	—	X
			I00203010030	Berm	Earthen Berm	—	X	—	X
			I00203060033	Berm	Straw Wattles	—	X	—	X
			I00206010031	Check Dam	Rock Check Dam	—	X	—	X
I00206010032	Check Dam	Rock Check Dam	—	X	—	X			
	Baseline	27-Apr-11	I00201010022	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			I00203010018	Berm	Earthen Berm	—	X	—	X
			I00203010019	Berm	Earthen Berm	—	X	—	X
			I00203010020	Berm	Earthen Berm	—	X	—	X
			I00203010021	Berm	Earthen Berm	—	X	—	X
			I00203120012	Berm	Rock Berm	—	X	X	—
			I00203120013	Berm	Rock Berm	—	X	X	—
Additional	n/a	I00202040034	Permanent Vegetation	Established Vegetation	X	—	—	X	
PT-SMA-1.7	Enhanced	TBD	I00303010018	Berm	Earthen Berm	—	X	—	X
			I00305040019	Sediment Trap and Basin	Gravel Infiltration Strip	—	X	—	X
			I00306010020	Check Dam	Rock Check Dam	—	X	—	X
			I00306010021	Check Dam	Rock Check Dam	—	X	—	X
			I00306010022	Check Dam	Rock Check Dam	—	X	—	X
			I00306010023	Check Dam	Rock Check Dam	—	X	—	X
			I00306010024	Check Dam	Rock Check Dam	—	X	—	X
	I00306010025	Check Dam	Rock Check Dam	—	X	—	X		
Additional	n/a	I00302040017	Permanent Vegetation	Established Vegetation	X	—	—	X	

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
PT-SMA-2	Baseline	27-Apr-11	I00403010009	Berm	Earthen Berm	—	X	—	X
			I00403120010	Berm	Rock Berm	—	X	X	—
	Additional	n/a	I00402040011	Permanent Vegetation	Established Vegetation	X	—	—	X
PT-SMA-2.01	Enhanced	03-Aug-12	I004A03010004	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	I004A02040005	Permanent Vegetation	Established Vegetation	X	—	—	X
PT-SMA-3	Baseline	22-Nov-10	I00504040005	Channel/Swale	Culvert	X	—	X	—
			I00504060004	Channel/Swale	Riprap	X	—	X	—
			I00506010006	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	I00502040009	Permanent Vegetation	Established Vegetation	X	—	—	X
			I00503020008	Berm	Base Course Berm	—	X	X	—
			I00503060011	Berm	Straw Wattles	—	X	X	—
			I00503060012	Berm	Straw Wattles	—	X	X	—
			I00504060007	Channel/Swale	Riprap	X	—	X	—
PT-SMA-4.2	Baseline	22-Nov-10	I00704040005	Channel/Swale	Culvert	X	—	X	—
			I00704060002	Channel/Swale	Riprap	X	—	—	X
	Additional	n/a	I00702040008	Permanent Vegetation	Established Vegetation	X	—	—	X
			I00703120007	Berm	Rock Berm	—	X	—	X
W-SMA-1	Enhanced	02-May-13	W00103010014	Berm	Earthen Berm	—	X	X	—
			W00103010015	Berm	Earthen Berm	—	X	X	—
			W00104060017	Channel/Swale	Riprap	X	—	—	X
			W00105030016	Sediment Trap and Basin	Sand Filter	—	X	—	X
			W00106010012	Check Dam	Rock Check Dam	—	X	X	—
			W00106010013	Check Dam	Rock Check Dam	—	X	X	—
			W00108020018	Cap	Rock Cap	X	—	—	—
	Baseline	22-Nov-10	W00104060011	Channel/Swale	Riprap	X	—	X	—
			W00106010008	Check Dam	Rock Check Dam	—	X	—	X
			Additional	n/a	W00102040019	Permanent Vegetation	Established Vegetation	X	—

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
W-SMA-1.5	Baseline	10-Jan-11	W00203060004	Berm	Straw Wattles	—	X	X	—
			W00203060005	Berm	Straw Wattles	—	X	X	—
			W00204060007	Channel/Swale	Riprap	X	—	—	X
			W00204070002	Channel/Swale	Vegetated Swale	X	—	—	X
			W00204070003	Channel/Swale	Vegetated Swale	X	—	—	X
			W00206010008	Check Dam	Rock Check Dam	—	X	X	—
			W00206010009	Check Dam	Rock Check Dam	—	X	X	—
			W00206010010	Check Dam	Rock Check Dam	—	X	—	X
			W00206010011	Check Dam	Rock Check Dam	—	X	—	X
	Enhanced	25-Sep-12	W00203010015	Berm	Earthen Berm	—	X	—	X
			W00205020013	Sediment Trap and Basin	Sediment Basin	—	X	—	X
			W00205020014	Sediment Trap and Basin	Sediment Basin	—	X	—	X
			W00206010016	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	W00202040017	Permanent Vegetation	Established Vegetation	X	—	—	X
W-SMA-2.05	Enhanced	25-Sep-12	W00303010007	Berm	Earthen Berm	—	X	—	X
			W00303010008	Berm	Earthen Berm	—	X	—	X
			W00306010009	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	W00302040010	Permanent Vegetation	Established Vegetation	X	—	—	X
W-SMA-3.5	Baseline	10-Jan-11	W00403060004	Berm	Straw Wattles	—	X	X	—
			W00403060005	Berm	Straw Wattles	—	X	X	—
			W00403060006	Berm	Straw Wattles	—	X	X	—
			W00404060003	Channel/Swale	Riprap	X	—	—	X
			W00406010007	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	W00402040008	Permanent Vegetation	Established Vegetation	X	—	—	X
W-SMA-4.1	Baseline	10-Jan-11	W00503060002	Berm	Straw Wattles	—	X	—	X
			W00503060005	Berm	Straw Wattles	—	X	X	—
	Additional	n/a	W00502040006	Permanent Vegetation	Established Vegetation	X	—	—	X

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
W-SMA-5	Baseline	10-Jan-11	W00604040011	Channel/Swale	Culvert	X	—	X	—
			W00604060006	Channel/Swale	Riprap	X	—	X	—
			W00606010003	Check Dam	Rock Check Dam	—	X	—	X
			W00606010012	Check Dam	Rock Check Dam	—	X	—	X
			W00606010013	Check Dam	Rock Check Dam	—	X	—	X
			W00606010014	Check Dam	Rock Check Dam	—	X	—	X
			W00606010015	Check Dam	Rock Check Dam	—	X	—	X
			W00606010017	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	W00602040029	Permanent Vegetation	Established Vegetation	X	—	—	X
			W00603060030	Berm	Straw Wattles	—	X	X	—
			W00606010021	Check Dam	Rock Check Dam	—	X	—	X
			W00606010022	Check Dam	Rock Check Dam	—	X	—	X
			W00606010023	Check Dam	Rock Check Dam	—	X	—	X
			W00606010024	Check Dam	Rock Check Dam	—	X	—	X
			W00606010025	Check Dam	Rock Check Dam	—	X	X	—
			W00606010026	Check Dam	Rock Check Dam	—	X	X	—
			W00606010027	Check Dam	Rock Check Dam	—	X	X	—
			W00606010028	Check Dam	Rock Check Dam	—	X	—	X
W-SMA-6	Additional	n/a	W00701010007	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
			W00702040004	Permanent Vegetation	Established Vegetation	X	—	—	X
			W00703060005	Berm	Straw Wattles	—	X	—	X
			W00703060006	Berm	Straw Wattles	—	X	—	X



SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
W-SMA-7	Baseline	10-Jan-11	W00803060010	Berm	Straw Wattles	—	X	X	—
			W00806010001	Check Dam	Rock Check Dam	—	X	—	X
			W00806010003	Check Dam	Rock Check Dam	—	X	—	X
			W00806010004	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	W00802040014	Permanent Vegetation	Established Vegetation	X	—	—	X
			W00803060017	Berm	Straw Wattles	—	X	X	—
			W00803060018	Berm	Straw Wattles	—	X	X	—
			W00803060019	Berm	Straw Wattles	—	X	—	X
			W00803060020	Berm	Straw Wattles	—	X	—	X
			W00803060021	Berm	Straw Wattles	—	X	—	X
			W00806010015	Check Dam	Rock Check Dam	—	X	—	X
W-SMA-7.8	Baseline	10-Jan-11	W00903010004	Berm	Earthen Berm	—	X	X	—
			W00904060003	Channel/Swale	Riprap	X	—	X	—
			W00906010001	Check Dam	Rock Check Dam	—	X	X	—
			W00906010005	Check Dam	Rock Check Dam	—	X	X	—
			W00906010006	Check Dam	Rock Check Dam	—	X	X	—
			W00906010007	Check Dam	Rock Check Dam	—	X	—	X
Additional	n/a	W00902040009	Permanent Vegetation	Established Vegetation	X	—	—	X	
W-SMA-7.9	Baseline	10-Jan-11	W01006010003	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	W01002040004	Permanent Vegetation	Established Vegetation	X	—	—	X
W-SMA-8	Baseline	10-Jan-11	W01106010002	Check Dam	Rock Check Dam	—	X	—	X
			W01106010006	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	W01102040009	Permanent Vegetation	Established Vegetation	X	—	—	X
			W01103010007	Berm	Earthen Berm	—	X	X	—
		W01103020008	Berm	Base Course Berm	—	X	X	—	

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
W-SMA-8.7	Baseline	10-Jan-11	W01203060010	Berm	Straw Wattles	—	X	—	X
			W01206010006	Check Dam	Rock Check Dam	—	X	—	X
			W01206010007	Check Dam	Rock Check Dam	—	X	—	X
			W01206010008	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	W01202040011	Permanent Vegetation	Established Vegetation	X	—	—	X
W-SMA-8.71	Enhanced	27-Nov-12	W012A03010004	Berm	Earthen Berm	—	X	—	X
			W012A03010005	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	W012A02040006	Permanent Vegetation	Established Vegetation	X	—	—	X
W-SMA-9.05	Baseline	10-Jan-11	W01303010003	Berm	Earthen Berm	—	X	X	—
			W01304010004	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			W01306010001	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	W01302040013	Permanent Vegetation	Established Vegetation	X	—	—	X
			W01303010010	Berm	Earthen Berm	—	X	—	X
			W01303010011	Berm	Earthen Berm	—	X	—	X
W01306010012	Check Dam	Rock Check Dam	—	X	—	X			
W-SMA-9.5	Baseline	22-Nov-10	W01403060002	Berm	Straw Wattles	—	X	—	X
			W01403060003	Berm	Straw Wattles	—	X	—	X
	Additional	n/a	W01402040008	Permanent Vegetation	Established Vegetation	X	—	—	X
			W01403010006	Berm	Earthen Berm	—	X	X	—
			W01403010007	Berm	Earthen Berm	—	X	X	—
W-SMA-9.7	Baseline	10-Jan-11	W01506030004	Check Dam	Juniper Bales	—	X	X	—
			W01506030005	Check Dam	Juniper Bales	—	X	X	—
	Additional	n/a	W01502040008	Permanent Vegetation	Established Vegetation	X	—	—	X
			W01503060009	Berm	Straw Wattles	—	X	—	X
			W01503060010	Berm	Straw Wattles	—	X	—	X
			W01503060011	Berm	Straw Wattles	—	X	X	—
			W01503060012	Berm	Straw Wattles	—	X	X	—
			W01503060014	Berm	Straw Wattles	—	X	X	—

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W-SMA-9.8	Baseline	10-Jan-11	W01603020007	Berm	Base Course Berm	—	X	X	—
			W01603060010	Berm	Straw Wattles	—	X	—	X
	Additional	n/a	W01602040012	Permanent Vegetation	Established Vegetation	X	—	—	X
W-SMA-9.9	Baseline	10-Jan-11	W01703090001	Berm	Curbing	—	X	X	—
	Enhanced	27-Jun-12	W01703010017	Berm	Earthen Berm	—	X	X	—
			W01703010018	Berm	Earthen Berm	—	X	—	X
			W01703010019	Berm	Earthen Berm	—	X	—	X
			W01703010020	Berm	Earthen Berm	—	X	—	X
Additional	n/a	W01702040022	Permanent Vegetation	Established Vegetation	X	—	—	X	
W-SMA-10	Baseline	10-Jan-11	W01803040010	Berm	Asphalt Berm	—	X	X	—
			W01803040016	Berm	Asphalt Berm	—	X	X	—
			W01803090002	Berm	Curbing	—	X	X	—
			W01804060004	Channel/Swale	Riprap	X	—	—	—
			W01804060013	Channel/Swale	Riprap	X	—	X	—
	Enhanced	23-Aug-12	W01803010022	Berm	Earthen Berm	—	X	—	X
			W01803010023	Berm	Earthen Berm	—	X	—	X
			W01803010024	Berm	Earthen Berm	—	X	—	X
Additional	n/a	W01802040025	Permanent Vegetation	Established Vegetation	X	—	—	X	
W-SMA-11.7	Enhanced	23-Oct-12	W01903010041	Berm	Earthen Berm	—	X	—	X
			W01903010042	Berm	Earthen Berm	—	X	—	X
			W01903010043	Berm	Earthen Berm	—	X	—	X
			W01903010044	Berm	Earthen Berm	—	X	—	X
			W01903010045	Berm	Earthen Berm	—	X	—	X
			W01903010046	Berm	Earthen Berm	—	X	—	X
			W01903010047	Berm	Earthen Berm	—	X	—	X
			W01903010048	Berm	Earthen Berm	—	X	—	X
			W01903010049	Berm	Earthen Berm	—	X	—	X
			W01903010050	Berm	Earthen Berm	—	X	—	X
W01904010051	Channel/Swale	Earthen Channel/Swale	X	—	X	—			

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W-SMA-11.7	Additional	n/a	W01902040052	Permanent Vegetation	Established Vegetation	X	—	—	X
			W01903010040	Berm	Earthen Berm	—	X	X	—
W-SMA-12.05	Baseline	10-Jan-11	W02004060002	Channel/Swale	Riprap	X	—	X	—
			W02006010001	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	W02002040018	Permanent Vegetation	Established Vegetation	X	—	—	X
			W02003010015	Berm	Earthen Berm	—	X	—	X
			W02003010016	Berm	Earthen Berm	—	X	—	X
			W02003010017	Berm	Earthen Berm	—	X	—	X
W-SMA-14.1	Enhanced	25-Sep-12	W02103010016	Berm	Earthen Berm	—	X	—	X
			W02103010017	Berm	Earthen Berm	—	X	—	X
			W02103010018	Berm	Earthen Berm	—	X	—	X
			W02103010019	Berm	Earthen Berm	—	X	—	X
			W02103010020	Berm	Earthen Berm	—	X	X	—
	Baseline	27-Apr-11	W02104060014	Channel/Swale	Riprap	X	—	X	—
			W02106010008	Check Dam	Rock Check Dam	—	X	X	—
			W02106010009	Check Dam	Rock Check Dam	—	X	X	—
			W02106010010	Check Dam	Rock Check Dam	—	X	X	—
			W02106010011	Check Dam	Rock Check Dam	—	X	X	—
			W02106010012	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	W02102040021	Permanent Vegetation	Established Vegetation	X	—	—	X
W-SMA-15.1	Enhanced	23-Oct-12	W02203010004	Berm	Earthen Berm	—	X	X	—
			W02203010005	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	W00202040006	Permanent Vegetation	Established Vegetation	X	—	—	X
A-SMA-1.1	Baseline	22-Nov-10	A00103010005	Berm	Earthen Berm	—	X	X	—
	Additional	n/a	A00102040006	Permanent Vegetation	Established Vegetation	X	—	—	X

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A-SMA-2	Baseline	09-Feb-11	A00203010007	Berm	Earthen Berm	—	X	X	—
			A00203010008	Berm	Earthen Berm	—	X	X	—
			A00204010013	Channel/Swale	Earthen Channel/Swale	X	—	X	—
			A00204060004	Channel/Swale	Riprap	X	—	X	—
	Additional	n/a	A00202040017	Permanent Vegetation	Established Vegetation	X	—	—	X
			A00203060018	Berm	Straw Wattles	—	X	—	X
			A00203060024	Berm	Straw Wattles	—	X	X	—
			A00203060027	Berm	Straw Wattles	—	X	X	—
			A00203060029	Berm	Straw Wattles	—	X	X	—
			A00203060030	Berm	Straw Wattles	—	X	X	—
			A00203060031	Berm	Straw Wattles	—	X	X	—
			A00203060032	Berm	Straw Wattles	—	X	X	—
			A00203060033	Berm	Straw Wattles	—	X	X	—
			A00203060034	Berm	Straw Wattles	—	X	X	—
			A00203060035	Berm	Straw Wattles	—	X	X	—
			A00203060036	Berm	Straw Wattles	—	X	X	—
			A00203060037	Berm	Straw Wattles	—	X	X	—
			A00203060038	Berm	Straw Wattles	—	X	X	—
			A00203060039	Berm	Straw Wattles	—	X	X	—
A-SMA-2.5	Baseline	09-Feb-11	A00303010003	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	A00302040007	Permanent Vegetation	Established Vegetation	X	—	—	X
			A00303060008	Berm	Straw Wattles	—	X	X	—
			A00303060009	Berm	Straw Wattles	—	X	X	—
A-SMA-2.7	Enhanced	23-Aug-12	A00403010013	Berm	Earthen Berm	—	X	—	X
			A00403010014	Berm	Earthen Berm	—	X	—	X
			A00403010015	Berm	Earthen Berm	—	X	—	X
			A00403010016	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	A00402040017	Permanent Vegetation	Established Vegetation	X	—	—	X

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A-SMA-2.8	Baseline	09-Feb-11	A00503010002	Berm	Earthen Berm	—	X	—	X
	Additional	n/a	A00501010004	Seed and Mulch	Seed and Wood Mulch	X	—	—	—
A-SMA-3	Baseline	22-Nov-10	A00604060002	Channel/Swale	Riprap	X	—	X	—
			A00606010003	Check Dam	Rock Check Dam	—	X	—	X
			A00606010009	Check Dam	Rock Check Dam	—	X	—	X
			A00606010010	Check Dam	Rock Check Dam	—	X	—	—
			A00606010011	Check Dam	Rock Check Dam	—	X	—	—
	Additional	n/a	A00602040018	Permanent Vegetation	Established Vegetation	X	—	—	X
			A00603120017	Berm	Rock Berm	—	X	X	—
			A00606010014	Check Dam	Rock Check Dam	—	X	—	X
A00606010019			Check Dam	Rock Check Dam	—	X	X	—	
A-SMA-3.5	Baseline	09-Feb-11	A00703060002	Berm	Straw Wattles	—	X	—	X
	Additional	n/a	A00702040003	Permanent Vegetation	Established Vegetation	X	—	—	X
			A00703060004	Berm	Straw Wattles	—	X	X	—
A-SMA-4	Baseline	09-Feb-11	A00803010007	Berm	Earthen Berm	—	—	X	—
			A00806010003	Check Dam	Rock Check Dam	—	X	X	—
			A00806010004	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	A00802040010	Permanent Vegetation	Established Vegetation	X	—	—	X
			A00803010009	Berm	Earthen Berm	—	X	—	X

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A-SMA-6	Baseline	09-Feb-11	A00903010021	Berm	Earthen Berm	—	X	—	X
			A00904020007	Channel/Swale	Concrete/Asphalt Channel/Swale	X	—	—	X
			A00904060005	Channel/Swale	Riprap	X	—	—	X
			A00906010008	Check Dam	Rock Check Dam	—	X	—	X
			A00906010009	Check Dam	Rock Check Dam	—	X	—	X
			A00906010010	Check Dam	Rock Check Dam	—	X	—	X
			A00906010011	Check Dam	Rock Check Dam	—	X	—	X
			A00906010012	Check Dam	Rock Check Dam	—	X	—	X
			A00906010013	Check Dam	Rock Check Dam	—	X	X	—
			A00906010014	Check Dam	Rock Check Dam	—	X	—	X
			A00906010015	Check Dam	Rock Check Dam	—	X	—	X
			A00906010016	Check Dam	Rock Check Dam	—	X	—	X
			A00906010017	Check Dam	Rock Check Dam	—	X	—	X
			A00906010018	Check Dam	Rock Check Dam	—	X	—	X
			A00906010019	Check Dam	Rock Check Dam	—	X	—	X
A00906010020	Check Dam	Rock Check Dam	—	X	—	X			
	Additional	n/a	A00902040023	Permanent Vegetation	Established Vegetation	X	—	—	X
CHQ-SMA-0.5	Baseline	09-Feb-11	Q00103020002	Berm	Base Course Berm	—	X	—	X
			Q00104050006	Channel/Swale	Water Bar	—	X	X	—
			Q00104050007	Channel/Swale	Water Bar	—	X	X	—
			Q00106010003	Check Dam	Rock Check Dam	—	X	X	—
			Q00106010004	Check Dam	Rock Check Dam	—	X	X	—
			Q00106010005	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	Q00102040008	Permanent Vegetation	Established Vegetation	X	—	—	X

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
CHQ-SMA-1.01	Baseline	09-Feb-11	Q00203060003	Berm	Straw Wattles	—	X	—	X
			Q00203060005	Berm	Straw Wattles	—	X	—	X
	Additional	n/a	Q00202040008	Permanent Vegetation	Established Vegetation	X	—	—	X
			Q00203060009	Berm	Straw Wattles	—	X	X	—
			Q00203060010	Berm	Straw Wattles	—	X	X	—
			Q00203060011	Berm	Straw Wattles	—	X	X	—
CHQ-SMA-1.02	Baseline	09-Feb-11	Q002A06010002	Check Dam	Rock Check Dam	—	X	—	X
			Q002A06010003	Check Dam	Rock Check Dam	—	X	—	X
			Q002A06010007	Check Dam	Rock Check Dam	—	X	X	—
			Q002A06010009	Check Dam	Rock Check Dam	—	X	—	X
			Q002A08030004	Cap	Concrete/Asphalt Cap	X	—	—	—
	Enhanced	23-Oct-12	Q002A03010010	Berm	Earthen Berm	—	X	—	X
			Q002A03010011	Berm	Earthen Berm	—	X	—	X
			Q002A03010012	Berm	Earthen Berm	—	X	—	X
			Q002A03010013	Berm	Earthen Berm	—	X	X	—
CHQ-SMA-1.03	Baseline	09-Feb-11	Q002B04060006	Channel/Swale	Riprap	X	—	X	—
			Q002B04060007	Channel/Swale	Riprap	X	—	—	X
			Q002B04060009	Channel/Swale	Riprap	X	—	—	X
			Q002B04060010	Channel/Swale	Riprap	X	—	—	X
			Q002B06010004	Check Dam	Rock Check Dam	—	X	—	X
			Q002B06010005	Check Dam	Rock Check Dam	—	X	—	X
			Q002B06010008	Check Dam	Rock Check Dam	—	X	—	X
			Q002B06010011	Check Dam	Rock Check Dam	—	X	—	X
			Q002B08030003	Cap	Concrete/Asphalt Cap	X	—	—	X
	Additional	n/a	Q002B02040012	Permanent Vegetation	Established Vegetation	X	—	—	X



SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
CHQ-SMA-2	Baseline	09-Feb-11	Q00303020001	Berm	Base Course Berm	—	X	X	—
			Q00303020006	Berm	Base Course Berm	—	X	X	—
			Q00303040015	Berm	Asphalt Berm	—	X	X	—
			Q00303060017	Berm	Straw Wattles	—	X	X	—
			Q00303060020	Berm	Straw Wattles	—	X	X	—
			Q00303060021	Berm	Straw Wattles	—	X	X	—
			Q00304060002	Channel/Swale	Riprap	X	—	X	—
			Q00304060007	Channel/Swale	Riprap	X	—	X	—
			Q00306010003	Check Dam	Rock Check Dam	—	X	—	X
			Q00306010008	Check Dam	Rock Check Dam	—	X	—	X
			Q00306010009	Check Dam	Rock Check Dam	—	X	X	—
			Q00306010010	Check Dam	Rock Check Dam	—	X	X	—
			Q00306010011	Check Dam	Rock Check Dam	—	X	X	—
			Q00306010012	Check Dam	Rock Check Dam	—	X	X	—
			Q00306010013	Check Dam	Rock Check Dam	—	X	X	—
	Q00306010014	Check Dam	Rock Check Dam	—	X	X	—		
	Additional	n/a	Q00302040023	Permanent Vegetation	Established Vegetation	X	—	—	X
CHQ-SMA-3.05	Baseline	09-Feb-11	Q00403060002	Berm	Straw Wattles	—	X	X	—
			Q00403060003	Berm	Straw Wattles	—	X	X	—
	Additional	n/a	Q00402040009	Permanent Vegetation	Established Vegetation	X	—	—	X
			Q00403010008	Berm	Earthen Berm	—	X	—	X
CHQ-SMA-4	Baseline	09-Feb-11	Q00503060006	Berm	Straw Wattles	—	X	X	—
			Q00506010003	Check Dam	Rock Check Dam	—	X	—	X
			Q00506010004	Check Dam	Rock Check Dam	—	X	—	X
			Q00506010005	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	Q00502040019	Permanent Vegetation	Established Vegetation	X	—	—	X
			Q00503010020	Berm	Earthen Berm	—	X	—	X

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
CHQ-SMA-4.1	Baseline	09-Feb-11	Q00603060004	Berm	Straw Wattles	—	X	X	—
			Q00603060005	Berm	Straw Wattles	—	X	X	—
			Q00606010002	Check Dam	Rock Check Dam	—	X	—	X
			Q00606010003	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	Q00602040008	Permanent Vegetation	Established Vegetation	X	—	—	X
CHQ-SMA-4.5	Baseline	09-Feb-11	Q00706010002	Check Dam	Rock Check Dam	—	X	—	X
			Q00706010003	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	Q00702040010	Permanent Vegetation	Established Vegetation	X	—	—	X
			Q00703010009	Berm	Earthen Berm	—	X	—	X
			Q00703060011	Berm	Straw Wattles	—	X	—	X
			Q00703060013	Berm	Straw Wattles	—	X	—	X
			Q00703060014	Berm	Straw Wattles	—	X	—	X
			Q00703060015	Berm	Straw Wattles	—	X	—	X
CHQ-SMA-5.05	Baseline	22-Nov-10	Q00803020006	Berm	Base Course Berm	—	X	—	X
			Q00804060002	Channel/Swale	Riprap	X	—	—	X
			Q00804060005	Channel/Swale	Riprap	X	—	X	—
			Q00804060007	Channel/Swale	Riprap	X	—	—	X
			Q00806010003	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	Q00802040008	Permanent Vegetation	Established Vegetation	X	—	—	X
CHQ-SMA-6	Baseline	09-Feb-11	Q00903010017	Berm	Earthen Berm	—	X	—	X
			Q00906010001	Check Dam	Rock Check Dam	—	X	—	X
			Q00906010002	Check Dam	Rock Check Dam	—	X	—	X
			Q00906010007	Check Dam	Rock Check Dam	—	X	—	X
			Q00906010008	Check Dam	Rock Check Dam	—	X	—	X
			Q00906010011	Check Dam	Rock Check Dam	—	X	X	—
			Q00906010018	Check Dam	Rock Check Dam	—	X	X	—
			Q00906010021	Check Dam	Rock Check Dam	—	X	—	X
			Q00906010022	Check Dam	Rock Check Dam	—	X	—	X

SMA	Control	Certification Date	Best Management Practice ID	Type of Control	Description	EC <sup>a</sup>	SC <sup>b</sup>	RON <sup>c</sup>	ROFF <sup>d</sup>
CHQ-SMA-6	Baseline	09-Feb-11	Q00906010023	Check Dam	Rock Check Dam	—	X	—	X
			Q00906010024	Check Dam	Rock Check Dam	—	X	X	—
			Q00906010025	Check Dam	Rock Check Dam	—	X	X	—
			Q00906010026	Check Dam	Rock Check Dam	—	X	X	—
			Q00906010027	Check Dam	Rock Check Dam	—	X	X	—
	Additional	n/a	Q00902040036	Permanent Vegetation	Established Vegetation	X	—	—	X
			Q00903060033	Berm	Straw Wattles	—	X	—	X
			Q00903060034	Berm	Straw Wattles	—	X	—	X
			Q00903060035	Berm	Straw Wattles	—	X	—	X
			Q00903120030	Berm	Rock Berm	—	X	X	—
			Q00903120031	Berm	Rock Berm	—	X	X	—
CHQ-SMA-7.1	Baseline	09-Feb-11	Q01006010003	Check Dam	Rock Check Dam	—	X	—	X
	Additional	n/a	Q01002040012	Permanent Vegetation	Established Vegetation	X	—	—	X
			Q01003010010	Berm	Earthen Berm	—	X	X	—
			Q01003010011	Berm	Earthen Berm	—	X	X	—
R-SMA-0.5	Baseline	06-Dec-10	R00103030006	Berm	Log Berm	—	X	—	X

<sup>a</sup> EC = Erosion control.

<sup>b</sup> SC = Sediment control.

<sup>c</sup> RON = Run-on control.

<sup>d</sup> ROFF = Runoff control.

<sup>e</sup> — = Control does not perform the identified function.

<sup>f</sup> X = Control performs the identified function.

<sup>g</sup> n/a = Not applicable.

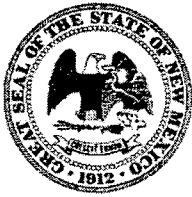
<sup>h</sup> TBD = To be determined.

# **Attachment 1**

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*Supporting Documentation for Permitted Sites with  
Certificates of Completion under the New Mexico  
Environment Department Compliance Order on Consent*





BILL RICHARDSON  
GOVERNOR

State of New Mexico  
**ENVIRONMENT DEPARTMENT**

Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Telephone (505) 428-2500  
Fax (505) 428-2567  
www.nmenv.state.nm.us



RON CURRY  
SECRETARY

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

September 13, 2006

David Gregory, Federal Project Director  
Los Alamos Site Operations  
Department of Energy  
528 35<sup>th</sup> Street, Mail Stop A316  
Los Alamos, New Mexico 87544

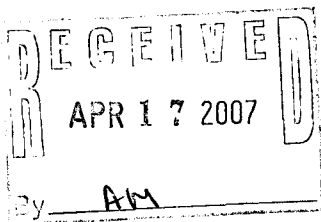
David McInroy, Deputy Project Director  
Environmental Services  
Los Alamos National Laboratory  
P.O. Box 1663  
Mail Stop M992  
Los Alamos, New Mexico 87545

**SUBJECT: CERTIFICATES OF COMPLETION FOR SOLID WASTE  
MANAGEMENT UNITS 53-002(a) AND 53-002(b), TECHNICAL AREA 53  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID # NM0890010515  
HWB-LANL-04-002**

Dear Messrs. Gregory and McInroy:

The New Mexico Environment Department (NMED) is in receipt of the *Request for Certificates of Completion for Solid Waste Management Units 53-002(a) and 53-002(b)*, dated August 15, 2006 and referenced by EP2006-0744.

Solid waste management unit (SWMU) 53-002(a) consists of two surface impoundments and SWMU 53-002(b) consists of one surface impoundment. Together, these two SWMUs comprise Consolidated Unit 53-002(a)-99. NMED has determined that the requirements of the March 1, 2005 Consent Order (Order) have been satisfied for these sites. NMED hereby issues a "Corrective Action Complete with Controls" certificate of completion for SWMUs 53-002(a) and 53-002(b) pursuant to Section VII.E.6.b of the Order. The control, as stated in the Permittees' approved TA-53 Investigation/Remediation Report, is that the land use remain industrial.

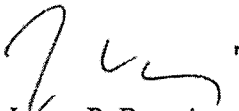


Messrs. Gregory and McInroy  
September 13, 2006  
Page 2

The Permittees may now initiate a "Class 3 Permit Modification for Corrective Action Complete" pursuant to the terms of the Permit and Section III.W.3.b of the Order. If the Class 3 Permit Modification for Corrective Action Complete is granted, SWMUs 53-002(a) and 53-002(b) will be removed from the list of SWMUs requiring corrective action and placed on the "Corrective Action Complete with Controls" list. In accordance with Section III.W.3b, the controls will then be enforceable under the Permit.

If you have any questions, please contact Kathryn Chamberlain of my staff at (505) 428-2546.

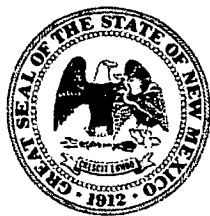
Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

JPB:kmc

cc: K. Chamberlain, NMED HWB  
D. Goering, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
L. King, EPA 6PD-N  
N. Quintana, LANL E/ER, MS M992  
A. Phelps, LANL ADEP, MS J591  
file: Reading and LANL '06 TA 53: [SWMU 53-002(a) & 53-002(b)]



NEW MEXICO  
ENVIRONMENT DEPARTMENT

CT 07-090  
ERID-98441



07 09 16 AM 10:16  
**Hazardous Waste Bureau**

BILL RICHARDSON  
Governor

2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303

RON CURRY  
Secretary

DIANE DENISH  
Lieutenant Governor

Phone (505) 476-6000 Fax (505) 476-6030

CINDY PADILLA  
Deputy Secretary

www.nmenv.state.nm.us

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

August 13, 2007

David Gregory  
Federal Project Director  
Los Alamos Site Office  
Department of Energy  
528 35<sup>th</sup> Street, Mail Stop A316  
Los Alamos, NM 87544

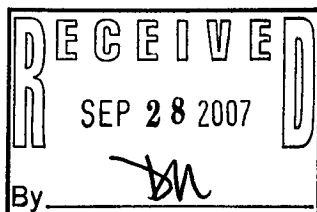
David McInroy  
Remediation Services Deputy Project Director  
Los Alamos National Laboratory  
P.O. Box 1663, MS M992  
Los Alamos, NM 87545

**RE: APPROVAL OF THE INVESTIGATION REPORT FOR CONSOLIDATED UNIT  
73-002-99 AND CORRECTIVE ACTION OF SOLID WASTE MANAGEMENT  
UNIT 73-002, AT TECHNICAL AREA 73, LOS ALAMOS NATIONAL  
LABORATORY (LANL),  
EPA ID #NM0890010515  
HWB-LANL-07-016**

Dear Messrs. Gregory and McInroy:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security LLC's (LANS) (collectively, the Permittees) *Investigation Report for Consolidated Unit 73-002-99 and Corrective Action of Solid Waste Management Unit 73-002, at Technical Area 73 (Report)*, dated July 2007 and referenced by LA-UR-07-4479/EP2006-1079. NMED has reviewed this document and hereby issues this Notice of Approval.

Consolidated Unit (CU) 73-002-99 is comprised of the following Solid Waste Management Units (SWMUs) and Area of Concern (AOC):





- SWMU 73-002 is a former incinerator and surface disposal area,
- AOC 73-003 is a former steam-cleaning facility (former building 00-1123) for garbage trucks,
- SWMU 73-004(a) is a former septic system that received sanitary waste from toilets and showers in the incinerator building,
- SWMU 73-004(b) was a concrete septic tank that discharged wash water from the steam-cleaning plant through a 6-in. vitrified clay pipe (VCP) drainline to an outfall on the slope of Pueblo Canyon and,
- SWMU 73-006 consisted of two drainlines that discharged to Pueblo Canyon from the incinerator.

NMED has determined that the requirements of the March 1, 2005 Order on Consent (Order) have been satisfied for these sites. This letter serves as a "Corrective Action Complete with Controls" certificate of completion for SWMUs 73-002, 73-004(a), 73-004(b), 73-006, and AOC 73-003 pursuant to Section VII.E.6.b of the Order.

Although levels of arsenic in discrete locations exceed applicable residential cleanup levels (e.g., 13.2 mg/kg at location 73-27314 at SWMU 73-002 and 13 mg/kg at location 73-02216 at SWMU 73-004(b)), these locations are virtually inaccessible to human or ecological receptors. However, the potential for transport of contaminants down gradient via storm water exists. The Permittees shall therefore install permanent and appropriate storm water controls, which will prevent the down gradient transport of contaminants via storm water. The Permittees must submit a work plan for installation of the storm water controls by September 30, 2007. The work plan shall include a description of all controls proposed for installation at CU 73-002-99 and a proposed inspection schedule for the proposed controls. If the Permittees choose to remove any soil/tuff containing arsenic concentrations above residential screening levels in the future, NMED will consider withdrawal of the control requirement.

Messrs. Glenn and Watkins  
August 13, 2007  
Page 3

Please contact Kathryn Roberts at (505) 476-6041 should you have any questions.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
K. Roberts, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
L. King, EPA 6PD-N  
G. Rael, DOE LASO, MS A316  
S. Stiger, ENV MS J591  
file: Reading and LANL TA-50 '07 (SWMU; 50-009)





BILL RICHARDSON  
Governor

DIANE DENISH  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

***Hazardous Waste Bureau***

**2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
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[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)**



RON CURRY  
Secretary

JON GOLDSTEIN  
Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

January 23, 2008

David Gregory  
Federal Project Director  
Los Alamos Site Office  
Department of Energy  
528 35<sup>th</sup> Street, Mail Stop A316  
Los Alamos, NM 87544

David McInroy  
Remediation Services Deputy Project Director  
Los Alamos National Laboratory  
P.O. Box 1663, MS M992  
Los Alamos, NM 87545

**RE: APPROVAL OF LOS ALAMOS NATIONAL LABORATORY  
PROPOSAL FOR NO FURTHER ACTION  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-02-019**

2008 JAN 25 AM 11:51

Dear Messrs. Gregory and McInroy:

The New Mexico Environment Department (NMED) has received and reviewed the United States Department of Energy (DOE) and the Los Alamos National Security, LLC (LANS) (collectively, the Permittees) *Los Alamos National Laboratory Proposal for No Further Action*, dated September 2002 and referenced by LA-UR-02-5883/ER2002-0624. The Permittees provided additional information (via an email sent by Linda Nonno to Neclam Dhawan on October 2, 2007) subsequent to conferring with NMED.

NMED has reviewed the document and the additional information, and agrees that no further corrective action is necessary at solid waste management units (SWMUs) 03-011, 03-046, 16-026(f), 16-030(c) and 73-004(c). NMED concurs that the above mentioned SWMUs do not pose unacceptable risk to human health and the environment. NMED has determined that a corrective action complete without controls designation is appropriate for these SWMUs. However, if in the future any additional information becomes available that indicates that the site may pose a risk to human health or the environment, NMED will require the Permittees to conduct additional corrective action at these sites.

Messrs. Gregory and McInroy  
January 23, 2008  
Page 2

NMED is hereby providing this letter as a 'Certificate of Completion,' which satisfies the requirements outlined in the Section VII.E.6.b of the Consent Order. The Permittees may now request a Class 3 Permit Modification for Corrective Action Complete for SWMUs 03-011, 03-046, 16-026(f), 16-030(c) and 73-004(c) pursuant to terms of the Permit and Section III.W.3.b of the Consent Order, to remove these sites from the Module VIII of the Permit.

Please contact Neelam Dhawan of my staff at (505) 476-6042 should you have any questions.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
K. Roberts, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
G. Rael, DOE LASO, MS A316  
S. Stiger ENV MS J591

File: LANL, NFA (SWMUs 03-011, 03-046, 16-026(f), 16-030(c) and 73-004(c)), 2008



BILL RICHARDSON  
Governor

DIANE DENISH  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

*Hazardous Waste Bureau*

**2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Phone (505) 476-6000 Fax (505) 476-6030  
[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)**



RON CURRY  
Secretary

SARAH COTTRELL  
Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

10 APR 7 AM 9:32

April 6, 2010

George J. Rael  
Environmental Operations Manager  
Los Alamos Site Office  
Department of Energy  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Michael Graham  
Associate Director Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS 991  
Los Alamos, NM 87545

**RE: APPROVAL  
REQUEST FOR CERTIFICATES OF COMPLETION FOR TWO SOLID WASTE  
MANAGEMENT UNITS AND FIVE AREAS OF CONCERN IN THE NORTH  
ANCHO CANYON AGGREGATE AREA  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-10-022**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Two Solid Waste Management Units and Five Areas of Concern in North Ancho Canyon Aggregate Area* (Request), dated March 9, 2010 and referenced by EP2010-0117. Results of the associated site investigation were presented in the *Investigation Report for North Ancho Canyon Aggregate Area, Revision 1*, dated January 2010, and referenced by LA-UR-10-0125 and EP2010-0005.

SWMU 39-001(b) is an inactive disposal area consisting of three trenches that accepted debris from firing site SWMU 39-008, empty chemical containers, and office waste. Pit 1 was constructed in the late 1960s. Pit 2 was constructed parallel and directly next to Pit 1 and was

used from 1976 to 1981. Pit 3 was constructed directly south of the other two pits and was used from 1981 to 1989. In 2009, the Pits were located, excavated, and the contents were removed. Based on review of associated soil sample analytical data, the nature and extent of contamination at the site has been defined. The evaluation of potential human health and ecological risks from the site indicates SWMU 39-001(b) does not pose an unacceptable risk to human health or to ecological receptors.

AOC 39-002(c) is a former outdoor satellite accumulation are (SAA) that was located on asphalt-paved areas next to the southwest corner of the gas-gun support structure (39-56). This SAA stored waste paper, solvent-contaminated rags (ethanol, acetone, and trichloroethene), and vacuum grease. In 2009, the SAA was investigated and characterized. Based on review of associated soil sample analytical data, the nature and extent of contamination at the site has been defined. The evaluation of potential human health and ecological risks from the site indicates AOC 39-002(c) does not pose an unacceptable risk to human health or to ecological receptors.

AOC 39-002(d) is a former SAA that was removed from service, administratively closed, and is no longer used for storage. The site only operated as an SAA and met all regulatory requirements (20.4.1.300 NMAC) for SAAs.

AOC 39-002(e) is a former satellite accumulation area (SAA) that was removed from service, administratively closed, and is no longer used for storage. The site only operated as an SAA and met all regulatory requirements (20.4.1.300 NMAC) for SAAs.

AOC 39-002(f) is a former SAA located on the asphalt driveway outside the northeast corner of a support structure (39-88) for an active firing site (SWMU 39-004(e)). Before this area became a SAA, it was used to store small quantities of waste solvents (ethanol, acetone, and trichloroethene), copper sulfate, transformer oil, vacuum grease, and photographic wastes. Based on review of associated soil sample analytical data from 2009, the nature and extent of contamination at the site has been defined. The evaluation of potential human health and ecological risks from the site indicates AOC 39-002(f) does not pose an unacceptable risk to human health or to ecological receptors.

SWMU 39-005 is a former seepage pit used to dispose of HE-contaminated decant from operations at an explosives operations building (39-04). The seepage pit measured approximately 5-ft x 5-ft x 7-ft and was not lined or otherwise contained. The gravel and HE-contaminated soil that comprised the pit were removed in 1986. Based on review of associated soil sample analytical data from 2009, the nature and extent of contamination at the site has been defined. The evaluation of potential human health and ecological risks from the site indicates SWMU 39-005 does not pose an unacceptable risk to human health or to ecological receptors.

AOC 39-007(d) is a storage area (structure 39-142) consisting of a bermed asphalt pad covered with a metal roof. A valved drainpipe discharged stormwater from the bermed area across the access road toward the Ancho Road drainage. The area was initially used to store metal and at times, drums of silicon transformer oil. Later it was used as a SAA where chemicals, including dielectric fluid, ethylene glycol, solvents, and kerosene were stored. The SAA was removed in

Messrs. Rael and Graham  
April 6, 2010  
Page 3

the 1990s, but the storage area continued to be used to store nonhazardous materials such as cable and wire. Based on review of associated soil sample analytical data from 2009, the nature and extent of contamination at the site has been defined. The evaluation of potential human health and ecological risks from the site indicates AOC 39-007(d) does not pose an unacceptable risk to human health or to ecological receptors.

NMED has determined that the requirements of the Consent Order have been satisfied and the aforementioned sites qualify for "Corrective Action Complete Without Controls" status. This letter serves as the certificate of completion for SWMUs 39-001(b) and 39-005, and AOCs 39-002(c), 39-002(d), 39-002(e), 39-002(f), and 39-007(d) pursuant to Section VII.E.6.b of the Consent Order.

If, in the future, any additional information becomes available that indicates that one or more of these sites may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at these sites.

Please contact Kathryn Roberts at (505) 476-6041 should you have any questions.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
K. Roberts, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
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S. Schulman, DOE-LASO, MS A316  
L. Nonno, EP-WES-EDA, MS M992  
J. McCann, EP-CAP, MS M992  
D. McInroy, EP-CAP, MS M992  
file: Reading and LANL TA-39 '10 (SWMUs: 39-001(b) and 39-005, AOCs: 39-002(c), 39-002(d), 39-002(e), 39-002(f), and 39-007(d))







BILL RICHARDSON  
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Lieutenant Governor

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*Hazardous Waste Bureau*

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RON CURRY  
Secretary

SARAH COTTRELL  
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 7, 2010

George J. Rael, Federal Projects Director  
Environmental Projects Office  
U.S. Department of Energy / National  
Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Michael J. Graham, Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545

**RE: CERTIFICATES OF COMPLETION  
UPPER MORTANDAD CANYON AGGREGATE AREA  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-10-055**



Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Three SWMUs and Three AOCs in the Upper Mortandad Canyon Aggregate Area* (Request), dated July 01, 2010 and referenced by EP2010-01293. Results of the site investigations were presented in the *Investigation Report for the Upper Mortandad Canyon Aggregate Area, Revision 1*, dated April 2010.

The Permittees have satisfied the requirements of the March 1, 2005 Consent Order for corrective action at the following solid waste management units/ areas of concern (SWMUs/AOCs) and the sites qualify for "Corrective Action Complete".

1. AOC 03-041 is an underground holding tank for industrial low-level radioactive wastewater. The tank is a 15 ft x 20 ft x 15ft double-walled fiberglass corrosion-proof

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tank with a leak-detection system. It is located in a below grade concrete-lined vault and the base of the vault is 15 ft below ground surface. Although it is currently on active status, it has never been used. Investigations conducted during 2009 defined the nature and extent of contamination. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 03-041. NMED hereby issues the Certificate of Completion for AOC 03-041 pursuant to Section VII.E.6.b of the Consent Order. Controls are not required at the site.

2. AOC 48-002(e) was a container storage area located on the east side of building 48-0001. The storage area is mostly paved except for a small portion of soil left unpaved to allow access to underground utilities. Investigations conducted during 1993, 1997, and 2009 defined the nature and extent of contamination at the site. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by the site. NMED hereby issues the Certificate of Completion for AOC 48-002(e) pursuant to Section VII.E.6.b of the Consent Order. Controls are not required at the site
3. SWMU 48-007(a) is an outfall formerly used to discharge treated cooling tower blowdown from two cooling towers. Water used in these cooling towers was treated to control scale, corrosion, and biological growth. The outfall was formerly listed on the National Pollutant Discharge Elimination System (NPDES) permit but was removed from the NPDES permit in 1999. Investigations conducted during 1993 and 2009 defined the nature and extent of contamination at the site. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by the site. Storm water continues to flow through the outfall and may mobilize the residual contamination at the site. The SWMU is monitored under the current NPDES permit. The control for the site is continuation of storm water monitoring under NPDES permit for potential transportation of residual contamination. NMED hereby issues the Certificate of Completion for SWMU 48-007(a) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.
4. SWMU 48-007(d) is an outfall formerly used to discharge noncontact cooling water that cooled a vacuum pump. The outfall was formerly listed on the NPDES permit, but was removed from the permit in 1998. Investigations conducted during 1993 and 2009 defined the nature and extent of contamination at the site. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by the site. Storm water continues to flow through the outfall and may result in mobilization of the residual contamination at the site. The SWMU is monitored under the current NPDES permit. The control for the site is continuation of storm water monitoring under NPDES permit for potential transportation of residual contamination. NMED hereby issues the Certificate of Completion for SWMU 48-007(d) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.
5. SWMU 48-010 is an unlined surface impoundment that received discharge from SWMUs 48-007(a) and 48-007(d). Investigations conducted during 1993, 1995, and 2009 defined

the nature and extent of contamination at the site. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by the site. Storm water continues to flow across the site and it is monitored under current NPDES permit. The control for the site is continuation of storm water monitoring under NPDES permit for potential transportation of residual contamination. NMED hereby issues the Certificate of Completion for SWMU 48-010 pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.

6. AOC 48-012 is a small area of stained soil that was discovered during routine trenching operations conducted in 2002. The site was reported as a one-time spill. Removal of the contaminated soil was conducted as a voluntary corrective action in 2002. Additional samples were collected in 2009 to define the nature and extent of contamination. Evaluation of human health risk indicates that there is potential unacceptable risk posed by the site under residential scenario, but not under the industrial and construction worker scenario. There are no complete exposure pathways to ecological receptors. The control for the site is industrial land use, the site cannot be used for residential purposes. NMED hereby issues the Certificate of Completion for AOC 48-012 pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.

If new information becomes available that indicates that these sites may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at these sites. Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

BRZ:nmd

cc: J. Kieling, NMED HWB  
D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
C. Rodriguez, DOE LASO, MS A316  
K. Rich, LANS, EP-CAP, MS M992

File: 2010 LANL, Certificates of Completion Upper Mortandad Aggregate Area (AOC 03-041, AOC 48-002(e), SWMU 48-007(a), SWMU 48-007(d), & SWMU 48-010).





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RON CURRY  
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Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

September 10, 2010

George J. Rael, Federal Projects Director  
Environmental Projects Office  
U.S. Department. of Energy / National  
Nuclear Security Administration  
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3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

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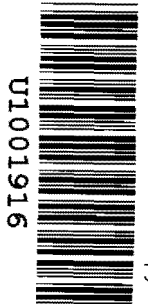
**RE: CERTIFICATES OF COMPLETION  
UPPER LOS ALAMOS CANYON AGGREGATE AREA  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-10-056**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Sixteen SWMUs and Nine AOCs in the Upper Los Alamos Canyon Aggregate Area* (Request), dated June 15, 2010 and referenced by EP2010-01284. Results of the site investigations were presented in the *Investigation Report for the Upper Los Alamos Canyon Aggregate Area, Revision 1*, dated February 2010.

The Permittees have satisfied the requirements of the March 1, 2005 Consent Order for corrective action at following solid waste management units/ areas of concern (SWMUs/AOCs). The sites qualify for Corrective Action Complete without Controls status.

1. AOC 00-031(a) is the potentially contaminated soil beneath a former service station. Historical information and investigations conducted during 2008-2009 confirmed that the



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underground storage tanks (USTs) were no longer in place and the analytical results indicated that no residual contamination related to the tanks is present at the site. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 00-031(a). NMED hereby issues this Certificate of Completion for AOC 00-031(a) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

2. AOC 00-034(b) was a suspected pit identified from a 1946 aerial photograph. Based on interviews and examination of aerial photographs it was determined that the identified pit was actually a staging area for soil or tuff fill material used for building roads and home sites and it was never used for land disposal of waste. No documentation of the pit was found. Based on the information provided by the Permittees, NMED has determined that the site does not need further corrective action. NMED hereby issues this Certificate of Completion for AOC 00-034(b) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
3. SWMU 01-001(t), known as the eastern sanitary waste line, served several former buildings. Currently, the entire SWMU area is either landscaped or beneath streets, parking lots, and commercial buildings. Investigations were conducted in 1993 and 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 01-001(t). NMED hereby issues this Certificate of Completion for SWMU 01-001(t) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
4. SWMU 01-001(u) is a branch of the western sanitary waste line that served former building J-2. Based on field screening and soil sample data collected during the radiological survey conducted in 1974-76, the site was not considered contaminated. Currently, the entire SWMU area is beneath residential buildings, parking lots, and a wooded area behind residential buildings. No piping was encountered during the 1994 borehole drilling. Investigations were conducted in 1994 and 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 01-001(u). NMED hereby issues this Certificate of Completion for SWMU 01-001(u) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
5. AOC 01-003(c) was a surface disposal area located below the north rim of Los Alamos Canyon. During 1988 and 1996 site visits, no debris was located. During 1996 a few scattered pieces of nonhazardous debris were found near the site. Another site visit was conducted during 2008-2009, revealing that the area is bare with boulders; no debris was observed on the cliff face. The site does not exist anymore. NMED hereby issues this Certificate of Completion for AOC 01-003(c) pursuant to Section VII.E.6.b of the

Consent Order. Based on the information provided, no controls are necessary for this site.

6. AOC 01-006(g) is a storm drainage system that served several buildings and discharged to Los Alamos Canyon. The entire area where drainlines were located has been regraded and developed for residential use. Investigations were conducted in 1992 and 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by AOC 01-006(g). NMED hereby issues this Certificate of Completion for AOC 01-006(g) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
7. SWMU 01-006(o) is a storm drainage system that served several buildings and discharged to Los Alamos Canyon. The entire area where drainlines were located has been completely regraded and rebuilt. Currently, the majority of the SWMU area is located beneath pavement and residential buildings. Investigations were conducted in 1992 and 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 01-006(o). NMED hereby issues this Certificate of Completion for SWMU 01-006(o) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
8. SWMU 01-007(d) refers to four areas of suspected subsurface soil radiological contamination between buildings because of overflow of an industrial waste line in 1946. After the overflow all contaminated soil that could be removed was excavated and gravel was spread over the area. Investigations were conducted in 1994 and 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 01-007(d). NMED hereby issues this Certificate of Completion for SWMU 01-007(d) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
9. SWMU 01-007(e) refers to suspected subsurface soil radiological contamination within the footprint of the former Sigma Building. Contaminated soil was excavated from three small areas within the footprint of Sigma Building. Investigations were conducted in 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 01-007(e). NMED hereby issues this Certificate of Completion for SWMU 01-007(e) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
10. SWMU 03-009(j) is a surface disposal area located west of warehouse 03-142. Interviews with site workers indicated that the soil fill contained construction debris. The site was never used for management of hazardous waste or hazardous constituents. The



area is partially covered by a paved road/parking lot. Investigations were conducted in 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 03-009(j). NMED hereby issues this Certificate of Completion for SWMU 03-009(j) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

11. SWMU 32-001 is the location of a former incinerator that was removed in 1954. It received combustible wastes from a medical research facility; the ash from the incinerator was disposed off-site. Investigations were conducted in 1993, 1996, and 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 32-001. NMED hereby issues this Certificate of Completion for SWMU 32-001 pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
12. SWMU 41-001 is an inactive septic system that received sanitary waste from a guard house. Investigations were conducted in 1995, 2000, and 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 41-001. NMED hereby issues this Certificate of Completion for SWMU 41-001 pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

The following sites have been investigated and found to pose no unacceptable risk under current and proposed future land use. The sites require controls and are eligible for Corrective Action Complete status with Controls.

13. SWMU 01-001(b), septic tank 135, served two former buildings that were determined by the Laboratory to be free of contamination in 1964. A radiological survey was conducted in 1974-76 that indicated that the tank and drainlines were not contaminated. The tank and drainlines were removed during 1974-1976 survey. Further investigations were conducted in 1992 and 2008-2009 to define the nature and extent of contamination, if any. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must institute a control on the site by monitoring storm water discharge for potential transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 01-001(b) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.
14. SWMU 01-001(c), septic tank 137, served former building D-2. The tank and its outfall were removed in 1975. Contaminated soil around the tank, drainlines and building D-2

were also removed in 1975. Investigations to define the nature and extent were conducted in 1992, 1993, and 2008-2009. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 01-001(c). However, storm water discharge may mobilize residual contamination from the site. The Permittees must institute a control on the site by monitoring storm water discharge for potential transport of residual contamination. This is currently being accomplished under the NPDES "Stormwater" Permit. NMED hereby issues this Certificate of Completion for SWMU 01-001(c) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.

15. SWMU 01-001(e), septic tank 139, served three former buildings. The tank became inactive in 1965 and was left in place. The tank was not located during the 1974-76 radiological survey and it was concluded that the tank had been previously removed. The entire SWMU area is under roads, residential buildings, driveways and sidewalks. Investigations were conducted in 1992 and 2008-2009 of the accessible areas. Evaluation of human health and ecological risk conducted on samples collected from accessible areas indicates that there is no potential unacceptable risk posed by SWMU 01-001(e). However, storm water discharge may mobilize residual contamination from the site. The Permittees must monitor storm water discharge for potential transport of residual contamination. This is currently being accomplished under the NPDES "Stormwater" Permit. Additionally, the Permittees must investigate the areas of potential contamination that are currently inaccessible due to the presence of structures when they become accessible. The controls for the site are to monitor the storm water discharge for potential transport of contamination from the site, and to prevent exposure of receptors to potential subsurface contamination. This latter control is accomplished so long as the existing structures remain intact. NMED hereby issues this Certificate of Completion for SWMU 01-001(e) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned controls.
16. SWMU 01-003(e) was a surface disposal area located along the northern wall of Los Alamos Canyon. Concrete construction debris, piping, and other miscellaneous objects were observed at the site in the past. A major portion of this site is under fill material brought in by the private owner to extend the canyon rim farther south. Investigations were conducted in 1992 and 2008-2009 to define the nature and extent of contamination. Evaluation of human health and ecological risks indicate that there is no potential unacceptable risk posed by SWMU 01-003(e). However, storm water discharge may mobilize residual contamination from the site. The Permittees must institute a control on the site by monitoring storm water discharge for potential transport of residual contamination. This is currently being accomplished under the NPDES "Stormwater" Permit. NMED hereby issues this Certificate of Completion for SWMU 01-003(e) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.
17. SWMU 01-006(d) is a drainline and associated outfall that served Building D-3 and discharged to hillside 137. Investigations were conducted in 1992, 1993, and 2008-2009

to define the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 01-006(d). However, storm water discharge may mobilize residual contamination from the site. The Permittees must institute a control on the site by monitoring storm water discharge for potential transport of residual contamination. This is currently being accomplished under the NPDES "Stormwater" Permit. NMED hereby issues this Certificate of Completion for SWMU 01-006(d) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.

18. SWMU 01-007(j) consists of twelve areas of suspected subsurface soil radiological contamination. These are small isolated contaminated areas in former Technical Area 1 discovered during a radiological survey conducted in 1976. Most of the contaminated soil was removed. These areas are developed with buildings, sidewalks, and roads. Investigations were conducted in 2008-2009 to define the nature and extent of contamination of accessible areas. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by SWMU 01-007(j). The Permittees must address the potential contamination beneath the structures when buildings and roadways are demolished or otherwise become accessible. The control for the site is to prevent exposure to receptors from potential subsurface contamination, which is accomplished so long as the existing structures remain intact. NMED hereby issues this Certificate of Completion for SWMU 01-007(j) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.
19. AOC 01-007(k) was a suspected soil contamination area located near the U and W buildings. The area is now developed and contains structures and parking lots. Investigations were conducted in 1993 and 2008-2009 to define the nature and extent of contamination in accessible areas. Evaluation of human health and ecological risk indicates that there is no potential unacceptable risk posed by AOC 01-007(k). The Permittees must investigate the areas beneath the structures for potential contamination at the time of demolition of these structures. The control for the site is to prevent exposure to receptors from potential subsurface contamination, which is accomplished so long as the existing structures remain intact. NMED hereby issues this Certificate of Completion for AOC 01-007(k) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.
20. AOC 03-008(a) is a firing site that was decommissioned in 1949. Review of engineering drawings and aerial photographs indicates that site would have been located near the intersection of Diamond Drive and Jemez Road and is no longer discernible. Currently the site is overlain by a parking garage. The Permittees must address the potential contamination beneath the site when the parking lot is decommissioned. The control for the site is to prevent exposure to receptors from potential subsurface contamination, which is accomplished so long as the existing structures remain intact. NMED hereby issues this Certificate of Completion for AOC 03-008(a) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.

21. AOC 43-001(b2) is a storm-drain outfall. It was permitted under the Laboratory's NPDES permit and was removed from the permit on January 11, 1999. Investigations conducted in 2008-2009 defined the nature and extent of contamination. Evaluation of human health and ecological risk indicates that there are potential unacceptable risks under the residential scenario. However, there is no potential unacceptable risk posed under the recreational scenario. The current and reasonably foreseeable future land use for the site is recreational; the control is that the site cannot be used for residential purposes. NMED hereby issues this Certificate of Completion for SWMU 43-001(b2) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.

Certificates of Completion are not issued for the following sites because the Permittees have not demonstrated that they do not pose unacceptable risk to human health or environment based on the current applicable standards.

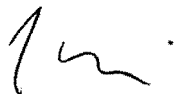
22. AOC 00-031(b), is the potentially contaminated soil associated with the Zia Company motor pool facility. Two USTs and associated piping were removed in 1994. Soil contaminated with petroleum hydrocarbons was removed and the excavation was backfilled and compacted. The Permittees must submit human health and ecological risk evaluations for NMED review and approval. The results of the risk evaluations may be included in the Upper Los Alamos Canyon Aggregate Area Phase II investigation report. NMED hereby denies the Certificate of Completion for the site.
23. AOC C-00-042 was a 2500-gallon steel waste-oil UST associated with the former automotive maintenance hanger at the Zia Company motor pool facility. The hanger was decommissioned and removed in 1962, and the land was subsequently transferred to Los Alamos County in 1967. The area was covered with fill material and asphalt. The tank and surrounding soil were removed in 1995 during VCA activities. The Permittees must conduct human health and risk evaluations using current standards. The results of the risk evaluations may be included in the Upper Los Alamos Canyon Aggregate Area Phase II investigation report. NMED hereby denies the Certificate of Completion for the site.
24. SWMU 01-002 is an outfall and associated industrial waste line that is located in the southern and western portion of Technical Area 1. Several former buildings with various processes discharged waste to the industrial waste lines. In 2000, the SWMU was split into two portions: the waste line portion of the SWMU was designated SWMU 01-002(a)-00, and the outfall was designated as SWMU 01-002(b)-00. For investigation purposes SWMU 01-002(b)-00 was included in the consolidated unit 45-001-00. The Permittees have completed corrective action at SWMU 01-002(a)-00. However, NMED will not issue the Certificate of Completion for the site until risk assessments are conducted by comparing contaminant concentrations to current standards for both sites. NMED hereby denies the certificate of completion for SWMU 01-002.

25. SWMU 01-007(1) is an area of potentially contaminated fill material located under Trinity Drive. The fill material is suspected of containing construction debris and other potentially radioactively contaminated soil from the Building D area. Investigations were conducted in 1993 and 1996. Currently, the site is overlain by Trinity Drive. The Permittees must conduct risk assessments using current standards and demonstrate that the site does not pose an unacceptable threat to human health or the environment. NMED hereby denies the Certificate of Completion for the site.

If new information becomes available that indicates that these sites may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at these sites.

Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,

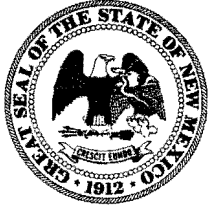


James P. Bearzi  
Chief  
Hazardous Waste Bureau

BRZ:nmd

cc: J. Kieling, NMED HWB  
D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
C. Rodriguez, DOE LASO, MS A316

File: 2010 LANL, Certificates of Completion, Upper Los Alamos Canyon Aggregate Area  
SWMUs/AOCs



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DAVE MARTIN  
Cabinet Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

January 14, 2011

George J. Rael, Assistant Manager  
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U.S. Department of Energy/National  
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Michael J. Graham  
Associate Director Environmental Programs  
Los Alamos National Security, L.L.C.  
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**RE: CERTIFICATE OF COMPLETION  
PUEBLO CANYON AGGREGATE AREA  
AREA OF CONCERN (AOC) 00-018(b)  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-10-096**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificate of Completion for Area of Concern 00-018(b), Bayo Wastewater Treatment Plant, Pueblo Canyon Aggregate Area*, dated December 10, 2010. Results of the associated facility demolition were presented in the *Demolition Documentation Report for the Bayo Canyon Wastewater Treatment Plant, Area of Concern 00-018(b)*, dated April 2010, and referenced by LA-UR-10-2076 and EP2010-0138.

AOC 00-018(b) is the former Bayo Canyon municipal wastewater treatment plant (WWTP) that was owned and operated by Los Alamos County. The Bayo WWTP was demolished by the County between October 2009 and February 2010. Although the evaluation of potential human health and ecological risks from the site indicated that AOC 00-018(b) does not pose an unacceptable risk to human health or to ecological receptors as presented and discussed in the July 2008 *Investigation Report for Pueblo Canyon Aggregate Area Revision 1* (LA-UR-08-4765 and EP2008-0391), NMED required the Permittees to observe and document demolition of the plant to ensure that contaminant releases had not occurred or were not present beneath site structures.

NMED has determined that the requirements of the Consent Order have been satisfied and the site qualifies for "Corrective Action Complete Without Controls" status. NMED hereby issues this certificate of completion for AOC 00-018(b) pursuant to Section VII.E.6.b of the Consent Order.

If, in the future, any additional information becomes available that indicates that the site may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at the site.

Please contact Daniel Comeau at (505) 476-6043, should you have any questions.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
D. Comeau, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
B. Coel-Roback, LANL, EP-CAP, MS M992  
C. Rodriguez, DOE-LASO, MS A316

File: LANL Pueblo Canyon Aggregate Area, AOC 00-018(b), Certificate of Completion -- 2011





SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

***Hazardous Waste Bureau***

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DAVE MARTIN  
Cabinet Secretary

RAJ SOLOMON, P.E.  
Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

February 18, 2011

George J. Rael, Assistant Manager  
Environmental Projects Office  
Department of Energy/National  
Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Michael J. Graham, Associate Director  
Environmental Programs  
Los Alamos National Security, LLC  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545

**RE: CERTIFICATES OF COMPLETION  
UPPER SANDIA CANYON AGGREGATE AREA  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-10-099**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Eight Solid Waste Management Units and Sixteen Areas of Concern in the Upper Sandia Canyon Aggregate Area* (Request), dated December 6, 2010 and referenced by EP2010-0540. Results of the site investigations were presented in the *Investigation Report for the Upper Sandia Canyon Aggregate Area, Revision 1*, dated October 2010.

The Permittees have satisfied the requirements of the March 1, 2005 Consent Order for corrective action at the following Solid Waste Management Units/Areas of Concern (SWMUs/AOCs).

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1. **SWMU 03-003(c)** is the location of a former temporary equipment storage area for used dielectric fluids and capacitors adjacent to the former building 03-287 at TA-3. Building 03-287 was constructed between 1966 and 1968 and used for experiments until the mid-1980s. The sealed capacitors containing non-polychlorinated biphenyl (PCB) dielectric oil were temporarily stored in this area. Before the remodeling of building 03-287 in late 1992 and early 1993, a single surface sample was collected and analyzed for PCBs; no PCBs were detected. Samples of asphalt and fill collected in 2001 indicated the presence of PCBs. In 2003 and 2004, building 03-287 underwent decommissioning that included removal of the building and all of the asphalt paving and fill directly beneath the asphalt including location of SWMU 03-003(c). The entire area was graded and leveled, and approximately 10 ft of clean fill was placed over the entire site to accommodate construction of a new facility. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by SWMU 03-003(c). NMED hereby issues this Certificate of Completion for SWMU 03-003(c) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
2. **AOC 03-003(n)** is the location of a one-time PCBs spill in the salvage yard at Technical Area (TA)-3. With the exception of two small areas, most of the area is asphalt-paved. The salvage yard was used to store transformers, electrical equipment, batteries, and scrap metal. In 1977, a transformer ruptured and spilled approximately 10 gallons of PCB-contaminated oil into the soil. The salvage operation and material were moved to a building in 1993. Investigations conducted in 1994 and 2009 defined the nature and extent of contamination. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 03-003(n). NMED hereby issues this Certificate of Completion for AOC 03-003(n) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
3. **AOC 03-003(o)** is the location of a former capacitor bank that was used for experiments in former building 03-287 at TA-3. The sealed capacitors contained non-PCB dielectric fluid oil; each of the associated spark gap switches at the building 03-287 required approximately two quarts of non-PCB mineral oil for electrical insulation. The experiment was decommissioned in mid-1980s and all of the capacitors were removed from the building. Oil samples from spark gap switches and swipe samples from the surfaces within the building were collected and analyzed for PCBs. PCBs were detected at concentrations of less than two parts per million. In 2003 and 2004, building 03-287 underwent decommissioning that included removal of the building all the asphalt paving and fill directly beneath the asphalt including location of SWMU 03-003(c). The entire area was graded and leveled, and approximately 10 feet of clean fill was placed over the entire site to accommodate construction of a new facility. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 03-003(o). NMED hereby issues this Certificate of Completion for AOC 03-003(o).



pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

4. **SWMU 03-014(q)** is the treated effluent storage tank located at the TA-3 power plant. Between 1951 and 1985, the tank received and stored effluent from the former wastewater treatment plant, for use as cooling water for the power plant cooling towers. The effluent was pumped to the holding tank and treated with chromate to hinder bacterial growth. The tank currently receives treated effluent from the TA-46 Sanitary Wastewater Systems Consolidation Plant to use at the power plant. The effluent is treated in a wastewater neutralization tank to adjust pH before use and subsequent discharge to an outfall. Investigations were conducted in 2009 indicating that there is no potential unacceptable risk posed by SWMU 03-014(q) to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-014(q) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
5. **AOC 03-014(v)** is the location of a former floor drain within building 03-36, that was installed in 1953 and connected to the sanitary sewer line tied to the former waste water treatment plant at TA-3. Building 03-36 and the soil beneath its footprint were removed in 1999. The area was further excavated to a depth of approximately 15 ft below grade to accommodate the foundation of new building. The depth of the excavation was approximately 8 ft deeper than the two confirmation samples collected in 1999. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 03-014(v). NMED hereby issues this Certificate of Completion for AOC 03-014(v) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
6. **AOC 03-027** is comprised of two former concrete-block lined lift wells located beneath the hydraulic lifts at a former garage (building 03-36) at TA-3. The lift wells collected floor wash water that contained residual oil and rinse water containing nitric acid. The garage was removed in 1999 for the construction of a new building. Building 03-36 and the soil beneath its footprint were removed in 1999. After demolition of the building in 1999, nine fill and tuff samples were collected from six locations within the footprint of the former lift wells. The area was further excavated to a depth of approximately 15 ft below grade to accommodate the foundation of new building. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 03-027. NMED hereby issues this Certificate of Completion for AOC 03-027 pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
7. **SWMU 03-028** is a former 12 ft x 15 ft x 6 ft deep concrete holding pond that was located at the northeast corner of the former asphalt batch plant. The site was used as a settling pond for mineral dust and particulates from gravel captured by scrubber water from the asphalt batch plant. Sediment from the bottom of the holding pond was



periodically removed and disposed of in a former landfill located southeast of the plant. Water from the pond was recycled to the scrubber system and replenished with potable water. During decommissioning of the asphalt batch plant in 2003, the pond sediment and water was removed from the pond, the pond filled with clean soil and gravel, and the surface of the site paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-028 pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

8. **SWMU 03-036(a)** is the location of two former asphalt emulsion product tanks at the former TA-3 asphalt batch plant. The tanks were 25 to 30 ft in diameter and 8 to 12 ft high. The tanks were located within a soil-bermed secondary containment area. Spills that occurred from plant operations were contained within the bermed area. Both tanks were removed and disposed of at the Los Alamos County Landfill in 1988 or 1989, as was soil around and beneath the tanks. The surface of the site was paved with asphalt for use as a parking lot in 2003. Results of investigations conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-036(a) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
9. **AOC 03-036(b)** is a former location of two 25- to 50-gallon aboveground storage tanks located at the former asphalt batch plant at TA-3. The tanks were surrounded by 3-ft soil berm and stored kerosene and No. 2 diesel fuel. The use of the tanks started in 1960. In 2002, the tanks, the soil berm, and stained soils were removed during decommissioning of the asphalt batch plant. Results of the investigation conducted in 2003 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-036(b) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
10. **SWMU 03-036(c)** is the location of two former asphalt emulsion storage tanks at the former TA-3 asphalt batch plant. The tanks were removed and disposed of at the Los Alamos County Landfill. The inspection of tanks indicated that the tanks had not leaked. The asphalt batch plant was decommissioned in 2002. In 2003, the site was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-036(c) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
11. **SWMU 03-036(d)** is the location of two former asphalt emulsion storage tanks (former structures 03-75 and 03-76) at the former TA-3 asphalt batch plant. The tanks were



removed and disposed of at the Los Alamos County landfill. The inspection of tanks indicated that the tanks had not leaked. The asphalt batch plant was decommissioned in 2002. In 2003, the site was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-036(d) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

12. **AOC 03-038(c)** is a 2-in cast-iron drainline that formerly carried rinse solution from a copper electroplating bath to an industrial waste line. Plating and acid solutions were washed of the circuit boards and down the drain. The electroplating bath initially operated in the 1960s and ceased operations in the early 1970s. The drainpipe was cut and capped inside the wall to make it inaccessible. Results of an investigation conducted in 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-038(c) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
13. **AOC 03-043(a)** is a former 20,000-gal aboveground storage tank, installed in 1948 at the former asphalt batch station at TA-3. The tank was removed in 1963 and disposed of at the Los Alamos County Landfill, and replaced by another storage tank (AOC 03-043(f)). In 2003, the surface was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(a) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
14. **AOC 03-043(b)** is the location of a former 10,000-gallon aboveground asphalt emulsion storage tank, installed in 1948 at the former TA-3 asphalt batch plant. In 1980, the tank was removed and disposed of at the Los Alamos County Landfill, as was stained soil observed beneath and around the tank. The asphalt batch plant was decommissioned in 2002. In 2003, the surface of the site was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(b) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
15. **AOC 03-043(d)** is the former aboveground asphalt storage tank (former structure 03-76) at the former asphalt batch plant at TA-3. The tank was removed and disposed of at the Los Alamos County Landfill in 1988 or 1989. The surface of the site was paved with asphalt for use as a parking lot in 2003. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-



043(d) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

16. **AOC 03-043(f)** is the location of a former aboveground storage tank (former structure number 03-178) at the former asphalt batch station at TA-3. The tank was removed, disassembled, disposed of at Los Alamos County Landfill. In 2003, the surface was paved with asphalt for use as a parking lot. The potential soil contamination associated with the former tank was included in the investigations conducted at SWMUs 03-036(c) and 03-036(d). Results of the investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(f) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
17. **AOC 03-043(g)** is the location of a former aboveground asphalt storage tank (former structure number 03-335) at the former asphalt batch station at TA-3. The tank was removed and disposed of at the Los Alamos County Landfill. In 2003, the surface was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(g) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
18. **AOC 03-043(h)** is the former aboveground asphalt storage tank (former structure 03-75) at the former asphalt batch plant at TA-3. The tank was removed and disposed of at the Los Alamos County Landfill in 1988-1989. The surface of the site was paved with asphalt for use as a parking lot in 2003. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(h) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
19. **AOC 03-047(d)** is the location of a former container storage area at TA-3. The storage area consisted of an asphalt pad where drums of new motor oil, used oil, and Stoddard solvent were stored from 1954-1989. The asphalt pad was removed when the area was decommissioned in 1989. Investigations conducted in 1995 indicated that the residual contamination posed no unacceptable risk to human health and ecological receptors. In 2002, before the installation of a concrete pad, soil was excavated within the boundary of AOC 03-047(d). Two days later, a waterline ruptured at the TA-3 power plant and eroded all remaining soil/fill, including the 1995 sampling locations. The location of the AOC 03-047(d) was backfilled with more than five ft of clean fill to bring the site back up to grade. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by the site. NMED hereby issues this Certificate of



Completion for AOC 03-047(d) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

20. **SWMU 03-056(l)** is the location of a former outdoor storage area at TA-3. Containers of disposable clothing contaminated with beryllium powder and carboys used to store beryllium powder in water were reportedly staged at this location before disposal. There are no documented releases from the drums or carboys to the environment. Results of the investigations conducted in 2003 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-056(l) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
21. **AOC C-03-016** is a former oil cleanout bin that was located north of the former asphalt batch plant at TA-3. The bin was approximately 4 ft x 16 ft x 3 ft deep, had a hinged lid, and was buried with the top flush to the ground surface. The bin was installed in the mid-1970s and contained used asphalt emulsion oil. In the late 1980s, the stained area surrounding the bin was removed. Clean sand and gravel was placed around the bin. The bin and stained soils around the bin were removed in the late 1990s. In 2003, the surface of the site was paved with asphalt for use as a parking lot. Results of investigations conducted in 2003 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC C-03-016 pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
22. **AOC 60-004(b)** is a former storage area at TA-60 for 12 containers of diesel sludge removed from underground tanks at the TA-3 power plant. The containers were staged at this area in 1988. Results of investigations conducted in 1994 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 60-004(b) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.
23. **AOC 60-004(d)** is the location of a former storage area at TA-60. The containers were staged at this area in 1988. The area was formerly used to temporarily stage drums containing fluids removed from underground storage tanks. Decommissioned underground storage tanks were also dismantled at this location. The storage area was first used in 1979. Results of investigations conducted in 1994 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 60-004(d) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.



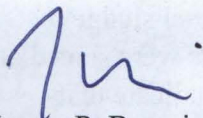
The following site is eligible for Corrective Action Complete with Controls.

24. **SWMU 03-056(c)** is an inactive outdoor transformer storage area located at TA-3. The area was used to store electrical equipment, capacitors, and transformers with PCB-containing dielectric oils. Waste solvents used to clean electric equipment were also stored at this location. Investigations and remedial actions were conducted at the site in 1994, 1995, 2000, and 2001. The nature and extent of contamination was defined and confirmatory sample results indicated that the site met the Environmental Protection Agency's PCB cleanup criterion of less than 1 part per million. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed at the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must institute and maintain a control on the site by monitoring storm water discharge for potential off-site transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 03-056(c) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.

If new information becomes available that indicates that these sites may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at these sites.

Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

cc: J. Kieling, NMED HWB  
D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
C. Rodriguez, DOE LASO, MS A316  
K. Rich, LANS, EP-CAP, MS M992

File: 2011 LANL, Certificates of Completion, Upper Sandia Canyon Aggregate Area  
SWMUs/AOCs





SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

NEW MEXICO  
ENVIRONMENT DEPARTMENT

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DAVE MARTIN  
Cabinet Secretary

RAJ SOLOMON, P.E.  
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 3, 2011

George J. Rael, Assistant Manager  
Environmental Projects Office  
Department of Energy/National  
Nuclear Security Administration  
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3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Michael J. Graham, Associate Director  
Environmental Programs  
Los Alamos National Security, LLC  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545

RE: **CERTIFICATES OF COMPLETION  
MATERIAL DISPOSAL AREA V, TECHNICAL AREA 21  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-11-030**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Four Solid Waste Management Units and One Area of Concern at Material Disposal Area V, Technical Area 21* (Request), dated May 13, 2011 and referenced by EP2011-0138. Results of the site investigations were presented in the *Investigation Report for Consolidated Unit 21-018(a)-99, Material Disposal Area V, at Technical Area 21, Revision 1*, dated July 2007 and the *Supplemental Investigation Report for Consolidated Unit 21-018(a)-99, Material Disposal Area V, at Technical Area 21, Revision 1*, dated April 2008.

To determine extent of subsurface tritium contamination, the Permittees implemented the *Vadose Zone Subsurface Characterization and Vapor-Monitoring Well Installation Work Plan for Material Disposal Area V, Consolidated Unit 21-018(a)-99, Revision 1*, dated August 2009. Four rounds of quarterly sampling were conducted and periodic monitoring reports were submitted to



NMED in December 2009, March 2010, June 2010, and October 2010. The Permittees have satisfied the requirements of the March 1, 2005 Consent Order for corrective action at the following Solid Waste Management Units/Areas of Concern (SWMUs/AOCs).

**SWMU 21-013(b)** is the location of a former surface debris disposal site located immediately south of MDA V on the south-facing slope leading into BV Canyon. It is not known how long this site received building debris; however, it did not receive waste after 1994. SWMU 21-013(b) contained the external concrete piers, the concrete building foundations, and other building debris derived from the 1965 demolition of the laundry facility (building 21-20 [SWMU 21-018(b)]) and a waste treatment laboratory (building 21-33 [AOC 21-009]). The debris was removed in 2005 and investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must monitor storm water discharge for potential off-site transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 21-013(b) pursuant to Section VII.E.6.b of the Consent Order.

**SWMU 21-018(a)**, more commonly referred to as Material Disposal Area (MDA) V, is an approximately 1-acre site located immediately south of the former laundry facility [building 21-20; SWMU 21-018(b)]. The SWMU consists of three interconnected liquid waste absorption beds. MDA V was constructed to receive radioactive liquid wastewater from the laundry facility and was designed to enhance the infiltration of liquids into the tuff bedrock. The absorption beds were constructed in 1945 and operated until 1961. They remained on stand-by status until September 1963 when they were permanently removed from service. All absorption bed material and associated piping was removed and investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must monitor storm water discharge for potential off-site transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. In addition, in the letter entitled *Extended Tritium Sampling at Material Disposal Area V*, dated February 15, 2011 and referenced by EP2011-0058, the Permittees commit to continue quarterly vapor monitoring at MDA V in connection with remedial actions currently in progress at MDA B. The need for continued vapor monitoring at MDA V will be reconsidered upon completion of the review of the final report detailing remedial actions at MDA B. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 21-018(a) pursuant to Section VII.E.6.b of the Consent Order.

**SWMU 21-018(b)** is a former laundry facility (building 21-20) located at the eastern end and south of DP Road, immediately west of the security fence that encloses other former TA-21 facilities. Operational from 1945 to 1961, the laundry facility was used to wash personal protective clothing and other reusable cloth items used in both research and production operations involving radioactive materials at TA-21. It is estimated that the laundry facility

generated approximately two million gallons of effluent annually, which was discharged to MDA V. The laundry facility was a wood-frame structure with both concrete slab and wood-framing-on-pier floors. The wood portions of the building were decommissioned and demolished in 1965 and taken to MDA G where the debris was burned. The concrete foundation and associated piping were bulldozed over the edge of DP Mesa onto the south-facing slope of BV Canyon. Investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. NMED hereby issues this Certificate of Completion for SWMU 21-018(b) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

**SWMU 21-023(c)** is a former septic system that consisted of a tank, inlet and outlet lines, and an outfall that served a waste treatment laboratory (building 21-33 [AOC 21-009]). The septic tank was located immediately west of the MDA V absorption beds and was constructed of reinforced concrete. The inlet and outlet lines were 4-inch vitrified clay pipe (VCP); the outlet line surfaced 40 feet southwest from the tank, approximately 30 feet from the canyon edge above BV Canyon. The outfall area extended south into BV Canyon. The waste treatment laboratory septic system was put into service in 1948. Wastewater was pumped from a sump in building 21-33 through the septic system. The tank was removed in 1965 and taken to MDA G. Investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must monitor storm water discharge for potential off-site transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 21-023(c) pursuant to Section VII.E.6.b of the Consent Order.

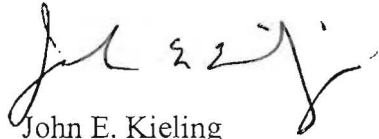
**AOC 21-013(g)** is located immediately south of MDA V on the south-facing slope leading into BV Canyon and has historically been described as a surface debris disposal site. It is not known how long the site received building debris; however, it did not receive waste after 1994. AOC 21-013(g) consisted of two discarded drainlines and miscellaneous building materials of unknown origin. The debris was removed in 2005 and investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must monitor storm water discharge for potential off-site transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 21-013(g) pursuant to Section VII.E.6.b of the Consent Order.

If new information becomes available that indicates that these sites pose a potential risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at these sites in the future.

Messrs. Rael and Graham  
June 3, 2011  
Page 4

Please contact Ben Wear at (505) 476-6041, if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "John E. Kieling". The signature is fluid and cursive, with the first name "John" being the most prominent.

John E. Kieling  
Acting Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
W. Woodworth, DOE LASO, MS A316  
A. Russell, DOE-LASO  
B. Wedgeworth, EP-TA-21 Closure Project, MS M992  
D. McInroy, EP-CAP, MS M992  
W. Alexander, EP-BPS, MS M992

File: 2011 LANL, Certificates of Completion, MDA V, TA-21 SWMUs/AOCs





SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

***Hazardous Waste Bureau***

**2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
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[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)**



DAVE MARTIN  
Secretary

BUTCH TONGATE  
Deputy Secretary

EP2012-5112

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

May 16, 2012

Pete Maggiore  
Assistant Manager  
Environmental Projects Office  
National Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Michael J. Graham  
Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545

**RE: CERTIFICATES OF COMPLETION  
ONE SOLID WASTE MANAGEMENT UNIT AND ONE AREA OF CONCERN  
IN THE GUAJE/BARRANCAS/RENDIJA CANYONS AGGREGATE AREA  
EPA ID #NM0890010515  
HWB-LANL-12-008**

Dear Messrs. Maggiore and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for One Solid Waste Management Unit and One Area of Concern in the Guaje/Barrancas/Rendija Canyons Aggregate Area*, dated February 02, 2012 and referenced by EP2012-0026.

One solid waste management unit (SWMU) 00-011(c) and one area of concern (AOC) C-00-020 were recommended for corrective action complete without controls in the *2011 Biennial Ordnance Survey Report* (Report), dated December 2011 (LA-UR-11-6766/EP2011-0383). NMED reviewed the Report and concurred with the conclusion that there is no need to conduct further ordnance surveys at these two sites (December 28, 2011). The Permittees have satisfied

U1201076

the requirements of the March 1, 2005 Consent Order for completion of corrective action at these sites.

Based on the results of investigations, the following sites within the Guaje/Barrancas/Rendija canyons Aggregate Area qualify for Corrective Action Complete Without Controls status.

**SWMU 00-011(c)** is a suspected mortar impact area located on U. S. Forest Service land in a tributary of Rendija canyon north of the Sportman's club small-arms firing range. The area is approximately 10 acres and may have been used as a mortar impact area in the 1940s. A RCRA facility investigation (RFI) conducted in 1993 included an ordnance survey that did not find any munitions debris (MD) at the site and the Permittees concluded that the site was never used as an ordnance impact area. In October 2006, another munitions debris survey was conducted at the site and no MD or munitions of explosive concern (MEC) were found at SWMU 00-011(c). At NMED's direction, additional ordnance surveys were conducted in 2009 and 2011 and no MD or MEC was found at the site during either survey. The Permittees have demonstrated that the SWMU 00-011(c) is eligible for corrective action complete without controls.

**AOC C-00-020** is a 30-acre suspected mortar impact area located along the north valley wall of Rendija Canyon on U. S. Forest Service land. The site was thought to be a former impact area because of the presence of "U.S. Property-No trespassing" signs posted along the southern edge of the area. In 1991, an ordnance team inspected the site and concluded that the site was not a former impact area. A RFI was conducted in 1993 that included an ordnance survey. No MD or MEC was observed at the site. In October 2006, another munitions debris survey was conducted at the site and no MD or MEC were found at AOC C-00-020. At NMED's direction, additional ordnance surveys were conducted in 2009 and 2011 and no MD or MEC was found during the surveys. The Permittees have demonstrated that the AOC C-00-020 is eligible for corrective action complete without controls.

If new information becomes available that indicates that any of these sites may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional investigation or remediation. NMED hereby issues this Certificate of Completion for 2 sites discussed above pursuant to section VII.E.6.b of the Consent Order.

U1201076

Messrs. Maggiore and Graham  
May 16, 2012  
Page 3

Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
C. Rodriguez, DOE LASO, MS A316  
T. Haagenstad, EP-CAP, MS M992

File: 2012 LANL, Certificates of Completion for Guaje/barrancas/Rendija Canyons AA Sites  
(LANL 12-008)

U1201076





SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

*Hazardous Waste Bureau*

2905 Rodeo Park Drive East, Building 1  
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DAVE MARTIN  
Cabinet Secretary

BUTCH TONGATE  
Deputy Secretary

JAMES H. DAVIS, Ph.D.  
Director  
Resource Protection Division  
EP2012-5183

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

July 13, 2012

Peter Maggiore, Assistant Manager  
Environmental Projects Office  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Michael J. Graham, Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545

**RE: APPROVAL OF REQUEST FOR CERTIFICATES OF COMPLETION FOR SIX  
SOLID WASTE MANAGEMENT UNITS AND ONE AREA OF CONCERN IN  
THE UPPER CAÑADA DEL BUEY AGGREGATE AREA  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-11-049**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Six Solid Waste Management Units and One Area of Concern in the Upper Cañada Del Buey Aggregate Area* (Request), dated July 14, 2011, and referenced by EP2011-0242.

The request included the following Solid Waste Management Units (SWMUs) and Area of Concern (AOC):



SWMU 46-002, Surface Impoundment  
SWMU 46-004(m), Inactive Outfall  
SWMU 46-004(p), Inactive Dry Well  
SWMU 46-006(b), Former Storage Shed

SWMU 46-006(g), Storage Area  
SWMU 52-001(d), Former Facility Equipment  
AOC C-46-001, Spill/Release Area

These SWMUs and the AOC were recommended for corrective action complete in the report entitled *Investigation Report for Upper Cañada del Buey Aggregate Area, Revision 1* (Report), dated May 2011 that summarized work completed in 2010. NMED approved the Report on May 31, 2011. The Permittees have satisfied the requirements of the March 1, 2005 Consent Order for completion of corrective action at these sites.

SWMU 46-002 is a surface impoundment system located at the eastern end of TA-46, southeast of the prototype fabrication building (46-77). The impoundment system was constructed in the early 1970s to receive sanitary wastewater from buildings located within the restricted access area of Technical Area (TA)-46. The lagoon was removed from service in the early 1990s when the Sanitary Wastewater System Consolidation (SWSC) plant came online. The outfall from the surface impoundment system had been removed from the National Pollutant Discharge Elimination System (NPDES) permit by 1993. Based on the risk screening assessment results, no potential unacceptable risks or doses from contaminants of potential concern (COPCs) exist for the industrial, construction worker, and residential scenarios. No potential ecological risks exist for any receptor following evaluations based on minimum ecological screening levels (ESLs), hazard index (HI) analyses, comparison with background concentrations, potential effects to plant and animal populations, and lowest observed adverse effect level (LOAEL) analyses.

SWMU 46-004(m) is a former NPDES-permitted outfall located approximately 60 ft north of building 46-30 at TA-46. The outfall protrudes from a slope on the hillside north of building 46-30. The outfall discharged effluent from an industrial drainline in building 46-30 to a ditch at the foot of the bank. In December 1995, the outfall was removed from the NPDES permit. Before the outfall was removed from the NPDES permit, all discharges to the outfall from building 46-30 ceased. Based on the risk screening assessment results, no potential unacceptable risks or doses from COPCs exist for the industrial, construction worker, and residential scenarios. No potential ecological risks exist for any receptor following evaluations based on minimum ESLs, HI analyses, comparison with background concentrations, potential effects to plant and animal populations, and LOAEL analyses.

SWMU 46-004(p) is an inactive dry well located next to the southwest corner of building 46-1 at TA-46. The dry well consists of corrugated metal pipe, approximately two feet in diameter and 10 feet in length, placed vertically in the ground, with a square concrete pad around the top three feet of the pipe, and covered with a hinged-metal lid. Building 46-1 housed offices, two assembly bays, a machine shop, several laboratories for the assembly and checkout of electrical components, general laboratories, and a uranium polishing area. All COPCs identified for

SWMU 46-004(p) were reported in samples collected from depths greater than 10 feet below ground surface (bgs). Therefore, no complete pathways to receptors for any of the exposure scenarios exist, and human health risk-screening assessments were not conducted for this site. All COPCs identified for SWMU 46-004(p) were reported in samples collected from depths greater than 10 feet bgs. Therefore, no complete pathways to any ecological receptors exist, and an ecological risk screening assessment was not conducted for this site.

SWMU 46-006(b) is a former storage shed that was located approximately 40 feet north of the Laser Isotope Support Facility at TA-46. The shed was installed sometime before 1977. The site of the shed is paved with asphalt and slopes toward a storm drain to the southeast. The shed was removed in 1990. Based on the risk-screening assessment results, no potential unacceptable risks from COPCs exist for the industrial, construction worker, and residential scenarios. No potential ecological risks exist for any receptor following evaluations based on minimum ESLs, HI analyses, comparison with background concentrations, potential effects to populations (individuals for threatened and endangered species), and LOAEL analyses.

SWMU 46-006(g) is a storage shed located at the west end of building 46-31 at TA-46. The shed is of corrugated-steel construction and measures 10 feet by 20 feet. From 1982 to 1984, the shed housed vacuum pumps used in experiments involving plasma vaporization of depleted uranium powder. The area around the shed is level and paved. Based on the risk-screening assessment results, no potential unacceptable risks from COPCs exist for the industrial, construction worker, and residential scenarios. No potential ecological risk was found for any receptor following evaluations based on minimum ESL, HI analyses, comparison with background concentrations, potential effects to populations (individuals for threatened and endangered species), and LOAEL analyses.

SWMU 52-001(d) used to contain various facility equipment. This site operated from 1967 to 1968 and underwent decontamination and decommissioning in 1989. Supplemental information provided to NMED in 2008 demonstrated that any releases outside building 52-01 would be associated with the other SWMUs associated with the building and additional sampling of SWMU 52-001(d) was not necessary.

AOC C-46-001 is the location of a one-time spill of mercury in the vicinity of building 46-75 at TA-46. On July 22, 1975, 0.55 to 1.1 lb of mercury spilled on the ground near building 46-75. The spill was cleaned up shortly after it occurred and aerial photos show the entire area surrounding building 46-75 was paved at the time of the spill. A human health risk assessment was not performed for AOC C-46-001 because no COPCs were identified for the site. Therefore, no potential unacceptable risks from COPCs exist for the industrial, construction worker, and residential scenarios. An ecological risk assessment was not performed for AOC C-46-001 because no COPCs were identified for the site. Therefore, no potential risks from COPCs to ecological receptors exist.

NMED has reviewed the Request and, based on review of associated soil sample analytical data, the nature and extent of contamination at the SWMUs and AOC have been defined. NMED has

Messrs. Rael and Graham  
July 13, 2012  
Page 4

determined that the requirements of the Consent Order have been satisfied and the sites qualify for "Corrective Action Complete Without Controls" status. NMED hereby issues this certificate for the SWMUs and AOC listed above pursuant to Section VII.E.6.b of the Consent Order.

If, in the future, any additional information becomes available that indicates the site(s) may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at the site(s).

If you have any questions regarding this letter, please contact Daniel Comeau at (505) 476-6043.

Sincerely,



John E. Kieling  
Acting Chief  
Hazardous Waste Bureau

cc: N. Dhawan, NMED HWB  
D. Cobrain, NMED HWB  
D. Comeau, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
C. Rodriguez, DOE-LASO, MS A316  
K. Rich, EP-CAP, MS M992

File: 2011 - Approval\_Rqst\_for\_CoCs, Upper CdB AA; LANL-11-049

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NR-EP-7-17-2012-452698



SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

*Hazardous Waste Bureau*

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DAVE MARTIN  
Secretary

BUTCH TONGATE  
Deputy Secretary

JAMES H. DAVIS, Ph.D.  
Director  
Resource Protection Division  
EP2013-5011

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

December 20, 2012

Pete Maggiore  
Assistant Manager  
Environmental Projects Office  
National Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Jeffrey D. Mousseau  
Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545



**RE: CERTIFICATE OF COMPLETION  
ONE AREA OF CONCERN IN THE UPPER LOS ALAMOS CANYON  
AGGREGATE AREA  
EPA ID #NM0890010515  
HWB-LANL-12-069**

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificate of Completion for One Area of Concern in the Upper Los Alamos Canyon Aggregate Area*, dated December 18, 2012 and referenced by EP2012-0301.

Area of Concern (AOC) 32-003 was recommended for corrective action complete without controls in the *Remedy Completion Report for Upper Los Alamos Canyon Aggregate Area, Former Technical Area 32, Revision 1* February 2011. NMED issued a Direction to Modify letter for the Report (April 6, 2011) that did not require any additional work at AOC 32-003.

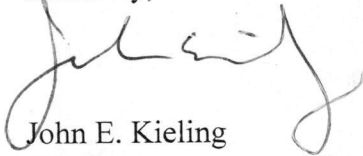
Messrs. Maggiore and Mousseau  
December 20, 2012  
Page 2

AOC 32-003 is a location of a former transformer station, structure 32-10. It consisted of three transformers on a wooden platform suspended on poles approximately 20 ft. off the ground. It is located northwest of the solid waste management unit 32-002(b) septic tank and directly south of former building 32-01, and was discovered during the investigations conducted in 1993. Investigations were conducted at the site in 1993, 1996, 2008, and 2010. Based on the results of the risk screening assessments, no potential unacceptable risk from residual contamination exists for the industrial, construction worker, recreational, and residential scenarios. No potential unacceptable risks to ecological receptors are present at the site.

In accordance with Section VII.E.6.b of the Order on Consent, NMED hereby issues a Certificate of Completion without Controls for AOC 32-003.

Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
C. Rodriguez, DOE LASO, MS A316  
T. Haagenstad, EP-CAP, MS M992

File: 2012 LANL, Certificate of Completion for AOC 32-003, Upper Los Alamos Canyon AA  
(LANL 12-069)



SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

*Hazardous Waste Bureau*

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DAVE MARTIN  
Secretary

BUTCH TONGATE  
Deputy Secretary

JAMES H. DAVIS, Ph.D.  
Director  
Resource Protection Division

EP2013-5008

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

December 28, 2012

Pete Maggiore  
Assistant Manager  
Environmental Projects Office  
National Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Jeffrey D. Mousseau  
Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545



**RE: CERTIFICATES OF COMPLETION  
TWO SOLID WASTE MANAGEMENT UNITS AND ONE AREA OF CONCERN  
IN THE UPPER LOS ALAMOS CANYON AGGREGATE AREA  
EPA ID #NM0890010515  
HWB-LANL-12-072**

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Two Solid Waste Management Units and One Area of Concern in the Upper Los Alamos Canyon Aggregate Area*, dated December 20, 2012 and referenced by EP2012-0304.

1. **Solid waste management unit (SWMU) 32-002(b1)** is a part of a former septic system that served former buildings 32-01 and 32-02 at former technical area (TA) 32. Former TA-32 was decommissioned in 1954. SWMU 32-002(b1) is the portion of the former septic system (32-002(b)) that is located on property currently owned by Los Alamos County (LAC). The remainder of the septic system is located on the property owned by



DOE and is designated as 32-002(b2). SWMU 32-002(b) was split into two separate SWMU in December 2012 through a permit modification to facilitate commercial development of the property owned by LAC. The outfall for SWMU 32-002(b) is located at the edge of Los Alamos Canyon, which is now part of SWMU 32-002(b2). The septic tank was removed in 1998, and the influent drainline was removed in 1996. Research activities mainly involved radionuclides, but other inorganic and organic chemicals were likely also used at the laboratory. Investigations were conducted at the site in 1996, 2008, and 2010.

The results of the investigations are reported in the *Remedy Completion Report for Upper Los Alamos Canyon Aggregate Area, Former Technical Area 32, Revision 1* (dated February 2011 and referenced by LA-UR-11-1177/EP2011-0064) and *Supplemental Remedy Completion Report for Upper Los Alamos Canyon Aggregate Area, Former Technical Area 32* (dated December 2012 and referenced by LA-UR-12-27053/EP2012-0306). Based on the results of the risk screening assessments, no potential unacceptable risk from residual contamination exists for the recreational, industrial, and construction worker scenario. However, the site does pose potential unacceptable risk under a residential exposure scenario. The site does not pose potential risk to ecological receptors under the proposed land use scenario. SWMU 32-002(b1) qualifies for corrective action complete with controls status. The control for the site is that the land use must be maintained as industrial.

2. **Area of Concern (AOC) 32-004** consists of a former drainline and outfall that served building 32-03 and discharged to Los Alamos Canyon. Building 32-03 was an office building and contained a vault room where a radioactive source was stored. The drainline at AOC 32-004 led directly to an outfall at the edge of the mesa without passing through a septic tank. Building 32-03 was removed when TA-32 was decommissioned in 1954. A section of the drainline located on LAC property was removed in 1996. Investigations were conducted at the site in 1993, 1996, 2008, and 2010.

The results of the investigations were reported in the *Remedy Completion Report for Upper Los Alamos Canyon Aggregate Area, Former Technical Area 32, Revision 1* (dated February 2011 and referenced by LA-UR-11-1177/EP2011-0064). Based on the results of the risk screening conducted at the site, AOC 32-004 does not pose a potential unacceptable risk for the industrial, recreational, and construction worker land use scenarios. No potential unacceptable risks to ecological receptors are present at the site under the proposed industrial/commercial land use scenario. However, potential unacceptable risk exists under a residential land use scenario. AOC 32-004 qualifies for corrective action complete with controls status. The control is to maintain the land use as industrial.

3. **SWMU 32-002(a)** is a former septic system that was installed in 1944 and served former building 32-01. The outlet drainline discharged to the edge of Los Alamos Canyon.

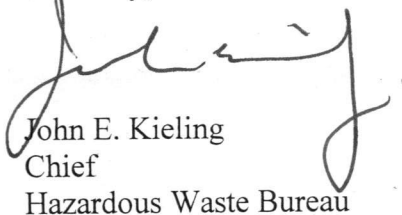
Former building 32-01 operated as a research laboratory from 1944-1954. Research activities mainly involved radionuclides, but inorganic and organic chemicals were likely also used at the laboratory. Former TA 32 was decommissioned in 1954. The septic tank was removed prior to 1996, but historical records of the removal activities are not available. The drainlines were removed in 1996. Investigations were conducted in 1996, 2008, 2010, and 2011.

The results of the investigations were reported in the *Remedy Completion Report for Upper Los Alamos Canyon Aggregate Area, Former Technical Area 32, Revision 1* (dated February 2011 and referenced by LA-UR-11-1177/EP2011-0064) and *Supplemental Remedy Completion Report for Upper Los Alamos Canyon Aggregate Area, Former Technical Area 32* (dated December 2012 and referenced by LA-UR-12-27053/EP2012-0306). Results of the investigations were used to evaluate the risk posed by the site. The site does not pose any unacceptable risk under an industrial land use scenario. However, the construction worker scenario was not evaluated. The Permittees must evaluate the risk posed to a construction worker by residual contamination at the site. The ecological risk evaluation indicated that the site does not pose unacceptable risk to the ecological receptors under the proposed land use scenario. NMED will make the corrective action completion determination after reviewing the results of evaluation of potential risk posed to a construction worker to be submitted by the Permittees.

NMED hereby issues a Certificate of Completion with Controls for SWMU 32-002(b1) and AOC 32-004. If new information becomes available that indicates that any of these sites may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action.

Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc:

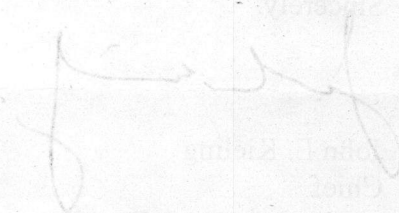
J. Davis, NMED HWB  
D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N



Messrs. Maggiore and Mousseau  
December 28, 2012  
Page 4

E. Worth, DOE LASO, MS A316  
T. Haagenstad, EP-CAP, MS M992

File: 2012 LANL, Certificates of Completion for TA-32, Upper Los Alamos Canyon AA Sites  
(LANL 12-072)

A handwritten signature in dark ink, appearing to be 'John J. ...', is located in the lower right quadrant of the page. The signature is cursive and somewhat stylized.



SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

NEW MEXICO  
ENVIRONMENT DEPARTMENT

*Hazardous Waste Bureau*

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ERID-522072



DAVE MARTIN  
Secretary

BUTCH TONGATE  
Deputy Secretary

THOMAS SKIBITSKI  
Acting Director  
Resource Protection Division

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

EP2013-5049

February 22, 2013

Pete Maggiore  
Assistant Manager  
Environmental Projects Office  
National Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Jeffrey D. Mousseau  
Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545

**RE: CERTIFICATES OF COMPLETION  
FOUR SOLID WASTE MANAGEMENT UNIT AND ONE AREA OF CONCERN  
IN THE PUEBLO CANYON AGGREGATE AREA  
EPA ID #NM0890010515  
HWB-LANL-12-063**

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Four Solid Waste Management Units and One Area of Concern in the Pueblo Canyon Aggregate Area*, dated September 13, 2012 and referenced by EP2012-0202.

1. Solid Waste Management Unit (SWMU) 45-001 was a former radioactive liquid waste (RLW) treatment plant and associated outfalls. The treatment plant began operating in 1951 and operated until 1964. The plant initially received RLW only from Technical Area (TA) 1. As laboratory operations expanded, RLW from TA-3, TA-43, and TA-48 was also sent to SWMU 45-001. Decontamination and decommissioning (D&D) of

COR-EP-2.25.2013-496670



SWMU 45-001 included the demolition and removal of treatment plant equipment, structures, and waste lines and the excavation of contaminated soil. Portions of the cliff walls of Acid Canyon below the outfalls were also decontaminated.

'13 FEB 23 12:02P

2. SWMU 45-002 consisted of a former vehicle decontamination facility (former building 45-1) that was used to decontaminate vehicles and large equipment, including filters from the Sigma Building, trash dumpsters, and wing tanks from airplanes. SWMU 45-002 was located approximately 40 feet south of the TA-45 RLW treatment plant (SWMU 45-001). The decontamination facility began operation in 1952. Vehicles and other equipment were decontaminated by steam-cleaning. This facility operated infrequently, approximately once per month. SWMU 45-002 was decommissioned in 1966, along with the other facilities that comprised former TA-45.
3. SWMU 45-003 consisted of the former buried industrial waste line and associated manhole (structure 45-8) located within the boundaries of TA-45. This waste line was used to convey RLW to the TA-45 treatment plant, SWMU 45-001.
4. SWMU 45-004 consisted of a sanitary sewer outfall that was associated with the sanitary sewer system constructed in 1947 to serve the Los Alamos town site. This sewer system included a sanitary sewer lift station (structure 45-3) and sanitary sewer manholes (structures 45-5 and 45-6).
5. Area of Concern (AOC) C-45-001 was the site of an accidental release of plutonium-contaminated sludge that occurred in the parking lot south of building 45-2 (SWMU 45-001) in January 1957. The parking lot was removed as part of the TA-45 D&D activities.

These five sites are components of Consolidated Unit 45-001-00. The July 2008 Investigation Report for Pueblo Canyon Aggregate Area, Revision 1 (IR) presented the results of characterization and remediation activities conducted in 2006 and 2007. The vertical extent of mercury and silver were not fully determined at one sample location within SWMU 45-004. The vertical extent of metals was determined by the Permittees between February and June 2010 and the results were presented in the September 2010 Phase II IR.

Because the footprints of the five sites overlap, the Phase II IR evaluated the risk for all five sites combined. The Phase II IR demonstrated that SWMUs 45-001, 45-002, 45-003, 45-004 and AOC C-45-001 pose no potential unacceptable risks to human health under the residential land use scenario and pose no potential risk to ecological receptors. Accordingly, the sites were recommended for corrective action complete without controls in the Phase II IR. A subsequent September 2012 evaluation of potential vapor intrusion for a residential scenario concluded that vapor intrusion by contaminants did not appreciably alter the risks at any of the five sites.

NMED hereby issues Certificates of Completion without controls for SWMUs 45-001, 45-002, 45-003, 45-004 and AOC C-45-001 pursuant to section VII.E.6.b of the Consent Order.

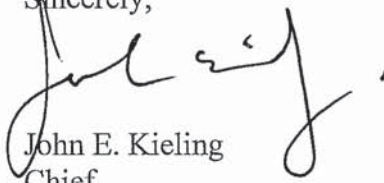
COR-EP-2.25.2013-496670

Messrs. Maggiore and Mousseau  
February 22, 2013  
Page 3

If, in the future, any additional information becomes available that indicates the sites may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at the sites.

Please contact Daniel Comeau at (505) 476-6043, if you have any questions.

Sincerely,



John E. Kieling  
Chief

Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
C. Rodriguez, DOE LASO, MS A316  
T. Haagenstad, EP-CAP, MS M992

File: 2012 LANL, Certificates of Completion for SWMU 45-001, SWMU 45-002, SWMU 45-003, SWMU 45-004 and AOC C-45-001 (HWB-LANL 08-036 and HWB-LANL-12-063)







SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

NEW MEXICO  
ENVIRONMENT DEPARTMENT

*Hazardous Waste Bureau*

2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Phone (505) 476-6000 Fax (505) 476-6030  
[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)



RYAN FLYNN  
Cabinet Secretary-Designate

BUTCH TONGATE  
Deputy Secretary

THOMAS SKIBITSKI  
Acting Director  
Resource Protection Division

EP2013-5097

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

May 7, 2013

Pete Maggiore  
Assistant Manager  
Environmental Projects Office  
National Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Jeffrey D. Mousseau  
Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545



**RE: CERTIFICATE OF COMPLETION  
THREE SOLID WASTE MANAGEMENT UNITS [00-011(A), 00-011(D), 00-011(E)] IN GUAJE/BARRANCAS/RENDIJA CANYONS AGGREGATE AREA  
EPA ID #NM0890010515  
HWB-LANL-12-039**

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Three Solid Waste Management Units in the Guaje/Barrancas/Rendija Canyons Aggregate Area*, dated June 28, 2012 and referenced by EP2012-0155. The results of the investigations were summarized in the *Investigation Report for Guaje/Barrancas/Rendija Canyons Aggregate Area at technical Area 00, Revision 1 (IR)* (dated November 2007 and referenced by LA-UR-07-7820/EP2007-0720).

**SWMU 00-011(a)** is a 28.5 acre former mortar impact area that is located on United States Forest Service (USFS) land approximately 0.4 miles east of the Sportsmen's club small arms firing range (SAFR) in Rendija Canyon. The site was used as a mortar impact area in 1940s.



The site is bisected east to west by Rendija Road. On the north side of the road, the site has a gradual to steep slope to the ephemeral Rendija Canyon stream channel. The slope is covered by downed trees that burned during the Cerro Grande fire in 2000. Currently, the site is fenced and posted with DOE "No Trespassing" signs. However, site is being used for recreational purposes by the public.

**SWMU 00-011(d)** is a former bazooka firing area located largely in Los Alamos County, except for a small section on private property. The area is in a small north-trending tributary of Bayo Canyon northeast of the intersection of San Ildefonso Road and Diamond Drive. The area is comprised of approximately 5 acres and was used as a target area for 2.36-in. bazooka rounds in the mid-1940s.

**SWMU 00-011(e)** is a former ammunition impact area located on USFS land in a tributary of Rendija Canyon north-northeast of the Sportsmen's Club SAFR. The area extends north along the tributary to the top of a cliff face. The area is roughly rectangular and consists of approximately 14 acres and was used as an ammunition impact area in the mid-1940s. The site is fenced with barbwire and posted with "Explosives No Trespassing" signs.

The IR recommended that the sites be granted corrective action complete without controls because they do not pose a threat to human health and the environment under the residential land use scenario. NMED issued an Approval with Directions (AWD) for the IR on December 20, 2007. The AWD directed the Permittees to conduct biennial visual surveys at these sites and to remove any munitions and explosives of concern (MEC) or munitions debris (MD) found during the surveys. In addition, the Permittees were directed to conduct storm water monitoring at these sites and implement institutional controls such as posting warning signs.

NMED received a letter from DOE Los Alamos Field Office on February 19, 2013. The letter states that based on discussions between DOE, NMED, and Los Alamos County (LAC), the DOE requests that these sites now be considered for corrective action complete with controls status. Request was made to expedite the transfer of Rendija Canyon tracts (Tract A-14a, -14c, and -14d) to LAC. The controls proposed by DOE and approved by NMED are:

- Conduct one additional biennial survey in December 2013;
- Install a kiosk sign at the entrance to Rendija Canyon that describes the history of the site and identifies the types of potential ordnance and associated debris that may be encountered, safety precautions and contact information, if ordnance encountered;
- Install signage within the Rendija parcel to guide and communicate safety practices to visitors;
- Conduct explosive and unexploded ordnance awareness training to LAC officials.

DOE also proposed to conduct one additional biennial survey in December 2013. Given the uncertainty associated with MEC/MD surveys NMED does not concur with this proposal.



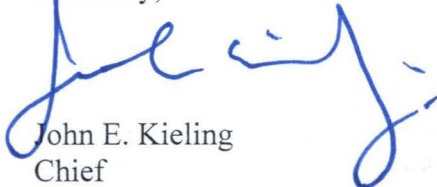
Messrs. Maggiore and Mousseau  
May 7, 2013  
Page 3

However, the frequency may be reduced from biennial to triennial surveys after conducting the next biennial survey in 2013.

NMED approves the above-mentioned controls and hereby issues these Certificates of Completion with Controls for SWMUs 00-011(a), 00-011(d), and 00-011(e). These controls must be implemented and the documentation submitted to NMED by September 30, 2013. In addition, these sites must be monitored under the National Pollutant Discharge Elimination System individual stormwater permit. DOE indicated (July 13, 2012) that LAC intends to use the property for recreational purposes only and construction activities are not planned for the site. Land use controls must also be maintained.

If new information becomes available that indicates that the site may pose a risk to human health or the environment, NMED may require additional corrective action at these sites. Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: T. Skibitski, NMED RPD  
D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
L. King, EPA 6PD-N  
C. Rodriguez, DOE LASO, MS A316  
T. Haagenstad, EP-CAP, MS M992

File: 2012 LANL, Certificates of Completion for SWMUs 00-001(a), 00-001(d), and 00-001(e) in Guaje/Barrancas/Rendija Canyons AA Sites (LANL 12-039)



10/10/2010

Dear Sir,  
I am writing to you regarding the matter of the...  
I have been informed that you are interested in...  
I would be pleased to provide you with more information...  
I am sure you will find this information useful...  
I am looking forward to hearing from you again.

*[Handwritten signature]*

Yours faithfully,  
[Name]

10/10/2010



SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

*Hazardous Waste Bureau*

2905 Rodeo Park Drive East, Building 1  
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RYAN FLYNN  
Secretary-Designate

BUTCH TONGATE  
Deputy Secretary

TOM BLAINE, P.E.  
Director  
Environmental Health Division

EP2013-5156

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

July 31, 2013

Pete Maggiore  
Assistant Manager  
Environmental Projects Office  
National Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Jeffrey D. Mousseau  
Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545



**RE: CERTIFICATES OF COMPLETION  
ONE SOLID WASTE MANAGEMENT UNIT AND TWO AREAS OF CONCERN  
IN THE LOWER SANDIA CANYON AGGREGATE AREA  
EPA ID #NM0890010515  
HWB-LANL-12-020**

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for One Solid Waste Management Unit and Two Areas of Concern in the Lower Sandia Canyon Aggregate Area*, dated March 21, 2012 and referenced by EP2012-0081.

Solid waste management unit (SWMU) 53-001(b), area of concern (AOC) 53-013, and AOC 53-014 were recommended for corrective action complete without controls in the *Investigation Report for Lower Sandia Canyon Aggregate Area Revision 1* (LA-UR-11-4795/EP2011-0261). NMED approved the Report on September 26, 2011.



SWMU 53-001(b) is an outdoor storage area located on a concrete pad on the south side of building 53-2 at technical area (TA) 53. The site was used to store drums containing product and waste associated with maintenance activities conducted at building 53-2. The storage area was constructed in 1971. The area was also used as a less than 90-day storage area that was taken out of service in 1998. Investigations were conducted in 1995 and 2010. Based on the results of the risk screening assessments, no potential unacceptable risk from residual contamination exists for the industrial, construction worker, and residential scenarios. The ecological risk screening assessment results also indicate that the site does not pose any unacceptable risk to environmental receptors.

AOC 53-013 is a lead spill site located near the east end of TA-53, northeast of buildings 53-10 and 53-315. Lead shot was present within two fenced areas used for storage and the staging of equipment used in experiments. Lead shot was used as radiation shielding for experiments conducted in building 53-10. The dates when shot was spilled on the ground are not known, but possibly date back to the late 1960s or early 1970s. Investigations were conducted in 1995 and 2010. Based on the results of the risk screening assessments, no potential unacceptable risk from residual contamination exists for the industrial, construction worker, and residential scenarios. The ecological risk screening assessment results also indicate that the site does not pose any unacceptable risk to environmental receptors.

AOC 53-014 is a lead spill site that is located at a paved storage area in TA-53 west of building 53-18. Lead shot was spilled on the paved surface and stormwater subsequently washed lead into an asphalt-lined channel that joins the drainage below NPDES outfall (03A113). A voluntary corrective action was conducted in 1997 to remove the lead shot from the paved area, the asphalt channel, and the drainage. The sediment was sieved to remove lead and confirmatory samples were collected. The results of the sediment samples collected at the site indicated that detected lead concentrations were below the NMED soil screening levels. The site does not pose any potential unacceptable risk for the industrial, construction worker, and residential scenarios. The ecological risk screening assessment results also indicate that the site does not pose any unacceptable risk to environmental receptors.

The Permittees have demonstrated that these sites are eligible for corrective action complete without controls. NMED hereby issues Certificates of Completion for SWMU 53-001(b), AOC 53-013, and AOC 53-014 pursuant to section VII.E.6.b of the Consent Order.

Messrs. Maggiore and Mousseau  
July 31, 2013  
Page 3

Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "John E. Kieling" with a stylized flourish at the end.

John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
R. Massey, DOE LASO, MS A316  
K. Rich, EP-CAP, MS M992

File: 2013 LANL, Certificates of Completion for Lower Sandia Canyon AA Sites (LANL 12-020)

10/10/2010  
10/10/2010

10/10/2010

*[Handwritten signature]*

10/10/2010

10/10/2010

10/10/2010





SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

NEW MEXICO  
ENVIRONMENT DEPARTMENT

*Hazardous Waste Bureau*

2905 Rodeo Park Drive East, Building 1  
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RYAN FLYNN  
Secretary-Designate

BUTCH TONGATE  
Deputy Secretary

TOM BLAINE, P.E.  
Director  
Environmental Health Division

EP2013-5206

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

September 27, 2013

Pete Maggiore  
Assistant Manager  
Environmental Projects Office  
National Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Jeffrey D. Mousseau  
Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545

**RE: CERTIFICATES OF COMPLETION  
ONE SOLID WASTE MANAGEMENT UNIT AND ONE AREA OF CONCERN  
MIDDLE MORTANDAD/TEN SITE AGGREGATE AREA  
EPA ID #NM0890010515  
HWB-LANL-11-068**

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Twenty-Seven Solid Waste Management Units and Ten Areas of Concern in the Middle Mortandad/Ten Site Aggregate Area* (Request), dated August 31, 2012 and referenced by EP2011-0297.

Twenty-seven solid waste management units (SWMUs) and ten areas of concern (AOCs) were recommended for corrective action complete in the *Investigation Report for the Middle Mortandad/Ten Site Aggregate Area, Revision 2* (Report), dated February 2008 (LA-UR-08-0336/EP2008-0035). NMED issued an Approval with Direction (AWD) for the Report on April 1, 2008. At a meeting held on August 26, 2013, the Permittees requested expedited review of

AOC 35-014(e2) and SWMU 35-016(i) that were included in the Request.

To protect the surface waters from potential adverse impacts from stormwater discharges from the sites, all of these thirty-seven sites are required to be monitored under the Permittees' National Pollutant Discharge Elimination System (NPDES) individual permit. In addition, ten of these sites including AOC 35-014(e2) and SWMU 35-016(i) were identified as high priority sites in the NPDES Permit (Part 1, Section E.4.(a)). The NPDES Permit (dated November 1, 2010) requires that at these ten sites, corrective action must be completed within three years of the effective date of the permit. The sites may qualify for corrective action complete without controls after data collected from these sites demonstrates compliance with the NPDES Permit. At this time these sites do not qualify for corrective action complete without controls because data has not yet been acquired to demonstrate that surface water quality standards have been met. NMED hereby issues certificates of completion with controls for the following sites pursuant to Section VII.E.6.b of the Consent Order.

**AOC 35-014(e2)** is the site of a former oil spill that originated from overflows of a waste-oil impoundment. The site is located about 150 ft northeast of TA-35-85. The impoundment was decommissioned in 1989. The documented releases for the site consist of oil spills from the impoundment. Soil samples from oil-stained areas showed detectable concentrations of polychlorinated biphenyls (PCBs). The site was included in the investigation of CU 35-016(i)-00. Investigations conducted during 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational and residential land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

The Permittees must institute and maintain the control at the site of monitoring storm water discharge for potential off-site transport of residual contamination. This is currently mandated by the NPDES Permit. AOC 35-014(e2) is listed as a high priority site on the NPDES Permit.

**SWMU 35-016(i)** is an active surface discharge channel that handles storm water runoff from the area between the east end of TA-35-85 and the main parking lot for TA-35. The outfall is a corrugated metal pipe 18 in. in diameter. Discharge from the outfall has eroded a small channel in the mesa slope approximately three feet below the outfall and into the tuff bedrock. The site was included in the investigation of CU 35-016(i)-00. Investigations conducted during 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational and residential land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

The Permittees must institute and maintain the control at the site of monitoring storm water discharge for potential off-site transport of residual contamination. This is currently required by the NPDES Permit. SWMU 35-016(i) is listed as a high priority site on the NPDES Permit.

Messrs. Maggiore and Mousseau  
September 27, 2013  
Page 3

If new information becomes available that indicates that any of these sites pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action. Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
N. Dhawan, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
C. Rodriguez, DOE LASO, MS A316  
T. Haagenstad, EP-CAP, MS M992

File: 2013 LANL, Certificates of Completion for MM/TS AA Sites (LANL 11-068)





## **Attachment 2**

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*Supporting Documentation for  
Analysis of Polychlorinated Biphenyl Congeners  
Using U.S. Environmental Protection Agency Method 1668*



**NPDES Permit No. NM0030759**  
**Individual Permit Annual Report**  
**January 1 – December 31, 2013**

**ATTACHMENT 2**

**Supporting Documentation for Analysis of PCB Congeners**  
**using EPA Method 1668**

~~LA-UR-14-~~

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1007  
**Lab Sample ID:** 4954001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32094  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 17:14  
**Data File:** c16jul13a-7  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:40  
**Date Received:** 06/21/2013 10:35  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	21.6	21.6	pg/L	21.6
2051-61-8	PCB-2	U	21.6	21.6	pg/L	21.6
2051-62-9	PCB-3	U	21.6	21.6	pg/L	21.6
13029-08-8	PCB-4	U	21.6	21.6	pg/L	21.6
16605-91-7	PCB-5	U	21.6	21.6	pg/L	21.6
25569-80-6	PCB-6	U	21.6	21.6	pg/L	21.6
33284-50-3	PCB-7	U	21.6	21.6	pg/L	21.6
34883-43-7	PCB-8	U	21.6	21.6	pg/L	21.6
34883-39-1	PCB-9	U	21.6	21.6	pg/L	21.6
33146-45-1	PCB-10	U	21.6	21.6	pg/L	21.6
2050-67-1	PCB-11	U	108	108	pg/L	108
PCB-12/13	PCB-13/12	CU	43.1	43.1	pg/L	43.1
34883-41-5	PCB-14	U	21.6	21.6	pg/L	21.6
2050-68-2	PCB-15	U	21.6	21.6	pg/L	21.6
38444-78-9	PCB-16	U	21.6	21.6	pg/L	21.6
37680-66-3	PCB-17	U	21.6	21.6	pg/L	21.6
PCB-18/30	PCB-18/30	CU	43.1	43.1	pg/L	43.1
38444-73-4	PCB-19	U	21.6	21.6	pg/L	21.6
PCB-20/28	PCB-20/28	CU	43.1	43.1	pg/L	43.1
PCB-21/33	PCB-21/33	CU	43.1	43.1	pg/L	43.1
38444-85-8	PCB-22	U	21.6	21.6	pg/L	21.6
55720-44-0	PCB-23	U	21.6	21.6	pg/L	21.6
55702-45-9	PCB-24	U	21.6	21.6	pg/L	21.6
55712-37-3	PCB-25	U	21.6	21.6	pg/L	21.6
PCB-26/29	PCB-26/29	CU	43.1	43.1	pg/L	43.1
38444-76-7	PCB-27	U	21.6	21.6	pg/L	21.6
16606-02-3	PCB-31	U	21.6	21.6	pg/L	21.6
38444-77-8	PCB-32	U	21.6	21.6	pg/L	21.6
37680-68-5	PCB-34	U	21.6	21.6	pg/L	21.6
37680-69-6	PCB-35	U	21.6	21.6	pg/L	21.6
38444-87-0	PCB-36	U	21.6	21.6	pg/L	21.6
38444-90-5	PCB-37	U	21.6	21.6	pg/L	21.6

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 2 of 7

**SDG Number:** 2013-1007  
**Lab Sample ID:** 4954001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32094  
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**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21.6	21.6	pg/L	21.6
38444-88-1	PCB-39	U	21.6	21.6	pg/L	21.6
PCB-40/71	PCB-40/71	CU	43.1	43.1	pg/L	43.1
52663-59-9	PCB-41	U	21.6	21.6	pg/L	21.6
36559-22-5	PCB-42	U	21.6	21.6	pg/L	21.6
70362-46-8	PCB-43	U	21.6	21.6	pg/L	21.6
PCB-44/47/65	PCB-44/65/47	CU	64.7	64.7	pg/L	64.7
PCB-45/51	PCB-45/51	CU	43.1	43.1	pg/L	43.1
41464-47-5	PCB-46	U	21.6	21.6	pg/L	21.6
70362-47-9	PCB-48	U	21.6	21.6	pg/L	21.6
PCB-49/69	PCB-69/49	CU	43.1	43.1	pg/L	43.1
PCB-50/53	PCB-50/53	CU	43.1	43.1	pg/L	43.1
35693-99-3	PCB-52		43.5	42.1	pg/L	21.6
15968-05-5	PCB-54	U	21.6	21.6	pg/L	21.6
74338-24-2	PCB-55	U	21.6	21.6	pg/L	21.6
41464-43-1	PCB-56	U	21.6	21.6	pg/L	21.6
70424-67-8	PCB-57	U	21.6	21.6	pg/L	21.6
41464-49-7	PCB-58	U	21.6	21.6	pg/L	21.6
PCB-59/62/75	PCB-59/62/75	CU	64.7	64.7	pg/L	64.7
33025-41-1	PCB-60	U	21.6	21.6	pg/L	21.6
PCB-61-76	PCB-61/76/70/74	CU	86.3	86.3	pg/L	86.3
74472-34-7	PCB-63	U	21.6	21.6	pg/L	21.6
52663-58-8	PCB-64	U	21.6	21.6	pg/L	21.6
32598-10-0	PCB-66	U	22.1	21.6	pg/L	21.6
73575-53-8	PCB-67	U	21.6	21.6	pg/L	21.6
73575-52-7	PCB-68	U	21.6	21.6	pg/L	21.6
41464-42-0	PCB-72	U	21.6	21.6	pg/L	21.6
74338-23-1	PCB-73	U	21.6	21.6	pg/L	21.6
32598-13-3	PCB-77	U	21.6	21.6	pg/L	21.6
70362-49-1	PCB-78	U	21.6	21.6	pg/L	21.6
41464-48-6	PCB-79	U	21.6	21.6	pg/L	21.6
33284-52-5	PCB-80	U	21.6	21.6	pg/L	21.6

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 3 of 7

**SDG Number:** 2013-1007  
**Lab Sample ID:** 4954001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32094  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 17:14  
**Data File:** c16jul13a-7  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:40  
**Date Received:** 06/21/2013 10:35  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21.6	21.6	pg/L	21.6
52663-62-4	PCB-82	U	21.6	21.6	pg/L	21.6
60145-20-2	PCB-83	U	21.6	21.6	pg/L	21.6
52663-60-2	PCB-84		32.8	31.5	pg/L	21.6
PCB-85-117	PCB-117/116/85	CU	64.7	64.7	pg/L	64.7
PCB-86-125	PCB-86/87/97/109/119/125	CU	129	129	pg/L	129
PCB-88/91	PCB-88/91	CU	43.1	43.1	pg/L	43.1
73575-57-2	PCB-89	U	21.6	21.6	pg/L	21.6
PCB-90-113	PCB-113/90/101	C	190	188	pg/L	64.7
52663-61-3	PCB-92		30.4	29.2	pg/L	21.6
PCB-93/100	PCB-93/100	CU	43.1	43.1	pg/L	43.1
73575-55-0	PCB-94	U	21.6	21.6	pg/L	21.6
38379-99-6	PCB-95		142	141	pg/L	21.6
73575-54-9	PCB-96	U	21.6	21.6	pg/L	21.6
PCB-98/102	PCB-102/98	CU	43.1	43.1	pg/L	43.1
38380-01-7	PCB-99		37.7	36.6	pg/L	21.6
60145-21-3	PCB-103	U	21.6	21.6	pg/L	21.6
56558-16-8	PCB-104	U	21.6	21.6	pg/L	21.6
32598-14-4	PCB-105		67.3	65.9	pg/L	21.6
70424-69-0	PCB-106	U	21.6	21.6	pg/L	21.6
70424-68-9	PCB-107	U	21.6	21.6	pg/L	21.6
PCB-108/124	PCB-108/124	CU	43.1	43.1	pg/L	43.1
PCB-110/115	PCB-110/115	C	263	261	pg/L	43.1
39635-32-0	PCB-111	U	21.6	21.6	pg/L	21.6
74472-36-9	PCB-112	U	21.6	21.6	pg/L	21.6
74472-37-0	PCB-114	U	21.6	21.6	pg/L	21.6
31508-00-6	PCB-118		171	169	pg/L	21.6
68194-12-7	PCB-120	U	21.6	21.6	pg/L	21.6
56558-18-0	PCB-121	U	21.6	21.6	pg/L	21.6
76842-07-4	PCB-122	U	21.6	21.6	pg/L	21.6
65510-44-3	PCB-123	U	21.6	21.6	pg/L	21.6
57465-28-8	PCB-126	U	21.6	21.6	pg/L	21.6

**Comments:**

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**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1007  
**Lab Sample ID:** 4954001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32094  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 17:14  
**Data File:** c16jul13a-7  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:40  
**Date Received:** 06/21/2013 10:35  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21.6	21.6	pg/L	21.6
PCB-128/166	PCB-128/166	C	64.5	63.6	pg/L	43.1
PCB-129-163	PCB-138/163/129	C	747	746	pg/L	64.7
52663-66-8	PCB-130		35.5	34.4	pg/L	21.6
61798-70-7	PCB-131	U	21.6	21.6	pg/L	21.6
38380-05-1	PCB-132		218	217	pg/L	21.6
35694-04-3	PCB-133	U	21.6	21.6	pg/L	21.6
52704-70-8	PCB-134		25.9	24.6	pg/L	21.6
PCB-135/151	PCB-151/135	C	240	239	pg/L	43.1
38411-22-2	PCB-136		64.2	63.7	pg/L	21.6
35694-06-5	PCB-137	U	21.6	21.6	pg/L	21.6
PCB-139/140	PCB-139/140	CU	43.1	43.1	pg/L	43.1
52712-04-6	PCB-141		169	168	pg/L	21.6
41411-61-4	PCB-142	U	21.6	21.6	pg/L	21.6
68194-15-0	PCB-143	U	21.6	21.6	pg/L	21.6
68194-14-9	PCB-144		31.2	30.7	pg/L	21.6
74472-40-5	PCB-145	U	21.6	21.6	pg/L	21.6
51908-16-8	PCB-146		96.0	95.1	pg/L	21.6
PCB-147/149	PCB-147/149	C	573	571	pg/L	43.1
74472-41-6	PCB-148	U	21.6	21.6	pg/L	21.6
68194-08-1	PCB-150	U	21.6	21.6	pg/L	21.6
68194-09-2	PCB-152	U	21.6	21.6	pg/L	21.6
PCB-153/168	PCB-153/168	C	628	627	pg/L	43.1
60145-22-4	PCB-154	U	21.6	21.6	pg/L	21.6
33979-03-2	PCB-155	U	21.6	21.6	pg/L	21.6
PCB-156/157	PCB-156/157	C	67.1	66.1	pg/L	43.1
74472-42-7	PCB-158		67.4	66.7	pg/L	21.6
39635-35-3	PCB-159	U	21.6	21.6	pg/L	21.6
41411-62-5	PCB-160	U	21.6	21.6	pg/L	21.6
74472-43-8	PCB-161	U	21.6	21.6	pg/L	21.6
39635-34-2	PCB-162	U	21.6	21.6	pg/L	21.6
74472-45-0	PCB-164		56.0	55.2	pg/L	21.6

**Comments:**

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**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1007  
**Lab Sample ID:** 4954001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32094  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 17:14  
**Data File:** c16jul13a-7  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:40  
**Date Received:** 06/21/2013 10:35  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21.6	21.6	pg/L	21.6
52663-72-6	PCB-167		30.6	30	pg/L	21.6
32774-16-6	PCB-169	U	21.6	21.6	pg/L	21.6
35065-30-6	PCB-170		346	345	pg/L	21.6
PCB-171/173	PCB-173/171	C	96.5	95.6	pg/L	43.1
52663-74-8	PCB-172		63.4	62.7	pg/L	21.6
38411-25-5	PCB-174		384	383	pg/L	21.6
40186-70-7	PCB-175	U	21.6	21.6	pg/L	21.6
52663-65-7	PCB-176		36.5	36	pg/L	21.6
52663-70-4	PCB-177		216	215	pg/L	21.6
52663-67-9	PCB-178		63.1	62.4	pg/L	21.6
52663-64-6	PCB-179		117	116	pg/L	21.6
PCB-180/193	PCB-193/180	C	833	831	pg/L	43.1
74472-47-2	PCB-181	U	21.6	21.6	pg/L	21.6
60145-23-5	PCB-182	U	21.6	21.6	pg/L	21.6
PCB-183/185	PCB-183/185	C	225	224	pg/L	43.1
74472-48-3	PCB-184	U	21.6	21.6	pg/L	21.6
74472-49-4	PCB-186	U	21.6	21.6	pg/L	21.6
52663-68-0	PCB-187		398	397	pg/L	21.6
74487-85-7	PCB-188	U	21.6	21.6	pg/L	21.6
39635-31-9	PCB-189	U	21.6	21.6	pg/L	21.6
41411-64-7	PCB-190		74.1	73.5	pg/L	21.6
74472-50-7	PCB-191	U	21.6	21.6	pg/L	21.6
74472-51-8	PCB-192	U	21.6	21.6	pg/L	21.6
35694-08-7	PCB-194		142	142	pg/L	21.6
52663-78-2	PCB-195		62.6	61.9	pg/L	21.6
42740-50-1	PCB-196		72.6	72	pg/L	21.6
PCB-197/200	PCB-197/200	CU	43.1	43.1	pg/L	43.1
PCB-198/199	PCB-198/199	C	154	153	pg/L	43.1
40186-71-8	PCB-201	U	21.6	21.6	pg/L	21.6
2136-99-4	PCB-202		24.3	23.8	pg/L	21.6
52663-76-0	PCB-203		89.9	89.3	pg/L	21.6

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 2013-1007  
**Lab Sample ID:** 4954001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32094  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 17:14  
**Data File:** c16jul13a-7  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:40  
**Date Received:** 06/21/2013 10:35  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21.6	21.6	pg/L	21.6
74472-53-0	PCB-205	U	21.6	21.6	pg/L	21.6
40186-72-9	PCB-206	U	21.6	21.6	pg/L	21.6
52663-79-3	PCB-207	U	21.6	21.6	pg/L	21.6
52663-77-1	PCB-208	U	21.6	21.6	pg/L	21.6
2051-24-3	PCB-209	U	21.6	21.6	pg/L	21.6
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		65.5	42.1	pg/L	
25429-29-2	Total Penta PCBs		934	923	pg/L	
26601-64-9	Total Hexa PCBs		3110	3100	pg/L	
28655-71-2	Total Hepta PCBs		2850	2840	pg/L	
55722-26-4	Total Octa PCBs		546	542	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		7510	7450	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1000	2160	pg/L	46.6	(15%-150%)
13C-3-MoCB		1210	2160	pg/L	55.9	(15%-150%)
13C-4-DiCB		1060	2160	pg/L	49.0	(25%-150%)
13C-15-DiCB		1470	2160	pg/L	68.3	(25%-150%)
13C-19-TrCB		1340	2160	pg/L	62.3	(25%-150%)
13C-37-TrCB		2090	2160	pg/L	96.8	(25%-150%)
13C-54-TeCB		1290	2160	pg/L	59.7	(25%-150%)
13C-77-TeCB		2500	2160	pg/L	116	(25%-150%)
13C-81-TeCB		2400	2160	pg/L	111	(25%-150%)
13C-104-PeCB		1450	2160	pg/L	67.2	(25%-150%)
13C-105-PeCB		1980	2160	pg/L	91.9	(25%-150%)
13C-114-PeCB		1900	2160	pg/L	88.0	(25%-150%)
13C-118-PeCB		1990	2160	pg/L	92.1	(25%-150%)
13C-123-PeCB		2090	2160	pg/L	96.8	(25%-150%)
13C-126-PeCB		2210	2160	pg/L	102	(25%-150%)
13C-155-HxCB		1420	2160	pg/L	65.6	(25%-150%)
13C-156-HxCB	C	3400	4310	pg/L	78.8	(25%-150%)
13C-167-HxCB		1770	2160	pg/L	82.0	(25%-150%)
13C-169-HxCB		1810	2160	pg/L	83.8	(25%-150%)
13C-188-HpCB		1720	2160	pg/L	79.6	(25%-150%)
13C-189-HpCB		2050	2160	pg/L	94.9	(25%-150%)
13C-202-OcCB		1700	2160	pg/L	79.0	(25%-150%)
13C-205-OcCB		1850	2160	pg/L	85.9	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1007	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 4954001	<b>Date Collected:</b> 06/14/2013 13:40	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 06/21/2013 10:35	
<b>Client ID:</b> WT_IPC-13-32094		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 23831	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 07/16/2013 17:14	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c16jul13a-7		<b>Dilution:</b> 1
<b>Prep Batch:</b> 23828	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 08-JUL-13	<b>Aliquot:</b> 927.5 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1670	2160	pg/L	77.6      (25%-150%)
13C-208-NoCB			1690	2160	pg/L	78.6      (25%-150%)
13C-209-DeCB			1700	2160	pg/L	78.7      (25%-150%)
13C-28-TrCB			2000	2160	pg/L	92.6      (30%-135%)
13C-111-PeCB			2050	2160	pg/L	95.3      (30%-135%)
13C-178-HpCB			1830	2160	pg/L	84.6      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.505	0.345	1.2	
3-Chlorobiphenyl (2)	pg/L	0.504	0.35	1.2	
4-Chlorobiphenyl (3)	pg/L	0.537	0.347	1.23	
2,2'-Dichlorobiphenyl (4)	pg/L	3.41	2.42	8.26	
2,3-Dichlorobiphenyl (5)	pg/L	3.36	2.52	8.4	
2,3'-Dichlorobiphenyl (6)	pg/L	2.66	1.91	6.48	
2,4-Dichlorobiphenyl (7)	pg/L	2.86	2.08	7.03	
2,4'-Dichlorobiphenyl (8)	pg/L	3	2.07	7.14	
2,5-Dichlorobiphenyl (9)	pg/L	2.84	2.12	7.09	
2,6-Dichlorobiphenyl (10)	pg/L	2.11	1.52	5.15	
3,3'-Dichlorobiphenyl (11)	pg/L	3.18	2.22	7.63	
3,4-Dichlorobiphenyl (12)	pg/L	3.76	2.4	8.55	
3,5-Dichlorobiphenyl (14)	pg/L	3.05	2.16	7.36	
4,4'-Dichlorobiphenyl (15)	pg/L	3.88	2.67	9.22	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.539	0.179	0.898	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.503	0.202	0.907	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.383	0.149	0.682	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.482	0.183	0.847	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.342	0.124	0.589	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.37	0.135	0.64	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.447	0.263	0.972	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.35	0.13	0.61	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.366	0.147	0.659	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.326	0.106	0.538	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.412	0.163	0.738	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.327	0.128	0.582	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.316	0.116	0.549	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.348	0.116	0.58	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.348	0.132	0.611	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.461	0.163	0.787	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.412	0.148	0.708	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.658	0.38	1.42	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.434	0.153	0.741	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.428	0.153	0.734	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.651	0.328	1.31	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.843	0.459	1.76	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.72	0.37	1.46	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.755	0.382	1.52	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.693	0.368	1.43	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.515	0.371	1.26	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.393	0.161	0.715	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.721	0.328	1.38	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.631	0.327	1.29	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.38	0.151	0.682	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.661	0.342	1.34	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.245	0.0963	0.438	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.559	0.267	1.09	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.736	0.401	1.54	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.513	0.256	1.02	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.541	0.268	1.08	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.584	0.321	1.23	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.561	0.257	1.07	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.646	0.321	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.487	0.234	0.954	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.534	0.273	1.08	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.515	0.247	1.01	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.429	0.205	0.838	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.529	0.255	1.04	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.516	0.264	1.04	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.539	0.276	1.09	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.667	0.299	1.27	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.573	0.242	1.06	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.472	0.207	0.886	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.489	0.224	0.937	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.62	0.27	1.16	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.729	0.275	1.28	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.774	0.299	1.37	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.745	0.299	1.34	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.63	0.251	1.13	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.684	0.301	1.29	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.816	0.376	1.57	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.686	0.271	1.23	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.657	0.264	1.18	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.675	0.266	1.21	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.592	0.239	1.07	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.744	0.308	1.36	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.749	0.235	1.22	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.3	0.123	0.546	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.767	0.344	1.46	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.649	0.265	1.18	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.628	0.261	1.15	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.335	0.131	0.596	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.803	0.296	1.4	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.629	0.279	1.19	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.61	0.261	1.13	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.686	0.267	1.22	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.689	0.395	1.48	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.503	0.189	0.882	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.495	0.186	0.867	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.749	0.326	1.4	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	0.848	0.457	1.76	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.462	0.174	0.811	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.526	0.208	0.942	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.687	0.3	1.29	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.69	0.305	1.3	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	0.826	0.355	1.54	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.639	0.279	1.2	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.494	0.162	0.818	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.593	0.28	1.15	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.597	0.241	1.08	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.657	0.26	1.18	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.62	0.246	1.11	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.565	0.225	1.01	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.71	0.293	1.29	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.39	0.138	0.665	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.273	0.112	0.497	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.567	0.233	1.03	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.551	0.215	0.982	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.557	0.204	0.964	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.596	0.24	1.08	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.55	0.216	0.983	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.334	0.119	0.573	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.283	0.11	0.502	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.507	0.204	0.915	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.646	0.319	1.28	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.338	0.129	0.596	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.272	0.107	0.486	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.256	0.101	0.459	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.514	0.224	0.962	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.304	0.115	0.535	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.265	0.0934	0.452	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.512	0.217	0.946	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.394	0.156	0.706	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.347	0.143	0.633	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.468	0.187	0.842	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.396	0.162	0.72	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.352	0.146	0.644	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.424	0.155	0.734	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.475	0.192	0.859	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.362	0.148	0.658	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.41	0.172	0.754	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.449	0.158	0.765	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.494	0.178	0.849	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.448	0.156	0.761	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.448	0.155	0.759	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.363	0.143	0.648	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.285	0.114	0.514	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.447	0.156	0.76	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.384	0.153	0.69	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.314	0.0843	0.483	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.625	0.622	1.87	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.439	0.156	0.751	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.374	0.149	0.671	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.516	0.171	0.858	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.277	0.111	0.498	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.308	0.124	0.555	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.394	0.153	0.701	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.326	0.125	0.575	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.37	0.183	0.736	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.345	0.121	0.586	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.332	0.108	0.549	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.373	0.132	0.636	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.339	0.192	0.723	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.355	0.173	0.701	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.324	0.127	0.579	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.308	0.175	0.659	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.388	0.201	0.789	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.243	0.0949	0.433	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.299	0.115	0.529	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.33	0.115	0.56	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.247	0.0968	0.44	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.304	0.142	0.589	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.404	0.135	0.674	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.271	0.124	0.519	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.315	0.146	0.608	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.322	0.245	0.812	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-34607  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 20:32  
**Data File:** c16jul13a-10  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 12:54  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 823.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	24.3	24.3	pg/L	24.3
2051-61-8	PCB-2	U	24.3	24.3	pg/L	24.3
2051-62-9	PCB-3	U	24.3	24.3	pg/L	24.3
13029-08-8	PCB-4	U	24.3	24.3	pg/L	24.3
16605-91-7	PCB-5	U	24.3	24.3	pg/L	24.3
25569-80-6	PCB-6	U	24.3	24.3	pg/L	24.3
33284-50-3	PCB-7	U	24.3	24.3	pg/L	24.3
34883-43-7	PCB-8	U	24.3	24.3	pg/L	24.3
34883-39-1	PCB-9	U	24.3	24.3	pg/L	24.3
33146-45-1	PCB-10	U	24.3	24.3	pg/L	24.3
2050-67-1	PCB-11	U	121	121	pg/L	121
PCB-12/13	PCB-13/12	CU	48.6	48.6	pg/L	48.6
34883-41-5	PCB-14	U	24.3	24.3	pg/L	24.3
2050-68-2	PCB-15	U	24.3	24.3	pg/L	24.3
38444-78-9	PCB-16	U	24.3	24.3	pg/L	24.3
37680-66-3	PCB-17	U	24.3	24.3	pg/L	24.3
PCB-18/30	PCB-18/30	CU	48.6	48.6	pg/L	48.6
38444-73-4	PCB-19	U	24.3	24.3	pg/L	24.3
PCB-20/28	PCB-20/28	CU	48.6	48.6	pg/L	48.6
PCB-21/33	PCB-21/33	CU	48.6	48.6	pg/L	48.6
38444-85-8	PCB-22	U	24.3	24.3	pg/L	24.3
55720-44-0	PCB-23	U	24.3	24.3	pg/L	24.3
55702-45-9	PCB-24	U	24.3	24.3	pg/L	24.3
55712-37-3	PCB-25	U	24.3	24.3	pg/L	24.3
PCB-26/29	PCB-26/29	CU	48.6	48.6	pg/L	48.6
38444-76-7	PCB-27	U	24.3	24.3	pg/L	24.3
16606-02-3	PCB-31		38.8	38.3	pg/L	24.3
38444-77-8	PCB-32	U	24.3	24.3	pg/L	24.3
37680-68-5	PCB-34	U	24.3	24.3	pg/L	24.3
37680-69-6	PCB-35	U	24.3	24.3	pg/L	24.3
38444-87-0	PCB-36	U	24.3	24.3	pg/L	24.3
38444-90-5	PCB-37		40.6	39.2	pg/L	24.3

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 2 of 7

**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-34607  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 20:32  
**Data File:** c16jul13a-10  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 12:54  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 823.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	24.3	24.3	pg/L	24.3
38444-88-1	PCB-39	U	24.3	24.3	pg/L	24.3
PCB-40/71	PCB-40/71	CU	48.6	48.6	pg/L	48.6
52663-59-9	PCB-41	U	24.3	24.3	pg/L	24.3
36559-22-5	PCB-42	U	24.3	24.3	pg/L	24.3
70362-46-8	PCB-43	U	24.3	24.3	pg/L	24.3
PCB-44/47/65	PCB-44/65/47	CU	72.9	72.9	pg/L	72.9
PCB-45/51	PCB-45/51	CU	48.6	48.6	pg/L	48.6
41464-47-5	PCB-46	U	24.3	24.3	pg/L	24.3
70362-47-9	PCB-48	U	24.3	24.3	pg/L	24.3
PCB-49/69	PCB-69/49	C	83.7	82.4	pg/L	48.6
PCB-50/53	PCB-50/53	CU	48.6	48.6	pg/L	48.6
35693-99-3	PCB-52		490	488	pg/L	24.3
15968-05-5	PCB-54	U	24.3	24.3	pg/L	24.3
74338-24-2	PCB-55	U	24.3	24.3	pg/L	24.3
41464-43-1	PCB-56		54.0	52.5	pg/L	24.3
70424-67-8	PCB-57	U	24.3	24.3	pg/L	24.3
41464-49-7	PCB-58	U	24.3	24.3	pg/L	24.3
PCB-59/62/75	PCB-59/62/75	CU	72.9	72.9	pg/L	72.9
33025-41-1	PCB-60	U	24.3	24.3	pg/L	24.3
PCB-61-76	PCB-61/76/70/74	C	378	376	pg/L	97.2
74472-34-7	PCB-63	U	24.3	24.3	pg/L	24.3
52663-58-8	PCB-64		63.8	62.7	pg/L	24.3
32598-10-0	PCB-66		99.4	98.4	pg/L	24.3
73575-53-8	PCB-67	U	24.3	24.3	pg/L	24.3
73575-52-7	PCB-68	U	24.3	24.3	pg/L	24.3
41464-42-0	PCB-72	U	24.3	24.3	pg/L	24.3
74338-23-1	PCB-73	U	24.3	24.3	pg/L	24.3
32598-13-3	PCB-77		97.5	96.3	pg/L	24.3
70362-49-1	PCB-78	U	24.3	24.3	pg/L	24.3
41464-48-6	PCB-79	U	24.3	24.3	pg/L	24.3
33284-52-5	PCB-80	U	24.3	24.3	pg/L	24.3

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-34607  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 20:32  
**Data File:** c16jul13a-10  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 12:54  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 823.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	24.3	24.3	pg/L	24.3
52663-62-4	PCB-82		320	319	pg/L	24.3
60145-20-2	PCB-83		165	163	pg/L	24.3
52663-60-2	PCB-84		776	775	pg/L	24.3
PCB-85-117	PCB-117/116/85	C	420	419	pg/L	72.9
PCB-86-125	PCB-86/87/97/109/119/125	C	1650	1650	pg/L	146
PCB-88/91	PCB-88/91	C	382	381	pg/L	48.6
73575-57-2	PCB-89	U	24.3	24.3	pg/L	24.3
PCB-90-113	PCB-113/90/101	C	2630	2630	pg/L	72.9
52663-61-3	PCB-92		573	571	pg/L	24.3
PCB-93/100	PCB-93/100	CU	48.6	48.6	pg/L	48.6
73575-55-0	PCB-94	U	24.3	24.3	pg/L	24.3
38379-99-6	PCB-95		2610	2610	pg/L	24.3
73575-54-9	PCB-96	U	24.3	24.3	pg/L	24.3
PCB-98/102	PCB-102/98	CU	48.6	48.6	pg/L	48.6
38380-01-7	PCB-99		992	991	pg/L	24.3
60145-21-3	PCB-103	U	24.3	24.3	pg/L	24.3
56558-16-8	PCB-104	U	24.3	24.3	pg/L	24.3
32598-14-4	PCB-105		684	683	pg/L	24.3
70424-69-0	PCB-106	U	24.3	24.3	pg/L	24.3
70424-68-9	PCB-107		107	105	pg/L	24.3
PCB-108/124	PCB-108/124	C	108	107	pg/L	48.6
PCB-110/115	PCB-110/115	C	5110	5110	pg/L	48.6
39635-32-0	PCB-111	U	24.3	24.3	pg/L	24.3
74472-36-9	PCB-112	U	24.3	24.3	pg/L	24.3
74472-37-0	PCB-114	U	24.3	24.3	pg/L	24.3
31508-00-6	PCB-118		1970	1970	pg/L	24.3
68194-12-7	PCB-120	U	24.3	24.3	pg/L	24.3
56558-18-0	PCB-121	U	24.3	24.3	pg/L	24.3
76842-07-4	PCB-122		35.3	34	pg/L	24.3
65510-44-3	PCB-123		50.6	49.3	pg/L	24.3
57465-28-8	PCB-126		30.8	29.3	pg/L	24.3

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-34607  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 20:32  
**Data File:** c16jul13a-10  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 12:54  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 823.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	24.3	24.3	pg/L	24.3
PCB-128/166	PCB-128/166	C	1260	1250	pg/L	48.6
PCB-129-163	PCB-138/163/129	C	6440	6440	pg/L	72.9
52663-66-8	PCB-130		448	447	pg/L	24.3
61798-70-7	PCB-131		87.2	86	pg/L	24.3
38380-05-1	PCB-132		2100	2090	pg/L	24.3
35694-04-3	PCB-133		65.8	64.7	pg/L	24.3
52704-70-8	PCB-134		326	324	pg/L	24.3
PCB-135/151	PCB-151/135	C	1110	1110	pg/L	48.6
38411-22-2	PCB-136		424	424	pg/L	24.3
35694-06-5	PCB-137		384	383	pg/L	24.3
PCB-139/140	PCB-139/140	C	96.2	95.2	pg/L	48.6
52712-04-6	PCB-141		930	929	pg/L	24.3
41411-61-4	PCB-142	U	24.3	24.3	pg/L	24.3
68194-15-0	PCB-143	U	24.3	24.3	pg/L	24.3
68194-14-9	PCB-144		164	163	pg/L	24.3
74472-40-5	PCB-145	U	24.3	24.3	pg/L	24.3
51908-16-8	PCB-146		655	655	pg/L	24.3
PCB-147/149	PCB-147/149	C	3350	3350	pg/L	48.6
74472-41-6	PCB-148	U	24.3	24.3	pg/L	24.3
68194-08-1	PCB-150	U	24.3	24.3	pg/L	24.3
68194-09-2	PCB-152	U	24.3	24.3	pg/L	24.3
PCB-153/168	PCB-153/168	C	3750	3750	pg/L	48.6
60145-22-4	PCB-154		32.0	31.5	pg/L	24.3
33979-03-2	PCB-155	U	24.3	24.3	pg/L	24.3
PCB-156/157	PCB-156/157	C	652	651	pg/L	48.6
74472-42-7	PCB-158		638	637	pg/L	24.3
39635-35-3	PCB-159	U	24.3	24.3	pg/L	24.3
41411-62-5	PCB-160	U	24.3	24.3	pg/L	24.3
74472-43-8	PCB-161	U	24.3	24.3	pg/L	24.3
39635-34-2	PCB-162		32.1	31.4	pg/L	24.3
74472-45-0	PCB-164		448	447	pg/L	24.3

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-34607  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 20:32  
**Data File:** c16jul13a-10  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 12:54  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 823.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	24.3	24.3	pg/L	24.3
52663-72-6	PCB-167		358	357	pg/L	24.3
32774-16-6	PCB-169	U	24.3	24.3	pg/L	24.3
35065-30-6	PCB-170		903	902	pg/L	24.3
PCB-171/173	PCB-173/171	C	245	244	pg/L	48.6
52663-74-8	PCB-172		135	134	pg/L	24.3
38411-25-5	PCB-174		635	634	pg/L	24.3
40186-70-7	PCB-175		25.5	24.8	pg/L	24.3
52663-65-7	PCB-176		59.2	58.7	pg/L	24.3
52663-70-4	PCB-177		391	391	pg/L	24.3
52663-67-9	PCB-178		93.4	92.7	pg/L	24.3
52663-64-6	PCB-179		171	170	pg/L	24.3
PCB-180/193	PCB-193/180	C	1480	1470	pg/L	48.6
74472-47-2	PCB-181	U	24.3	24.3	pg/L	24.3
60145-23-5	PCB-182	U	24.3	24.3	pg/L	24.3
PCB-183/185	PCB-183/185	C	391	390	pg/L	48.6
74472-48-3	PCB-184	U	24.3	24.3	pg/L	24.3
74472-49-4	PCB-186	U	24.3	24.3	pg/L	24.3
52663-68-0	PCB-187		617	616	pg/L	24.3
74487-85-7	PCB-188	U	24.3	24.3	pg/L	24.3
39635-31-9	PCB-189		44.4	43.7	pg/L	24.3
41411-64-7	PCB-190		163	162	pg/L	24.3
74472-50-7	PCB-191		26.1	25.5	pg/L	24.3
74472-51-8	PCB-192	U	24.3	24.3	pg/L	24.3
35694-08-7	PCB-194		180	179	pg/L	24.3
52663-78-2	PCB-195		69.7	69	pg/L	24.3
42740-50-1	PCB-196		83.5	83	pg/L	24.3
PCB-197/200	PCB-197/200	CU	48.6	48.6	pg/L	48.6
PCB-198/199	PCB-198/199	C	198	197	pg/L	48.6
40186-71-8	PCB-201	U	24.3	24.3	pg/L	24.3
2136-99-4	PCB-202		36.2	35.7	pg/L	24.3
52663-76-0	PCB-203		126	125	pg/L	24.3

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-34607  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 20:32  
**Data File:** c16jul13a-10  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 12:54  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 823.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	24.3	24.3	pg/L	24.3
74472-53-0	PCB-205	U	24.3	24.3	pg/L	24.3
40186-72-9	PCB-206		78.8	78.1	pg/L	24.3
52663-79-3	PCB-207	U	24.3	24.3	pg/L	24.3
52663-77-1	PCB-208	U	24.3	24.3	pg/L	24.3
2051-24-3	PCB-209	U	24.3	24.3	pg/L	24.3
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		79.4	77.5	pg/L	
26914-33-0	Total Tetra PCBs		1270	1260	pg/L	
25429-29-2	Total Penta PCBs		18600	18600	pg/L	
26601-64-9	Total Hexa PCBs		23700	23700	pg/L	
28655-71-2	Total Hepta PCBs		5370	5360	pg/L	
55722-26-4	Total Octa PCBs		693	689	pg/L	
53742-07-7	Total Nona PCBs		78.8	78.1	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		49800	49700	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1400	2430	pg/L	57.8	(15%-150%)
13C-3-MoCB		1630	2430	pg/L	67.1	(15%-150%)
13C-4-DiCB		1470	2430	pg/L	60.5	(25%-150%)
13C-15-DiCB		1810	2430	pg/L	74.4	(25%-150%)
13C-19-TrCB		1690	2430	pg/L	69.5	(25%-150%)
13C-37-TrCB		2330	2430	pg/L	96.1	(25%-150%)
13C-54-TeCB		1490	2430	pg/L	61.3	(25%-150%)
13C-77-TeCB		2720	2430	pg/L	112	(25%-150%)
13C-81-TeCB		2570	2430	pg/L	106	(25%-150%)
13C-104-PeCB		1850	2430	pg/L	76.2	(25%-150%)
13C-105-PeCB		2170	2430	pg/L	89.5	(25%-150%)
13C-114-PeCB		2080	2430	pg/L	85.6	(25%-150%)
13C-118-PeCB		2190	2430	pg/L	90.2	(25%-150%)
13C-123-PeCB		2270	2430	pg/L	93.5	(25%-150%)
13C-126-PeCB		2380	2430	pg/L	98.0	(25%-150%)
13C-155-HxCB		1780	2430	pg/L	73.2	(25%-150%)
13C-156-HxCB	C	3910	4860	pg/L	80.4	(25%-150%)
13C-167-HxCB		1990	2430	pg/L	81.9	(25%-150%)
13C-169-HxCB		2190	2430	pg/L	90.1	(25%-150%)
13C-188-HpCB		2090	2430	pg/L	85.9	(25%-150%)
13C-189-HpCB		2390	2430	pg/L	98.4	(25%-150%)
13C-202-OcCB		2020	2430	pg/L	83.0	(25%-150%)
13C-205-OcCB		2240	2430	pg/L	92.3	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 2013-1020	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 4967001	<b>Date Collected:</b> 06/14/2013 12:54	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668 Water	<b>Date Received:</b> 06/25/2013 10:30	
<b>Client ID:</b> WT_IPC-13-34607		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 23831	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 07/16/2013 20:32	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c16jul13a-10		<b>Dilution:</b> 1
<b>Prep Batch:</b> 23828	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 08-JUL-13	<b>Aliquot:</b> 823.1 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2090	2430	pg/L	86.0      (25%-150%)
13C-208-NoCB			2070	2430	pg/L	85.2      (25%-150%)
13C-209-DeCB			2140	2430	pg/L	88.0      (25%-150%)
13C-28-TrCB			2070	2430	pg/L	85.0      (30%-135%)
13C-111-PeCB			2140	2430	pg/L	88.0      (30%-135%)
13C-178-HpCB			1940	2430	pg/L	79.7      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data
- U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967002  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32157  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 21:38  
**Data File:** c16jul13a-11  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:06  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 919.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	21.8	21.8	pg/L	21.8
2051-61-8	PCB-2	U	21.8	21.8	pg/L	21.8
2051-62-9	PCB-3	U	21.8	21.8	pg/L	21.8
13029-08-8	PCB-4	U	21.8	21.8	pg/L	21.8
16605-91-7	PCB-5	U	21.8	21.8	pg/L	21.8
25569-80-6	PCB-6	U	21.8	21.8	pg/L	21.8
33284-50-3	PCB-7	U	21.8	21.8	pg/L	21.8
34883-43-7	PCB-8	U	21.8	21.8	pg/L	21.8
34883-39-1	PCB-9	U	21.8	21.8	pg/L	21.8
33146-45-1	PCB-10	U	21.8	21.8	pg/L	21.8
2050-67-1	PCB-11	U	109	109	pg/L	109
PCB-12/13	PCB-13/12	CU	43.5	43.5	pg/L	43.5
34883-41-5	PCB-14	U	21.8	21.8	pg/L	21.8
2050-68-2	PCB-15		89.6	80.4	pg/L	21.8
38444-78-9	PCB-16		47.5	46.6	pg/L	21.8
37680-66-3	PCB-17		28.5	27.6	pg/L	21.8
PCB-18/30	PCB-18/30	C	66.4	65.7	pg/L	43.5
38444-73-4	PCB-19	U	21.8	21.8	pg/L	21.8
PCB-20/28	PCB-20/28	C	176	175	pg/L	43.5
PCB-21/33	PCB-21/33	C	62.3	61.6	pg/L	43.5
38444-85-8	PCB-22		71.3	70.3	pg/L	21.8
55720-44-0	PCB-23	U	21.8	21.8	pg/L	21.8
55702-45-9	PCB-24	U	21.8	21.8	pg/L	21.8
55712-37-3	PCB-25	U	21.8	21.8	pg/L	21.8
PCB-26/29	PCB-26/29	CU	43.5	43.5	pg/L	43.5
38444-76-7	PCB-27	U	21.8	21.8	pg/L	21.8
16606-02-3	PCB-31		105	104	pg/L	21.8
38444-77-8	PCB-32		31.6	31	pg/L	21.8
37680-68-5	PCB-34	U	21.8	21.8	pg/L	21.8
37680-69-6	PCB-35	U	21.8	21.8	pg/L	21.8
38444-87-0	PCB-36	U	21.8	21.8	pg/L	21.8
38444-90-5	PCB-37		104	103	pg/L	21.8

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967002  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32157  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 21:38  
**Data File:** c16jul13a-11  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:06  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 919.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21.8	21.8	pg/L	21.8
38444-88-1	PCB-39	U	21.8	21.8	pg/L	21.8
PCB-40/71	PCB-40/71	C	57.9	56.6	pg/L	43.5
52663-59-9	PCB-41	U	21.8	21.8	pg/L	21.8
36559-22-5	PCB-42		37.6	36.2	pg/L	21.8
70362-46-8	PCB-43	U	21.8	21.8	pg/L	21.8
PCB-44/47/65	PCB-44/65/47	CU	65.3	65.3	pg/L	65.3
PCB-45/51	PCB-45/51	CU	43.5	43.5	pg/L	43.5
41464-47-5	PCB-46	U	21.8	21.8	pg/L	21.8
70362-47-9	PCB-48	U	21.8	21.8	pg/L	21.8
PCB-49/69	PCB-69/49	C	63.0	61.7	pg/L	43.5
PCB-50/53	PCB-50/53	CU	43.5	43.5	pg/L	43.5
35693-99-3	PCB-52		162	160	pg/L	21.8
15968-05-5	PCB-54	U	21.8	21.8	pg/L	21.8
74338-24-2	PCB-55	U	21.8	21.8	pg/L	21.8
41464-43-1	PCB-56		73.7	72.1	pg/L	21.8
70424-67-8	PCB-57	U	21.8	21.8	pg/L	21.8
41464-49-7	PCB-58	U	21.8	21.8	pg/L	21.8
PCB-59/62/75	PCB-59/62/75	CU	65.3	65.3	pg/L	65.3
33025-41-1	PCB-60		38.8	37.7	pg/L	21.8
PCB-61-76	PCB-61/76/70/74	C	263	261	pg/L	87.0
74472-34-7	PCB-63	U	21.8	21.8	pg/L	21.8
52663-58-8	PCB-64		60.4	59.3	pg/L	21.8
32598-10-0	PCB-66		117	116	pg/L	21.8
73575-53-8	PCB-67	U	21.8	21.8	pg/L	21.8
73575-52-7	PCB-68	U	21.8	21.8	pg/L	21.8
41464-42-0	PCB-72	U	21.8	21.8	pg/L	21.8
74338-23-1	PCB-73	U	21.8	21.8	pg/L	21.8
32598-13-3	PCB-77		60.7	59.4	pg/L	21.8
70362-49-1	PCB-78	U	21.8	21.8	pg/L	21.8
41464-48-6	PCB-79	U	21.8	21.8	pg/L	21.8
33284-52-5	PCB-80	U	21.8	21.8	pg/L	21.8

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-1020  
Lab Sample ID: 4967002  
Client Sample: 1668 Water  
Client ID: WT\_IPC-13-32157  
Batch ID: 23831  
Run Date: 07/16/2013 21:38  
Data File: c16jul13a-11  
Prep Batch: 23828  
Prep Date: 08-JUL-13

Client: LANL001  
Date Collected: 06/14/2013 13:06  
Date Received: 06/25/2013 10:30  
Method: EPA Method 1668A  
Analyst: CLP  
Prep Method: SW846 3520C  
Aliquot: 919.1 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21.8	21.8	pg/L	21.8
52663-62-4	PCB-82		61.6	60.3	pg/L	21.8
60145-20-2	PCB-83		27.5	26.2	pg/L	21.8
52663-60-2	PCB-84		105	103	pg/L	21.8
PCB-85-117	PCB-117/116/85	C	75.4	74.3	pg/L	65.3
PCB-86-125	PCB-86/87/97/109/119/125	C	341	339	pg/L	131
PCB-88/91	PCB-88/91	CU	43.5	43.5	pg/L	43.5
73575-57-2	PCB-89	U	21.8	21.8	pg/L	21.8
PCB-90-113	PCB-113/90/101	C	442	441	pg/L	65.3
52663-61-3	PCB-92		72.1	70.9	pg/L	21.8
PCB-93/100	PCB-93/100	CU	43.5	43.5	pg/L	43.5
73575-55-0	PCB-94	U	21.8	21.8	pg/L	21.8
38379-99-6	PCB-95		282	281	pg/L	21.8
73575-54-9	PCB-96	U	21.8	21.8	pg/L	21.8
PCB-98/102	PCB-102/98	CU	43.5	43.5	pg/L	43.5
38380-01-7	PCB-99		150	148	pg/L	21.8
60145-21-3	PCB-103	U	21.8	21.8	pg/L	21.8
56558-16-8	PCB-104	U	21.8	21.8	pg/L	21.8
32598-14-4	PCB-105		270	269	pg/L	21.8
70424-69-0	PCB-106	U	21.8	21.8	pg/L	21.8
70424-68-9	PCB-107		35.1	34	pg/L	21.8
PCB-108/124	PCB-108/124	CU	43.5	43.5	pg/L	43.5
PCB-110/115	PCB-110/115	C	816	815	pg/L	43.5
39635-32-0	PCB-111	U	21.8	21.8	pg/L	21.8
74472-36-9	PCB-112	U	21.8	21.8	pg/L	21.8
74472-37-0	PCB-114	U	21.8	21.8	pg/L	21.8
31508-00-6	PCB-118		579	577	pg/L	21.8
68194-12-7	PCB-120	U	21.8	21.8	pg/L	21.8
56558-18-0	PCB-121	U	21.8	21.8	pg/L	21.8
76842-07-4	PCB-122	U	21.8	21.8	pg/L	21.8
65510-44-3	PCB-123	U	21.8	21.8	pg/L	21.8
57465-28-8	PCB-126	U	21.8	21.8	pg/L	21.8

**Comments:**

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**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967002  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32157  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 21:38  
**Data File:** c16jul13a-11  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:06  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 919.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21.8	21.8	pg/L	21.8
PCB-128/166	PCB-128/166	C	187	186	pg/L	43.5
PCB-129-163	PCB-138/163/129	C	1080	1080	pg/L	65.3
52663-66-8	PCB-130		63.6	62.6	pg/L	21.8
61798-70-7	PCB-131	U	21.8	21.8	pg/L	21.8
38380-05-1	PCB-132		312	311	pg/L	21.8
35694-04-3	PCB-133	U	21.8	21.8	pg/L	21.8
52704-70-8	PCB-134		29.6	28.3	pg/L	21.8
PCB-135/151	PCB-151/135	C	195	194	pg/L	43.5
38411-22-2	PCB-136		66.0	65.5	pg/L	21.8
35694-06-5	PCB-137		46.3	45.3	pg/L	21.8
PCB-139/140	PCB-139/140	CU	43.5	43.5	pg/L	43.5
52712-04-6	PCB-141		166	165	pg/L	21.8
41411-61-4	PCB-142	U	21.8	21.8	pg/L	21.8
68194-15-0	PCB-143	U	21.8	21.8	pg/L	21.8
68194-14-9	PCB-144		26.6	26	pg/L	21.8
74472-40-5	PCB-145	U	21.8	21.8	pg/L	21.8
51908-16-8	PCB-146		108	107	pg/L	21.8
PCB-147/149	PCB-147/149	C	544	543	pg/L	43.5
74472-41-6	PCB-148	U	21.8	21.8	pg/L	21.8
68194-08-1	PCB-150	U	21.8	21.8	pg/L	21.8
68194-09-2	PCB-152	U	21.8	21.8	pg/L	21.8
PCB-153/168	PCB-153/168	C	663	662	pg/L	43.5
60145-22-4	PCB-154	U	21.8	21.8	pg/L	21.8
33979-03-2	PCB-155	U	21.8	21.8	pg/L	21.8
PCB-156/157	PCB-156/157	C	132	131	pg/L	43.5
74472-42-7	PCB-158		106	105	pg/L	21.8
39635-35-3	PCB-159	U	21.8	21.8	pg/L	21.8
41411-62-5	PCB-160	U	21.8	21.8	pg/L	21.8
74472-43-8	PCB-161	U	21.8	21.8	pg/L	21.8
39635-34-2	PCB-162	U	21.8	21.8	pg/L	21.8
74472-45-0	PCB-164		74.1	73.4	pg/L	21.8

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967002  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32157  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 21:38  
**Data File:** c16jul13a-11  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:06  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 919.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21.8	21.8	pg/L	21.8
52663-72-6	PCB-167		55.0	54.3	pg/L	21.8
32774-16-6	PCB-169	U	21.8	21.8	pg/L	21.8
35065-30-6	PCB-170		232	232	pg/L	21.8
PCB-171/173	PCB-173/171	C	64.1	63.3	pg/L	43.5
52663-74-8	PCB-172		36.4	35.7	pg/L	21.8
38411-25-5	PCB-174		201	200	pg/L	21.8
40186-70-7	PCB-175	U	21.8	21.8	pg/L	21.8
52663-65-7	PCB-176	U	21.8	21.8	pg/L	21.8
52663-70-4	PCB-177		126	125	pg/L	21.8
52663-67-9	PCB-178		34.7	34	pg/L	21.8
52663-64-6	PCB-179		58.7	58.2	pg/L	21.8
PCB-180/193	PCB-193/180	CU	43.5	43.5	pg/L	43.5
74472-47-2	PCB-181	U	21.8	21.8	pg/L	21.8
60145-23-5	PCB-182	U	21.8	21.8	pg/L	21.8
PCB-183/185	PCB-183/185	C	119	118	pg/L	43.5
74472-48-3	PCB-184	U	21.8	21.8	pg/L	21.8
74472-49-4	PCB-186	U	21.8	21.8	pg/L	21.8
52663-68-0	PCB-187		214	213	pg/L	21.8
74487-85-7	PCB-188	U	21.8	21.8	pg/L	21.8
39635-31-9	PCB-189	U	21.8	21.8	pg/L	21.8
41411-64-7	PCB-190		45.0	44.5	pg/L	21.8
74472-50-7	PCB-191	U	21.8	21.8	pg/L	21.8
74472-51-8	PCB-192	U	21.8	21.8	pg/L	21.8
35694-08-7	PCB-194		70.5	69.8	pg/L	21.8
52663-78-2	PCB-195		29.6	28.9	pg/L	21.8
42740-50-1	PCB-196		35.6	35	pg/L	21.8
PCB-197/200	PCB-197/200	CU	43.5	43.5	pg/L	43.5
PCB-198/199	PCB-198/199	C	72.1	71.3	pg/L	43.5
40186-71-8	PCB-201	U	21.8	21.8	pg/L	21.8
2136-99-4	PCB-202	U	21.8	21.8	pg/L	21.8
52663-76-0	PCB-203		45.8	45.3	pg/L	21.8

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1020  
**Lab Sample ID:** 4967002  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32157  
**Batch ID:** 23831  
**Run Date:** 07/16/2013 21:38  
**Data File:** c16jul13a-11  
**Prep Batch:** 23828  
**Prep Date:** 08-JUL-13

**Client:** LANL001  
**Date Collected:** 06/14/2013 13:06  
**Date Received:** 06/25/2013 10:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 919.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21.8	21.8	pg/L	21.8
74472-53-0	PCB-205	U	21.8	21.8	pg/L	21.8
40186-72-9	PCB-206		32.1	31.4	pg/L	21.8
52663-79-3	PCB-207	U	21.8	21.8	pg/L	21.8
52663-77-1	PCB-208	U	21.8	21.8	pg/L	21.8
2051-24-3	PCB-209	U	21.8	21.8	pg/L	21.8
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs		89.6	80.4	pg/L	
25323-68-6	Total Tri PCBs		692	685	pg/L	
26914-33-0	Total Tetra PCBs		933	921	pg/L	
25429-29-2	Total Penta PCBs		3260	3240	pg/L	
26601-64-9	Total Hexa PCBs		3850	3840	pg/L	
28655-71-2	Total Hepta PCBs		1130	1120	pg/L	
55722-26-4	Total Octa PCBs		254	250	pg/L	
53742-07-7	Total Nona PCBs		32.1	31.4	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		10200	10200	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1070	2180	pg/L	49.1	(15%-150%)
13C-3-MoCB		1280	2180	pg/L	59.0	(15%-150%)
13C-4-DiCB		1150	2180	pg/L	52.7	(25%-150%)
13C-15-DiCB		1550	2180	pg/L	71.1	(25%-150%)
13C-19-TrCB		1400	2180	pg/L	64.4	(25%-150%)
13C-37-TrCB		2060	2180	pg/L	94.8	(25%-150%)
13C-54-TeCB		1280	2180	pg/L	58.8	(25%-150%)
13C-77-TeCB		2450	2180	pg/L	112	(25%-150%)
13C-81-TeCB		2300	2180	pg/L	106	(25%-150%)
13C-104-PeCB		1650	2180	pg/L	75.9	(25%-150%)
13C-105-PeCB		1940	2180	pg/L	89.3	(25%-150%)
13C-114-PeCB		1870	2180	pg/L	85.9	(25%-150%)
13C-118-PeCB		1960	2180	pg/L	90.3	(25%-150%)
13C-123-PeCB		2030	2180	pg/L	93.4	(25%-150%)
13C-126-PeCB		2200	2180	pg/L	101	(25%-150%)
13C-155-HxCB		1610	2180	pg/L	74.0	(25%-150%)
13C-156-HxCB	C	3540	4350	pg/L	81.4	(25%-150%)
13C-167-HxCB		1830	2180	pg/L	84.3	(25%-150%)
13C-169-HxCB		1960	2180	pg/L	90.0	(25%-150%)
13C-188-HpCB		1750	2180	pg/L	80.3	(25%-150%)
13C-189-HpCB		2100	2180	pg/L	96.5	(25%-150%)
13C-202-OcCB		1740	2180	pg/L	79.9	(25%-150%)
13C-205-OcCB		2060	2180	pg/L	94.6	(25%-150%)

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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<b>SDG Number:</b> 2013-1020	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 4967002	<b>Date Collected:</b> 06/14/2013 13:06	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668 Water	<b>Date Received:</b> 06/25/2013 10:30	
<b>Client ID:</b> WT_IPC-13-32157		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 23831	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 07/16/2013 21:38	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c16jul13a-11		<b>Dilution:</b> 1
<b>Prep Batch:</b> 23828	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 08-JUL-13	<b>Aliquot:</b> 919.1 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%</b>
						<b>Acceptable Limits</b>
13C-206-NoCB			1900	2180	pg/L	87.2 (25%-150%)
13C-208-NoCB			1810	2180	pg/L	83.2 (25%-150%)
13C-209-DeCB			1940	2180	pg/L	89.1 (25%-150%)
13C-28-TrCB			1940	2180	pg/L	89.1 (30%-135%)
13C-111-PeCB			2030	2180	pg/L	93.4 (30%-135%)
13C-178-HpCB			1930	2180	pg/L	88.6 (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.505	0.345	1.2	
3-Chlorobiphenyl (2)	pg/L	0.504	0.35	1.2	
4-Chlorobiphenyl (3)	pg/L	0.537	0.347	1.23	
2,2'-Dichlorobiphenyl (4)	pg/L	3.41	2.42	8.26	
2,3-Dichlorobiphenyl (5)	pg/L	3.36	2.52	8.4	
2,3'-Dichlorobiphenyl (6)	pg/L	2.66	1.91	6.48	
2,4-Dichlorobiphenyl (7)	pg/L	2.86	2.08	7.03	
2,4'-Dichlorobiphenyl (8)	pg/L	3	2.07	7.14	
2,5-Dichlorobiphenyl (9)	pg/L	2.84	2.12	7.09	
2,6-Dichlorobiphenyl (10)	pg/L	2.11	1.52	5.15	
3,3'-Dichlorobiphenyl (11)	pg/L	3.18	2.22	7.63	
3,4-Dichlorobiphenyl (12)	pg/L	3.76	2.4	8.55	
3,5-Dichlorobiphenyl (14)	pg/L	3.05	2.16	7.36	
4,4'-Dichlorobiphenyl (15)	pg/L	3.88	2.67	9.22	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.539	0.179	0.898	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.503	0.202	0.907	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.383	0.149	0.682	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.482	0.183	0.847	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.342	0.124	0.589	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.37	0.135	0.64	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.447	0.263	0.972	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.35	0.13	0.61	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.366	0.147	0.659	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.326	0.106	0.538	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.412	0.163	0.738	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.327	0.128	0.582	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.316	0.116	0.549	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.348	0.116	0.58	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.348	0.132	0.611	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.461	0.163	0.787	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.412	0.148	0.708	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.658	0.38	1.42	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.434	0.153	0.741	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.428	0.153	0.734	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.651	0.328	1.31	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.843	0.459	1.76	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.72	0.37	1.46	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.755	0.382	1.52	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.693	0.368	1.43	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.515	0.371	1.26	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.393	0.161	0.715	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.721	0.328	1.38	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.631	0.327	1.29	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.38	0.151	0.682	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.661	0.342	1.34	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.245	0.0963	0.438	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.559	0.267	1.09	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.736	0.401	1.54	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.513	0.256	1.02	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.541	0.268	1.08	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.584	0.321	1.23	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.561	0.257	1.07	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.646	0.321	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.487	0.234	0.954	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.534	0.273	1.08	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.515	0.247	1.01	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.429	0.205	0.838	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.529	0.255	1.04	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.516	0.264	1.04	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.539	0.276	1.09	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.667	0.299	1.27	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.573	0.242	1.06	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.472	0.207	0.886	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.489	0.224	0.937	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.62	0.27	1.16	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.729	0.275	1.28	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.774	0.299	1.37	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.745	0.299	1.34	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.63	0.251	1.13	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.684	0.301	1.29	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.816	0.376	1.57	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.686	0.271	1.23	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.657	0.264	1.18	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.675	0.266	1.21	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.592	0.239	1.07	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.744	0.308	1.36	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.749	0.235	1.22	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.3	0.123	0.546	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.767	0.344	1.46	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.649	0.265	1.18	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.628	0.261	1.15	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.335	0.131	0.596	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.803	0.296	1.4	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.629	0.279	1.19	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.61	0.261	1.13	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.686	0.267	1.22	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.689	0.395	1.48	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.503	0.189	0.882	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.495	0.186	0.867	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.749	0.326	1.4	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	0.848	0.457	1.76	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.462	0.174	0.811	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.526	0.208	0.942	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.687	0.3	1.29	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.69	0.305	1.3	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	0.826	0.355	1.54	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.639	0.279	1.2	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.494	0.162	0.818	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.593	0.28	1.15	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.597	0.241	1.08	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.657	0.26	1.18	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.62	0.246	1.11	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.565	0.225	1.01	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.71	0.293	1.29	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.39	0.138	0.665	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.273	0.112	0.497	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.567	0.233	1.03	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.551	0.215	0.982	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.557	0.204	0.964	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.596	0.24	1.08	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.55	0.216	0.983	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.334	0.119	0.573	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.283	0.11	0.502	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.507	0.204	0.915	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.646	0.319	1.28	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.338	0.129	0.596	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.272	0.107	0.486	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.256	0.101	0.459	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.514	0.224	0.962	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.304	0.115	0.535	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.265	0.0934	0.452	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.512	0.217	0.946	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.394	0.156	0.706	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.347	0.143	0.633	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.468	0.187	0.842	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.396	0.162	0.72	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.352	0.146	0.644	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.424	0.155	0.734	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.475	0.192	0.859	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.362	0.148	0.658	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.41	0.172	0.754	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.449	0.158	0.765	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.494	0.178	0.849	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.448	0.156	0.761	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.448	0.155	0.759	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.363	0.143	0.648	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.285	0.114	0.514	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.447	0.156	0.76	



# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.384	0.153	0.69	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.314	0.0843	0.483	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.625	0.622	1.87	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.439	0.156	0.751	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.374	0.149	0.671	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.516	0.171	0.858	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.277	0.111	0.498	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.308	0.124	0.555	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.394	0.153	0.701	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.326	0.125	0.575	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.37	0.183	0.736	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.345	0.121	0.586	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.332	0.108	0.549	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.373	0.132	0.636	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.339	0.192	0.723	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.355	0.173	0.701	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.324	0.127	0.579	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.308	0.175	0.659	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.388	0.201	0.789	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.243	0.0949	0.433	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.299	0.115	0.529	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.33	0.115	0.56	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.247	0.0968	0.44	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.304	0.142	0.589	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.404	0.135	0.674	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.271	0.124	0.519	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.315	0.146	0.608	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.322	0.245	0.812	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1087  
**Lab Sample ID:** 5021001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-38617  
**Batch ID:** 23875  
**Run Date:** 07/31/2013 17:46  
**Data File:** c29jul13a\_5-9  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/02/2013 13:18  
**Date Received:** 07/10/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 920.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	21.7	21.7	pg/L	21.7
2051-61-8	PCB-2	U	21.7	21.7	pg/L	21.7
2051-62-9	PCB-3	U	21.7	21.7	pg/L	21.7
13029-08-8	PCB-4	U	21.7	21.7	pg/L	21.7
16605-91-7	PCB-5	U	21.7	21.7	pg/L	21.7
25569-80-6	PCB-6	U	21.7	21.7	pg/L	21.7
33284-50-3	PCB-7	U	21.7	21.7	pg/L	21.7
34883-43-7	PCB-8	U	21.7	21.7	pg/L	21.7
34883-39-1	PCB-9	U	21.7	21.7	pg/L	21.7
33146-45-1	PCB-10	U	21.7	21.7	pg/L	21.7
2050-67-1	PCB-11	U	109	109	pg/L	109
PCB-12/13	PCB-13/12	CU	43.5	43.5	pg/L	43.5
34883-41-5	PCB-14	U	21.7	21.7	pg/L	21.7
2050-68-2	PCB-15		33.0	23.8	pg/L	21.7
38444-78-9	PCB-16		51.0	50.1	pg/L	21.7
37680-66-3	PCB-17		28.3	27.3	pg/L	21.7
PCB-18/30	PCB-18/30	C	78.0	77.3	pg/L	43.5
38444-73-4	PCB-19	U	21.7	21.7	pg/L	21.7
PCB-20/28	PCB-20/28	C	192	191	pg/L	43.5
PCB-21/33	PCB-21/33	C	51.7	51.1	pg/L	43.5
38444-85-8	PCB-22		67.4	66.4	pg/L	21.7
55720-44-0	PCB-23	U	21.7	21.7	pg/L	21.7
55702-45-9	PCB-24	U	21.7	21.7	pg/L	21.7
55712-37-3	PCB-25	U	21.7	21.7	pg/L	21.7
PCB-26/29	PCB-26/29	CU	43.5	43.5	pg/L	43.5
38444-76-7	PCB-27	U	21.7	21.7	pg/L	21.7
16606-02-3	PCB-31		104	103	pg/L	21.7
38444-77-8	PCB-32		29.1	28.6	pg/L	21.7
37680-68-5	PCB-34	U	21.7	21.7	pg/L	21.7
37680-69-6	PCB-35	U	21.7	21.7	pg/L	21.7
38444-87-0	PCB-36	U	21.7	21.7	pg/L	21.7
38444-90-5	PCB-37		54.2	52.7	pg/L	21.7

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 2 of 7

SDG Number: 2013-1087  
Lab Sample ID: 5021001  
Client Sample: 1668A Water  
Client ID: WT\_IPC-13-38617  
Batch ID: 23875  
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Data File: c29jul13a\_5-9  
Prep Batch: 23871  
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Analyst: CLP  
  
Prep Method: SW846 3520C  
Aliquot: 920.2 mL

Project: LANL00112  
Matrix: WATER  
  
Prep Basis: As Received  
  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21.7	21.7	pg/L	21.7
38444-88-1	PCB-39	U	21.7	21.7	pg/L	21.7
PCB-40/71	PCB-40/71	C	92.1	90.8	pg/L	43.5
52663-59-9	PCB-41	U	21.7	21.7	pg/L	21.7
36559-22-5	PCB-42		46.1	44.7	pg/L	21.7
70362-46-8	PCB-43	U	21.7	21.7	pg/L	21.7
PCB-44/47/65	PCB-44/65/47	C	195	194	pg/L	65.2
PCB-45/51	PCB-45/51	CU	43.5	43.5	pg/L	43.5
41464-47-5	PCB-46	U	21.7	21.7	pg/L	21.7
70362-47-9	PCB-48		38.5	37.1	pg/L	21.7
PCB-49/69	PCB-69/49	C	91.3	90	pg/L	43.5
PCB-50/53	PCB-50/53	CU	43.5	43.5	pg/L	43.5
35693-99-3	PCB-52		279	278	pg/L	21.7
15968-05-5	PCB-54	U	21.7	21.7	pg/L	21.7
74338-24-2	PCB-55	U	21.7	21.7	pg/L	21.7
41464-43-1	PCB-56		82.2	80.6	pg/L	21.7
70424-67-8	PCB-57	U	21.7	21.7	pg/L	21.7
41464-49-7	PCB-58	U	21.7	21.7	pg/L	21.7
PCB-59/62/75	PCB-59/62/75	CU	65.2	65.2	pg/L	65.2
33025-41-1	PCB-60		55.5	54.4	pg/L	21.7
PCB-61-76	PCB-61/76/70/74	C	336	335	pg/L	86.9
74472-34-7	PCB-63	U	21.7	21.7	pg/L	21.7
52663-58-8	PCB-64		80.1	79	pg/L	21.7
32598-10-0	PCB-66		118	117	pg/L	21.7
73575-53-8	PCB-67	U	21.7	21.7	pg/L	21.7
73575-52-7	PCB-68	U	21.7	21.7	pg/L	21.7
41464-42-0	PCB-72	U	21.7	21.7	pg/L	21.7
74338-23-1	PCB-73	U	21.7	21.7	pg/L	21.7
32598-13-3	PCB-77		31.5	30.2	pg/L	21.7
70362-49-1	PCB-78	U	21.7	21.7	pg/L	21.7
41464-48-6	PCB-79	U	21.7	21.7	pg/L	21.7
33284-52-5	PCB-80	U	21.7	21.7	pg/L	21.7

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 3 of 7

SDG Number: 2013-1087  
 Lab Sample ID: 5021001  
 Client Sample: 1668A Water  
 Client ID: WT\_IPC-13-38617  
 Batch ID: 23875  
 Run Date: 07/31/2013 17:46  
 Data File: c29jul13a\_5-9  
 Prep Batch: 23871  
 Prep Date: 17-JUL-13

Client: LANL001  
 Date Collected: 07/02/2013 13:18  
 Date Received: 07/10/2013 10:00  
 Method: EPA Method 1668A  
 Analyst: CLP  
 Prep Method: SW846 3520C  
 Aliquot: 920.2 mL

Project: LANL00112  
 Matrix: WATER  
 Prep Basis: As Received  
 Instrument: HRP791  
 Dilution: 1  
 Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21.7	21.7	pg/L	21.7
52663-62-4	PCB-82		53.1	51.9	pg/L	21.7
60145-20-2	PCB-83	U	23.0	21.7	pg/L	21.7
52663-60-2	PCB-84		125	123	pg/L	21.7
PCB-85-117	PCB-117/116/85	C	73.5	72.3	pg/L	65.2
PCB-86-125	PCB-86/87/97/109/119/125	C	338	336	pg/L	130
PCB-88/91	PCB-88/91	CU	43.5	43.5	pg/L	43.5
73575-57-2	PCB-89	U	21.7	21.7	pg/L	21.7
PCB-90-113	PCB-113/90/101	C	473	472	pg/L	65.2
52663-61-3	PCB-92		71.6	70.4	pg/L	21.7
PCB-93/100	PCB-93/100	CU	43.5	43.5	pg/L	43.5
73575-55-0	PCB-94	U	21.7	21.7	pg/L	21.7
38379-99-6	PCB-95		361	360	pg/L	21.7
73575-54-9	PCB-96	U	21.7	21.7	pg/L	21.7
PCB-98/102	PCB-102/98	CU	43.5	43.5	pg/L	43.5
38380-01-7	PCB-99		209	207	pg/L	21.7
60145-21-3	PCB-103	U	21.7	21.7	pg/L	21.7
56558-16-8	PCB-104	U	21.7	21.7	pg/L	21.7
32598-14-4	PCB-105		193	191	pg/L	21.7
70424-69-0	PCB-106	U	21.7	21.7	pg/L	21.7
70424-68-9	PCB-107		25.2	24.1	pg/L	21.7
PCB-108/124	PCB-108/124	CU	43.5	43.5	pg/L	43.5
PCB-110/115	PCB-110/115	C	665	664	pg/L	43.5
39635-32-0	PCB-111	U	21.7	21.7	pg/L	21.7
74472-36-9	PCB-112	U	21.7	21.7	pg/L	21.7
74472-37-0	PCB-114	U	21.7	21.7	pg/L	21.7
31508-00-6	PCB-118		438	437	pg/L	21.7
68194-12-7	PCB-120	U	21.7	21.7	pg/L	21.7
56558-18-0	PCB-121	U	21.7	21.7	pg/L	21.7
76842-07-4	PCB-122	U	21.7	21.7	pg/L	21.7
65510-44-3	PCB-123	U	21.7	21.7	pg/L	21.7
57465-28-8	PCB-126	U	21.7	21.7	pg/L	21.7

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-1087  
Lab Sample ID: 5021001  
Client Sample: 1668A Water  
Client ID: WT\_IPC-13-38617  
Batch ID: 23875  
Run Date: 07/31/2013 17:46  
Data File: c29jul13a\_5-9  
Prep Batch: 23871  
Prep Date: 17-JUL-13

Client: LANL001  
Date Collected: 07/02/2013 13:18  
Date Received: 07/10/2013 10:00  
Method: EPA Method 1668A  
Analyst: CLP  
Prep Method: SW846 3520C  
Aliquot: 920.2 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21.7	21.7	pg/L	21.7
PCB-128/166	PCB-128/166	C	136	135	pg/L	43.5
PCB-129-163	PCB-138/163/129	C	905	903	pg/L	65.2
52663-66-8	PCB-130		47.4	46.3	pg/L	21.7
61798-70-7	PCB-131	U	21.7	21.7	pg/L	21.7
38380-05-1	PCB-132		371	370	pg/L	21.7
35694-04-3	PCB-133	U	21.7	21.7	pg/L	21.7
52704-70-8	PCB-134		36.1	34.8	pg/L	21.7
PCB-135/151	PCB-151/135	C	258	257	pg/L	43.5
38411-22-2	PCB-136		81.8	81.3	pg/L	21.7
35694-06-5	PCB-137		44.7	43.6	pg/L	21.7
PCB-139/140	PCB-139/140	CU	43.5	43.5	pg/L	43.5
52712-04-6	PCB-141		160	159	pg/L	21.7
41411-61-4	PCB-142	U	21.7	21.7	pg/L	21.7
68194-15-0	PCB-143	U	21.7	21.7	pg/L	21.7
68194-14-9	PCB-144		31.7	31.2	pg/L	21.7
74472-40-5	PCB-145	U	21.7	21.7	pg/L	21.7
51908-16-8	PCB-146		88.9	88	pg/L	21.7
PCB-147/149	PCB-147/149	C	640	639	pg/L	43.5
74472-41-6	PCB-148	U	21.7	21.7	pg/L	21.7
68194-08-1	PCB-150	U	21.7	21.7	pg/L	21.7
68194-09-2	PCB-152	U	21.7	21.7	pg/L	21.7
PCB-153/168	PCB-153/168	C	660	660	pg/L	43.5
60145-22-4	PCB-154	U	21.7	21.7	pg/L	21.7
33979-03-2	PCB-155	U	21.7	21.7	pg/L	21.7
PCB-156/157	PCB-156/157	C	95.8	94.8	pg/L	43.5
74472-42-7	PCB-158		83.7	83	pg/L	21.7
39635-35-3	PCB-159	U	21.7	21.7	pg/L	21.7
41411-62-5	PCB-160	U	21.7	21.7	pg/L	21.7
74472-43-8	PCB-161	U	21.7	21.7	pg/L	21.7
39635-34-2	PCB-162	U	21.7	21.7	pg/L	21.7
74472-45-0	PCB-164		66.6	65.9	pg/L	21.7

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1087  
**Lab Sample ID:** 5021001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-38617  
**Batch ID:** 23875  
**Run Date:** 07/31/2013 17:46  
**Data File:** c29jul13a\_5-9  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/02/2013 13:18  
**Date Received:** 07/10/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 920.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21.7	21.7	pg/L	21.7
52663-72-6	PCB-167		40.0	39.4	pg/L	21.7
32774-16-6	PCB-169	U	21.7	21.7	pg/L	21.7
35065-30-6	PCB-170		193	193	pg/L	21.7
PCB-171/173	PCB-173/171	C	55.8	54.9	pg/L	43.5
52663-74-8	PCB-172		33.1	32.4	pg/L	21.7
38411-25-5	PCB-174		215	215	pg/L	21.7
40186-70-7	PCB-175	U	21.7	21.7	pg/L	21.7
52663-65-7	PCB-176		24.8	24.3	pg/L	21.7
52663-70-4	PCB-177		114	113	pg/L	21.7
52663-67-9	PCB-178		38.4	37.7	pg/L	21.7
52663-64-6	PCB-179		81.4	80.9	pg/L	21.7
PCB-180/193	PCB-193/180	CU	43.5	43.5	pg/L	43.5
74472-47-2	PCB-181	U	21.7	21.7	pg/L	21.7
60145-23-5	PCB-182	U	21.7	21.7	pg/L	21.7
PCB-183/185	PCB-183/185	C	149	148	pg/L	43.5
74472-48-3	PCB-184	U	21.7	21.7	pg/L	21.7
74472-49-4	PCB-186	U	21.7	21.7	pg/L	21.7
52663-68-0	PCB-187		312	312	pg/L	21.7
74487-85-7	PCB-188	U	21.7	21.7	pg/L	21.7
39635-31-9	PCB-189	U	21.7	21.7	pg/L	21.7
41411-64-7	PCB-190		40.6	40	pg/L	21.7
74472-50-7	PCB-191	U	21.7	21.7	pg/L	21.7
74472-51-8	PCB-192	U	21.7	21.7	pg/L	21.7
35694-08-7	PCB-194		85.8	85	pg/L	21.7
52663-78-2	PCB-195		33.6	32.9	pg/L	21.7
42740-50-1	PCB-196		45.9	45.3	pg/L	21.7
PCB-197/200	PCB-197/200	CU	43.5	43.5	pg/L	43.5
PCB-198/199	PCB-198/199	C	114	114	pg/L	43.5
40186-71-8	PCB-201	U	21.7	21.7	pg/L	21.7
2136-99-4	PCB-202	U	21.7	21.7	pg/L	21.7
52663-76-0	PCB-203		86.0	85.4	pg/L	21.7

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1087  
**Lab Sample ID:** 5021001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-38617  
**Batch ID:** 23875  
**Run Date:** 07/31/2013 17:46  
**Data File:** c29jul13a\_5-9  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/02/2013 13:18  
**Date Received:** 07/10/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 920.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21.7	21.7	pg/L	21.7
74472-53-0	PCB-205	U	21.7	21.7	pg/L	21.7
40186-72-9	PCB-206		27.7	27	pg/L	21.7
52663-79-3	PCB-207	U	21.7	21.7	pg/L	21.7
52663-77-1	PCB-208	U	21.7	21.7	pg/L	21.7
2051-24-3	PCB-209	U	21.7	21.7	pg/L	21.7
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs		33.0	23.8	pg/L	
25323-68-6	Total Tri PCBs		655	648	pg/L	
26914-33-0	Total Tetra PCBs		1450	1430	pg/L	
25429-29-2	Total Penta PCBs		3050	3010	pg/L	
26601-64-9	Total Hexa PCBs		3750	3730	pg/L	
28655-71-2	Total Hepta PCBs		1260	1250	pg/L	
55722-26-4	Total Octa PCBs		366	362	pg/L	
53742-07-7	Total Nona PCBs		27.7	27	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		10600	10500	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		915	2170	pg/L	42.1	(15%-150%)
13C-3-MoCB		975	2170	pg/L	44.8	(15%-150%)
13C-4-DiCB		1010	2170	pg/L	46.3	(25%-150%)
13C-15-DiCB		1160	2170	pg/L	53.5	(25%-150%)
13C-19-TrCB		1120	2170	pg/L	51.6	(25%-150%)
13C-37-TrCB		1380	2170	pg/L	63.3	(25%-150%)
13C-54-TeCB		1320	2170	pg/L	60.5	(25%-150%)
13C-77-TeCB		1490	2170	pg/L	68.4	(25%-150%)
13C-81-TeCB		1490	2170	pg/L	68.6	(25%-150%)
13C-104-PeCB		1480	2170	pg/L	68.3	(25%-150%)
13C-105-PeCB		1470	2170	pg/L	67.5	(25%-150%)
13C-114-PeCB		1430	2170	pg/L	65.9	(25%-150%)
13C-118-PeCB		1510	2170	pg/L	69.5	(25%-150%)
13C-123-PeCB		1580	2170	pg/L	72.6	(25%-150%)
13C-126-PeCB		1480	2170	pg/L	68.1	(25%-150%)
13C-155-HxCB		1540	2170	pg/L	70.9	(25%-150%)
13C-156-HxCB	C	2980	4350	pg/L	68.5	(25%-150%)
13C-167-HxCB		1470	2170	pg/L	67.6	(25%-150%)
13C-169-HxCB		1590	2170	pg/L	73.1	(25%-150%)
13C-188-HpCB		1510	2170	pg/L	69.6	(25%-150%)
13C-189-HpCB		1540	2170	pg/L	71.0	(25%-150%)
13C-202-OcCB		1490	2170	pg/L	68.6	(25%-150%)
13C-205-OcCB		1710	2170	pg/L	78.7	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1087	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5021001	<b>Date Collected:</b> 07/02/2013 13:18	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 07/10/2013 10:00	
<b>Client ID:</b> WT_IPC-13-38617		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 23875	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 07/31/2013 17:46	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c29jul13a_5-9		<b>Dilution:</b> 1
<b>Prep Batch:</b> 23871	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 17-JUL-13	<b>Aliquot:</b> 920.2 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1580	2170	pg/L	72.7      (25%-150%)
13C-208-NoCB			1580	2170	pg/L	72.6      (25%-150%)
13C-209-DeCB			1580	2170	pg/L	72.8      (25%-150%)
13C-28-TrCB			1560	2170	pg/L	71.7      (30%-135%)
13C-111-PeCB			1580	2170	pg/L	72.9      (30%-135%)
13C-178-HpCB			1570	2170	pg/L	72.4      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1087  
**Lab Sample ID:** 5021002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32095  
**Batch ID:** 23875  
**Run Date:** 07/31/2013 18:48  
**Data File:** c29jul13a\_5-10  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/02/2013 13:51  
**Date Received:** 07/10/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 942.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	21.2	21.2	pg/L	21.2
2051-61-8	PCB-2	U	21.2	21.2	pg/L	21.2
2051-62-9	PCB-3	U	21.2	21.2	pg/L	21.2
13029-08-8	PCB-4	U	21.2	21.2	pg/L	21.2
16605-91-7	PCB-5	U	21.2	21.2	pg/L	21.2
25569-80-6	PCB-6	U	21.2	21.2	pg/L	21.2
33284-50-3	PCB-7	U	21.2	21.2	pg/L	21.2
34883-43-7	PCB-8	U	21.2	21.2	pg/L	21.2
34883-39-1	PCB-9	U	21.2	21.2	pg/L	21.2
33146-45-1	PCB-10	U	21.2	21.2	pg/L	21.2
2050-67-1	PCB-11	U	106	106	pg/L	106
PCB-12/13	PCB-13/12	CU	42.4	42.4	pg/L	42.4
34883-41-5	PCB-14	U	21.2	21.2	pg/L	21.2
2050-68-2	PCB-15	U	21.2	21.2	pg/L	21.2
38444-78-9	PCB-16	U	21.2	21.2	pg/L	21.2
37680-66-3	PCB-17	U	21.2	21.2	pg/L	21.2
PCB-18/30	PCB-18/30	CU	42.4	42.4	pg/L	42.4
38444-73-4	PCB-19	U	21.2	21.2	pg/L	21.2
PCB-20/28	PCB-20/28	CU	42.4	42.4	pg/L	42.4
PCB-21/33	PCB-21/33	CU	42.4	42.4	pg/L	42.4
38444-85-8	PCB-22	U	21.2	21.2	pg/L	21.2
55720-44-0	PCB-23	U	21.2	21.2	pg/L	21.2
55702-45-9	PCB-24	U	21.2	21.2	pg/L	21.2
55712-37-3	PCB-25	U	21.2	21.2	pg/L	21.2
PCB-26/29	PCB-26/29	CU	42.4	42.4	pg/L	42.4
38444-76-7	PCB-27	U	21.2	21.2	pg/L	21.2
16606-02-3	PCB-31	U	21.2	21.2	pg/L	21.2
38444-77-8	PCB-32	U	21.2	21.2	pg/L	21.2
37680-68-5	PCB-34	U	21.2	21.2	pg/L	21.2
37680-69-6	PCB-35	U	21.2	21.2	pg/L	21.2
38444-87-0	PCB-36	U	21.2	21.2	pg/L	21.2
38444-90-5	PCB-37	U	21.2	21.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1087  
**Lab Sample ID:** 5021002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32095  
**Batch ID:** 23875  
**Run Date:** 07/31/2013 18:48  
**Data File:** c29jul13a\_5-10  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/02/2013 13:51  
**Date Received:** 07/10/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 942.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21.2	21.2	pg/L	21.2
38444-88-1	PCB-39	U	21.2	21.2	pg/L	21.2
PCB-40/71	PCB-40/71	CU	42.4	42.4	pg/L	42.4
52663-59-9	PCB-41	U	21.2	21.2	pg/L	21.2
36559-22-5	PCB-42	U	21.2	21.2	pg/L	21.2
70362-46-8	PCB-43	U	21.2	21.2	pg/L	21.2
PCB-44/47/65	PCB-44/65/47	CU	63.6	63.6	pg/L	63.6
PCB-45/51	PCB-45/51	CU	42.4	42.4	pg/L	42.4
41464-47-5	PCB-46	U	21.2	21.2	pg/L	21.2
70362-47-9	PCB-48	U	21.2	21.2	pg/L	21.2
PCB-49/69	PCB-69/49	CU	42.4	42.4	pg/L	42.4
PCB-50/53	PCB-50/53	CU	42.4	42.4	pg/L	42.4
35693-99-3	PCB-52		24.5	23.2	pg/L	21.2
15968-05-5	PCB-54	U	21.2	21.2	pg/L	21.2
74338-24-2	PCB-55	U	21.2	21.2	pg/L	21.2
41464-43-1	PCB-56	U	21.2	21.2	pg/L	21.2
70424-67-8	PCB-57	U	21.2	21.2	pg/L	21.2
41464-49-7	PCB-58	U	21.2	21.2	pg/L	21.2
PCB-59/62/75	PCB-59/62/75	CU	63.6	63.6	pg/L	63.6
33025-41-1	PCB-60	U	21.2	21.2	pg/L	21.2
PCB-61-76	PCB-61/76/70/74	CU	84.8	84.8	pg/L	84.8
74472-34-7	PCB-63	U	21.2	21.2	pg/L	21.2
52663-58-8	PCB-64	U	21.2	21.2	pg/L	21.2
32598-10-0	PCB-66	U	21.2	21.2	pg/L	21.2
73575-53-8	PCB-67	U	21.2	21.2	pg/L	21.2
73575-52-7	PCB-68	U	21.2	21.2	pg/L	21.2
41464-42-0	PCB-72	U	21.2	21.2	pg/L	21.2
74338-23-1	PCB-73	U	21.2	21.2	pg/L	21.2
32598-13-3	PCB-77	U	21.2	21.2	pg/L	21.2
70362-49-1	PCB-78	U	21.2	21.2	pg/L	21.2
41464-48-6	PCB-79	U	21.2	21.2	pg/L	21.2
33284-52-5	PCB-80	U	21.2	21.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 3 of 7

SDG Number: 2013-1087  
 Lab Sample ID: 5021002  
 Client Sample: 1668A Water  
 Client ID: WT\_IPC-13-32095  
 Batch ID: 23875  
 Run Date: 07/31/2013 18:48  
 Data File: c29jul13a\_5-10  
 Prep Batch: 23871  
 Prep Date: 17-JUL-13

Client: LANL001  
 Date Collected: 07/02/2013 13:51  
 Date Received: 07/10/2013 10:00  
 Method: EPA Method 1668A  
 Analyst: CLP  
 Prep Method: SW846 3520C  
 Aliquot: 942.9 mL

Project: LANL00112  
 Matrix: WATER  
 Prep Basis: As Received  
 Instrument: HRP791  
 Dilution: 1  
 Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21.2	21.2	pg/L	21.2
52663-62-4	PCB-82	U	21.2	21.2	pg/L	21.2
60145-20-2	PCB-83	U	21.2	21.2	pg/L	21.2
52663-60-2	PCB-84	U	21.2	21.2	pg/L	21.2
PCB-85-117	PCB-117/116/85	CU	63.6	63.6	pg/L	63.6
PCB-86-125	PCB-86/87/97/109/119/125	CU	127	127	pg/L	127
PCB-88/91	PCB-88/91	CU	42.4	42.4	pg/L	42.4
73575-57-2	PCB-89	U	21.2	21.2	pg/L	21.2
PCB-90-113	PCB-113/90/101	C	67.5	66.3	pg/L	63.6
52663-61-3	PCB-92	U	21.2	21.2	pg/L	21.2
PCB-93/100	PCB-93/100	CU	42.4	42.4	pg/L	42.4
73575-55-0	PCB-94	U	21.2	21.2	pg/L	21.2
38379-99-6	PCB-95		58.9	57.7	pg/L	21.2
73575-54-9	PCB-96	U	21.2	21.2	pg/L	21.2
PCB-98/102	PCB-102/98	CU	42.4	42.4	pg/L	42.4
38380-01-7	PCB-99	U	22.3	21.2	pg/L	21.2
60145-21-3	PCB-103	U	21.2	21.2	pg/L	21.2
56558-16-8	PCB-104	U	21.2	21.2	pg/L	21.2
32598-14-4	PCB-105		23.6	22.2	pg/L	21.2
70424-69-0	PCB-106	U	21.2	21.2	pg/L	21.2
70424-68-9	PCB-107	U	21.2	21.2	pg/L	21.2
PCB-108/124	PCB-108/124	CU	42.4	42.4	pg/L	42.4
PCB-110/115	PCB-110/115	C	101	100	pg/L	42.4
39635-32-0	PCB-111	U	21.2	21.2	pg/L	21.2
74472-36-9	PCB-112	U	21.2	21.2	pg/L	21.2
74472-37-0	PCB-114	U	21.2	21.2	pg/L	21.2
31508-00-6	PCB-118		54.6	52.9	pg/L	21.2
68194-12-7	PCB-120	U	21.2	21.2	pg/L	21.2
56558-18-0	PCB-121	U	21.2	21.2	pg/L	21.2
76842-07-4	PCB-122	U	21.2	21.2	pg/L	21.2
65510-44-3	PCB-123	U	21.2	21.2	pg/L	21.2
57465-28-8	PCB-126	U	21.2	21.2	pg/L	21.2

**Comments:**

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**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1087  
**Lab Sample ID:** 5021002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32095  
**Batch ID:** 23875  
**Run Date:** 07/31/2013 18:48  
**Data File:** c29jul13a\_5-10  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/02/2013 13:51  
**Date Received:** 07/10/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 942.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21.2	21.2	pg/L	21.2
PCB-128/166	PCB-128/166	CU	42.4	42.4	pg/L	42.4
PCB-129-163	PCB-138/163/129	C	212	211	pg/L	63.6
52663-66-8	PCB-130	U	21.2	21.2	pg/L	21.2
61798-70-7	PCB-131	U	21.2	21.2	pg/L	21.2
38380-05-1	PCB-132		85.8	84.7	pg/L	21.2
35694-04-3	PCB-133	U	21.2	21.2	pg/L	21.2
52704-70-8	PCB-134	U	21.2	21.2	pg/L	21.2
PCB-135/151	PCB-151/135	C	76.9	76.2	pg/L	42.4
38411-22-2	PCB-136		23.0	22.5	pg/L	21.2
35694-06-5	PCB-137	U	21.2	21.2	pg/L	21.2
PCB-139/140	PCB-139/140	CU	42.4	42.4	pg/L	42.4
52712-04-6	PCB-141		46.9	45.9	pg/L	21.2
41411-61-4	PCB-142	U	21.2	21.2	pg/L	21.2
68194-15-0	PCB-143	U	21.2	21.2	pg/L	21.2
68194-14-9	PCB-144	U	21.2	21.2	pg/L	21.2
74472-40-5	PCB-145	U	21.2	21.2	pg/L	21.2
51908-16-8	PCB-146		25.7	24.8	pg/L	21.2
PCB-147/149	PCB-147/149	C	186	185	pg/L	42.4
74472-41-6	PCB-148	U	21.2	21.2	pg/L	21.2
68194-08-1	PCB-150	U	21.2	21.2	pg/L	21.2
68194-09-2	PCB-152	U	21.2	21.2	pg/L	21.2
PCB-153/168	PCB-153/168	C	173	172	pg/L	42.4
60145-22-4	PCB-154	U	21.2	21.2	pg/L	21.2
33979-03-2	PCB-155	U	21.2	21.2	pg/L	21.2
PCB-156/157	PCB-156/157	CU	42.4	42.4	pg/L	42.4
74472-42-7	PCB-158	U	21.2	21.2	pg/L	21.2
39635-35-3	PCB-159	U	21.2	21.2	pg/L	21.2
41411-62-5	PCB-160	U	21.2	21.2	pg/L	21.2
74472-43-8	PCB-161	U	21.2	21.2	pg/L	21.2
39635-34-2	PCB-162	U	21.2	21.2	pg/L	21.2
74472-45-0	PCB-164	U	21.2	21.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1087  
**Lab Sample ID:** 5021002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32095  
**Batch ID:** 23875  
**Run Date:** 07/31/2013 18:48  
**Data File:** c29jul13a\_5-10  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/02/2013 13:51  
**Date Received:** 07/10/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 942.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21.2	21.2	pg/L	21.2
52663-72-6	PCB-167	U	21.2	21.2	pg/L	21.2
32774-16-6	PCB-169	U	21.2	21.2	pg/L	21.2
35065-30-6	PCB-170		71.7	70.9	pg/L	21.2
PCB-171/173	PCB-173/171	CU	42.4	42.4	pg/L	42.4
52663-74-8	PCB-172	U	21.2	21.2	pg/L	21.2
38411-25-5	PCB-174		85.9	85.1	pg/L	21.2
40186-70-7	PCB-175	U	21.2	21.2	pg/L	21.2
52663-65-7	PCB-176	U	21.2	21.2	pg/L	21.2
52663-70-4	PCB-177		43.9	43.2	pg/L	21.2
52663-67-9	PCB-178	U	21.2	21.2	pg/L	21.2
52663-64-6	PCB-179		29.7	29.2	pg/L	21.2
PCB-180/193	PCB-193/180	CU	42.4	42.4	pg/L	42.4
74472-47-2	PCB-181	U	21.2	21.2	pg/L	21.2
60145-23-5	PCB-182	U	21.2	21.2	pg/L	21.2
PCB-183/185	PCB-183/185	C	51.0	50.1	pg/L	42.4
74472-48-3	PCB-184	U	21.2	21.2	pg/L	21.2
74472-49-4	PCB-186	U	21.2	21.2	pg/L	21.2
52663-68-0	PCB-187		117	116	pg/L	21.2
74487-85-7	PCB-188	U	21.2	21.2	pg/L	21.2
39635-31-9	PCB-189	U	21.2	21.2	pg/L	21.2
41411-64-7	PCB-190	U	21.2	21.2	pg/L	21.2
74472-50-7	PCB-191	U	21.2	21.2	pg/L	21.2
74472-51-8	PCB-192	U	21.2	21.2	pg/L	21.2
35694-08-7	PCB-194		34.0	33.3	pg/L	21.2
52663-78-2	PCB-195	U	21.2	21.2	pg/L	21.2
42740-50-1	PCB-196	U	21.2	21.2	pg/L	21.2
PCB-197/200	PCB-197/200	CU	42.4	42.4	pg/L	42.4
PCB-198/199	PCB-198/199	CU	42.4	42.4	pg/L	42.4
40186-71-8	PCB-201	U	21.2	21.2	pg/L	21.2
2136-99-4	PCB-202	U	21.2	21.2	pg/L	21.2
52663-76-0	PCB-203		30.7	30.1	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1087  
**Lab Sample ID:** 5021002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32095  
**Batch ID:** 23875  
**Run Date:** 07/31/2013 18:48  
**Data File:** c29jul13a\_5-10  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/02/2013 13:51  
**Date Received:** 07/10/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 942.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21.2	21.2	pg/L	21.2
74472-53-0	PCB-205	U	21.2	21.2	pg/L	21.2
40186-72-9	PCB-206	U	21.2	21.2	pg/L	21.2
52663-79-3	PCB-207	U	21.2	21.2	pg/L	21.2
52663-77-1	PCB-208	U	21.2	21.2	pg/L	21.2
2051-24-3	PCB-209	U	21.2	21.2	pg/L	21.2
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		24.5	23.2	pg/L	
25429-29-2	Total Penta PCBs		328	299	pg/L	
26601-64-9	Total Hexa PCBs		829	821	pg/L	
28655-71-2	Total Hepta PCBs		399	395	pg/L	
55722-26-4	Total Octa PCBs		64.7	63.5	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		1650	1600	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		960	2120	pg/L	45.3	(15%-150%)
13C-3-MoCB		1040	2120	pg/L	48.8	(15%-150%)
13C-4-DiCB		1070	2120	pg/L	50.4	(25%-150%)
13C-15-DiCB		1280	2120	pg/L	60.4	(25%-150%)
13C-19-TrCB		1210	2120	pg/L	56.9	(25%-150%)
13C-37-TrCB		1550	2120	pg/L	72.9	(25%-150%)
13C-54-TeCB		1350	2120	pg/L	63.6	(25%-150%)
13C-77-TeCB		1730	2120	pg/L	81.6	(25%-150%)
13C-81-TeCB		1740	2120	pg/L	81.9	(25%-150%)
13C-104-PeCB		1490	2120	pg/L	70.1	(25%-150%)
13C-105-PeCB		1640	2120	pg/L	77.4	(25%-150%)
13C-114-PeCB		1580	2120	pg/L	74.5	(25%-150%)
13C-118-PeCB		1660	2120	pg/L	78.4	(25%-150%)
13C-123-PeCB		1750	2120	pg/L	82.3	(25%-150%)
13C-126-PeCB		1650	2120	pg/L	78.0	(25%-150%)
13C-155-HxCB		1570	2120	pg/L	73.8	(25%-150%)
13C-156-HxCB	C	3190	4240	pg/L	75.2	(25%-150%)
13C-167-HxCB		1570	2120	pg/L	73.9	(25%-150%)
13C-169-HxCB		1720	2120	pg/L	80.9	(25%-150%)
13C-188-HpCB		1590	2120	pg/L	74.8	(25%-150%)
13C-189-HpCB		1740	2120	pg/L	81.9	(25%-150%)
13C-202-OcCB		1630	2120	pg/L	76.8	(25%-150%)
13C-205-OcCB		1780	2120	pg/L	83.8	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 7 of 7

<b>SDG Number:</b> 2013-1087	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5021002	<b>Date Collected:</b> 07/02/2013 13:51	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 07/10/2013 10:00	
<b>Client ID:</b> WT_IPC-13-32095		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 23875	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 07/31/2013 18:48	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c29jul13a_5-10		<b>Dilution:</b> 1
<b>Prep Batch:</b> 23871	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 17-JUL-13	<b>Aliquot:</b> 942.9 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1580	2120	pg/L	74.5      (25%-150%)
13C-208-NoCB			1780	2120	pg/L	84.1      (25%-150%)
13C-209-DeCB			1560	2120	pg/L	73.4      (25%-150%)
13C-28-TrCB			1570	2120	pg/L	73.9      (30%-135%)
13C-111-PeCB			1660	2120	pg/L	78.1      (30%-135%)
13C-178-HpCB			1560	2120	pg/L	73.4      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.505	0.345	1.2	
3-Chlorobiphenyl (2)	pg/L	0.504	0.35	1.2	
4-Chlorobiphenyl (3)	pg/L	0.537	0.347	1.23	
2,2'-Dichlorobiphenyl (4)	pg/L	3.41	2.42	8.26	
2,3-Dichlorobiphenyl (5)	pg/L	3.36	2.52	8.4	
2,3'-Dichlorobiphenyl (6)	pg/L	2.66	1.91	6.48	
2,4-Dichlorobiphenyl (7)	pg/L	2.86	2.08	7.03	
2,4'-Dichlorobiphenyl (8)	pg/L	3	2.07	7.14	
2,5-Dichlorobiphenyl (9)	pg/L	2.84	2.12	7.09	
2,6-Dichlorobiphenyl (10)	pg/L	2.11	1.52	5.15	
3,3'-Dichlorobiphenyl (11)	pg/L	3.18	2.22	7.63	
3,4-Dichlorobiphenyl (12)	pg/L	3.76	2.4	8.55	
3,5-Dichlorobiphenyl (14)	pg/L	3.05	2.16	7.36	
4,4'-Dichlorobiphenyl (15)	pg/L	3.88	2.67	9.22	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.539	0.179	0.898	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.503	0.202	0.907	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.383	0.149	0.682	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.482	0.183	0.847	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.342	0.124	0.589	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.37	0.135	0.64	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.447	0.263	0.972	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.35	0.13	0.61	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.366	0.147	0.659	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.326	0.106	0.538	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.412	0.163	0.738	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.327	0.128	0.582	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.316	0.116	0.549	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.348	0.116	0.58	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.348	0.132	0.611	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.461	0.163	0.787	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.412	0.148	0.708	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.658	0.38	1.42	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.434	0.153	0.741	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.428	0.153	0.734	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.651	0.328	1.31	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.843	0.459	1.76	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.72	0.37	1.46	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.755	0.382	1.52	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.693	0.368	1.43	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.515	0.371	1.26	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.393	0.161	0.715	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.721	0.328	1.38	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.631	0.327	1.29	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.38	0.151	0.682	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.661	0.342	1.34	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.245	0.0963	0.438	



# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.559	0.267	1.09	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.736	0.401	1.54	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.513	0.256	1.02	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.541	0.268	1.08	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.584	0.321	1.23	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.561	0.257	1.07	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.646	0.321	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.487	0.234	0.954	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.534	0.273	1.08	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.515	0.247	1.01	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.429	0.205	0.838	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.529	0.255	1.04	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.516	0.264	1.04	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.539	0.276	1.09	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.667	0.299	1.27	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.573	0.242	1.06	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.472	0.207	0.886	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.489	0.224	0.937	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.62	0.27	1.16	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.729	0.275	1.28	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.774	0.299	1.37	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.745	0.299	1.34	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.63	0.251	1.13	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.684	0.301	1.29	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.816	0.376	1.57	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.686	0.271	1.23	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.657	0.264	1.18	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.675	0.266	1.21	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.592	0.239	1.07	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.744	0.308	1.36	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.749	0.235	1.22	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.3	0.123	0.546	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.767	0.344	1.46	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.649	0.265	1.18	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.628	0.261	1.15	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.335	0.131	0.596	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.803	0.296	1.4	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.629	0.279	1.19	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.61	0.261	1.13	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.686	0.267	1.22	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.689	0.395	1.48	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.503	0.189	0.882	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.495	0.186	0.867	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.749	0.326	1.4	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	0.848	0.457	1.76	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.462	0.174	0.811	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.526	0.208	0.942	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.687	0.3	1.29	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.69	0.305	1.3	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	0.826	0.355	1.54	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.639	0.279	1.2	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.494	0.162	0.818	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.593	0.28	1.15	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.597	0.241	1.08	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.657	0.26	1.18	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.62	0.246	1.11	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.565	0.225	1.01	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.71	0.293	1.29	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.39	0.138	0.665	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.273	0.112	0.497	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.567	0.233	1.03	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.551	0.215	0.982	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.557	0.204	0.964	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.596	0.24	1.08	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.55	0.216	0.983	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.334	0.119	0.573	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.283	0.11	0.502	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.507	0.204	0.915	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.646	0.319	1.28	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.338	0.129	0.596	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.272	0.107	0.486	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.256	0.101	0.459	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.514	0.224	0.962	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.304	0.115	0.535	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.265	0.0934	0.452	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.512	0.217	0.946	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.394	0.156	0.706	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.347	0.143	0.633	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.468	0.187	0.842	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.396	0.162	0.72	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.352	0.146	0.644	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.424	0.155	0.734	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.475	0.192	0.859	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.362	0.148	0.658	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.41	0.172	0.754	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.449	0.158	0.765	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.494	0.178	0.849	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.448	0.156	0.761	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.448	0.155	0.759	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.363	0.143	0.648	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.285	0.114	0.514	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.447	0.156	0.76	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.384	0.153	0.69	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.314	0.0843	0.483	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.625	0.622	1.87	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.439	0.156	0.751	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.374	0.149	0.671	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.516	0.171	0.858	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.277	0.111	0.498	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.308	0.124	0.555	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.394	0.153	0.701	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.326	0.125	0.575	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.37	0.183	0.736	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.345	0.121	0.586	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.332	0.108	0.549	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.373	0.132	0.636	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.339	0.192	0.723	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.355	0.173	0.701	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.324	0.127	0.579	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.308	0.175	0.659	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.388	0.201	0.789	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.243	0.0949	0.433	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.299	0.115	0.529	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.33	0.115	0.56	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.247	0.0968	0.44	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.304	0.142	0.589	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.404	0.135	0.674	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.271	0.124	0.519	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.315	0.146	0.608	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.322	0.245	0.812	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1154  
**Lab Sample ID:** 5042001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32183  
**Batch ID:** 23875  
**Run Date:** 08/02/2013 17:56  
**Data File:** c01aug13a\_4-6  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:17  
**Date Received:** 07/17/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 955 mL

**Project:** LANL00112  
**Matrix:** W  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	20.9	20.9	pg/L	20.9
2051-61-8	PCB-2	U	20.9	20.9	pg/L	20.9
2051-62-9	PCB-3	U	20.9	20.9	pg/L	20.9
13029-08-8	PCB-4	U	20.9	20.9	pg/L	20.9
16605-91-7	PCB-5	U	20.9	20.9	pg/L	20.9
25569-80-6	PCB-6	U	20.9	20.9	pg/L	20.9
33284-50-3	PCB-7	U	20.9	20.9	pg/L	20.9
34883-43-7	PCB-8	U	20.9	20.9	pg/L	20.9
34883-39-1	PCB-9	U	20.9	20.9	pg/L	20.9
33146-45-1	PCB-10	U	20.9	20.9	pg/L	20.9
2050-67-1	PCB-11	U	105	105	pg/L	105
PCB-12/13	PCB-13/12	CU	41.9	41.9	pg/L	41.9
34883-41-5	PCB-14	U	20.9	20.9	pg/L	20.9
2050-68-2	PCB-15	U	20.9	20.9	pg/L	20.9
38444-78-9	PCB-16	U	20.9	20.9	pg/L	20.9
37680-66-3	PCB-17	U	20.9	20.9	pg/L	20.9
PCB-18/30	PCB-18/30	CU	41.9	41.9	pg/L	41.9
38444-73-4	PCB-19	U	20.9	20.9	pg/L	20.9
PCB-20/28	PCB-20/28	CU	41.9	41.9	pg/L	41.9
PCB-21/33	PCB-21/33	CU	41.9	41.9	pg/L	41.9
38444-85-8	PCB-22	U	20.9	20.9	pg/L	20.9
55720-44-0	PCB-23	U	20.9	20.9	pg/L	20.9
55702-45-9	PCB-24	U	20.9	20.9	pg/L	20.9
55712-37-3	PCB-25	U	20.9	20.9	pg/L	20.9
PCB-26/29	PCB-26/29	CU	41.9	41.9	pg/L	41.9
38444-76-7	PCB-27	U	20.9	20.9	pg/L	20.9
16606-02-3	PCB-31		32.0	31.4	pg/L	20.9
38444-77-8	PCB-32	U	20.9	20.9	pg/L	20.9
37680-68-5	PCB-34	U	20.9	20.9	pg/L	20.9
37680-69-6	PCB-35	U	20.9	20.9	pg/L	20.9
38444-87-0	PCB-36	U	20.9	20.9	pg/L	20.9
38444-90-5	PCB-37	U	20.9	20.9	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 7

**SDG Number:** 2013-1154  
**Lab Sample ID:** 5042001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32183  
**Batch ID:** 23875  
**Run Date:** 08/02/2013 17:56  
**Data File:** c01aug13a\_4-6  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:17  
**Date Received:** 07/17/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 955 mL

**Project:** LANL00112  
**Matrix:** W  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	20.9	20.9	pg/L	20.9
38444-88-1	PCB-39	U	20.9	20.9	pg/L	20.9
PCB-40/71	PCB-40/71	C	43.3	42	pg/L	41.9
52663-59-9	PCB-41	U	20.9	20.9	pg/L	20.9
36559-22-5	PCB-42	U	21.5	20.9	pg/L	20.9
70362-46-8	PCB-43	U	20.9	20.9	pg/L	20.9
PCB-44/47/65	PCB-44/65/47	C	214	212	pg/L	62.8
PCB-45/51	PCB-45/51	CU	41.9	41.9	pg/L	41.9
41464-47-5	PCB-46	U	20.9	20.9	pg/L	20.9
70362-47-9	PCB-48	U	20.9	20.9	pg/L	20.9
PCB-49/69	PCB-69/49	C	98.8	97.5	pg/L	41.9
PCB-50/53	PCB-50/53	CU	41.9	41.9	pg/L	41.9
35693-99-3	PCB-52		488	487	pg/L	20.9
15968-05-5	PCB-54	U	20.9	20.9	pg/L	20.9
74338-24-2	PCB-55	U	20.9	20.9	pg/L	20.9
41464-43-1	PCB-56		62.2	60.7	pg/L	20.9
70424-67-8	PCB-57	U	20.9	20.9	pg/L	20.9
41464-49-7	PCB-58	U	20.9	20.9	pg/L	20.9
PCB-59/62/75	PCB-59/62/75	CU	62.8	62.8	pg/L	62.8
33025-41-1	PCB-60		28.3	27.2	pg/L	20.9
PCB-61-76	PCB-61/76/70/74	C	481	479	pg/L	83.8
74472-34-7	PCB-63	U	20.9	20.9	pg/L	20.9
52663-58-8	PCB-64		62.7	61.6	pg/L	20.9
32598-10-0	PCB-66		96.3	95.3	pg/L	20.9
73575-53-8	PCB-67	U	20.9	20.9	pg/L	20.9
73575-52-7	PCB-68	U	20.9	20.9	pg/L	20.9
41464-42-0	PCB-72	U	20.9	20.9	pg/L	20.9
74338-23-1	PCB-73	U	20.9	20.9	pg/L	20.9
32598-13-3	PCB-77		74.0	72.7	pg/L	20.9
70362-49-1	PCB-78	U	20.9	20.9	pg/L	20.9
41464-48-6	PCB-79	U	20.9	20.9	pg/L	20.9
33284-52-5	PCB-80	U	20.9	20.9	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-1154  
Lab Sample ID: 5042001  
Client Sample: 1668A Water  
Client ID: WT\_IPC-13-32183  
Batch ID: 23875  
Run Date: 08/02/2013 17:56  
Data File: c01aug13a\_4-6  
Prep Batch: 23871  
Prep Date: 17-JUL-13

Client: LANL001  
Date Collected: 07/12/2013 11:17  
Date Received: 07/17/2013 10:00  
  
Method: EPA Method 1668A  
Analyst: CLP  
  
Prep Method: SW846 3520C  
Aliquot: 955 mL

Project: LANL00112  
Matrix: W  
  
Prep Basis: As Received  
  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	20.9	20.9	pg/L	20.9
52663-62-4	PCB-82		137	136	pg/L	20.9
60145-20-2	PCB-83		44.5	43.1	pg/L	20.9
52663-60-2	PCB-84		308	307	pg/L	20.9
PCB-85-117	PCB-117/116/85	C	180	179	pg/L	62.8
PCB-86-125	PCB-86/87/97/109/119/125	C	918	917	pg/L	126
PCB-88/91	PCB-88/91	C	154	153	pg/L	41.9
73575-57-2	PCB-89	U	20.9	20.9	pg/L	20.9
PCB-90-113	PCB-113/90/101	C	1220	1220	pg/L	62.8
52663-61-3	PCB-92		197	196	pg/L	20.9
PCB-93/100	PCB-93/100	CU	41.9	41.9	pg/L	41.9
73575-55-0	PCB-94	U	20.9	20.9	pg/L	20.9
38379-99-6	PCB-95		844	842	pg/L	20.9
73575-54-9	PCB-96	U	20.9	20.9	pg/L	20.9
PCB-98/102	PCB-102/98	CU	41.9	41.9	pg/L	41.9
38380-01-7	PCB-99		590	589	pg/L	20.9
60145-21-3	PCB-103	U	20.9	20.9	pg/L	20.9
56558-16-8	PCB-104	U	20.9	20.9	pg/L	20.9
32598-14-4	PCB-105		526	525	pg/L	20.9
70424-69-0	PCB-106	U	20.9	20.9	pg/L	20.9
70424-68-9	PCB-107		70.9	69.8	pg/L	20.9
PCB-108/124	PCB-108/124	C	55.4	54.2	pg/L	41.9
PCB-110/115	PCB-110/115	CU	41.9	41.9	pg/L	41.9
39635-32-0	PCB-111	U	20.9	20.9	pg/L	20.9
74472-36-9	PCB-112	U	20.9	20.9	pg/L	20.9
74472-37-0	PCB-114	U	20.9	20.9	pg/L	20.9
31508-00-6	PCB-118		1090	1090	pg/L	20.9
68194-12-7	PCB-120	U	20.9	20.9	pg/L	20.9
56558-18-0	PCB-121	U	20.9	20.9	pg/L	20.9
76842-07-4	PCB-122	U	20.9	20.9	pg/L	20.9
65510-44-3	PCB-123	U	20.9	20.9	pg/L	20.9
57465-28-8	PCB-126		27.0	25.4	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1154  
**Lab Sample ID:** 5042001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32183  
**Batch ID:** 23875  
**Run Date:** 08/02/2013 17:56  
**Data File:** c01aug13a\_4-6  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:17  
**Date Received:** 07/17/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 955 mL

**Project:** LANL00112  
**Matrix:** W  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	20.9	20.9	pg/L	20.9
PCB-128/166	PCB-128/166	C	446	445	pg/L	41.9
PCB-129-163	PCB-138/163/129	C	2150	2150	pg/L	62.8
52663-66-8	PCB-130		136	135	pg/L	20.9
61798-70-7	PCB-131		28.9	27.8	pg/L	20.9
38380-05-1	PCB-132		841	840	pg/L	20.9
35694-04-3	PCB-133	U	21.2	20.9	pg/L	20.9
52704-70-8	PCB-134		95.3	94	pg/L	20.9
PCB-135/151	PCB-151/135	C	376	375	pg/L	41.9
38411-22-2	PCB-136		137	136	pg/L	20.9
35694-06-5	PCB-137		158	157	pg/L	20.9
PCB-139/140	PCB-139/140	CU	41.9	41.9	pg/L	41.9
52712-04-6	PCB-141		243	242	pg/L	20.9
41411-61-4	PCB-142	U	20.9	20.9	pg/L	20.9
68194-15-0	PCB-143	U	20.9	20.9	pg/L	20.9
68194-14-9	PCB-144		39.8	39.2	pg/L	20.9
74472-40-5	PCB-145	U	20.9	20.9	pg/L	20.9
51908-16-8	PCB-146		213	212	pg/L	20.9
PCB-147/149	PCB-147/149	C	1180	1180	pg/L	41.9
74472-41-6	PCB-148	U	20.9	20.9	pg/L	20.9
68194-08-1	PCB-150	U	20.9	20.9	pg/L	20.9
68194-09-2	PCB-152	U	20.9	20.9	pg/L	20.9
PCB-153/168	PCB-153/168	C	1340	1340	pg/L	41.9
60145-22-4	PCB-154	U	20.9	20.9	pg/L	20.9
33979-03-2	PCB-155	U	20.9	20.9	pg/L	20.9
PCB-156/157	PCB-156/157	C	261	260	pg/L	41.9
74472-42-7	PCB-158		202	202	pg/L	20.9
39635-35-3	PCB-159	U	20.9	20.9	pg/L	20.9
41411-62-5	PCB-160	U	20.9	20.9	pg/L	20.9
74472-43-8	PCB-161	U	20.9	20.9	pg/L	20.9
39635-34-2	PCB-162	U	20.9	20.9	pg/L	20.9
74472-45-0	PCB-164		135	134	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1154  
**Lab Sample ID:** 5042001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32183  
**Batch ID:** 23875  
**Run Date:** 08/02/2013 17:56  
**Data File:** c01aug13a\_4-6  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:17  
**Date Received:** 07/17/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 955 mL

**Project:** LANL00112  
**Matrix:** W  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	20.9	20.9	pg/L	20.9
52663-72-6	PCB-167		99.5	98.9	pg/L	20.9
32774-16-6	PCB-169	U	20.9	20.9	pg/L	20.9
35065-30-6	PCB-170		255	255	pg/L	20.9
PCB-171/173	PCB-173/171	C	75.4	74.5	pg/L	41.9
52663-74-8	PCB-172		40.5	39.8	pg/L	20.9
38411-25-5	PCB-174		204	204	pg/L	20.9
40186-70-7	PCB-175	U	20.9	20.9	pg/L	20.9
52663-65-7	PCB-176	U	20.9	20.9	pg/L	20.9
52663-70-4	PCB-177		129	128	pg/L	20.9
52663-67-9	PCB-178		38.5	37.8	pg/L	20.9
52663-64-6	PCB-179		61.2	60.7	pg/L	20.9
PCB-180/193	PCB-193/180	C	451	449	pg/L	41.9
74472-47-2	PCB-181	U	20.9	20.9	pg/L	20.9
60145-23-5	PCB-182	U	20.9	20.9	pg/L	20.9
PCB-183/185	PCB-183/185	C	136	135	pg/L	41.9
74472-48-3	PCB-184	U	20.9	20.9	pg/L	20.9
74472-49-4	PCB-186	U	20.9	20.9	pg/L	20.9
52663-68-0	PCB-187		317	316	pg/L	20.9
74487-85-7	PCB-188	U	20.9	20.9	pg/L	20.9
39635-31-9	PCB-189	U	20.9	20.9	pg/L	20.9
41411-64-7	PCB-190		48.5	47.9	pg/L	20.9
74472-50-7	PCB-191	U	20.9	20.9	pg/L	20.9
74472-51-8	PCB-192	U	20.9	20.9	pg/L	20.9
35694-08-7	PCB-194		66.6	65.9	pg/L	20.9
52663-78-2	PCB-195		28.8	28.1	pg/L	20.9
42740-50-1	PCB-196		32.9	32.3	pg/L	20.9
PCB-197/200	PCB-197/200	CU	41.9	41.9	pg/L	41.9
PCB-198/199	PCB-198/199	C	94.3	93.6	pg/L	41.9
40186-71-8	PCB-201	U	20.9	20.9	pg/L	20.9
2136-99-4	PCB-202	U	20.9	20.9	pg/L	20.9
52663-76-0	PCB-203		67.5	66.9	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1154  
**Lab Sample ID:** 5042001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32183  
**Batch ID:** 23875  
**Run Date:** 08/02/2013 17:56  
**Data File:** c01aug13a\_4-6  
**Prep Batch:** 23871  
**Prep Date:** 17-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:17  
**Date Received:** 07/17/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 955 mL

**Project:** LANL00112  
**Matrix:** W  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	20.9	20.9	pg/L	20.9
74472-53-0	PCB-205	U	20.9	20.9	pg/L	20.9
40186-72-9	PCB-206		29.6	28.9	pg/L	20.9
52663-79-3	PCB-207	U	20.9	20.9	pg/L	20.9
52663-77-1	PCB-208	U	20.9	20.9	pg/L	20.9
2051-24-3	PCB-209	U	20.9	20.9	pg/L	20.9
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		32.0	31.4	pg/L	
26914-33-0	Total Tetra PCBs		1670	1640	pg/L	
25429-29-2	Total Penta PCBs		6360	6340	pg/L	
26601-64-9	Total Hexa PCBs		8110	8070	pg/L	
28655-71-2	Total Hepta PCBs		1760	1750	pg/L	
55722-26-4	Total Octa PCBs		290	287	pg/L	
53742-07-7	Total Nona PCBs		29.6	28.9	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		18200	18100	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1140	2090	pg/L	54.6	(15%-150%)
13C-3-MoCB		1330	2090	pg/L	63.5	(15%-150%)
13C-4-DiCB		1530	2090	pg/L	73.0	(25%-150%)
13C-15-DiCB		1650	2090	pg/L	78.8	(25%-150%)
13C-19-TrCB		1740	2090	pg/L	83.3	(25%-150%)
13C-37-TrCB		1670	2090	pg/L	79.7	(25%-150%)
13C-54-TeCB		1730	2090	pg/L	82.5	(25%-150%)
13C-77-TeCB		1930	2090	pg/L	91.9	(25%-150%)
13C-81-TeCB		1930	2090	pg/L	91.9	(25%-150%)
13C-104-PeCB		1680	2090	pg/L	80.5	(25%-150%)
13C-105-PeCB		1670	2090	pg/L	79.6	(25%-150%)
13C-114-PeCB		1610	2090	pg/L	76.8	(25%-150%)
13C-118-PeCB		1690	2090	pg/L	80.6	(25%-150%)
13C-123-PeCB		1730	2090	pg/L	82.8	(25%-150%)
13C-126-PeCB		1810	2090	pg/L	86.3	(25%-150%)
13C-155-HxCB		1700	2090	pg/L	81.3	(25%-150%)
13C-156-HxCB	C	3100	4190	pg/L	74.1	(25%-150%)
13C-167-HxCB		1500	2090	pg/L	71.7	(25%-150%)
13C-169-HxCB		1730	2090	pg/L	82.5	(25%-150%)
13C-188-HpCB		1730	2090	pg/L	82.8	(25%-150%)
13C-189-HpCB		1610	2090	pg/L	77.0	(25%-150%)
13C-202-OcCB		1830	2090	pg/L	87.2	(25%-150%)
13C-205-OcCB		1880	2090	pg/L	89.5	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1154	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5042001	<b>Date Collected:</b> 07/12/2013 11:17	<b>Matrix:</b> W
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 07/17/2013 10:00	
<b>Client ID:</b> WT_IPC-13-32183		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 23875	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/02/2013 17:56	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c01aug13a_4-6		<b>Dilution:</b> 1
<b>Prep Batch:</b> 23871	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 17-JUL-13	<b>Aliquot:</b> 955 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%</b>
						<b>Acceptable Limits</b>
13C-206-NoCB			1930	2090	pg/L	92.2 (25%-150%)
13C-208-NoCB			1970	2090	pg/L	94.2 (25%-150%)
13C-209-DeCB			2080	2090	pg/L	99.4 (25%-150%)
13C-28-TrCB			1640	2090	pg/L	78.4 (30%-135%)
13C-111-PeCB			1750	2090	pg/L	83.7 (30%-135%)
13C-178-HpCB			1780	2090	pg/L	85.2 (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.559	0.267	1.09	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.736	0.401	1.54	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.513	0.256	1.02	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.541	0.268	1.08	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.584	0.321	1.23	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.561	0.257	1.07	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.646	0.321	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.487	0.234	0.954	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.534	0.273	1.08	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.515	0.247	1.01	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.429	0.205	0.838	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.529	0.255	1.04	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.516	0.264	1.04	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.539	0.276	1.09	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.667	0.299	1.27	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.573	0.242	1.06	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.472	0.207	0.886	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.489	0.224	0.937	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.62	0.27	1.16	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.729	0.275	1.28	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.774	0.299	1.37	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.745	0.299	1.34	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.63	0.251	1.13	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.684	0.301	1.29	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.816	0.376	1.57	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.686	0.271	1.23	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.657	0.264	1.18	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.675	0.266	1.21	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.592	0.239	1.07	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.744	0.308	1.36	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.749	0.235	1.22	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.3	0.123	0.546	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.767	0.344	1.46	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.649	0.265	1.18	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.628	0.261	1.15	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.335	0.131	0.596	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.803	0.296	1.4	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.629	0.279	1.19	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.61	0.261	1.13	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.686	0.267	1.22	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.689	0.395	1.48	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.503	0.189	0.882	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.495	0.186	0.867	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.749	0.326	1.4	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	0.848	0.457	1.76	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.462	0.174	0.811	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.526	0.208	0.942	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.687	0.3	1.29	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.69	0.305	1.3	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	0.826	0.355	1.54	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.639	0.279	1.2	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.494	0.162	0.818	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.593	0.28	1.15	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.597	0.241	1.08	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.657	0.26	1.18	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.62	0.246	1.11	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.565	0.225	1.01	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.71	0.293	1.29	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.39	0.138	0.665	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.273	0.112	0.497	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.567	0.233	1.03	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.551	0.215	0.982	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.557	0.204	0.964	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.596	0.24	1.08	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.55	0.216	0.983	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.334	0.119	0.573	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.283	0.11	0.502	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.507	0.204	0.915	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.646	0.319	1.28	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.338	0.129	0.596	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.272	0.107	0.486	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.256	0.101	0.459	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.514	0.224	0.962	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.304	0.115	0.535	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.265	0.0934	0.452	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.512	0.217	0.946	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.394	0.156	0.706	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.347	0.143	0.633	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.468	0.187	0.842	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.396	0.162	0.72	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.352	0.146	0.644	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.424	0.155	0.734	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.475	0.192	0.859	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.362	0.148	0.658	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.41	0.172	0.754	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.449	0.158	0.765	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.494	0.178	0.849	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.448	0.156	0.761	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.448	0.155	0.759	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.363	0.143	0.648	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.285	0.114	0.514	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.447	0.156	0.76	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.384	0.153	0.69	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.314	0.0843	0.483	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.625	0.622	1.87	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.439	0.156	0.751	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.374	0.149	0.671	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.516	0.171	0.858	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.277	0.111	0.498	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.308	0.124	0.555	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.394	0.153	0.701	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.326	0.125	0.575	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.37	0.183	0.736	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.345	0.121	0.586	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.332	0.108	0.549	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.373	0.132	0.636	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.339	0.192	0.723	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.355	0.173	0.701	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.324	0.127	0.579	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.308	0.175	0.659	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.388	0.201	0.789	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.243	0.0949	0.433	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.299	0.115	0.529	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.33	0.115	0.56	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.247	0.0968	0.44	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.304	0.142	0.589	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.404	0.135	0.674	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.271	0.124	0.519	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.315	0.146	0.608	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.322	0.245	0.812	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1271  
**Lab Sample ID:** 5081001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39141  
**Batch ID:** 23979  
**Run Date:** 08/05/2013 19:17  
**Data File:** c05aug13a-8  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/11/2013 22:39  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	20.9	20.9	pg/L	20.9
2051-61-8	PCB-2	U	20.9	20.9	pg/L	20.9
2051-62-9	PCB-3	U	20.9	20.9	pg/L	20.9
13029-08-8	PCB-4	U	20.9	20.9	pg/L	20.9
16605-91-7	PCB-5	U	20.9	20.9	pg/L	20.9
25569-80-6	PCB-6	U	20.9	20.9	pg/L	20.9
33284-50-3	PCB-7	U	20.9	20.9	pg/L	20.9
34883-43-7	PCB-8	U	20.9	20.9	pg/L	20.9
34883-39-1	PCB-9	U	20.9	20.9	pg/L	20.9
33146-45-1	PCB-10	U	20.9	20.9	pg/L	20.9
2050-67-1	PCB-11	U	105	105	pg/L	105
PCB-12/13	PCB-13/12	CU	41.8	41.8	pg/L	41.8
34883-41-5	PCB-14	U	20.9	20.9	pg/L	20.9
2050-68-2	PCB-15		38.0	28.8	pg/L	20.9
38444-78-9	PCB-16		30.5	29.6	pg/L	20.9
37680-66-3	PCB-17	U	20.9	20.9	pg/L	20.9
PCB-18/30	PCB-18/30	C	43.0	42.3	pg/L	41.8
38444-73-4	PCB-19	U	20.9	20.9	pg/L	20.9
PCB-20/28	PCB-20/28	C	180	179	pg/L	41.8
PCB-21/33	PCB-21/33	CU	41.8	41.8	pg/L	41.8
38444-85-8	PCB-22		81.6	80.6	pg/L	20.9
55720-44-0	PCB-23	U	20.9	20.9	pg/L	20.9
55702-45-9	PCB-24	U	20.9	20.9	pg/L	20.9
55712-37-3	PCB-25	U	20.9	20.9	pg/L	20.9
PCB-26/29	PCB-26/29	CU	41.8	41.8	pg/L	41.8
38444-76-7	PCB-27	U	20.9	20.9	pg/L	20.9
16606-02-3	PCB-31		102	101	pg/L	20.9
38444-77-8	PCB-32	U	20.9	20.9	pg/L	20.9
37680-68-5	PCB-34	U	20.9	20.9	pg/L	20.9
37680-69-6	PCB-35	U	20.9	20.9	pg/L	20.9
38444-87-0	PCB-36	U	20.9	20.9	pg/L	20.9
38444-90-5	PCB-37		72.4	70.9	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 2 of 7

SDG Number: 2013-1271  
 Lab Sample ID: 5081001  
 Client Sample: 1668A Water  
 Client ID: WT\_IPC-13-39141  
 Batch ID: 23979  
 Run Date: 08/05/2013 19:17  
 Data File: c05aug13a-8  
 Prep Batch: 23951  
 Prep Date: 31-JUL-13

Client: LANL001  
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 Method: EPA Method 1668A  
 Analyst: CLP  
 Prep Method: SW846 3520C  
 Aliquot: 956 mL

Project: LANL00112  
 Matrix: WATER  
 Prep Basis: As Received  
 Instrument: HRP791  
 Dilution: 1  
 Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	20.9	20.9	pg/L	20.9
38444-88-1	PCB-39	U	20.9	20.9	pg/L	20.9
PCB-40/71	PCB-40/71	C	179	178	pg/L	41.8
52663-59-9	PCB-41		22.8	21	pg/L	20.9
36559-22-5	PCB-42		89.9	88.5	pg/L	20.9
70362-46-8	PCB-43	U	20.9	20.9	pg/L	20.9
PCB-44/47/65	PCB-44/65/47	C	536	534	pg/L	62.8
PCB-45/51	PCB-45/51	C	51.5	50.3	pg/L	41.8
41464-47-5	PCB-46	U	20.9	20.9	pg/L	20.9
70362-47-9	PCB-48		60.4	59.1	pg/L	20.9
PCB-49/69	PCB-69/49	C	257	255	pg/L	41.8
PCB-50/53	PCB-50/53	C	45.9	45.2	pg/L	41.8
35693-99-3	PCB-52		1180	1180	pg/L	20.9
15968-05-5	PCB-54	U	20.9	20.9	pg/L	20.9
74338-24-2	PCB-55	U	20.9	20.9	pg/L	20.9
41464-43-1	PCB-56		214	213	pg/L	20.9
70424-67-8	PCB-57	U	20.9	20.9	pg/L	20.9
41464-49-7	PCB-58	U	20.9	20.9	pg/L	20.9
PCB-59/62/75	PCB-59/62/75	CU	62.8	62.8	pg/L	62.8
33025-41-1	PCB-60		124	123	pg/L	20.9
PCB-61-76	PCB-61/76/70/74	C	1430	1430	pg/L	83.7
74472-34-7	PCB-63	U	20.9	20.9	pg/L	20.9
52663-58-8	PCB-64		208	207	pg/L	20.9
32598-10-0	PCB-66		381	380	pg/L	20.9
73575-53-8	PCB-67	U	20.9	20.9	pg/L	20.9
73575-52-7	PCB-68	U	20.9	20.9	pg/L	20.9
41464-42-0	PCB-72	U	20.9	20.9	pg/L	20.9
74338-23-1	PCB-73	U	20.9	20.9	pg/L	20.9
32598-13-3	PCB-77		165	164	pg/L	20.9
70362-49-1	PCB-78	U	20.9	20.9	pg/L	20.9
41464-48-6	PCB-79	U	20.9	20.9	pg/L	20.9
33284-52-5	PCB-80	U	20.9	20.9	pg/L	20.9

**Comments:**

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**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 3 of 7

**SDG Number:** 2013-1271  
**Lab Sample ID:** 5081001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39141  
**Batch ID:** 23979  
**Run Date:** 08/05/2013 19:17  
**Data File:** c05aug13a-8  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/11/2013 22:39  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	20.9	20.9	pg/L	20.9
52663-62-4	PCB-82		376	374	pg/L	20.9
60145-20-2	PCB-83		215	213	pg/L	20.9
52663-60-2	PCB-84		938	937	pg/L	20.9
PCB-85-117	PCB-117/116/85	C	556	555	pg/L	62.8
PCB-86-125	PCB-86/87/97/109/119/125	C	3410	3410	pg/L	126
PCB-88/91	PCB-88/91	CU	41.8	41.8	pg/L	41.8
73575-57-2	PCB-89	U	20.9	20.9	pg/L	20.9
PCB-90-113	PCB-113/90/101	C	7180	7180	pg/L	62.8
52663-61-3	PCB-92		949	948	pg/L	20.9
PCB-93/100	PCB-93/100	CU	41.8	41.8	pg/L	41.8
73575-55-0	PCB-94	U	20.9	20.9	pg/L	20.9
38379-99-6	PCB-95		4300	4300	pg/L	20.9
73575-54-9	PCB-96	U	20.9	20.9	pg/L	20.9
PCB-98/102	PCB-102/98	C	66.3	64.9	pg/L	41.8
38380-01-7	PCB-99		1740	1740	pg/L	20.9
60145-21-3	PCB-103	U	20.9	20.9	pg/L	20.9
56558-16-8	PCB-104	U	20.9	20.9	pg/L	20.9
32598-14-4	PCB-105		1720	1720	pg/L	20.9
70424-69-0	PCB-106	U	20.9	20.9	pg/L	20.9
70424-68-9	PCB-107		297	296	pg/L	20.9
PCB-108/124	PCB-108/124	C	240	239	pg/L	41.8
PCB-110/115	PCB-110/115	CU	41.8	41.8	pg/L	41.8
39635-32-0	PCB-111	U	20.9	20.9	pg/L	20.9
74472-36-9	PCB-112	U	20.9	20.9	pg/L	20.9
74472-37-0	PCB-114		75.4	74	pg/L	20.9
31508-00-6	PCB-118		5030	5030	pg/L	20.9
68194-12-7	PCB-120	U	20.9	20.9	pg/L	20.9
56558-18-0	PCB-121	U	20.9	20.9	pg/L	20.9
76842-07-4	PCB-122		40.5	39.2	pg/L	20.9
65510-44-3	PCB-123		45.5	44.2	pg/L	20.9
57465-28-8	PCB-126		100	98.8	pg/L	20.9

**Comments:**

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**PCB Congeners  
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SDG Number: 2013-1271  
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Method: EPA Method 1668A  
Analyst: CLP  
Prep Method: SW846 3520C  
Aliquot: 956 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	20.9	20.9	pg/L	20.9
PCB-128/166	PCB-128/166	C	1940	1940	pg/L	41.8
PCB-129-163	PCB-138/163/129	C	20500	20500	pg/L	62.8
52663-66-8	PCB-130		819	818	pg/L	20.9
61798-70-7	PCB-131		175	174	pg/L	20.9
38380-05-1	PCB-132		8160	8160	pg/L	20.9
35694-04-3	PCB-133		196	195	pg/L	20.9
52704-70-8	PCB-134		993	992	pg/L	20.9
PCB-135/151	PCB-151/135	C	7680	7680	pg/L	41.8
38411-22-2	PCB-136		1970	1970	pg/L	20.9
35694-06-5	PCB-137		455	454	pg/L	20.9
PCB-139/140	PCB-139/140	C	160	159	pg/L	41.8
52712-04-6	PCB-141		4820	4820	pg/L	20.9
41411-61-4	PCB-142	U	20.9	20.9	pg/L	20.9
68194-15-0	PCB-143	U	20.9	20.9	pg/L	20.9
68194-14-9	PCB-144		988	988	pg/L	20.9
74472-40-5	PCB-145	U	20.9	20.9	pg/L	20.9
51908-16-8	PCB-146		2480	2470	pg/L	20.9
PCB-147/149	PCB-147/149	C	19000	19000	pg/L	41.8
74472-41-6	PCB-148	U	20.9	20.9	pg/L	20.9
68194-08-1	PCB-150	U	20.9	20.9	pg/L	20.9
68194-09-2	PCB-152	U	20.9	20.9	pg/L	20.9
PCB-153/168	PCB-153/168	C	20600	20600	pg/L	41.8
60145-22-4	PCB-154		80.7	80.1	pg/L	20.9
33979-03-2	PCB-155	U	20.9	20.9	pg/L	20.9
PCB-156/157	PCB-156/157	C	1840	1840	pg/L	41.8
74472-42-7	PCB-158		1740	1740	pg/L	20.9
39635-35-3	PCB-159	U	20.9	20.9	pg/L	20.9
41411-62-5	PCB-160	U	20.9	20.9	pg/L	20.9
74472-43-8	PCB-161	U	20.9	20.9	pg/L	20.9
39635-34-2	PCB-162	U	20.9	20.9	pg/L	20.9
74472-45-0	PCB-164		1470	1470	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1271  
**Lab Sample ID:** 5081001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39141  
**Batch ID:** 23979  
**Run Date:** 08/05/2013 19:17  
**Data File:** c05aug13a-8  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/11/2013 22:39  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	20.9	20.9	pg/L	20.9
52663-72-6	PCB-167		801	801	pg/L	20.9
32774-16-6	PCB-169		46.3	45.6	pg/L	20.9
35065-30-6	PCB-170		7800	7800	pg/L	20.9
PCB-171/173	PCB-173/171	C	2350	2350	pg/L	41.8
52663-74-8	PCB-172		1390	1380	pg/L	20.9
38411-25-5	PCB-174		9250	9250	pg/L	20.9
40186-70-7	PCB-175		319	319	pg/L	20.9
52663-65-7	PCB-176		931	931	pg/L	20.9
52663-70-4	PCB-177		4820	4820	pg/L	20.9
52663-67-9	PCB-178		1390	1390	pg/L	20.9
52663-64-6	PCB-179		3000	3000	pg/L	20.9
PCB-180/193	PCB-193/180	C	19200	19200	pg/L	41.8
74472-47-2	PCB-181		41.9	41.2	pg/L	20.9
60145-23-5	PCB-182	U	20.9	20.9	pg/L	20.9
PCB-183/185	PCB-183/185	C	6430	6430	pg/L	41.8
74472-48-3	PCB-184	U	20.9	20.9	pg/L	20.9
74472-49-4	PCB-186	U	20.9	20.9	pg/L	20.9
52663-68-0	PCB-187		13100	13100	pg/L	20.9
74487-85-7	PCB-188	U	20.9	20.9	pg/L	20.9
39635-31-9	PCB-189		289	289	pg/L	20.9
41411-64-7	PCB-190		1700	1700	pg/L	20.9
74472-50-7	PCB-191		309	309	pg/L	20.9
74472-51-8	PCB-192	U	20.9	20.9	pg/L	20.9
35694-08-7	PCB-194		3620	3620	pg/L	20.9
52663-78-2	PCB-195		1510	1510	pg/L	20.9
42740-50-1	PCB-196		1960	1960	pg/L	20.9
PCB-197/200	PCB-197/200	C	661	660	pg/L	41.8
PCB-198/199	PCB-198/199	C	4680	4680	pg/L	41.8
40186-71-8	PCB-201		412	412	pg/L	20.9
2136-99-4	PCB-202		589	589	pg/L	20.9
52663-76-0	PCB-203		3240	3240	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1271  
**Lab Sample ID:** 5081001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39141  
**Batch ID:** 23979  
**Run Date:** 08/05/2013 19:17  
**Data File:** c05aug13a-8  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/11/2013 22:39  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	20.9	20.9	pg/L	20.9
74472-53-0	PCB-205		205	204	pg/L	20.9
40186-72-9	PCB-206		681	680	pg/L	20.9
52663-79-3	PCB-207		84.5	84	pg/L	20.9
52663-77-1	PCB-208		119	118	pg/L	20.9
2051-24-3	PCB-209	U	20.9	20.9	pg/L	20.9
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs		38.0	28.8	pg/L	
25323-68-6	Total Tri PCBs		509	504	pg/L	
26914-33-0	Total Tetra PCBs		4950	4930	pg/L	
25429-29-2	Total Penta PCBs		27300	27300	pg/L	
26601-64-9	Total Hexa PCBs		97000	97000	pg/L	
28655-71-2	Total Hepta PCBs		72300	72300	pg/L	
55722-26-4	Total Octa PCBs		16900	16900	pg/L	
53742-07-7	Total Nona PCBs		885	883	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		220000	220000	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1140	2090	pg/L	54.6	(15%-150%)
13C-3-MoCB		1180	2090	pg/L	56.2	(15%-150%)
13C-4-DiCB		1250	2090	pg/L	59.5	(25%-150%)
13C-15-DiCB		1220	2090	pg/L	58.5	(25%-150%)
13C-19-TrCB		1420	2090	pg/L	68.0	(25%-150%)
13C-37-TrCB		1410	2090	pg/L	67.6	(25%-150%)
13C-54-TeCB		1380	2090	pg/L	65.7	(25%-150%)
13C-77-TeCB		1600	2090	pg/L	76.7	(25%-150%)
13C-81-TeCB		1610	2090	pg/L	77.1	(25%-150%)
13C-104-PeCB		1190	2090	pg/L	57.1	(25%-150%)
13C-105-PeCB		1550	2090	pg/L	74.3	(25%-150%)
13C-114-PeCB		1490	2090	pg/L	71.0	(25%-150%)
13C-118-PeCB		1590	2090	pg/L	75.8	(25%-150%)
13C-123-PeCB		1680	2090	pg/L	80.4	(25%-150%)
13C-126-PeCB		1580	2090	pg/L	75.5	(25%-150%)
13C-155-HxCB		1280	2090	pg/L	61.1	(25%-150%)
13C-156-HxCB	C	2730	4180	pg/L	65.3	(25%-150%)
13C-167-HxCB		1320	2090	pg/L	63.3	(25%-150%)
13C-169-HxCB		1530	2090	pg/L	73.3	(25%-150%)
13C-188-HpCB		1380	2090	pg/L	66.2	(25%-150%)
13C-189-HpCB		1410	2090	pg/L	67.5	(25%-150%)
13C-202-OcCB		1510	2090	pg/L	72.1	(25%-150%)
13C-205-OcCB		1720	2090	pg/L	82.1	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 2013-1271	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5081001	<b>Date Collected:</b> 07/11/2013 22:39	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 07/23/2013 11:00	
<b>Client ID:</b> WT_IPC-13-39141		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 23979	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/05/2013 19:17	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c05aug13a-8		<b>Dilution:</b> 1
<b>Prep Batch:</b> 23951	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 31-JUL-13	<b>Aliquot:</b> 956 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1750	2090	pg/L	83.6      (25%-150%)
13C-208-NoCB			1760	2090	pg/L	84.1      (25%-150%)
13C-209-DeCB			1680	2090	pg/L	80.2      (25%-150%)
13C-28-TrCB			1680	2090	pg/L	80.1      (30%-135%)
13C-111-PeCB			1750	2090	pg/L	83.6      (30%-135%)
13C-178-HpCB			1650	2090	pg/L	78.9      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data
- U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1271  
**Lab Sample ID:** 5081002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32195  
**Batch ID:** 23979  
**Run Date:** 08/05/2013 20:19  
**Data File:** c05aug13a-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:30  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 640.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	31.2	31.2	pg/L	31.2
2051-61-8	PCB-2	U	31.2	31.2	pg/L	31.2
2051-62-9	PCB-3	U	31.2	31.2	pg/L	31.2
13029-08-8	PCB-4	U	31.2	31.2	pg/L	31.2
16605-91-7	PCB-5	U	31.2	31.2	pg/L	31.2
25569-80-6	PCB-6	U	31.2	31.2	pg/L	31.2
33284-50-3	PCB-7	U	31.2	31.2	pg/L	31.2
34883-43-7	PCB-8	U	31.2	31.2	pg/L	31.2
34883-39-1	PCB-9	U	31.2	31.2	pg/L	31.2
33146-45-1	PCB-10	U	31.2	31.2	pg/L	31.2
2050-67-1	PCB-11	U	156	156	pg/L	156
PCB-12/13	PCB-13/12	CU	62.4	62.4	pg/L	62.4
34883-41-5	PCB-14	U	31.2	31.2	pg/L	31.2
2050-68-2	PCB-15		53.4	44.2	pg/L	31.2
38444-78-9	PCB-16	U	31.2	31.2	pg/L	31.2
37680-66-3	PCB-17	U	31.2	31.2	pg/L	31.2
PCB-18/30	PCB-18/30	C	92.5	91.8	pg/L	62.4
38444-73-4	PCB-19	U	31.2	31.2	pg/L	31.2
PCB-20/28	PCB-20/28	C	143	143	pg/L	62.4
PCB-21/33	PCB-21/33	CU	62.4	62.4	pg/L	62.4
38444-85-8	PCB-22		69.2	68.2	pg/L	31.2
55720-44-0	PCB-23	U	31.2	31.2	pg/L	31.2
55702-45-9	PCB-24	U	31.2	31.2	pg/L	31.2
55712-37-3	PCB-25	U	31.2	31.2	pg/L	31.2
PCB-26/29	PCB-26/29	CU	62.4	62.4	pg/L	62.4
38444-76-7	PCB-27	U	31.2	31.2	pg/L	31.2
16606-02-3	PCB-31		120	120	pg/L	31.2
38444-77-8	PCB-32	U	31.2	31.2	pg/L	31.2
37680-68-5	PCB-34	U	31.2	31.2	pg/L	31.2
37680-69-6	PCB-35	U	31.2	31.2	pg/L	31.2
38444-87-0	PCB-36	U	31.2	31.2	pg/L	31.2
38444-90-5	PCB-37		86.2	84.8	pg/L	31.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 7

**SDG Number:** 2013-1271  
**Lab Sample ID:** 5081002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32195  
**Batch ID:** 23979  
**Run Date:** 08/05/2013 20:19  
**Data File:** c05aug13a-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:30  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 640.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	31.2	31.2	pg/L	31.2
38444-88-1	PCB-39	U	31.2	31.2	pg/L	31.2
PCB-40/71	PCB-40/71	C	109	108	pg/L	62.4
52663-59-9	PCB-41	U	31.2	31.2	pg/L	31.2
36559-22-5	PCB-42		63.4	62	pg/L	31.2
70362-46-8	PCB-43	U	31.2	31.2	pg/L	31.2
PCB-44/47/65	PCB-44/65/47	C	275	273	pg/L	93.6
PCB-45/51	PCB-45/51	CU	62.4	62.4	pg/L	62.4
41464-47-5	PCB-46	U	31.2	31.2	pg/L	31.2
70362-47-9	PCB-48		38.5	37.1	pg/L	31.2
PCB-49/69	PCB-69/49	C	160	159	pg/L	62.4
PCB-50/53	PCB-50/53	CU	62.4	62.4	pg/L	62.4
35693-99-3	PCB-52		254	253	pg/L	31.2
15968-05-5	PCB-54	U	31.2	31.2	pg/L	31.2
74338-24-2	PCB-55	U	31.2	31.2	pg/L	31.2
41464-43-1	PCB-56		170	168	pg/L	31.2
70424-67-8	PCB-57	U	31.2	31.2	pg/L	31.2
41464-49-7	PCB-58	U	31.2	31.2	pg/L	31.2
PCB-59/62/75	PCB-59/62/75	CU	93.6	93.6	pg/L	93.6
33025-41-1	PCB-60		94.7	93.7	pg/L	31.2
PCB-61-76	PCB-61/76/70/74	C	407	406	pg/L	125
74472-34-7	PCB-63	U	31.2	31.2	pg/L	31.2
52663-58-8	PCB-64		105	104	pg/L	31.2
32598-10-0	PCB-66		254	253	pg/L	31.2
73575-53-8	PCB-67	U	31.2	31.2	pg/L	31.2
73575-52-7	PCB-68	U	31.2	31.2	pg/L	31.2
41464-42-0	PCB-72	U	31.2	31.2	pg/L	31.2
74338-23-1	PCB-73	U	31.2	31.2	pg/L	31.2
32598-13-3	PCB-77		50.4	49.1	pg/L	31.2
70362-49-1	PCB-78	U	31.2	31.2	pg/L	31.2
41464-48-6	PCB-79	U	31.2	31.2	pg/L	31.2
33284-52-5	PCB-80	U	31.2	31.2	pg/L	31.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 3 of 7

SDG Number: 2013-1271  
 Lab Sample ID: 5081002  
 Client Sample: 1668A Water  
 Client ID: WT\_IPC-13-32195  
 Batch ID: 23979  
 Run Date: 08/05/2013 20:19  
 Data File: c05aug13a-9  
 Prep Batch: 23951  
 Prep Date: 31-JUL-13

Client: LANL001  
 Date Collected: 07/12/2013 11:30  
 Date Received: 07/23/2013 11:00  
 Method: EPA Method 1668A  
 Analyst: CLP  
 Prep Method: SW846 3520C  
 Aliquot: 640.8 mL

Project: LANL00112  
 Matrix: WATER  
 Prep Basis: As Received  
 Instrument: HRP791  
 Dilution: 1  
 Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	31.2	31.2	pg/L	31.2
52663-62-4	PCB-82		70.8	69.5	pg/L	31.2
60145-20-2	PCB-83	U	31.2	31.2	pg/L	31.2
52663-60-2	PCB-84		107	106	pg/L	31.2
PCB-85-117	PCB-117/116/85	C	113	111	pg/L	93.6
PCB-86-125	PCB-86/87/97/109/119/125	C	329	328	pg/L	187
PCB-88/91	PCB-88/91	C	80.5	78.9	pg/L	62.4
73575-57-2	PCB-89	U	31.2	31.2	pg/L	31.2
PCB-90-113	PCB-113/90/101	C	634	633	pg/L	93.6
52663-61-3	PCB-92		92.9	91.7	pg/L	31.2
PCB-93/100	PCB-93/100	CU	62.4	62.4	pg/L	62.4
73575-55-0	PCB-94	U	31.2	31.2	pg/L	31.2
38379-99-6	PCB-95		529	527	pg/L	31.2
73575-54-9	PCB-96	U	31.2	31.2	pg/L	31.2
PCB-98/102	PCB-102/98	CU	62.4	62.4	pg/L	62.4
38380-01-7	PCB-99		270	269	pg/L	31.2
60145-21-3	PCB-103	U	31.2	31.2	pg/L	31.2
56558-16-8	PCB-104	U	31.2	31.2	pg/L	31.2
32598-14-4	PCB-105		183	182	pg/L	31.2
70424-69-0	PCB-106	U	31.2	31.2	pg/L	31.2
70424-68-9	PCB-107	U	32.3	31.2	pg/L	31.2
PCB-108/124	PCB-108/124	CU	62.4	62.4	pg/L	62.4
PCB-110/115	PCB-110/115	CU	62.4	62.4	pg/L	62.4
39635-32-0	PCB-111	U	31.2	31.2	pg/L	31.2
74472-36-9	PCB-112	U	31.2	31.2	pg/L	31.2
74472-37-0	PCB-114	U	31.2	31.2	pg/L	31.2
31508-00-6	PCB-118		319	317	pg/L	31.2
68194-12-7	PCB-120	U	31.2	31.2	pg/L	31.2
56558-18-0	PCB-121	U	31.2	31.2	pg/L	31.2
76842-07-4	PCB-122	U	31.2	31.2	pg/L	31.2
65510-44-3	PCB-123	U	31.2	31.2	pg/L	31.2
57465-28-8	PCB-126	U	31.2	31.2	pg/L	31.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1271  
**Lab Sample ID:** 5081002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32195  
**Batch ID:** 23979  
**Run Date:** 08/05/2013 20:19  
**Data File:** c05aug13a-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:30  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 640.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	31.2	31.2	pg/L	31.2
PCB-128/166	PCB-128/166	C	130	129	pg/L	62.4
PCB-129-163	PCB-138/163/129	C	2110	2110	pg/L	93.6
52663-66-8	PCB-130		71.8	70.7	pg/L	31.2
61798-70-7	PCB-131	U	31.2	31.2	pg/L	31.2
38380-05-1	PCB-132		736	734	pg/L	31.2
35694-04-3	PCB-133	U	31.2	31.2	pg/L	31.2
52704-70-8	PCB-134		87.2	85.9	pg/L	31.2
PCB-135/151	PCB-151/135	C	1400	1400	pg/L	62.4
38411-22-2	PCB-136		336	336	pg/L	31.2
35694-06-5	PCB-137	U	31.2	31.2	pg/L	31.2
PCB-139/140	PCB-139/140	CU	62.4	62.4	pg/L	62.4
52712-04-6	PCB-141		531	530	pg/L	31.2
41411-61-4	PCB-142	U	31.2	31.2	pg/L	31.2
68194-15-0	PCB-143	U	31.2	31.2	pg/L	31.2
68194-14-9	PCB-144		120	119	pg/L	31.2
74472-40-5	PCB-145	U	31.2	31.2	pg/L	31.2
51908-16-8	PCB-146		301	300	pg/L	31.2
PCB-147/149	PCB-147/149	C	2900	2900	pg/L	62.4
74472-41-6	PCB-148	U	31.2	31.2	pg/L	31.2
68194-08-1	PCB-150	U	31.2	31.2	pg/L	31.2
68194-09-2	PCB-152	U	31.2	31.2	pg/L	31.2
PCB-153/168	PCB-153/168	C	2790	2790	pg/L	62.4
60145-22-4	PCB-154	U	31.2	31.2	pg/L	31.2
33979-03-2	PCB-155	U	31.2	31.2	pg/L	31.2
PCB-156/157	PCB-156/157	C	100	99.1	pg/L	62.4
74472-42-7	PCB-158		132	131	pg/L	31.2
39635-35-3	PCB-159	U	31.2	31.2	pg/L	31.2
41411-62-5	PCB-160	U	31.2	31.2	pg/L	31.2
74472-43-8	PCB-161	U	31.2	31.2	pg/L	31.2
39635-34-2	PCB-162	U	31.2	31.2	pg/L	31.2
74472-45-0	PCB-164		146	145	pg/L	31.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1271  
**Lab Sample ID:** 5081002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32195  
**Batch ID:** 23979  
**Run Date:** 08/05/2013 20:19  
**Data File:** c05aug13a-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:30  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 640.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	31.2	31.2	pg/L	31.2
52663-72-6	PCB-167		51.3	50.7	pg/L	31.2
32774-16-6	PCB-169	U	31.2	31.2	pg/L	31.2
35065-30-6	PCB-170		903	902	pg/L	31.2
PCB-171/173	PCB-173/171	C	294	293	pg/L	62.4
52663-74-8	PCB-172		186	186	pg/L	31.2
38411-25-5	PCB-174		1610	1610	pg/L	31.2
40186-70-7	PCB-175		48.3	47.6	pg/L	31.2
52663-65-7	PCB-176		168	167	pg/L	31.2
52663-70-4	PCB-177		793	792	pg/L	31.2
52663-67-9	PCB-178		290	289	pg/L	31.2
52663-64-6	PCB-179		757	756	pg/L	31.2
PCB-180/193	PCB-193/180	C	2960	2960	pg/L	62.4
74472-47-2	PCB-181	U	31.2	31.2	pg/L	31.2
60145-23-5	PCB-182	U	31.2	31.2	pg/L	31.2
PCB-183/185	PCB-183/185	C	1090	1090	pg/L	62.4
74472-48-3	PCB-184	U	31.2	31.2	pg/L	31.2
74472-49-4	PCB-186	U	31.2	31.2	pg/L	31.2
52663-68-0	PCB-187		2850	2850	pg/L	31.2
74487-85-7	PCB-188	U	31.2	31.2	pg/L	31.2
39635-31-9	PCB-189	U	31.2	31.2	pg/L	31.2
41411-64-7	PCB-190		224	224	pg/L	31.2
74472-50-7	PCB-191		39.9	39.3	pg/L	31.2
74472-51-8	PCB-192	U	31.2	31.2	pg/L	31.2
35694-08-7	PCB-194		622	621	pg/L	31.2
52663-78-2	PCB-195		290	290	pg/L	31.2
42740-50-1	PCB-196		365	364	pg/L	31.2
PCB-197/200	PCB-197/200	C	173	172	pg/L	62.4
PCB-198/199	PCB-198/199	C	1100	1100	pg/L	62.4
40186-71-8	PCB-201		107	107	pg/L	31.2
2136-99-4	PCB-202		195	194	pg/L	31.2
52663-76-0	PCB-203		725	724	pg/L	31.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1271  
**Lab Sample ID:** 5081002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32195  
**Batch ID:** 23979  
**Run Date:** 08/05/2013 20:19  
**Data File:** c05aug13a-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:30  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 640.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	31.2	31.2	pg/L	31.2
74472-53-0	PCB-205		36.2	35.6	pg/L	31.2
40186-72-9	PCB-206		182	181	pg/L	31.2
52663-79-3	PCB-207	U	31.2	31.2	pg/L	31.2
52663-77-1	PCB-208		46.5	45.9	pg/L	31.2
2051-24-3	PCB-209		34.9	34.1	pg/L	31.2
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs		53.4	44.2	pg/L	
25323-68-6	Total Tri PCBs		511	507	pg/L	
26914-33-0	Total Tetra PCBs		1980	1970	pg/L	
25429-29-2	Total Penta PCBs		2760	2710	pg/L	
26601-64-9	Total Hexa PCBs		12000	11900	pg/L	
28655-71-2	Total Hepta PCBs		12200	12200	pg/L	
55722-26-4	Total Octa PCBs		3610	3600	pg/L	
53742-07-7	Total Nona PCBs		228	227	pg/L	
DECACB(Tot)	Total Deca PCB		34.9	34.1	pg/L	
1336-36-3	Total PCB Congeners		33300	33200	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1580	3120	pg/L	50.7	(15%-150%)
13C-3-MoCB		1680	3120	pg/L	53.9	(15%-150%)
13C-4-DiCB		1750	3120	pg/L	56.1	(25%-150%)
13C-15-DiCB		1860	3120	pg/L	59.7	(25%-150%)
13C-19-TrCB		2030	3120	pg/L	65.0	(25%-150%)
13C-37-TrCB		2140	3120	pg/L	68.6	(25%-150%)
13C-54-TeCB		1960	3120	pg/L	63.0	(25%-150%)
13C-77-TeCB		2290	3120	pg/L	73.2	(25%-150%)
13C-81-TeCB		2280	3120	pg/L	73.1	(25%-150%)
13C-104-PeCB		1820	3120	pg/L	58.3	(25%-150%)
13C-105-PeCB		2160	3120	pg/L	69.1	(25%-150%)
13C-114-PeCB		2040	3120	pg/L	65.2	(25%-150%)
13C-118-PeCB		2170	3120	pg/L	69.6	(25%-150%)
13C-123-PeCB		2290	3120	pg/L	73.3	(25%-150%)
13C-126-PeCB		2220	3120	pg/L	71.3	(25%-150%)
13C-155-HxCB		2000	3120	pg/L	64.1	(25%-150%)
13C-156-HxCB	C	4020	6240	pg/L	64.4	(25%-150%)
13C-167-HxCB		1910	3120	pg/L	61.2	(25%-150%)
13C-169-HxCB		2240	3120	pg/L	71.8	(25%-150%)
13C-188-HpCB		2150	3120	pg/L	68.8	(25%-150%)
13C-189-HpCB		2120	3120	pg/L	67.9	(25%-150%)
13C-202-OcCB		2260	3120	pg/L	72.3	(25%-150%)
13C-205-OcCB		2630	3120	pg/L	84.3	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1271	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5081002	<b>Date Collected:</b> 07/12/2013 11:30	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 07/23/2013 11:00	
<b>Client ID:</b> WT_IPC-13-32195		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 23979	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/05/2013 20:19	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c05aug13a-9		<b>Dilution:</b> 1
<b>Prep Batch:</b> 23951	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 31-JUL-13	<b>Aliquot:</b> 640.8 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2580	3120	pg/L	82.6      (25%-150%)
13C-208-NoCB			2680	3120	pg/L	85.9      (25%-150%)
13C-209-DeCB			2470	3120	pg/L	79.0      (25%-150%)
13C-28-TrCB			2470	3120	pg/L	79.1      (30%-135%)
13C-111-PeCB			2510	3120	pg/L	80.3      (30%-135%)
13C-178-HpCB			2410	3120	pg/L	77.3      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.505	0.345	1.2	
3-Chlorobiphenyl (2)	pg/L	0.504	0.35	1.2	
4-Chlorobiphenyl (3)	pg/L	0.537	0.347	1.23	
2,2'-Dichlorobiphenyl (4)	pg/L	3.41	2.42	8.26	
2,3-Dichlorobiphenyl (5)	pg/L	3.36	2.52	8.4	
2,3'-Dichlorobiphenyl (6)	pg/L	2.66	1.91	6.48	
2,4-Dichlorobiphenyl (7)	pg/L	2.86	2.08	7.03	
2,4'-Dichlorobiphenyl (8)	pg/L	3	2.07	7.14	
2,5-Dichlorobiphenyl (9)	pg/L	2.84	2.12	7.09	
2,6-Dichlorobiphenyl (10)	pg/L	2.11	1.52	5.15	
3,3'-Dichlorobiphenyl (11)	pg/L	3.18	2.22	7.63	
3,4-Dichlorobiphenyl (12)	pg/L	3.76	2.4	8.55	
3,5-Dichlorobiphenyl (14)	pg/L	3.05	2.16	7.36	
4,4'-Dichlorobiphenyl (15)	pg/L	3.88	2.67	9.22	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.539	0.179	0.898	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.503	0.202	0.907	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.383	0.149	0.682	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.482	0.183	0.847	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.342	0.124	0.589	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.37	0.135	0.64	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.447	0.263	0.972	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.35	0.13	0.61	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.366	0.147	0.659	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.326	0.106	0.538	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.412	0.163	0.738	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.327	0.128	0.582	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.316	0.116	0.549	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.348	0.116	0.58	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.348	0.132	0.611	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.461	0.163	0.787	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.412	0.148	0.708	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.658	0.38	1.42	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.434	0.153	0.741	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.428	0.153	0.734	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.651	0.328	1.31	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.843	0.459	1.76	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.72	0.37	1.46	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.755	0.382	1.52	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.693	0.368	1.43	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.515	0.371	1.26	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.393	0.161	0.715	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.721	0.328	1.38	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.631	0.327	1.29	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.38	0.151	0.682	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.661	0.342	1.34	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.245	0.0963	0.438	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.559	0.267	1.09	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.736	0.401	1.54	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.513	0.256	1.02	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.541	0.268	1.08	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.584	0.321	1.23	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.561	0.257	1.07	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.646	0.321	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.487	0.234	0.954	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.534	0.273	1.08	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.515	0.247	1.01	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.429	0.205	0.838	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.529	0.255	1.04	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.516	0.264	1.04	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.539	0.276	1.09	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.667	0.299	1.27	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.573	0.242	1.06	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.472	0.207	0.886	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.489	0.224	0.937	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.62	0.27	1.16	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.729	0.275	1.28	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.774	0.299	1.37	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.745	0.299	1.34	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.63	0.251	1.13	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.684	0.301	1.29	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.816	0.376	1.57	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.686	0.271	1.23	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.657	0.264	1.18	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.675	0.266	1.21	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.592	0.239	1.07	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.744	0.308	1.36	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.749	0.235	1.22	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.3	0.123	0.546	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.767	0.344	1.46	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.649	0.265	1.18	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.628	0.261	1.15	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.335	0.131	0.596	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.803	0.296	1.4	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.629	0.279	1.19	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.61	0.261	1.13	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.686	0.267	1.22	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.689	0.395	1.48	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.503	0.189	0.882	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.495	0.186	0.867	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.749	0.326	1.4	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	0.848	0.457	1.76	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.462	0.174	0.811	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.526	0.208	0.942	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.687	0.3	1.29	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.69	0.305	1.3	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	0.826	0.355	1.54	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.639	0.279	1.2	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.494	0.162	0.818	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.593	0.28	1.15	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.597	0.241	1.08	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.657	0.26	1.18	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.62	0.246	1.11	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.565	0.225	1.01	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.71	0.293	1.29	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.39	0.138	0.665	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.273	0.112	0.497	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.567	0.233	1.03	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.551	0.215	0.982	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.557	0.204	0.964	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.596	0.24	1.08	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.55	0.216	0.983	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.334	0.119	0.573	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.283	0.11	0.502	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.507	0.204	0.915	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.646	0.319	1.28	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.338	0.129	0.596	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.272	0.107	0.486	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.256	0.101	0.459	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.514	0.224	0.962	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.304	0.115	0.535	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.265	0.0934	0.452	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.512	0.217	0.946	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.394	0.156	0.706	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.347	0.143	0.633	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.468	0.187	0.842	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.396	0.162	0.72	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.352	0.146	0.644	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.424	0.155	0.734	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.475	0.192	0.859	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.362	0.148	0.658	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.41	0.172	0.754	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.449	0.158	0.765	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.494	0.178	0.849	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.448	0.156	0.761	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.448	0.155	0.759	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.363	0.143	0.648	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.285	0.114	0.514	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.447	0.156	0.76	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.384	0.153	0.69	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.314	0.0843	0.483	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.625	0.622	1.87	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.439	0.156	0.751	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.374	0.149	0.671	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.516	0.171	0.858	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.277	0.111	0.498	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.308	0.124	0.555	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.394	0.153	0.701	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.326	0.125	0.575	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.37	0.183	0.736	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.345	0.121	0.586	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.332	0.108	0.549	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.373	0.132	0.636	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.339	0.192	0.723	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.355	0.173	0.701	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.324	0.127	0.579	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.308	0.175	0.659	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.388	0.201	0.789	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.243	0.0949	0.433	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.299	0.115	0.529	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.33	0.115	0.56	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.247	0.0968	0.44	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.304	0.142	0.589	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.404	0.135	0.674	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.271	0.124	0.519	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.315	0.146	0.608	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.322	0.245	0.812	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1274  
**Lab Sample ID:** 5084001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32200  
**Batch ID:** 23979  
**Run Date:** 08/06/2013 06:53  
**Data File:** c05aug13a\_2-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:27  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 888.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	22.5	22.5	pg/L	22.5
2051-61-8	PCB-2	U	22.5	22.5	pg/L	22.5
2051-62-9	PCB-3	U	22.5	22.5	pg/L	22.5
13029-08-8	PCB-4	U	22.5	22.5	pg/L	22.5
16605-91-7	PCB-5	U	22.5	22.5	pg/L	22.5
25569-80-6	PCB-6	U	22.5	22.5	pg/L	22.5
33284-50-3	PCB-7	U	22.5	22.5	pg/L	22.5
34883-43-7	PCB-8	U	29.2	22.5	pg/L	22.5
34883-39-1	PCB-9	U	22.5	22.5	pg/L	22.5
33146-45-1	PCB-10	U	22.5	22.5	pg/L	22.5
2050-67-1	PCB-11	U	112	112	pg/L	112
PCB-12/13	PCB-13/12	CU	45	45	pg/L	45.0
34883-41-5	PCB-14	U	22.5	22.5	pg/L	22.5
2050-68-2	PCB-15		32.1	22.9	pg/L	22.5
38444-78-9	PCB-16		41.5	40.6	pg/L	22.5
37680-66-3	PCB-17		34.9	33.9	pg/L	22.5
PCB-18/30	PCB-18/30	C	82.0	81.3	pg/L	45.0
38444-73-4	PCB-19	U	22.5	22.5	pg/L	22.5
PCB-20/28	PCB-20/28	C	115	115	pg/L	45.0
PCB-21/33	PCB-21/33	C	52.5	51.9	pg/L	45.0
38444-85-8	PCB-22		56.7	55.7	pg/L	22.5
55720-44-0	PCB-23	U	22.5	22.5	pg/L	22.5
55702-45-9	PCB-24	U	22.5	22.5	pg/L	22.5
55712-37-3	PCB-25	U	22.5	22.5	pg/L	22.5
PCB-26/29	PCB-26/29	CU	45	45	pg/L	45.0
38444-76-7	PCB-27	U	22.5	22.5	pg/L	22.5
16606-02-3	PCB-31		105	104	pg/L	22.5
38444-77-8	PCB-32		24.7	24.2	pg/L	22.5
37680-68-5	PCB-34	U	22.5	22.5	pg/L	22.5
37680-69-6	PCB-35	U	22.5	22.5	pg/L	22.5
38444-87-0	PCB-36	U	22.5	22.5	pg/L	22.5
38444-90-5	PCB-37		48.6	47.1	pg/L	22.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 7

**SDG Number:** 2013-1274  
**Lab Sample ID:** 5084001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32200  
**Batch ID:** 23979  
**Run Date:** 08/06/2013 06:53  
**Data File:** c05aug13a\_2-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:27  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 888.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	22.5	22.5	pg/L	22.5
38444-88-1	PCB-39	U	22.5	22.5	pg/L	22.5
PCB-40/71	PCB-40/71	C	88.0	86.7	pg/L	45.0
52663-59-9	PCB-41	U	22.5	22.5	pg/L	22.5
36559-22-5	PCB-42		48.3	46.8	pg/L	22.5
70362-46-8	PCB-43	U	22.5	22.5	pg/L	22.5
PCB-44/47/65	PCB-44/65/47	C	390	388	pg/L	67.5
PCB-45/51	PCB-45/51	CU	45	45	pg/L	45.0
41464-47-5	PCB-46	U	22.5	22.5	pg/L	22.5
70362-47-9	PCB-48		35.2	33.9	pg/L	22.5
PCB-49/69	PCB-69/49	C	198	197	pg/L	45.0
PCB-50/53	PCB-50/53	CU	45	45	pg/L	45.0
35693-99-3	PCB-52		826	825	pg/L	22.5
15968-05-5	PCB-54	U	22.5	22.5	pg/L	22.5
74338-24-2	PCB-55	U	22.5	22.5	pg/L	22.5
41464-43-1	PCB-56		127	125	pg/L	22.5
70424-67-8	PCB-57	U	22.5	22.5	pg/L	22.5
41464-49-7	PCB-58	U	22.5	22.5	pg/L	22.5
PCB-59/62/75	PCB-59/62/75	CU	67.5	67.5	pg/L	67.5
33025-41-1	PCB-60		70.2	69.1	pg/L	22.5
PCB-61-76	PCB-61/76/70/74	C	878	877	pg/L	90.0
74472-34-7	PCB-63	U	22.5	22.5	pg/L	22.5
52663-58-8	PCB-64		128	126	pg/L	22.5
32598-10-0	PCB-66		206	205	pg/L	22.5
73575-53-8	PCB-67	U	22.5	22.5	pg/L	22.5
73575-52-7	PCB-68	U	22.5	22.5	pg/L	22.5
41464-42-0	PCB-72	U	22.5	22.5	pg/L	22.5
74338-23-1	PCB-73	U	22.5	22.5	pg/L	22.5
32598-13-3	PCB-77		48.1	46.8	pg/L	22.5
70362-49-1	PCB-78	U	22.5	22.5	pg/L	22.5
41464-48-6	PCB-79	U	22.5	22.5	pg/L	22.5
33284-52-5	PCB-80	U	22.5	22.5	pg/L	22.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
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**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-1274  
 Lab Sample ID: 5084001  
 Client Sample: 1668A Water  
 Client ID: WT\_IPC-13-32200  
 Batch ID: 23979  
 Run Date: 08/06/2013 06:53  
 Data File: c05aug13a\_2-9  
 Prep Batch: 23951  
 Prep Date: 31-JUL-13

Client: LANL001  
 Date Collected: 07/12/2013 11:27  
 Date Received: 07/23/2013 11:00  
 Method: EPA Method 1668A  
 Analyst: CLP  
 Prep Method: SW846 3520C  
 Aliquot: 888.9 mL

Project: LANL00112  
 Matrix: WATER  
 Prep Basis: As Received  
 Instrument: HRP791  
 Dilution: 1  
 Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	22.5	22.5	pg/L	22.5
52663-62-4	PCB-82		169	168	pg/L	22.5
60145-20-2	PCB-83		86.0	84.7	pg/L	22.5
52663-60-2	PCB-84		462	461	pg/L	22.5
PCB-85-117	PCB-117/116/85	C	326	325	pg/L	67.5
PCB-86-125	PCB-86/87/97/109/119/125	C	1310	1310	pg/L	135
PCB-88/91	PCB-88/91	C	246	244	pg/L	45.0
73575-57-2	PCB-89	U	22.5	22.5	pg/L	22.5
PCB-90-113	PCB-113/90/101	C	2220	2220	pg/L	67.5
52663-61-3	PCB-92		357	356	pg/L	22.5
PCB-93/100	PCB-93/100	CU	45	45	pg/L	45.0
73575-55-0	PCB-94	U	22.5	22.5	pg/L	22.5
38379-99-6	PCB-95		1630	1630	pg/L	22.5
73575-54-9	PCB-96	U	22.5	22.5	pg/L	22.5
PCB-98/102	PCB-102/98	CU	45	45	pg/L	45.0
38380-01-7	PCB-99		1090	1090	pg/L	22.5
60145-21-3	PCB-103	U	22.5	22.5	pg/L	22.5
56558-16-8	PCB-104	U	22.5	22.5	pg/L	22.5
32598-14-4	PCB-105		702	701	pg/L	22.5
70424-69-0	PCB-106	U	22.5	22.5	pg/L	22.5
70424-68-9	PCB-107		124	123	pg/L	22.5
PCB-108/124	PCB-108/124	C	88.7	87.5	pg/L	45.0
PCB-110/115	PCB-110/115	CU	45	45	pg/L	45.0
39635-32-0	PCB-111	U	22.5	22.5	pg/L	22.5
74472-36-9	PCB-112	U	22.5	22.5	pg/L	22.5
74472-37-0	PCB-114		35.0	33.6	pg/L	22.5
31508-00-6	PCB-118		1650	1640	pg/L	22.5
68194-12-7	PCB-120	U	22.5	22.5	pg/L	22.5
56558-18-0	PCB-121	U	22.5	22.5	pg/L	22.5
76842-07-4	PCB-122	U	22.5	22.5	pg/L	22.5
65510-44-3	PCB-123		32.0	30.7	pg/L	22.5
57465-28-8	PCB-126	U	22.5	22.5	pg/L	22.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1274  
**Lab Sample ID:** 5084001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32200  
**Batch ID:** 23979  
**Run Date:** 08/06/2013 06:53  
**Data File:** c05aug13a\_2-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:27  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 888.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	22.5	22.5	pg/L	22.5
PCB-128/166	PCB-128/166	C	591	591	pg/L	45.0
PCB-129-163	PCB-138/163/129	C	5350	5350	pg/L	67.5
52663-66-8	PCB-130		248	247	pg/L	22.5
61798-70-7	PCB-131		44.3	43.1	pg/L	22.5
38380-05-1	PCB-132		1860	1860	pg/L	22.5
35694-04-3	PCB-133		61.2	60.2	pg/L	22.5
52704-70-8	PCB-134		201	200	pg/L	22.5
PCB-135/151	PCB-151/135	C	1780	1780	pg/L	45.0
38411-22-2	PCB-136		492	491	pg/L	22.5
35694-06-5	PCB-137		171	170	pg/L	22.5
PCB-139/140	PCB-139/140	C	59.1	58.1	pg/L	45.0
52712-04-6	PCB-141		904	903	pg/L	22.5
41411-61-4	PCB-142	U	22.5	22.5	pg/L	22.5
68194-15-0	PCB-143	U	22.5	22.5	pg/L	22.5
68194-14-9	PCB-144		185	184	pg/L	22.5
74472-40-5	PCB-145	U	22.5	22.5	pg/L	22.5
51908-16-8	PCB-146		699	699	pg/L	22.5
PCB-147/149	PCB-147/149	C	4440	4440	pg/L	45.0
74472-41-6	PCB-148	U	22.5	22.5	pg/L	22.5
68194-08-1	PCB-150	U	22.5	22.5	pg/L	22.5
68194-09-2	PCB-152	U	22.5	22.5	pg/L	22.5
PCB-153/168	PCB-153/168	C	4930	4930	pg/L	45.0
60145-22-4	PCB-154		33.4	32.9	pg/L	22.5
33979-03-2	PCB-155	U	22.5	22.5	pg/L	22.5
PCB-156/157	PCB-156/157	C	460	459	pg/L	45.0
74472-42-7	PCB-158		436	435	pg/L	22.5
39635-35-3	PCB-159	U	22.5	22.5	pg/L	22.5
41411-62-5	PCB-160	U	22.5	22.5	pg/L	22.5
74472-43-8	PCB-161	U	22.5	22.5	pg/L	22.5
39635-34-2	PCB-162		81.5	80.9	pg/L	22.5
74472-45-0	PCB-164		360	359	pg/L	22.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 2013-1274  
**Lab Sample ID:** 5084001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32200  
**Batch ID:** 23979  
**Run Date:** 08/06/2013 06:53  
**Data File:** c05aug13a\_2-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:27  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 888.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	22.5	22.5	pg/L	22.5
52663-72-6	PCB-167		209	208	pg/L	22.5
32774-16-6	PCB-169	U	22.5	22.5	pg/L	22.5
35065-30-6	PCB-170		1600	1600	pg/L	22.5
PCB-171/173	PCB-173/171	C	464	463	pg/L	45.0
52663-74-8	PCB-172		291	291	pg/L	22.5
38411-25-5	PCB-174		1840	1840	pg/L	22.5
40186-70-7	PCB-175		64.6	63.9	pg/L	22.5
52663-65-7	PCB-176		164	164	pg/L	22.5
52663-70-4	PCB-177		1000	1000	pg/L	22.5
52663-67-9	PCB-178		372	371	pg/L	22.5
52663-64-6	PCB-179		648	648	pg/L	22.5
PCB-180/193	PCB-193/180	C	4050	4050	pg/L	45.0
74472-47-2	PCB-181	U	22.5	22.5	pg/L	22.5
60145-23-5	PCB-182	U	22.5	22.5	pg/L	22.5
PCB-183/185	PCB-183/185	C	1280	1280	pg/L	45.0
74472-48-3	PCB-184	U	22.5	22.5	pg/L	22.5
74472-49-4	PCB-186	U	22.5	22.5	pg/L	22.5
52663-68-0	PCB-187		3210	3210	pg/L	22.5
74487-85-7	PCB-188	U	22.5	22.5	pg/L	22.5
39635-31-9	PCB-189		65.9	65.1	pg/L	22.5
41411-64-7	PCB-190		350	350	pg/L	22.5
74472-50-7	PCB-191		63.8	63.2	pg/L	22.5
74472-51-8	PCB-192	U	22.5	22.5	pg/L	22.5
35694-08-7	PCB-194		909	908	pg/L	22.5
52663-78-2	PCB-195		362	362	pg/L	22.5
42740-50-1	PCB-196		471	470	pg/L	22.5
PCB-197/200	PCB-197/200	C	172	171	pg/L	45.0
PCB-198/199	PCB-198/199	C	1400	1400	pg/L	45.0
40186-71-8	PCB-201		117	117	pg/L	22.5
2136-99-4	PCB-202		218	218	pg/L	22.5
52663-76-0	PCB-203		1040	1040	pg/L	22.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1274  
**Lab Sample ID:** 5084001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32200  
**Batch ID:** 23979  
**Run Date:** 08/06/2013 06:53  
**Data File:** c05aug13a\_2-9  
**Prep Batch:** 23951  
**Prep Date:** 31-JUL-13

**Client:** LANL001  
**Date Collected:** 07/12/2013 11:27  
**Date Received:** 07/23/2013 11:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 888.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	22.5	22.5	pg/L	22.5
74472-53-0	PCB-205		53.3	52.7	pg/L	22.5
40186-72-9	PCB-206		712	712	pg/L	22.5
52663-79-3	PCB-207		69.8	69.3	pg/L	22.5
52663-77-1	PCB-208		192	191	pg/L	22.5
2051-24-3	PCB-209		333	332	pg/L	22.5
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs		61.3	22.9	pg/L	
25323-68-6	Total Tri PCBs		561	554	pg/L	
26914-33-0	Total Tetra PCBs		3040	3030	pg/L	
25429-29-2	Total Penta PCBs		10500	10500	pg/L	
26601-64-9	Total Hexa PCBs		23600	23600	pg/L	
28655-71-2	Total Hepta PCBs		15500	15500	pg/L	
55722-26-4	Total Octa PCBs		4740	4730	pg/L	
53742-07-7	Total Nona PCBs		974	972	pg/L	
DECACB(Tot)	Total Deca PCB		333	332	pg/L	
1336-36-3	Total PCB Congeners		59300	59100	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		929	2250	pg/L	41.3	(15%-150%)
13C-3-MoCB		995	2250	pg/L	44.2	(15%-150%)
13C-4-DiCB		1060	2250	pg/L	47.2	(25%-150%)
13C-15-DiCB		1180	2250	pg/L	52.6	(25%-150%)
13C-19-TrCB		1240	2250	pg/L	55.2	(25%-150%)
13C-37-TrCB		1440	2250	pg/L	64.2	(25%-150%)
13C-54-TeCB		1260	2250	pg/L	55.8	(25%-150%)
13C-77-TeCB		1590	2250	pg/L	70.8	(25%-150%)
13C-81-TeCB		1570	2250	pg/L	70.0	(25%-150%)
13C-104-PeCB		1260	2250	pg/L	55.8	(25%-150%)
13C-105-PeCB		1490	2250	pg/L	66.0	(25%-150%)
13C-114-PeCB		1410	2250	pg/L	62.5	(25%-150%)
13C-118-PeCB		1510	2250	pg/L	67.0	(25%-150%)
13C-123-PeCB		1560	2250	pg/L	69.4	(25%-150%)
13C-126-PeCB		1520	2250	pg/L	67.6	(25%-150%)
13C-155-HxCB		1480	2250	pg/L	65.7	(25%-150%)
13C-156-HxCB	C	2760	4500	pg/L	61.4	(25%-150%)
13C-167-HxCB		1330	2250	pg/L	59.3	(25%-150%)
13C-169-HxCB		1480	2250	pg/L	66.0	(25%-150%)
13C-188-HpCB		1760	2250	pg/L	78.3	(25%-150%)
13C-189-HpCB		1510	2250	pg/L	67.2	(25%-150%)
13C-202-OcCB		1840	2250	pg/L	81.9	(25%-150%)
13C-205-OcCB		1820	2250	pg/L	80.9	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1274	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5084001	<b>Date Collected:</b> 07/12/2013 11:27	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 07/23/2013 11:00	
<b>Client ID:</b> WT_IPC-13-32200		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 23979	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/06/2013 06:53	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c05aug13a_2-9		<b>Dilution:</b> 1
<b>Prep Batch:</b> 23951	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 31-JUL-13	<b>Aliquot:</b> 888.9 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1750	2250	pg/L	77.8      (25%-150%)
13C-208-NoCB			1930	2250	pg/L	85.9      (25%-150%)
13C-209-DeCB			1640	2250	pg/L	72.9      (25%-150%)
13C-28-TrCB			1720	2250	pg/L	76.7      (30%-135%)
13C-111-PeCB			1850	2250	pg/L	82.4      (30%-135%)
13C-178-HpCB			1840	2250	pg/L	82.0      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.505	0.345	1.2	
3-Chlorobiphenyl (2)	pg/L	0.504	0.35	1.2	
4-Chlorobiphenyl (3)	pg/L	0.537	0.347	1.23	
2,2'-Dichlorobiphenyl (4)	pg/L	3.41	2.42	8.26	
2,3-Dichlorobiphenyl (5)	pg/L	3.36	2.52	8.4	
2,3'-Dichlorobiphenyl (6)	pg/L	2.66	1.91	6.48	
2,4-Dichlorobiphenyl (7)	pg/L	2.86	2.08	7.03	
2,4'-Dichlorobiphenyl (8)	pg/L	3	2.07	7.14	
2,5-Dichlorobiphenyl (9)	pg/L	2.84	2.12	7.09	
2,6-Dichlorobiphenyl (10)	pg/L	2.11	1.52	5.15	
3,3'-Dichlorobiphenyl (11)	pg/L	3.18	2.22	7.63	
3,4-Dichlorobiphenyl (12)	pg/L	3.76	2.4	8.55	
3,5-Dichlorobiphenyl (14)	pg/L	3.05	2.16	7.36	
4,4'-Dichlorobiphenyl (15)	pg/L	3.88	2.67	9.22	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.539	0.179	0.898	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.503	0.202	0.907	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.383	0.149	0.682	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.482	0.183	0.847	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.342	0.124	0.589	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.37	0.135	0.64	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.447	0.263	0.972	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.35	0.13	0.61	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.366	0.147	0.659	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.326	0.106	0.538	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.412	0.163	0.738	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.327	0.128	0.582	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.316	0.116	0.549	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.348	0.116	0.58	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.348	0.132	0.611	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.461	0.163	0.787	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.412	0.148	0.708	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.658	0.38	1.42	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.434	0.153	0.741	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.428	0.153	0.734	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.651	0.328	1.31	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.843	0.459	1.76	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.72	0.37	1.46	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.755	0.382	1.52	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.693	0.368	1.43	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.515	0.371	1.26	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.393	0.161	0.715	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.721	0.328	1.38	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.631	0.327	1.29	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.38	0.151	0.682	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.661	0.342	1.34	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.245	0.0963	0.438	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.559	0.267	1.09	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.736	0.401	1.54	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.513	0.256	1.02	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.541	0.268	1.08	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.584	0.321	1.23	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.561	0.257	1.07	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.646	0.321	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.487	0.234	0.954	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.534	0.273	1.08	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.515	0.247	1.01	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.429	0.205	0.838	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.529	0.255	1.04	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.516	0.264	1.04	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.539	0.276	1.09	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.667	0.299	1.27	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.573	0.242	1.06	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.472	0.207	0.886	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.489	0.224	0.937	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.62	0.27	1.16	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.729	0.275	1.28	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.774	0.299	1.37	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.745	0.299	1.34	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.63	0.251	1.13	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.684	0.301	1.29	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.816	0.376	1.57	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.686	0.271	1.23	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.657	0.264	1.18	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.675	0.266	1.21	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.592	0.239	1.07	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.744	0.308	1.36	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.749	0.235	1.22	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.3	0.123	0.546	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.767	0.344	1.46	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.649	0.265	1.18	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.628	0.261	1.15	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.335	0.131	0.596	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.803	0.296	1.4	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.629	0.279	1.19	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.61	0.261	1.13	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.686	0.267	1.22	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.689	0.395	1.48	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.503	0.189	0.882	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.495	0.186	0.867	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.749	0.326	1.4	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	0.848	0.457	1.76	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.462	0.174	0.811	



# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.526	0.208	0.942	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.687	0.3	1.29	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.69	0.305	1.3	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	0.826	0.355	1.54	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.639	0.279	1.2	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.494	0.162	0.818	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.593	0.28	1.15	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.597	0.241	1.08	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.657	0.26	1.18	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.62	0.246	1.11	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.565	0.225	1.01	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.71	0.293	1.29	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.39	0.138	0.665	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.273	0.112	0.497	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.567	0.233	1.03	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.551	0.215	0.982	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.557	0.204	0.964	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.596	0.24	1.08	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.55	0.216	0.983	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.334	0.119	0.573	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.283	0.11	0.502	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.507	0.204	0.915	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.646	0.319	1.28	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.338	0.129	0.596	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.272	0.107	0.486	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.256	0.101	0.459	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.514	0.224	0.962	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.304	0.115	0.535	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.265	0.0934	0.452	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.512	0.217	0.946	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.394	0.156	0.706	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.347	0.143	0.633	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.468	0.187	0.842	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.396	0.162	0.72	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.352	0.146	0.644	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.424	0.155	0.734	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.475	0.192	0.859	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.362	0.148	0.658	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.41	0.172	0.754	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.449	0.158	0.765	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.494	0.178	0.849	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.448	0.156	0.761	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.448	0.155	0.759	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.363	0.143	0.648	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.285	0.114	0.514	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.447	0.156	0.76	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-JUL-13 to 31-JUL-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.384	0.153	0.69	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.314	0.0843	0.483	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.625	0.622	1.87	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.439	0.156	0.751	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.374	0.149	0.671	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.516	0.171	0.858	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.277	0.111	0.498	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.308	0.124	0.555	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.394	0.153	0.701	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.326	0.125	0.575	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.37	0.183	0.736	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.345	0.121	0.586	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.332	0.108	0.549	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.373	0.132	0.636	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.339	0.192	0.723	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.355	0.173	0.701	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.324	0.127	0.579	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.308	0.175	0.659	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.388	0.201	0.789	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.243	0.0949	0.433	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.299	0.115	0.529	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.33	0.115	0.56	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.247	0.0968	0.44	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.304	0.142	0.589	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.404	0.135	0.674	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.271	0.124	0.519	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.315	0.146	0.608	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.322	0.245	0.812	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1380  
**Lab Sample ID:** 5119001  
**Client Sample:** 1613/1668A Water  
**Client ID:** WT\_IPC-13-32138  
**Batch ID:** 24114  
**Run Date:** 08/15/2013 16:05  
**Data File:** c14aug13a\_3-7  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:31  
**Date Received:** 07/30/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 848.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	236	236	pg/L	236
2051-61-8	PCB-2	U	236	236	pg/L	236
2051-62-9	PCB-3	U	236	236	pg/L	236
13029-08-8	PCB-4	U	236	236	pg/L	236
16605-91-7	PCB-5	U	236	236	pg/L	236
25569-80-6	PCB-6	U	236	236	pg/L	236
33284-50-3	PCB-7	U	236	236	pg/L	236
34883-43-7	PCB-8	U	236	236	pg/L	236
34883-39-1	PCB-9	U	236	236	pg/L	236
33146-45-1	PCB-10	U	236	236	pg/L	236
2050-67-1	PCB-11	U	1180	1180	pg/L	1180
PCB-12/13	PCB-13/12	CU	471	471	pg/L	471
34883-41-5	PCB-14	U	236	236	pg/L	236
2050-68-2	PCB-15	U	236	236	pg/L	236
38444-78-9	PCB-16	U	236	236	pg/L	236
37680-66-3	PCB-17	U	236	236	pg/L	236
PCB-18/30	PCB-18/30	CU	471	471	pg/L	471
38444-73-4	PCB-19	U	236	236	pg/L	236
PCB-20/28	PCB-20/28	CU	471	471	pg/L	471
PCB-21/33	PCB-21/33	CU	471	471	pg/L	471
38444-85-8	PCB-22	U	236	236	pg/L	236
55720-44-0	PCB-23	U	236	236	pg/L	236
55702-45-9	PCB-24	U	236	236	pg/L	236
55712-37-3	PCB-25	U	236	236	pg/L	236
PCB-26/29	PCB-26/29	CU	471	471	pg/L	471
38444-76-7	PCB-27	U	236	236	pg/L	236
16606-02-3	PCB-31	U	236	236	pg/L	236
38444-77-8	PCB-32	U	236	236	pg/L	236
37680-68-5	PCB-34	U	236	236	pg/L	236
37680-69-6	PCB-35	U	236	236	pg/L	236
38444-87-0	PCB-36	U	236	236	pg/L	236
38444-90-5	PCB-37	U	236	236	pg/L	236

**Comments:**

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**PCB Congeners**  
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**Prep Date:** 08-AUG-13

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**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	236	236	pg/L	236
38444-88-1	PCB-39	U	236	236	pg/L	236
PCB-40/71	PCB-40/71	CU	471	471	pg/L	471
52663-59-9	PCB-41	U	236	236	pg/L	236
36559-22-5	PCB-42	U	236	236	pg/L	236
70362-46-8	PCB-43	U	236	236	pg/L	236
PCB-44/47/65	PCB-44/65/47	CU	707	707	pg/L	707
PCB-45/51	PCB-45/51	CU	471	471	pg/L	471
41464-47-5	PCB-46	U	236	236	pg/L	236
70362-47-9	PCB-48	U	236	236	pg/L	236
PCB-49/69	PCB-69/49	CU	471	471	pg/L	471
PCB-50/53	PCB-50/53	CU	471	471	pg/L	471
35693-99-3	PCB-52	U	236	236	pg/L	236
15968-05-5	PCB-54	U	236	236	pg/L	236
74338-24-2	PCB-55	U	236	236	pg/L	236
41464-43-1	PCB-56	U	236	236	pg/L	236
70424-67-8	PCB-57	U	236	236	pg/L	236
41464-49-7	PCB-58	U	236	236	pg/L	236
PCB-59/62/75	PCB-59/62/75	CU	707	707	pg/L	707
33025-41-1	PCB-60	U	236	236	pg/L	236
PCB-61-76	PCB-61/76/70/74	CU	943	943	pg/L	943
74472-34-7	PCB-63	U	236	236	pg/L	236
52663-58-8	PCB-64	U	236	236	pg/L	236
32598-10-0	PCB-66	U	236	236	pg/L	236
73575-53-8	PCB-67	U	236	236	pg/L	236
73575-52-7	PCB-68	U	236	236	pg/L	236
41464-42-0	PCB-72	U	236	236	pg/L	236
74338-23-1	PCB-73	U	236	236	pg/L	236
32598-13-3	PCB-77	U	236	236	pg/L	236
70362-49-1	PCB-78	U	236	236	pg/L	236
41464-48-6	PCB-79	U	236	236	pg/L	236
33284-52-5	PCB-80	U	236	236	pg/L	236

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**PCB Congeners**  
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**Prep Method:** SW846 3520C  
**Aliquot:** 848.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	236	236	pg/L	236
52663-62-4	PCB-82	U	236	236	pg/L	236
60145-20-2	PCB-83	U	236	236	pg/L	236
52663-60-2	PCB-84	U	236	236	pg/L	236
PCB-85-117	PCB-117/116/85	CU	707	707	pg/L	707
PCB-86-125	PCB-86/87/97/109/119/125	CU	1410	1410	pg/L	1410
PCB-88/91	PCB-88/91	CU	471	471	pg/L	471
73575-57-2	PCB-89	U	236	236	pg/L	236
PCB-90-113	PCB-113/90/101	CU	707	707	pg/L	707
52663-61-3	PCB-92	U	236	236	pg/L	236
PCB-93/100	PCB-93/100	CU	471	471	pg/L	471
73575-55-0	PCB-94	U	236	236	pg/L	236
38379-99-6	PCB-95		304	303	pg/L	236
73575-54-9	PCB-96	U	236	236	pg/L	236
PCB-98/102	PCB-102/98	CU	471	471	pg/L	471
38380-01-7	PCB-99		257	255	pg/L	236
60145-21-3	PCB-103	U	236	236	pg/L	236
56558-16-8	PCB-104	U	236	236	pg/L	236
32598-14-4	PCB-105	U	236	236	pg/L	236
70424-69-0	PCB-106	U	236	236	pg/L	236
70424-68-9	PCB-107	U	236	236	pg/L	236
PCB-108/124	PCB-108/124	CU	471	471	pg/L	471
PCB-110/115	PCB-110/115	CU	471	471	pg/L	471
39635-32-0	PCB-111	U	236	236	pg/L	236
74472-36-9	PCB-112	U	236	236	pg/L	236
74472-37-0	PCB-114	U	236	236	pg/L	236
31508-00-6	PCB-118		386	384	pg/L	236
68194-12-7	PCB-120	U	236	236	pg/L	236
56558-18-0	PCB-121	U	236	236	pg/L	236
76842-07-4	PCB-122	U	236	236	pg/L	236
65510-44-3	PCB-123	U	236	236	pg/L	236
57465-28-8	PCB-126	U	236	236	pg/L	236

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**PCB Congeners**  
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**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 848.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	236	236	pg/L	236
PCB-128/166	PCB-128/166	CU	471	471	pg/L	471
PCB-129-163	PCB-138/163/129	C	1270	1270	pg/L	707
52663-66-8	PCB-130	U	236	236	pg/L	236
61798-70-7	PCB-131	U	236	236	pg/L	236
38380-05-1	PCB-132	U	236	236	pg/L	236
35694-04-3	PCB-133	U	236	236	pg/L	236
52704-70-8	PCB-134	U	236	236	pg/L	236
PCB-135/151	PCB-151/135	CU	471	471	pg/L	471
38411-22-2	PCB-136	U	236	236	pg/L	236
35694-06-5	PCB-137	U	236	236	pg/L	236
PCB-139/140	PCB-139/140	CU	471	471	pg/L	471
52712-04-6	PCB-141	U	236	236	pg/L	236
41411-61-4	PCB-142	U	236	236	pg/L	236
68194-15-0	PCB-143	U	236	236	pg/L	236
68194-14-9	PCB-144	U	236	236	pg/L	236
74472-40-5	PCB-145	U	236	236	pg/L	236
51908-16-8	PCB-146	U	236	236	pg/L	236
PCB-147/149	PCB-147/149	C	897	895	pg/L	471
74472-41-6	PCB-148	U	236	236	pg/L	236
68194-08-1	PCB-150	U	236	236	pg/L	236
68194-09-2	PCB-152	U	236	236	pg/L	236
PCB-153/168	PCB-153/168	C	993	992	pg/L	471
60145-22-4	PCB-154	U	236	236	pg/L	236
33979-03-2	PCB-155	U	236	236	pg/L	236
PCB-156/157	PCB-156/157	CU	471	471	pg/L	471
74472-42-7	PCB-158	U	236	236	pg/L	236
39635-35-3	PCB-159	U	236	236	pg/L	236
41411-62-5	PCB-160	U	236	236	pg/L	236
74472-43-8	PCB-161	U	236	236	pg/L	236
39635-34-2	PCB-162	U	236	236	pg/L	236
74472-45-0	PCB-164	U	236	236	pg/L	236

**Comments:**

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**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	236	236	pg/L	236
52663-72-6	PCB-167	U	236	236	pg/L	236
32774-16-6	PCB-169	U	236	236	pg/L	236
35065-30-6	PCB-170		269	268	pg/L	236
PCB-171/173	PCB-173/171	CU	471	471	pg/L	471
52663-74-8	PCB-172	U	236	236	pg/L	236
38411-25-5	PCB-174	U	236	236	pg/L	236
40186-70-7	PCB-175	U	236	236	pg/L	236
52663-65-7	PCB-176	U	236	236	pg/L	236
52663-70-4	PCB-177	U	236	236	pg/L	236
52663-67-9	PCB-178	U	236	236	pg/L	236
52663-64-6	PCB-179	U	236	236	pg/L	236
PCB-180/193	PCB-193/180	CU	471	471	pg/L	471
74472-47-2	PCB-181	U	236	236	pg/L	236
60145-23-5	PCB-182	U	236	236	pg/L	236
PCB-183/185	PCB-183/185	CU	471	471	pg/L	471
74472-48-3	PCB-184	U	236	236	pg/L	236
74472-49-4	PCB-186	U	236	236	pg/L	236
52663-68-0	PCB-187	U	236	236	pg/L	236
74487-85-7	PCB-188	U	236	236	pg/L	236
39635-31-9	PCB-189	U	236	236	pg/L	236
41411-64-7	PCB-190	U	236	236	pg/L	236
74472-50-7	PCB-191	U	236	236	pg/L	236
74472-51-8	PCB-192	U	236	236	pg/L	236
35694-08-7	PCB-194	U	236	236	pg/L	236
52663-78-2	PCB-195	U	236	236	pg/L	236
42740-50-1	PCB-196	U	236	236	pg/L	236
PCB-197/200	PCB-197/200	CU	471	471	pg/L	471
PCB-198/199	PCB-198/199	CU	471	471	pg/L	471
40186-71-8	PCB-201	U	236	236	pg/L	236
2136-99-4	PCB-202	U	236	236	pg/L	236
52663-76-0	PCB-203	U	236	236	pg/L	236

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**SDG Number:** 2013-1380  
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**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	236	236	pg/L	236
74472-53-0	PCB-205	U	236	236	pg/L	236
40186-72-9	PCB-206	U	236	236	pg/L	236
52663-79-3	PCB-207	U	236	236	pg/L	236
52663-77-1	PCB-208	U	236	236	pg/L	236
2051-24-3	PCB-209	U	236	236	pg/L	236
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs	U	0	0	pg/L	
25429-29-2	Total Penta PCBs		947	942	pg/L	
26601-64-9	Total Hexa PCBs		3160	3160	pg/L	
28655-71-2	Total Hepta PCBs		269	268	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		4380	4370	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1740	2360	pg/L	73.8	(15%-150%)
13C-3-MoCB		1990	2360	pg/L	84.5	(15%-150%)
13C-4-DiCB		2480	2360	pg/L	105	(25%-150%)
13C-15-DiCB		2150	2360	pg/L	91.1	(25%-150%)
13C-19-TrCB		2670	2360	pg/L	113	(25%-150%)
13C-37-TrCB		1950	2360	pg/L	82.8	(25%-150%)
13C-54-TeCB		2540	2360	pg/L	108	(25%-150%)
13C-77-TeCB		1870	2360	pg/L	79.6	(25%-150%)
13C-81-TeCB		1810	2360	pg/L	77.0	(25%-150%)
13C-104-PeCB		2820	2360	pg/L	120	(25%-150%)
13C-105-PeCB		1730	2360	pg/L	73.4	(25%-150%)
13C-114-PeCB		1650	2360	pg/L	69.8	(25%-150%)
13C-118-PeCB		1720	2360	pg/L	73.0	(25%-150%)
13C-123-PeCB		1760	2360	pg/L	74.8	(25%-150%)
13C-126-PeCB		1640	2360	pg/L	69.6	(25%-150%)
13C-155-HxCB		2840	2360	pg/L	121	(25%-150%)
13C-156-HxCB	C	3550	4710	pg/L	75.3	(25%-150%)
13C-167-HxCB		1700	2360	pg/L	72.0	(25%-150%)
13C-169-HxCB		1830	2360	pg/L	77.6	(25%-150%)
13C-188-HpCB		2650	2360	pg/L	112	(25%-150%)
13C-189-HpCB		1830	2360	pg/L	77.5	(25%-150%)
13C-202-OcCB		2430	2360	pg/L	103	(25%-150%)
13C-205-OcCB		2290	2360	pg/L	97.1	(25%-150%)



**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1380	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5119001	<b>Date Collected:</b> 07/25/2013 22:31	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1613/1668A Water	<b>Date Received:</b> 07/30/2013 09:40	
<b>Client ID:</b> WT_IPC-13-32138		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24114	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/15/2013 16:05	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c14aug13a_3-7		<b>Dilution:</b> 10
<b>Prep Batch:</b> 24111	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 08-AUG-13	<b>Aliquot:</b> 848.7 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2670	2360	pg/L	113      (25%-150%)
13C-208-NoCB			2540	2360	pg/L	108      (25%-150%)
13C-209-DeCB			3130	2360	pg/L	133      (25%-150%)
13C-28-TrCB			2690	2360	pg/L	114      (30%-135%)
13C-111-PeCB			2460	2360	pg/L	104      (30%-135%)
13C-178-HpCB			2970	2360	pg/L	126      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.571	0.321	1.21	
3-Chlorobiphenyl (2)	pg/L	0.551	0.344	1.24	
4-Chlorobiphenyl (3)	pg/L	0.604	0.31	1.22	
2,2'-Dichlorobiphenyl (4)	pg/L	4.26	2.62	9.5	
2,3-Dichlorobiphenyl (5)	pg/L	3.78	2.51	8.8	
2,3'-Dichlorobiphenyl (6)	pg/L	3	1.94	6.89	
2,4-Dichlorobiphenyl (7)	pg/L	3.27	2.1	7.47	
2,4'-Dichlorobiphenyl (8)	pg/L	3.34	2.01	7.36	
2,5-Dichlorobiphenyl (9)	pg/L	3.1	2.15	7.41	
2,6-Dichlorobiphenyl (10)	pg/L	2.47	1.51	5.48	
3,3'-Dichlorobiphenyl (11)	pg/L	4.01	2.01	8.04	
3,4-Dichlorobiphenyl (12)	pg/L	4.26	2.2	8.67	
3,5-Dichlorobiphenyl (14)	pg/L	3.39	2.14	7.68	
4,4'-Dichlorobiphenyl (15)	pg/L	4.31	2.73	9.77	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.634	0.253	1.14	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.554	0.212	0.978	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.42	0.19	0.799	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.538	0.212	0.962	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.386	0.147	0.681	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.427	0.132	0.692	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.53	0.254	1.04	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.416	0.188	0.792	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.411	0.195	0.801	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.369	0.141	0.651	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.457	0.146	0.749	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.352	0.154	0.661	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.355	0.134	0.624	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.375	0.131	0.638	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.378	0.151	0.681	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.486	0.181	0.847	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.433	0.165	0.763	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.694	0.401	1.5	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.46	0.172	0.803	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.466	0.171	0.808	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.704	0.35	1.4	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.855	0.502	1.86	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.786	0.409	1.6	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.837	0.446	1.73	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.73	0.377	1.48	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.644	0.329	1.3	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.484	0.26	1	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.761	0.384	1.53	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.656	0.346	1.35	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.463	0.208	0.88	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.723	0.336	1.4	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.316	0.196	0.707	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.605	0.289	1.18	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.798	0.362	1.52	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.518	0.269	1.06	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.568	0.289	1.15	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.614	0.328	1.27	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.632	0.231	1.09	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.677	0.307	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.495	0.245	0.986	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.585	0.28	1.14	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.526	0.263	1.05	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.44	0.213	0.866	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.586	0.231	1.05	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.521	0.281	1.08	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.562	0.302	1.17	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.699	0.325	1.35	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.606	0.26	1.13	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.497	0.22	0.937	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.507	0.236	0.979	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.658	0.299	1.26	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.886	0.378	1.64	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.901	0.396	1.69	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.876	0.415	1.71	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.764	0.289	1.34	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.825	0.319	1.46	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.963	0.41	1.78	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.804	0.371	1.55	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.788	0.312	1.41	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.792	0.359	1.51	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.701	0.387	1.48	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.916	0.525	1.97	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.777	0.323	1.42	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.415	0.259	0.934	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.907	0.4	1.71	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.805	0.455	1.72	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.713	0.335	1.38	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.467	0.278	1.02	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.971	0.4	1.77	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.777	0.375	1.53	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.728	0.334	1.39	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.822	0.396	1.61	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.826	0.373	1.57	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.645	0.343	1.33	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.601	0.278	1.16	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.938	0.467	1.87	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	1.06	0.407	1.88	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.564	0.244	1.05	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.653	0.361	1.37	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.835	0.385	1.61	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.85	0.424	1.7	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	1.03	0.495	2.02	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.8	0.366	1.53	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.598	0.268	1.13	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.711	0.301	1.31	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.729	0.32	1.37	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.779	0.348	1.47	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.786	0.428	1.64	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.681	0.298	1.28	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.817	0.375	1.57	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.521	0.224	0.968	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.345	0.178	0.701	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.737	0.418	1.57	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.663	0.308	1.28	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.679	0.318	1.31	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.714	0.319	1.35	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.655	0.294	1.24	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.44	0.244	0.928	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.382	0.236	0.854	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.605	0.263	1.13	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.753	0.354	1.46	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.436	0.222	0.879	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.371	0.231	0.833	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.328	0.179	0.687	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.627	0.249	1.12	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.4	0.215	0.83	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.343	0.179	0.702	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.675	0.259	1.19	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.49	0.212	0.913	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.436	0.192	0.821	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.625	0.356	1.34	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.49	0.23	0.95	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.463	0.214	0.891	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.515	0.23	0.976	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.606	0.323	1.25	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.472	0.212	0.897	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.545	0.252	1.05	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.587	0.222	1.03	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.61	0.201	1.01	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.556	0.223	1	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.56	0.195	0.95	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.476	0.212	0.9	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.368	0.164	0.696	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.548	0.219	0.985	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.501	0.222	0.945	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.367	0.154	0.675	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.869	0.672	2.21	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.56	0.247	1.05	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.495	0.22	0.936	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.581	0.206	0.993	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.376	0.197	0.77	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.418	0.214	0.846	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.562	0.227	1.02	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.416	0.184	0.785	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.508	0.25	1.01	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.436	0.175	0.785	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.414	0.168	0.749	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.485	0.221	0.927	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.441	0.223	0.887	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.464	0.215	0.894	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.458	0.228	0.914	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.412	0.199	0.809	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.551	0.251	1.05	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.333	0.167	0.667	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.395	0.189	0.772	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.484	0.284	1.05	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.337	0.165	0.666	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.411	0.189	0.789	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.532	0.311	1.15	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.384	0.229	0.842	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.446	0.275	0.995	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.443	0.304	1.05	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39427  
**Batch ID:** 24114  
**Run Date:** 08/13/2013 16:29  
**Data File:** c13aug13a-6  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 18:01  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 830.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	24.1	24.1	pg/L	24.1
2051-61-8	PCB-2	U	24.1	24.1	pg/L	24.1
2051-62-9	PCB-3	U	24.1	24.1	pg/L	24.1
13029-08-8	PCB-4	U	24.1	24.1	pg/L	24.1
16605-91-7	PCB-5	U	24.1	24.1	pg/L	24.1
25569-80-6	PCB-6	U	24.1	24.1	pg/L	24.1
33284-50-3	PCB-7	U	24.1	24.1	pg/L	24.1
34883-43-7	PCB-8	U	24.1	24.1	pg/L	24.1
34883-39-1	PCB-9	U	24.1	24.1	pg/L	24.1
33146-45-1	PCB-10	U	24.1	24.1	pg/L	24.1
2050-67-1	PCB-11	U	120	120	pg/L	120
PCB-12/13	PCB-13/12	CU	48.2	48.2	pg/L	48.2
34883-41-5	PCB-14	U	24.1	24.1	pg/L	24.1
2050-68-2	PCB-15	U	24.1	24.1	pg/L	24.1
38444-78-9	PCB-16	U	24.1	24.1	pg/L	24.1
37680-66-3	PCB-17	U	24.1	24.1	pg/L	24.1
PCB-18/30	PCB-18/30	CU	48.2	48.2	pg/L	48.2
38444-73-4	PCB-19	U	24.1	24.1	pg/L	24.1
PCB-20/28	PCB-20/28	CU	48.2	48.2	pg/L	48.2
PCB-21/33	PCB-21/33	CU	48.2	48.2	pg/L	48.2
38444-85-8	PCB-22	U	24.1	24.1	pg/L	24.1
55720-44-0	PCB-23	U	24.1	24.1	pg/L	24.1
55702-45-9	PCB-24	U	24.1	24.1	pg/L	24.1
55712-37-3	PCB-25	U	24.1	24.1	pg/L	24.1
PCB-26/29	PCB-26/29	CU	48.2	48.2	pg/L	48.2
38444-76-7	PCB-27	U	24.1	24.1	pg/L	24.1
16606-02-3	PCB-31	U	24.1	24.1	pg/L	24.1
38444-77-8	PCB-32	U	24.1	24.1	pg/L	24.1
37680-68-5	PCB-34	U	24.1	24.1	pg/L	24.1
37680-69-6	PCB-35	U	24.1	24.1	pg/L	24.1
38444-87-0	PCB-36	U	24.1	24.1	pg/L	24.1
38444-90-5	PCB-37	U	24.1	24.1	pg/L	24.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39427  
**Batch ID:** 24114  
**Run Date:** 08/13/2013 16:29  
**Data File:** c13aug13a-6  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 18:01  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 830.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	24.1	24.1	pg/L	24.1
38444-88-1	PCB-39	U	24.1	24.1	pg/L	24.1
PCB-40/71	PCB-40/71	CU	48.2	48.2	pg/L	48.2
52663-59-9	PCB-41	U	24.1	24.1	pg/L	24.1
36559-22-5	PCB-42	U	24.1	24.1	pg/L	24.1
70362-46-8	PCB-43	U	24.1	24.1	pg/L	24.1
PCB-44/47/65	PCB-44/65/47	CU	72.2	72.2	pg/L	72.2
PCB-45/51	PCB-45/51	CU	48.2	48.2	pg/L	48.2
41464-47-5	PCB-46	U	24.1	24.1	pg/L	24.1
70362-47-9	PCB-48	U	24.1	24.1	pg/L	24.1
PCB-49/69	PCB-69/49	CU	48.2	48.2	pg/L	48.2
PCB-50/53	PCB-50/53	CU	48.2	48.2	pg/L	48.2
35693-99-3	PCB-52		38.5	37.1	pg/L	24.1
15968-05-5	PCB-54	U	24.1	24.1	pg/L	24.1
74338-24-2	PCB-55	U	24.1	24.1	pg/L	24.1
41464-43-1	PCB-56	U	24.1	24.1	pg/L	24.1
70424-67-8	PCB-57	U	24.1	24.1	pg/L	24.1
41464-49-7	PCB-58	U	24.1	24.1	pg/L	24.1
PCB-59/62/75	PCB-59/62/75	CU	72.2	72.2	pg/L	72.2
33025-41-1	PCB-60	U	24.1	24.1	pg/L	24.1
PCB-61-76	PCB-61/76/70/74	CU	96.3	96.3	pg/L	96.3
74472-34-7	PCB-63	U	24.1	24.1	pg/L	24.1
52663-58-8	PCB-64	U	24.1	24.1	pg/L	24.1
32598-10-0	PCB-66	U	24.1	24.1	pg/L	24.1
73575-53-8	PCB-67	U	24.1	24.1	pg/L	24.1
73575-52-7	PCB-68	U	24.1	24.1	pg/L	24.1
41464-42-0	PCB-72	U	24.1	24.1	pg/L	24.1
74338-23-1	PCB-73	U	24.1	24.1	pg/L	24.1
32598-13-3	PCB-77	U	24.1	24.1	pg/L	24.1
70362-49-1	PCB-78	U	24.1	24.1	pg/L	24.1
41464-48-6	PCB-79	U	24.1	24.1	pg/L	24.1
33284-52-5	PCB-80	U	24.1	24.1	pg/L	24.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
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**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-1431  
Lab Sample ID: 5137001  
Client Sample: 1668A Water  
Client ID: WT\_IPC-13-39427  
Batch ID: 24114  
Run Date: 08/13/2013 16:29  
Data File: c13aug13a-6  
Prep Batch: 24111  
Prep Date: 08-AUG-13

Client: LANL001  
Date Collected: 07/25/2013 18:01  
Date Received: 08/01/2013 10:15  
Method: EPA Method 1668A  
Analyst: CLP  
Prep Method: SW846 3520C  
Aliquot: 830.6 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	24.1	24.1	pg/L	24.1
52663-62-4	PCB-82	U	24.1	24.1	pg/L	24.1
60145-20-2	PCB-83	U	24.1	24.1	pg/L	24.1
52663-60-2	PCB-84		37.0	35.3	pg/L	24.1
PCB-85-117	PCB-117/116/85	CU	72.2	72.2	pg/L	72.2
PCB-86-125	PCB-86/87/97/109/119/125	CU	144	144	pg/L	144
PCB-88/91	PCB-88/91	CU	48.2	48.2	pg/L	48.2
73575-57-2	PCB-89	U	24.1	24.1	pg/L	24.1
PCB-90-113	PCB-113/90/101	C	159	157	pg/L	72.2
52663-61-3	PCB-92		28.2	26.7	pg/L	24.1
PCB-93/100	PCB-93/100	CU	48.2	48.2	pg/L	48.2
73575-55-0	PCB-94	U	24.1	24.1	pg/L	24.1
38379-99-6	PCB-95		99.5	98	pg/L	24.1
73575-54-9	PCB-96	U	24.1	24.1	pg/L	24.1
PCB-98/102	PCB-102/98	CU	48.2	48.2	pg/L	48.2
38380-01-7	PCB-99		87.2	85.5	pg/L	24.1
60145-21-3	PCB-103	U	24.1	24.1	pg/L	24.1
56558-16-8	PCB-104	U	24.1	24.1	pg/L	24.1
32598-14-4	PCB-105		93.6	91.9	pg/L	24.1
70424-69-0	PCB-106	U	24.1	24.1	pg/L	24.1
70424-68-9	PCB-107	U	24.1	24.1	pg/L	24.1
PCB-108/124	PCB-108/124	CU	48.2	48.2	pg/L	48.2
PCB-110/115	PCB-110/115	CU	48.2	48.2	pg/L	48.2
39635-32-0	PCB-111	U	24.1	24.1	pg/L	24.1
74472-36-9	PCB-112	U	24.1	24.1	pg/L	24.1
74472-37-0	PCB-114	U	24.1	24.1	pg/L	24.1
31508-00-6	PCB-118		179	177	pg/L	24.1
68194-12-7	PCB-120	U	24.1	24.1	pg/L	24.1
56558-18-0	PCB-121	U	24.1	24.1	pg/L	24.1
76842-07-4	PCB-122	U	24.1	24.1	pg/L	24.1
65510-44-3	PCB-123	U	24.1	24.1	pg/L	24.1
57465-28-8	PCB-126	U	24.1	24.1	pg/L	24.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39427  
**Batch ID:** 24114  
**Run Date:** 08/13/2013 16:29  
**Data File:** c13aug13a-6  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 18:01  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 830.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	24.1	24.1	pg/L	24.1
PCB-128/166	PCB-128/166	C	78.9	77.8	pg/L	48.2
PCB-129-163	PCB-138/163/129	C	392	391	pg/L	72.2
52663-66-8	PCB-130		28.0	26.7	pg/L	24.1
61798-70-7	PCB-131	U	24.1	24.1	pg/L	24.1
38380-05-1	PCB-132		157	156	pg/L	24.1
35694-04-3	PCB-133	U	24.1	24.1	pg/L	24.1
52704-70-8	PCB-134	U	24.1	24.1	pg/L	24.1
PCB-135/151	PCB-151/135	C	88.4	87.4	pg/L	48.2
38411-22-2	PCB-136		26.5	25.8	pg/L	24.1
35694-06-5	PCB-137	U	24.1	24.1	pg/L	24.1
PCB-139/140	PCB-139/140	CU	48.2	48.2	pg/L	48.2
52712-04-6	PCB-141		59.5	58.2	pg/L	24.1
41411-61-4	PCB-142	U	24.1	24.1	pg/L	24.1
68194-15-0	PCB-143	U	24.1	24.1	pg/L	24.1
68194-14-9	PCB-144	U	24.1	24.1	pg/L	24.1
74472-40-5	PCB-145	U	24.1	24.1	pg/L	24.1
51908-16-8	PCB-146		43.4	42.3	pg/L	24.1
PCB-147/149	PCB-147/149	C	248	246	pg/L	48.2
74472-41-6	PCB-148	U	24.1	24.1	pg/L	24.1
68194-08-1	PCB-150	U	24.1	24.1	pg/L	24.1
68194-09-2	PCB-152	U	24.1	24.1	pg/L	24.1
PCB-153/168	PCB-153/168	C	265	264	pg/L	48.2
60145-22-4	PCB-154	U	24.1	24.1	pg/L	24.1
33979-03-2	PCB-155	U	24.1	24.1	pg/L	24.1
PCB-156/157	PCB-156/157	C	49.4	48.2	pg/L	48.2
74472-42-7	PCB-158		39.7	38.8	pg/L	24.1
39635-35-3	PCB-159	U	24.1	24.1	pg/L	24.1
41411-62-5	PCB-160	U	24.1	24.1	pg/L	24.1
74472-43-8	PCB-161	U	24.1	24.1	pg/L	24.1
39635-34-2	PCB-162	U	24.1	24.1	pg/L	24.1
74472-45-0	PCB-164		32.2	31.2	pg/L	24.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39427  
**Batch ID:** 24114  
**Run Date:** 08/13/2013 16:29  
**Data File:** c13aug13a-6  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 18:01  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 830.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	24.1	24.1	pg/L	24.1
52663-72-6	PCB-167	U	24.1	24.1	pg/L	24.1
32774-16-6	PCB-169	U	24.1	24.1	pg/L	24.1
35065-30-6	PCB-170		83.2	82.2	pg/L	24.1
PCB-171/173	PCB-173/171	CU	48.2	48.2	pg/L	48.2
52663-74-8	PCB-172	U	24.1	24.1	pg/L	24.1
38411-25-5	PCB-174		89.5	88.5	pg/L	24.1
40186-70-7	PCB-175	U	24.1	24.1	pg/L	24.1
52663-65-7	PCB-176	U	24.1	24.1	pg/L	24.1
52663-70-4	PCB-177		47.3	46.3	pg/L	24.1
52663-67-9	PCB-178	U	24.1	24.1	pg/L	24.1
52663-64-6	PCB-179		26.9	26.3	pg/L	24.1
PCB-180/193	PCB-193/180	C	176	174	pg/L	48.2
74472-47-2	PCB-181	U	24.1	24.1	pg/L	24.1
60145-23-5	PCB-182	U	24.1	24.1	pg/L	24.1
PCB-183/185	PCB-183/185	C	52.4	51.4	pg/L	48.2
74472-48-3	PCB-184	U	24.1	24.1	pg/L	24.1
74472-49-4	PCB-186	U	24.1	24.1	pg/L	24.1
52663-68-0	PCB-187		108	107	pg/L	24.1
74487-85-7	PCB-188	U	24.1	24.1	pg/L	24.1
39635-31-9	PCB-189	U	24.1	24.1	pg/L	24.1
41411-64-7	PCB-190	U	24.1	24.1	pg/L	24.1
74472-50-7	PCB-191	U	24.1	24.1	pg/L	24.1
74472-51-8	PCB-192	U	24.1	24.1	pg/L	24.1
35694-08-7	PCB-194		41.1	40.2	pg/L	24.1
52663-78-2	PCB-195	U	24.1	24.1	pg/L	24.1
42740-50-1	PCB-196	U	24.1	24.1	pg/L	24.1
PCB-197/200	PCB-197/200	CU	48.2	48.2	pg/L	48.2
PCB-198/199	PCB-198/199	CU	48.2	48.2	pg/L	48.2
40186-71-8	PCB-201	U	24.1	24.1	pg/L	24.1
2136-99-4	PCB-202	U	24.1	24.1	pg/L	24.1
52663-76-0	PCB-203	U	24.1	24.1	pg/L	24.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
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**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39427  
**Batch ID:** 24114  
**Run Date:** 08/13/2013 16:29  
**Data File:** c13aug13a-6  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 18:01  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 830.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	24.1	24.1	pg/L	24.1
74472-53-0	PCB-205	U	24.1	24.1	pg/L	24.1
40186-72-9	PCB-206	U	24.1	24.1	pg/L	24.1
52663-79-3	PCB-207	U	24.1	24.1	pg/L	24.1
52663-77-1	PCB-208	U	24.1	24.1	pg/L	24.1
2051-24-3	PCB-209	U	24.1	24.1	pg/L	24.1
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		38.5	37.1	pg/L	
25429-29-2	Total Penta PCBs		684	672	pg/L	
26601-64-9	Total Hexa PCBs		1510	1490	pg/L	
28655-71-2	Total Hepta PCBs		583	575	pg/L	
55722-26-4	Total Octa PCBs		41.1	40.2	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		2850	2820	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		857	2410	pg/L	35.6	(15%-150%)
13C-3-MoCB		907	2410	pg/L	37.7	(15%-150%)
13C-4-DiCB		1070	2410	pg/L	44.6	(25%-150%)
13C-15-DiCB		1300	2410	pg/L	53.8	(25%-150%)
13C-19-TrCB		1280	2410	pg/L	53.0	(25%-150%)
13C-37-TrCB		1530	2410	pg/L	63.6	(25%-150%)
13C-54-TeCB		1370	2410	pg/L	57.0	(25%-150%)
13C-77-TeCB		2020	2410	pg/L	83.9	(25%-150%)
13C-81-TeCB		1940	2410	pg/L	80.5	(25%-150%)
13C-104-PeCB		1400	2410	pg/L	58.3	(25%-150%)
13C-105-PeCB		1780	2410	pg/L	74.0	(25%-150%)
13C-114-PeCB		1680	2410	pg/L	69.6	(25%-150%)
13C-118-PeCB		1770	2410	pg/L	73.6	(25%-150%)
13C-123-PeCB		1890	2410	pg/L	78.3	(25%-150%)
13C-126-PeCB		1910	2410	pg/L	79.3	(25%-150%)
13C-155-HxCB		1440	2410	pg/L	59.9	(25%-150%)
13C-156-HxCB	C	3360	4820	pg/L	69.7	(25%-150%)
13C-167-HxCB		1580	2410	pg/L	65.5	(25%-150%)
13C-169-HxCB		1990	2410	pg/L	82.7	(25%-150%)
13C-188-HpCB		1160	2410	pg/L	48.3	(25%-150%)
13C-189-HpCB		1540	2410	pg/L	63.8	(25%-150%)
13C-202-OcCB		1310	2410	pg/L	54.4	(25%-150%)
13C-205-OcCB		1870	2410	pg/L	77.7	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1431	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5137001	<b>Date Collected:</b> 07/25/2013 18:01	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 08/01/2013 10:15	
<b>Client ID:</b> WT_IPC-13-39427		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24114	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/13/2013 16:29	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c13aug13a-6		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24111	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 08-AUG-13	<b>Aliquot:</b> 830.6 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1980	2410	pg/L	82.4      (25%-150%)
13C-208-NoCB			1760	2410	pg/L	73.1      (25%-150%)
13C-209-DeCB			2170	2410	pg/L	90.0      (25%-150%)
13C-28-TrCB			1760	2410	pg/L	72.9      (30%-135%)
13C-111-PeCB			2150	2410	pg/L	89.1      (30%-135%)
13C-178-HpCB			2170	2410	pg/L	90.0      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39423  
**Batch ID:** 24147  
**Run Date:** 08/17/2013 03:04  
**Data File:** c16aug13a-11  
**Prep Batch:** 24144  
**Prep Date:** 13-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:22  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A HS  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 267.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 5  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	747	747	pg/L	747
2051-61-8	PCB-2	U	403	403	pg/L	403
2051-62-9	PCB-3	U	373	373	pg/L	373
13029-08-8	PCB-4	U	2610	2610	pg/L	2610
16605-91-7	PCB-5	U	3730	3730	pg/L	3730
25569-80-6	PCB-6	U	1230	1230	pg/L	1230
33284-50-3	PCB-7	U	1340	1340	pg/L	1340
34883-43-7	PCB-8	U	1140	1140	pg/L	1140
34883-39-1	PCB-9	U	1370	1370	pg/L	1370
33146-45-1	PCB-10	U	1100	1100	pg/L	1100
2050-67-1	PCB-11	U	3730	3730	pg/L	3730
PCB-12/13	PCB-13/12	CU	1550	1550	pg/L	1550
34883-41-5	PCB-14	U	1400	1400	pg/L	1400
2050-68-2	PCB-15	U	1460	1460	pg/L	1460
38444-78-9	PCB-16		3760	3750	pg/L	373
37680-66-3	PCB-17		2490	2480	pg/L	373
PCB-18/30	PCB-18/30	C	5580	5570	pg/L	747
38444-73-4	PCB-19		1300	1290	pg/L	373
PCB-20/28	PCB-20/28	C	39600	39600	pg/L	1490
PCB-21/33	PCB-21/33	C	3140	3130	pg/L	747
38444-85-8	PCB-22		16200	16200	pg/L	373
55720-44-0	PCB-23	U	373	373	pg/L	373
55702-45-9	PCB-24	U	373	373	pg/L	373
55712-37-3	PCB-25		911	907	pg/L	373
PCB-26/29	PCB-26/29	C	3410	3400	pg/L	747
38444-76-7	PCB-27		931	927	pg/L	373
16606-02-3	PCB-31		13900	13900	pg/L	747
38444-77-8	PCB-32		5100	5090	pg/L	373
37680-68-5	PCB-34	U	373	373	pg/L	373
37680-69-6	PCB-35		686	681	pg/L	373
38444-87-0	PCB-36	U	373	373	pg/L	373
38444-90-5	PCB-37		16600	16600	pg/L	373

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39423  
**Batch ID:** 24147  
**Run Date:** 08/17/2013 03:04  
**Data File:** c16aug13a-11  
**Prep Batch:** 24144  
**Prep Date:** 13-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:22  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A HS  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 267.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 5  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	373	373	pg/L	373
38444-88-1	PCB-39	U	373	373	pg/L	373
PCB-40/71	PCB-40/71	C	14900	14900	pg/L	747
52663-59-9	PCB-41		2210	2200	pg/L	373
36559-22-5	PCB-42		7330	7330	pg/L	373
70362-46-8	PCB-43		779	768	pg/L	747
PCB-44/47/65	PCB-44/65/47	C	28500	28500	pg/L	1120
PCB-45/51	PCB-45/51	C	3710	3700	pg/L	747
41464-47-5	PCB-46		1230	1230	pg/L	373
70362-47-9	PCB-48		4790	4780	pg/L	373
PCB-49/69	PCB-69/49	C	16800	16800	pg/L	747
PCB-50/53	PCB-50/53	C	2640	2630	pg/L	747
35693-99-3	PCB-52		38600	38600	pg/L	373
15968-05-5	PCB-54	U	373	373	pg/L	373
74338-24-2	PCB-55	U	373	373	pg/L	373
41464-43-1	PCB-56		26100	26100	pg/L	373
70424-67-8	PCB-57	U	373	373	pg/L	373
41464-49-7	PCB-58	U	747	747	pg/L	747
PCB-59/62/75	PCB-59/62/75	C	2690	2680	pg/L	1120
33025-41-1	PCB-60		18700	18700	pg/L	747
PCB-61-76	PCB-61/76/70/74	C	105000	105000	pg/L	1490
74472-34-7	PCB-63		1490	1480	pg/L	373
52663-58-8	PCB-64		16000	16000	pg/L	373
32598-10-0	PCB-66		43900	43900	pg/L	373
73575-53-8	PCB-67		1310	1300	pg/L	373
73575-52-7	PCB-68	U	373	373	pg/L	373
41464-42-0	PCB-72	U	373	373	pg/L	373
74338-23-1	PCB-73	U	373	373	pg/L	373
32598-13-3	PCB-77		11200	11200	pg/L	373
70362-49-1	PCB-78	U	373	373	pg/L	373
41464-48-6	PCB-79		1270	1260	pg/L	373
33284-52-5	PCB-80	U	373	373	pg/L	373

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39423  
**Batch ID:** 24147  
**Run Date:** 08/17/2013 03:04  
**Data File:** c16aug13a-11  
**Prep Batch:** 24144  
**Prep Date:** 13-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:22  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A HS  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 267.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 5  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81		384	378	pg/L	373
52663-62-4	PCB-82		15200	15200	pg/L	373
60145-20-2	PCB-83		6250	6240	pg/L	373
52663-60-2	PCB-84		25400	25400	pg/L	933
PCB-85-117	PCB-117/116/85	C	40000	40000	pg/L	1120
PCB-86-125	PCB-86/87/97/109/119/125	C	115000	115000	pg/L	2240
PCB-88/91	PCB-88/91	C	16500	16500	pg/L	747
73575-57-2	PCB-89		679	673	pg/L	373
PCB-90-113	PCB-113/90/101	C	164000	164000	pg/L	1120
52663-61-3	PCB-92		25700	25700	pg/L	373
PCB-93/100	PCB-93/100	CU	747	747	pg/L	747
73575-55-0	PCB-94	U	933	933	pg/L	933
38379-99-6	PCB-95		78600	78600	pg/L	373
73575-54-9	PCB-96	U	373	373	pg/L	373
PCB-98/102	PCB-102/98	C	2300	2290	pg/L	747
38380-01-7	PCB-99		99900	99900	pg/L	747
60145-21-3	PCB-103	U	373	373	pg/L	373
56558-16-8	PCB-104	U	373	373	pg/L	373
32598-14-4	PCB-105		114000	114000	pg/L	373
70424-69-0	PCB-106	U	933	933	pg/L	933
70424-68-9	PCB-107		15400	15400	pg/L	933
PCB-108/124	PCB-108/124	C	10800	10800	pg/L	747
PCB-110/115	PCB-110/115	CU	747	747	pg/L	747
39635-32-0	PCB-111	U	373	373	pg/L	373
74472-36-9	PCB-112	U	373	373	pg/L	373
74472-37-0	PCB-114		4130	4130	pg/L	933
31508-00-6	PCB-118		220000	220000	pg/L	747
68194-12-7	PCB-120	U	376	373	pg/L	373
56558-18-0	PCB-121	U	933	933	pg/L	933
76842-07-4	PCB-122		2260	2260	pg/L	373
65510-44-3	PCB-123		3920	3920	pg/L	933
57465-28-8	PCB-126		2390	2380	pg/L	373

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39423  
**Batch ID:** 24147  
**Run Date:** 08/17/2013 03:04  
**Data File:** c16aug13a-11  
**Prep Batch:** 24144  
**Prep Date:** 13-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:22  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A HS  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 267.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 5  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	933	933	pg/L	933
PCB-128/166	PCB-128/166	C	69400	69400	pg/L	747
PCB-129-163	PCB-138/163/129	C	357000	357000	pg/L	1120
52663-66-8	PCB-130		20500	20500	pg/L	933
61798-70-7	PCB-131		3100	3100	pg/L	933
38380-05-1	PCB-132		112000	112000	pg/L	373
35694-04-3	PCB-133		2970	2960	pg/L	373
52704-70-8	PCB-134		12100	12100	pg/L	373
PCB-135/151	PCB-151/135	C	53300	53300	pg/L	747
38411-22-2	PCB-136		15600	15600	pg/L	373
35694-06-5	PCB-137		24500	24500	pg/L	933
PCB-139/140	PCB-139/140	C	5050	5050	pg/L	747
52712-04-6	PCB-141		38800	38800	pg/L	373
41411-61-4	PCB-142	U	373	373	pg/L	373
68194-15-0	PCB-143		695	689	pg/L	373
68194-14-9	PCB-144		5950	5940	pg/L	373
74472-40-5	PCB-145	U	373	373	pg/L	373
51908-16-8	PCB-146		33700	33700	pg/L	373
PCB-147/149	PCB-147/149	C	173000	173000	pg/L	747
74472-41-6	PCB-148	U	373	373	pg/L	373
68194-08-1	PCB-150	U	373	373	pg/L	373
68194-09-2	PCB-152	U	373	373	pg/L	373
PCB-153/168	PCB-153/168	C	228000	228000	pg/L	747
60145-22-4	PCB-154		1460	1450	pg/L	373
33979-03-2	PCB-155	U	373	373	pg/L	373
PCB-156/157	PCB-156/157	C	47300	47300	pg/L	747
74472-42-7	PCB-158		32500	32500	pg/L	373
39635-35-3	PCB-159	U	373	373	pg/L	373
41411-62-5	PCB-160	U	933	933	pg/L	933
74472-43-8	PCB-161	U	373	373	pg/L	373
39635-34-2	PCB-162		2740	2730	pg/L	373
74472-45-0	PCB-164		21000	21000	pg/L	373

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39423  
**Batch ID:** 24147  
**Run Date:** 08/17/2013 03:04  
**Data File:** c16aug13a-11  
**Prep Batch:** 24144  
**Prep Date:** 13-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:22  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A HS  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 267.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 5  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	373	373	pg/L	373
52663-72-6	PCB-167		17700	17700	pg/L	373
32774-16-6	PCB-169	U	373	373	pg/L	373
35065-30-6	PCB-170		38400	38400	pg/L	373
PCB-171/173	PCB-173/171	C	10300	10300	pg/L	747
52663-74-8	PCB-172		6300	6290	pg/L	373
38411-25-5	PCB-174		33500	33400	pg/L	373
40186-70-7	PCB-175		1150	1150	pg/L	373
52663-65-7	PCB-176		2900	2900	pg/L	373
52663-70-4	PCB-177		18200	18200	pg/L	373
52663-67-9	PCB-178		5540	5540	pg/L	373
52663-64-6	PCB-179		9580	9580	pg/L	373
PCB-180/193	PCB-193/180	C	75400	75400	pg/L	747
74472-47-2	PCB-181		950	946	pg/L	373
60145-23-5	PCB-182	U	373	373	pg/L	373
PCB-183/185	PCB-183/185	C	22600	22600	pg/L	747
74472-48-3	PCB-184	U	373	373	pg/L	373
74472-49-4	PCB-186	U	373	373	pg/L	373
52663-68-0	PCB-187		47800	47800	pg/L	747
74487-85-7	PCB-188	U	373	373	pg/L	373
39635-31-9	PCB-189		1890	1890	pg/L	373
41411-64-7	PCB-190		7770	7770	pg/L	373
74472-50-7	PCB-191		1380	1370	pg/L	373
74472-51-8	PCB-192	U	373	373	pg/L	373
35694-08-7	PCB-194		14200	14200	pg/L	373
52663-78-2	PCB-195		5560	5560	pg/L	373
42740-50-1	PCB-196		6890	6890	pg/L	373
PCB-197/200	PCB-197/200	C	2640	2640	pg/L	747
PCB-198/199	PCB-198/199	C	18300	18200	pg/L	747
40186-71-8	PCB-201		1630	1630	pg/L	373
2136-99-4	PCB-202		2950	2940	pg/L	373
52663-76-0	PCB-203		14000	14000	pg/L	373

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1431  
**Lab Sample ID:** 5137002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39423  
**Batch ID:** 24147  
**Run Date:** 08/17/2013 03:04  
**Data File:** c16aug13a-11  
**Prep Batch:** 24144  
**Prep Date:** 13-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:22  
**Date Received:** 08/01/2013 10:15  
  
**Method:** EPA Method 1668A HS  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 267.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 5  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	373	373	pg/L	373
74472-53-0	PCB-205		859	857	pg/L	373
40186-72-9	PCB-206		5400	5400	pg/L	373
52663-79-3	PCB-207		690	688	pg/L	373
52663-77-1	PCB-208		1220	1220	pg/L	373
2051-24-3	PCB-209	U	747	747	pg/L	747
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		114000	114000	pg/L	
26914-33-0	Total Tetra PCBs		349000	349000	pg/L	
25429-29-2	Total Penta PCBs		963000	962000	pg/L	
26601-64-9	Total Hexa PCBs		1280000	1280000	pg/L	
28655-71-2	Total Hepta PCBs		284000	284000	pg/L	
55722-26-4	Total Octa PCBs		67000	66900	pg/L	
53742-07-7	Total Nona PCBs		7310	7310	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		3060000	3060000	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1360	7470	pg/L	18.2	(15%-150%)
13C-3-MoCB		1670	7470	pg/L	22.4	(15%-150%)
13C-4-DiCB		1670	7470	pg/L	22.4 *	(25%-150%)
13C-15-DiCB		2680	7470	pg/L	35.9	(25%-150%)
13C-19-TrCB		2390	7470	pg/L	32.0	(25%-150%)
13C-37-TrCB		3710	7470	pg/L	49.7	(25%-150%)
13C-54-TeCB		2850	7470	pg/L	38.1	(25%-150%)
13C-77-TeCB		4620	7470	pg/L	61.8	(25%-150%)
13C-81-TeCB		4590	7470	pg/L	61.5	(25%-150%)
13C-104-PeCB		3230	7470	pg/L	43.2	(25%-150%)
13C-105-PeCB		4190	7470	pg/L	56.1	(25%-150%)
13C-114-PeCB		4030	7470	pg/L	53.9	(25%-150%)
13C-118-PeCB		4320	7470	pg/L	57.8	(25%-150%)
13C-123-PeCB		4510	7470	pg/L	60.4	(25%-150%)
13C-126-PeCB		4540	7470	pg/L	60.9	(25%-150%)
13C-155-HxCB		3770	7470	pg/L	50.4	(25%-150%)
13C-156-HxCB	C	8050	14900	pg/L	53.9	(25%-150%)
13C-157-HxCB	C156L					
13C-167-HxCB		3880	7470	pg/L	52.0	(25%-150%)
13C-169-HxCB		4530	7470	pg/L	60.7	(25%-150%)
13C-188-HpCB		3990	7470	pg/L	53.4	(25%-150%)
13C-189-HpCB		4250	7470	pg/L	56.9	(25%-150%)
13C-202-OcCB		4310	7470	pg/L	57.7	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1431	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5137002	<b>Date Collected:</b> 07/25/2013 22:22	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 08/01/2013 10:15	
<b>Client ID:</b> WT_IPC-13-39423		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24147	<b>Method:</b> EPA Method 1668A HS	
<b>Run Date:</b> 08/17/2013 03:04	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c16aug13a-11		<b>Dilution:</b> 5
<b>Prep Batch:</b> 24144	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 13-AUG-13	<b>Aliquot:</b> 267.9 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-205-OcCB			5000	7470	pg/L	67.0      (25%-150%)
13C-206-NoCB			5130	7470	pg/L	68.7      (25%-150%)
13C-208-NoCB			4950	7470	pg/L	66.3      (25%-150%)
13C-209-DeCB			5590	7470	pg/L	74.9      (25%-150%)
13C-28-TrCB			6640	7470	pg/L	89.0      (30%-135%)
13C-111-PeCB			7240	7470	pg/L	97.0      (30%-135%)
13C-178-HpCB			6900	7470	pg/L	92.4      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.571	0.321	1.21	
3-Chlorobiphenyl (2)	pg/L	0.551	0.344	1.24	
4-Chlorobiphenyl (3)	pg/L	0.604	0.31	1.22	
2,2'-Dichlorobiphenyl (4)	pg/L	4.26	2.62	9.5	
2,3-Dichlorobiphenyl (5)	pg/L	3.78	2.51	8.8	
2,3'-Dichlorobiphenyl (6)	pg/L	3	1.94	6.89	
2,4-Dichlorobiphenyl (7)	pg/L	3.27	2.1	7.47	
2,4'-Dichlorobiphenyl (8)	pg/L	3.34	2.01	7.36	
2,5-Dichlorobiphenyl (9)	pg/L	3.1	2.15	7.41	
2,6-Dichlorobiphenyl (10)	pg/L	2.47	1.51	5.48	
3,3'-Dichlorobiphenyl (11)	pg/L	4.01	2.01	8.04	
3,4-Dichlorobiphenyl (12)	pg/L	4.26	2.2	8.67	
3,5-Dichlorobiphenyl (14)	pg/L	3.39	2.14	7.68	
4,4'-Dichlorobiphenyl (15)	pg/L	4.31	2.73	9.77	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.634	0.253	1.14	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.554	0.212	0.978	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.42	0.19	0.799	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.538	0.212	0.962	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.386	0.147	0.681	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.427	0.132	0.692	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.53	0.254	1.04	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.416	0.188	0.792	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.411	0.195	0.801	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.369	0.141	0.651	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.457	0.146	0.749	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.352	0.154	0.661	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.355	0.134	0.624	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.375	0.131	0.638	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.378	0.151	0.681	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.486	0.181	0.847	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.433	0.165	0.763	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.694	0.401	1.5	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.46	0.172	0.803	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.466	0.171	0.808	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.704	0.35	1.4	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.855	0.502	1.86	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.786	0.409	1.6	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.837	0.446	1.73	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.73	0.377	1.48	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.644	0.329	1.3	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.484	0.26	1	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.761	0.384	1.53	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.656	0.346	1.35	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.463	0.208	0.88	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.723	0.336	1.4	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.316	0.196	0.707	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.605	0.289	1.18	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.798	0.362	1.52	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.518	0.269	1.06	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.568	0.289	1.15	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.614	0.328	1.27	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.632	0.231	1.09	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.677	0.307	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.495	0.245	0.986	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.585	0.28	1.14	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.526	0.263	1.05	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.44	0.213	0.866	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.586	0.231	1.05	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.521	0.281	1.08	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.562	0.302	1.17	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.699	0.325	1.35	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.606	0.26	1.13	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.497	0.22	0.937	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.507	0.236	0.979	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.658	0.299	1.26	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.886	0.378	1.64	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.901	0.396	1.69	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.876	0.415	1.71	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.764	0.289	1.34	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.825	0.319	1.46	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.963	0.41	1.78	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.804	0.371	1.55	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.788	0.312	1.41	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.792	0.359	1.51	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.701	0.387	1.48	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.916	0.525	1.97	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.777	0.323	1.42	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.415	0.259	0.934	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.907	0.4	1.71	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.805	0.455	1.72	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.713	0.335	1.38	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.467	0.278	1.02	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.971	0.4	1.77	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.777	0.375	1.53	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.728	0.334	1.39	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.822	0.396	1.61	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.826	0.373	1.57	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.645	0.343	1.33	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.601	0.278	1.16	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.938	0.467	1.87	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	1.06	0.407	1.88	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.564	0.244	1.05	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.653	0.361	1.37	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.835	0.385	1.61	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.85	0.424	1.7	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	1.03	0.495	2.02	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.8	0.366	1.53	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.598	0.268	1.13	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.711	0.301	1.31	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.729	0.32	1.37	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.779	0.348	1.47	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.786	0.428	1.64	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.681	0.298	1.28	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.817	0.375	1.57	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.521	0.224	0.968	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.345	0.178	0.701	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.737	0.418	1.57	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.663	0.308	1.28	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.679	0.318	1.31	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.714	0.319	1.35	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.655	0.294	1.24	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.44	0.244	0.928	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.382	0.236	0.854	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.605	0.263	1.13	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.753	0.354	1.46	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.436	0.222	0.879	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.371	0.231	0.833	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.328	0.179	0.687	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.627	0.249	1.12	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.4	0.215	0.83	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.343	0.179	0.702	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.675	0.259	1.19	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.49	0.212	0.913	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.436	0.192	0.821	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.625	0.356	1.34	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.49	0.23	0.95	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.463	0.214	0.891	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.515	0.23	0.976	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.606	0.323	1.25	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.472	0.212	0.897	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.545	0.252	1.05	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.587	0.222	1.03	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.61	0.201	1.01	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.556	0.223	1	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.56	0.195	0.95	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.476	0.212	0.9	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.368	0.164	0.696	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.548	0.219	0.985	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.501	0.222	0.945	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.367	0.154	0.675	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.869	0.672	2.21	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.56	0.247	1.05	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.495	0.22	0.936	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.581	0.206	0.993	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.376	0.197	0.77	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.418	0.214	0.846	
2,2',3,4',5,5',6-Heptachlorobiphenyl (187)	pg/L	0.562	0.227	1.02	
2,2',3,4',5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.416	0.184	0.785	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.508	0.25	1.01	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.436	0.175	0.785	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.414	0.168	0.749	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.485	0.221	0.927	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.441	0.223	0.887	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.464	0.215	0.894	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.458	0.228	0.914	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.412	0.199	0.809	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.551	0.251	1.05	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.333	0.167	0.667	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.395	0.189	0.772	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.484	0.284	1.05	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.337	0.165	0.666	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.411	0.189	0.789	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.532	0.311	1.15	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.384	0.229	0.842	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.446	0.275	0.995	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.443	0.304	1.05	

*1668A PCBs with High Solids Prep for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	7.55	4.27	16.1	
3-Chlorobiphenyl (2)	pg/L	9.06	6.27	21.6	*
4-Chlorobiphenyl (3)	pg/L	6.86	5.16	17.2	
2,2'-Dichlorobiphenyl (4)	pg/L	31.1	54.3	140	*
2,3-Dichlorobiphenyl (5)	pg/L	18.8	34.6	88	*
2,3'-Dichlorobiphenyl (6)	pg/L	14.2	25.8	65.8	*
2,4-Dichlorobiphenyl (7)	pg/L	15.2	28.2	71.6	*
2,4'-Dichlorobiphenyl (8)	pg/L	13	24	61.1	*
2,5-Dichlorobiphenyl (9)	pg/L	16.4	28.4	73.2	*
2,6-Dichlorobiphenyl (10)	pg/L	13.6	22.8	59.2	*
3,3'-Dichlorobiphenyl (11)	pg/L	30	48.5	127	
3,4-Dichlorobiphenyl (12)	pg/L	17.5	32.8	83	*
3,5-Dichlorobiphenyl (14)	pg/L	16.2	29.6	75.3	*
4,4'-Dichlorobiphenyl (15)	pg/L	16.2	31.1	78.5	*

# Blank Population Summary

*1668A PCBs with High Solids Prep for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3-Trichlorobiphenyl (16)	pg/L	3.26	1.74	6.74	
2,2',4-Trichlorobiphenyl (17)	pg/L	3.8	2.25	8.3	
2,2',5-Trichlorobiphenyl (18)	pg/L	2.62	1.45	5.53	
2,2',6-Trichlorobiphenyl (19)	pg/L	4.94	3.16	11.3	
2,3,3'-Trichlorobiphenyl (20)	pg/L	2.32	1.28	4.88	
2,3,4-Trichlorobiphenyl (21)	pg/L	2.1	1.16	4.42	
2,3,4'-Trichlorobiphenyl (22)	pg/L	2.27	1.29	4.85	
2,3,5-Trichlorobiphenyl (23)	pg/L	2.17	1.18	4.53	
2,3,6-Trichlorobiphenyl (24)	pg/L	2.37	1.37	5.11	
2,3',4-Trichlorobiphenyl (25)	pg/L	1.86	1.02	3.9	
2,3',5-Trichlorobiphenyl (26)	pg/L	2.56	1.81	6.18	
2,3',6-Trichlorobiphenyl (27)	pg/L	2.35	1.28	4.91	
2,4,5-Trichlorobiphenyl (31)	pg/L	5.11	10.5	26	
2,4',6-Trichlorobiphenyl (32)	pg/L	2.5	2.13	6.76	
2',3,5-Trichlorobiphenyl (34)	pg/L	2.37	1.27	4.9	
3,3',4-Trichlorobiphenyl (35)	pg/L	2.59	1.17	4.93	
3,3',5-Trichlorobiphenyl (36)	pg/L	2.46	1.07	4.61	
3,4,4'-Trichlorobiphenyl (37)	pg/L	2.36	1.01	4.39	
3,4,5-Trichlorobiphenyl (38)	pg/L	2.52	1.11	4.74	
3,4',5-Trichlorobiphenyl (39)	pg/L	2.35	1.07	4.49	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	3.86	2.34	8.53	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	5.21	3.04	11.3	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	3.79	2.2	8.18	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	4.84	2.82	10.5	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	3.93	2.37	8.67	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	1.98	1.32	4.63	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	2.22	1.33	4.88	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	4.1	2.45	9	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	3.45	2	7.45	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	1.62	0.776	3.17	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	4.21	2.44	9.09	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	1.66	0.896	3.45	
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	2.82	1.79	6.41	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	3.77	3.68	11.1	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	2.84	1.69	6.22	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	2.83	1.73	6.3	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	3.22	1.93	7.07	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	3.22	2.74	8.7	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	2.82	1.72	6.26	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	2.73	1.67	6.07	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	2.85	1.66	6.17	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	2.79	1.74	6.26	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	2.74	1.69	6.12	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	2.62	1.58	5.78	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	2.73	1.62	5.96	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	3.15	1.95	7.05	



# Blank Population Summary

*1668A PCBs with High Solids Prep for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	3.35	2.48	8.32	
3,3',4,5'-Tetrachlorobiphenyl (78)	pg/L	2.83	1.77	6.36	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	2.47	1.53	5.54	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	2.8	1.7	6.21	
3,4,4',5'-Tetrachlorobiphenyl (81)	pg/L	2.67	1.7	6.07	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	3.29	1.51	6.31	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	3.59	1.69	6.97	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	3.75	1.89	7.54	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	2.56	1.23	5.03	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	2.59	1.23	5.05	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	3.09	1.44	5.98	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	3.2	1.46	6.11	
2,2',3,4,5-Pentachlorobiphenyl (90)	pg/L	3.52	3.37	10.3	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	3.04	1.38	5.8	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	3.12	1.61	6.33	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	3.21	1.52	6.25	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	3.45	2.38	8.22	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	1.19	0.68	2.55	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	2.96	1.43	5.82	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	2.85	1.51	5.87	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	2.92	1.32	5.57	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	1.5	0.969	3.43	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	2.51	1.43	5.37	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	2.36	1.26	4.89	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	2.59	1.43	5.45	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	2.46	1.35	5.17	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	2.21	1.07	4.35	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	2.15	1.06	4.26	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	2.4	1.23	4.87	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	2.63	1.5	5.62	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	2.43	1.31	5.06	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	2.09	1	4.09	
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	2.25	1.07	4.38	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	2.58	1.39	5.37	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	2.46	1.33	5.11	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	2.66	1.66	5.97	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	2.34	1.32	4.99	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	2.43	1.44	5.31	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	2.51	1.34	5.19	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	3.06	1.62	6.3	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	3.13	1.62	6.36	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	3.32	2.06	7.44	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	2.97	1.57	6.11	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	3.46	1.85	7.16	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	1.8	0.866	3.53	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	1.38	0.65	2.68	

# Blank Population Summary

*1668A PCBs with High Solids Prep for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	2.81	1.48	5.76	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	2.88	1.44	5.76	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	3.01	1.55	6.1	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	3.09	1.58	6.25	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	2.85	1.39	5.63	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	1.75	0.84	3.43	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	1.41	0.691	2.79	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	2.87	1.47	5.8	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	2.9	1.48	5.87	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	1.75	0.819	3.39	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	1.35	0.663	2.67	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	1.3	0.604	2.51	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	2.22	1.16	4.54	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	1.79	0.904	3.59	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	1.29	0.638	2.57	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	2.34	1.99	6.32	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	2.12	1.08	4.28	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	1.5	0.666	2.83	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	2.15	1.18	4.51	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	2.07	1.07	4.2	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	1.46	0.682	2.82	
2,3,3',4',5,6-Hexachlorobiphenyl (164)	pg/L	2.28	1.18	4.63	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	2.31	1.21	4.74	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	1.55	0.713	2.97	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	1.55	0.884	3.32	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	2.02	0.976	3.97	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	2.19	1.09	4.37	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	2.04	0.942	3.92	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	2.6	1.79	6.19	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	1.66	0.957	3.58	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	1.32	0.735	2.79	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	2.21	1.3	4.82	
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	1.76	0.991	3.74	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	1.32	0.736	2.79	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	1.7	0.769	3.24	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	1.88	0.883	3.64	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	1.8	0.959	3.72	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	1.87	0.873	3.61	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	1.24	0.673	2.59	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	1.35	0.758	2.86	
2,2',3,4',5,5',6-Heptachlorobiphenyl (187)	pg/L	1.56	0.896	3.35	
2,2',3,4',5,6,6'-Heptachlorobiphenyl (188)	pg/L	1.45	0.853	3.16	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	1.43	0.818	3.06	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	1.53	0.747	3.02	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	1.48	0.69	2.86	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	1.59	0.751	3.09	

# Blank Population Summary

*1668A PCBs with High Solids Prep for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	1.45	0.717	2.88	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (195)	pg/L	1.61	0.889	3.39	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	1.44	0.871	3.19	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	1.09	0.647	2.38	
2,2',3,3',4,5,5',6'-Octachlorobiphenyl (198)	pg/L	1.91	2.09	6.08	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	1.1	0.641	2.38	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	1.28	0.773	2.83	
2,2',3,4,4',5,5',6'-Octachlorobiphenyl (203)	pg/L	1.53	1.31	4.16	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	1.12	0.635	2.39	
2,3,3',4,4',5,5',6'-Octachlorobiphenyl (205)	pg/L	1.18	0.663	2.5	
2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl (206)	pg/L	1.74	0.907	3.55	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	1.31	0.669	2.64	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	1.47	0.789	3.05	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	1.41	0.772	2.95	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1460  
**Lab Sample ID:** 5140001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32209  
**Batch ID:** 24114  
**Run Date:** 08/15/2013 17:07  
**Data File:** c14aug13a\_3-8  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:26  
**Date Received:** 08/02/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	215	215	pg/L	215
2051-61-8	PCB-2	U	215	215	pg/L	215
2051-62-9	PCB-3	U	215	215	pg/L	215
13029-08-8	PCB-4	U	215	215	pg/L	215
16605-91-7	PCB-5	U	215	215	pg/L	215
25569-80-6	PCB-6	U	215	215	pg/L	215
33284-50-3	PCB-7	U	215	215	pg/L	215
34883-43-7	PCB-8	U	215	215	pg/L	215
34883-39-1	PCB-9	U	215	215	pg/L	215
33146-45-1	PCB-10	U	215	215	pg/L	215
2050-67-1	PCB-11	U	1080	1080	pg/L	1080
PCB-12/13	PCB-13/12	CU	431	431	pg/L	431
34883-41-5	PCB-14	U	215	215	pg/L	215
2050-68-2	PCB-15	U	215	215	pg/L	215
38444-78-9	PCB-16	U	215	215	pg/L	215
37680-66-3	PCB-17	U	215	215	pg/L	215
PCB-18/30	PCB-18/30	CU	431	431	pg/L	431
38444-73-4	PCB-19	U	215	215	pg/L	215
PCB-20/28	PCB-20/28	CU	431	431	pg/L	431
PCB-21/33	PCB-21/33	CU	431	431	pg/L	431
38444-85-8	PCB-22	U	215	215	pg/L	215
55720-44-0	PCB-23	U	215	215	pg/L	215
55702-45-9	PCB-24	U	215	215	pg/L	215
55712-37-3	PCB-25	U	215	215	pg/L	215
PCB-26/29	PCB-26/29	CU	431	431	pg/L	431
38444-76-7	PCB-27	U	215	215	pg/L	215
16606-02-3	PCB-31	U	215	215	pg/L	215
38444-77-8	PCB-32	U	215	215	pg/L	215
37680-68-5	PCB-34	U	215	215	pg/L	215
37680-69-6	PCB-35	U	215	215	pg/L	215
38444-87-0	PCB-36	U	215	215	pg/L	215
38444-90-5	PCB-37	U	215	215	pg/L	215

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 7

**SDG Number:** 2013-1460  
**Lab Sample ID:** 5140001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32209  
**Batch ID:** 24114  
**Run Date:** 08/15/2013 17:07  
**Data File:** c14aug13a\_3-8  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:26  
**Date Received:** 08/02/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	215	215	pg/L	215
38444-88-1	PCB-39	U	215	215	pg/L	215
PCB-40/71	PCB-40/71	CU	431	431	pg/L	431
52663-59-9	PCB-41	U	215	215	pg/L	215
36559-22-5	PCB-42	U	215	215	pg/L	215
70362-46-8	PCB-43	U	215	215	pg/L	215
PCB-44/47/65	PCB-44/65/47	CU	646	646	pg/L	646
PCB-45/51	PCB-45/51	CU	431	431	pg/L	431
41464-47-5	PCB-46	U	215	215	pg/L	215
70362-47-9	PCB-48	U	215	215	pg/L	215
PCB-49/69	PCB-69/49	CU	431	431	pg/L	431
PCB-50/53	PCB-50/53	CU	431	431	pg/L	431
35693-99-3	PCB-52	U	215	215	pg/L	215
15968-05-5	PCB-54	U	215	215	pg/L	215
74338-24-2	PCB-55	U	215	215	pg/L	215
41464-43-1	PCB-56	U	215	215	pg/L	215
70424-67-8	PCB-57	U	215	215	pg/L	215
41464-49-7	PCB-58	U	215	215	pg/L	215
PCB-59/62/75	PCB-59/62/75	CU	646	646	pg/L	646
33025-41-1	PCB-60	U	215	215	pg/L	215
PCB-61-76	PCB-61/76/70/74	CU	862	862	pg/L	862
74472-34-7	PCB-63	U	215	215	pg/L	215
52663-58-8	PCB-64	U	215	215	pg/L	215
32598-10-0	PCB-66	U	215	215	pg/L	215
73575-53-8	PCB-67	U	215	215	pg/L	215
73575-52-7	PCB-68	U	215	215	pg/L	215
41464-42-0	PCB-72	U	215	215	pg/L	215
74338-23-1	PCB-73	U	215	215	pg/L	215
32598-13-3	PCB-77	U	215	215	pg/L	215
70362-49-1	PCB-78	U	215	215	pg/L	215
41464-48-6	PCB-79	U	215	215	pg/L	215
33284-52-5	PCB-80	U	215	215	pg/L	215

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 3 of 7

SDG Number: 2013-1460  
 Lab Sample ID: 5140001  
 Client Sample: 1668A Water  
 Client ID: WT\_IPC-13-32209  
 Batch ID: 24114  
 Run Date: 08/15/2013 17:07  
 Data File: c14aug13a\_3-8  
 Prep Batch: 24111  
 Prep Date: 08-AUG-13

Client: LANL001  
 Date Collected: 07/25/2013 22:26  
 Date Received: 08/02/2013 10:00  
 Method: EPA Method 1668A  
 Analyst: CLP  
 Prep Method: SW846 3520C  
 Aliquot: 928.2 mL

Project: LANL00112  
 Matrix: WATER  
 Prep Basis: As Received  
 Instrument: HRP791  
 Dilution: 10  
 Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	215	215	pg/L	215
52663-62-4	PCB-82	U	215	215	pg/L	215
60145-20-2	PCB-83	U	215	215	pg/L	215
52663-60-2	PCB-84	U	215	215	pg/L	215
PCB-85-117	PCB-117/116/85	CU	646	646	pg/L	646
PCB-86-125	PCB-86/87/97/109/119/125	CU	1290	1290	pg/L	1290
PCB-88/91	PCB-88/91	CU	431	431	pg/L	431
73575-57-2	PCB-89	U	215	215	pg/L	215
PCB-90-113	PCB-113/90/101	CU	646	646	pg/L	646
52663-61-3	PCB-92	U	215	215	pg/L	215
PCB-93/100	PCB-93/100	CU	431	431	pg/L	431
73575-55-0	PCB-94	U	215	215	pg/L	215
38379-99-6	PCB-95	U	215	215	pg/L	215
73575-54-9	PCB-96	U	215	215	pg/L	215
PCB-98/102	PCB-102/98	CU	431	431	pg/L	431
38380-01-7	PCB-99	U	215	215	pg/L	215
60145-21-3	PCB-103	U	215	215	pg/L	215
56558-16-8	PCB-104	U	215	215	pg/L	215
32598-14-4	PCB-105	U	215	215	pg/L	215
70424-69-0	PCB-106	U	215	215	pg/L	215
70424-68-9	PCB-107	U	215	215	pg/L	215
PCB-108/124	PCB-108/124	CU	431	431	pg/L	431
PCB-110/115	PCB-110/115	CU	431	431	pg/L	431
39635-32-0	PCB-111	U	215	215	pg/L	215
74472-36-9	PCB-112	U	215	215	pg/L	215
74472-37-0	PCB-114	U	215	215	pg/L	215
31508-00-6	PCB-118		269	267	pg/L	215
68194-12-7	PCB-120	U	215	215	pg/L	215
56558-18-0	PCB-121	U	215	215	pg/L	215
76842-07-4	PCB-122	U	215	215	pg/L	215
65510-44-3	PCB-123	U	215	215	pg/L	215
57465-28-8	PCB-126	U	215	215	pg/L	215

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1460  
**Lab Sample ID:** 5140001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32209  
**Batch ID:** 24114  
**Run Date:** 08/15/2013 17:07  
**Data File:** c14aug13a\_3-8  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:26  
**Date Received:** 08/02/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	215	215	pg/L	215
PCB-128/166	PCB-128/166	CU	431	431	pg/L	431
PCB-129-163	PCB-138/163/129	CU	646	646	pg/L	646
52663-66-8	PCB-130	U	215	215	pg/L	215
61798-70-7	PCB-131	U	215	215	pg/L	215
38380-05-1	PCB-132	U	215	215	pg/L	215
35694-04-3	PCB-133	U	215	215	pg/L	215
52704-70-8	PCB-134	U	215	215	pg/L	215
PCB-135/151	PCB-151/135	CU	431	431	pg/L	431
38411-22-2	PCB-136	U	215	215	pg/L	215
35694-06-5	PCB-137	U	215	215	pg/L	215
PCB-139/140	PCB-139/140	CU	431	431	pg/L	431
52712-04-6	PCB-141	U	215	215	pg/L	215
41411-61-4	PCB-142	U	215	215	pg/L	215
68194-15-0	PCB-143	U	215	215	pg/L	215
68194-14-9	PCB-144	U	215	215	pg/L	215
74472-40-5	PCB-145	U	215	215	pg/L	215
51908-16-8	PCB-146	U	215	215	pg/L	215
PCB-147/149	PCB-147/149	CU	431	431	pg/L	431
74472-41-6	PCB-148	U	215	215	pg/L	215
68194-08-1	PCB-150	U	215	215	pg/L	215
68194-09-2	PCB-152	U	215	215	pg/L	215
PCB-153/168	PCB-153/168	CU	431	431	pg/L	431
60145-22-4	PCB-154	U	215	215	pg/L	215
33979-03-2	PCB-155	U	215	215	pg/L	215
PCB-156/157	PCB-156/157	CU	431	431	pg/L	431
74472-42-7	PCB-158	U	215	215	pg/L	215
39635-35-3	PCB-159	U	215	215	pg/L	215
41411-62-5	PCB-160	U	215	215	pg/L	215
74472-43-8	PCB-161	U	215	215	pg/L	215
39635-34-2	PCB-162	U	215	215	pg/L	215
74472-45-0	PCB-164	U	215	215	pg/L	215

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 5 of 7

**SDG Number:** 2013-1460  
**Lab Sample ID:** 5140001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32209  
**Batch ID:** 24114  
**Run Date:** 08/15/2013 17:07  
**Data File:** c14aug13a\_3-8  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:26  
**Date Received:** 08/02/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	215	215	pg/L	215
52663-72-6	PCB-167	U	215	215	pg/L	215
32774-16-6	PCB-169	U	215	215	pg/L	215
35065-30-6	PCB-170	U	215	215	pg/L	215
PCB-171/173	PCB-173/171	CU	431	431	pg/L	431
52663-74-8	PCB-172	U	215	215	pg/L	215
38411-25-5	PCB-174	U	215	215	pg/L	215
40186-70-7	PCB-175	U	215	215	pg/L	215
52663-65-7	PCB-176	U	215	215	pg/L	215
52663-70-4	PCB-177	U	215	215	pg/L	215
52663-67-9	PCB-178	U	215	215	pg/L	215
52663-64-6	PCB-179	U	215	215	pg/L	215
PCB-180/193	PCB-193/180	CU	431	431	pg/L	431
74472-47-2	PCB-181	U	215	215	pg/L	215
60145-23-5	PCB-182	U	215	215	pg/L	215
PCB-183/185	PCB-183/185	CU	431	431	pg/L	431
74472-48-3	PCB-184	U	215	215	pg/L	215
74472-49-4	PCB-186	U	215	215	pg/L	215
52663-68-0	PCB-187	U	215	215	pg/L	215
74487-85-7	PCB-188	U	215	215	pg/L	215
39635-31-9	PCB-189	U	215	215	pg/L	215
41411-64-7	PCB-190	U	215	215	pg/L	215
74472-50-7	PCB-191	U	215	215	pg/L	215
74472-51-8	PCB-192	U	215	215	pg/L	215
35694-08-7	PCB-194	U	215	215	pg/L	215
52663-78-2	PCB-195	U	215	215	pg/L	215
42740-50-1	PCB-196	U	215	215	pg/L	215
PCB-197/200	PCB-197/200	CU	431	431	pg/L	431
PCB-198/199	PCB-198/199	CU	431	431	pg/L	431
40186-71-8	PCB-201	U	215	215	pg/L	215
2136-99-4	PCB-202	U	215	215	pg/L	215
52663-76-0	PCB-203	U	215	215	pg/L	215

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1460  
**Lab Sample ID:** 5140001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32209  
**Batch ID:** 24114  
**Run Date:** 08/15/2013 17:07  
**Data File:** c14aug13a\_3-8  
**Prep Batch:** 24111  
**Prep Date:** 08-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:26  
**Date Received:** 08/02/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	215	215	pg/L	215
74472-53-0	PCB-205	U	215	215	pg/L	215
40186-72-9	PCB-206	U	215	215	pg/L	215
52663-79-3	PCB-207	U	215	215	pg/L	215
52663-77-1	PCB-208	U	215	215	pg/L	215
2051-24-3	PCB-209	U	215	215	pg/L	215
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs	U	0	0	pg/L	
25429-29-2	Total Penta PCBs		269	267	pg/L	
26601-64-9	Total Hexa PCBs	U	0	0	pg/L	
28655-71-2	Total Hepta PCBs	U	0	0	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		269	267	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1470	2150	pg/L	68.1	(15%-150%)
13C-3-MoCB		1750	2150	pg/L	81.4	(15%-150%)
13C-4-DiCB		2310	2150	pg/L	107	(25%-150%)
13C-15-DiCB		2020	2150	pg/L	93.7	(25%-150%)
13C-19-TrCB		2410	2150	pg/L	112	(25%-150%)
13C-37-TrCB		1910	2150	pg/L	88.5	(25%-150%)
13C-54-TeCB		2290	2150	pg/L	106	(25%-150%)
13C-77-TeCB		1860	2150	pg/L	86.2	(25%-150%)
13C-81-TeCB		1860	2150	pg/L	86.5	(25%-150%)
13C-104-PeCB		2430	2150	pg/L	113	(25%-150%)
13C-105-PeCB		1590	2150	pg/L	73.8	(25%-150%)
13C-114-PeCB		1590	2150	pg/L	73.9	(25%-150%)
13C-118-PeCB		1630	2150	pg/L	75.6	(25%-150%)
13C-123-PeCB		1770	2150	pg/L	82.1	(25%-150%)
13C-126-PeCB		1640	2150	pg/L	75.9	(25%-150%)
13C-155-HxCB		2400	2150	pg/L	112	(25%-150%)
13C-156-HxCB	C	3340	4310	pg/L	77.6	(25%-150%)
13C-167-HxCB		1610	2150	pg/L	74.7	(25%-150%)
13C-169-HxCB		1820	2150	pg/L	84.4	(25%-150%)
13C-188-HpCB		2220	2150	pg/L	103	(25%-150%)
13C-189-HpCB		1830	2150	pg/L	85.0	(25%-150%)
13C-202-OcCB		2290	2150	pg/L	106	(25%-150%)
13C-205-OcCB		2110	2150	pg/L	98.1	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 2013-1460	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5140001	<b>Date Collected:</b> 07/25/2013 22:26	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 08/02/2013 10:00	
<b>Client ID:</b> WT_IPC-13-32209		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24114	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/15/2013 17:07	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c14aug13a_3-8		<b>Dilution:</b> 10
<b>Prep Batch:</b> 24111	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 08-AUG-13	<b>Aliquot:</b> 928.2 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2400	2150	pg/L	112 (25%-150%)
13C-208-NoCB			2400	2150	pg/L	111 (25%-150%)
13C-209-DeCB			2920	2150	pg/L	135 (25%-150%)
13C-28-TrCB			2280	2150	pg/L	106 (30%-135%)
13C-111-PeCB			2240	2150	pg/L	104 (30%-135%)
13C-178-HpCB			2590	2150	pg/L	120 (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data
- U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.571	0.321	1.21	
3-Chlorobiphenyl (2)	pg/L	0.551	0.344	1.24	
4-Chlorobiphenyl (3)	pg/L	0.604	0.31	1.22	
2,2'-Dichlorobiphenyl (4)	pg/L	4.26	2.62	9.5	
2,3-Dichlorobiphenyl (5)	pg/L	3.78	2.51	8.8	
2,3'-Dichlorobiphenyl (6)	pg/L	3	1.94	6.89	
2,4-Dichlorobiphenyl (7)	pg/L	3.27	2.1	7.47	
2,4'-Dichlorobiphenyl (8)	pg/L	3.34	2.01	7.36	
2,5-Dichlorobiphenyl (9)	pg/L	3.1	2.15	7.41	
2,6-Dichlorobiphenyl (10)	pg/L	2.47	1.51	5.48	
3,3'-Dichlorobiphenyl (11)	pg/L	4.01	2.01	8.04	
3,4-Dichlorobiphenyl (12)	pg/L	4.26	2.2	8.67	
3,5-Dichlorobiphenyl (14)	pg/L	3.39	2.14	7.68	
4,4'-Dichlorobiphenyl (15)	pg/L	4.31	2.73	9.77	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.634	0.253	1.14	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.554	0.212	0.978	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.42	0.19	0.799	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.538	0.212	0.962	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.386	0.147	0.681	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.427	0.132	0.692	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.53	0.254	1.04	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.416	0.188	0.792	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.411	0.195	0.801	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.369	0.141	0.651	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.457	0.146	0.749	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.352	0.154	0.661	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.355	0.134	0.624	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.375	0.131	0.638	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.378	0.151	0.681	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.486	0.181	0.847	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.433	0.165	0.763	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.694	0.401	1.5	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.46	0.172	0.803	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.466	0.171	0.808	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.704	0.35	1.4	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.855	0.502	1.86	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.786	0.409	1.6	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.837	0.446	1.73	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.73	0.377	1.48	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.644	0.329	1.3	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.484	0.26	1	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.761	0.384	1.53	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.656	0.346	1.35	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.463	0.208	0.88	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.723	0.336	1.4	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.316	0.196	0.707	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.605	0.289	1.18	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.798	0.362	1.52	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.518	0.269	1.06	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.568	0.289	1.15	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.614	0.328	1.27	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.632	0.231	1.09	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.677	0.307	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.495	0.245	0.986	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.585	0.28	1.14	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.526	0.263	1.05	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.44	0.213	0.866	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.586	0.231	1.05	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.521	0.281	1.08	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.562	0.302	1.17	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.699	0.325	1.35	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.606	0.26	1.13	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.497	0.22	0.937	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.507	0.236	0.979	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.658	0.299	1.26	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.886	0.378	1.64	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.901	0.396	1.69	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.876	0.415	1.71	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.764	0.289	1.34	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.825	0.319	1.46	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.963	0.41	1.78	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.804	0.371	1.55	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.788	0.312	1.41	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.792	0.359	1.51	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.701	0.387	1.48	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.916	0.525	1.97	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.777	0.323	1.42	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.415	0.259	0.934	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.907	0.4	1.71	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.805	0.455	1.72	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.713	0.335	1.38	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.467	0.278	1.02	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.971	0.4	1.77	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.777	0.375	1.53	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.728	0.334	1.39	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.822	0.396	1.61	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.826	0.373	1.57	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.645	0.343	1.33	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.601	0.278	1.16	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.938	0.467	1.87	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	1.06	0.407	1.88	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.564	0.244	1.05	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.653	0.361	1.37	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.835	0.385	1.61	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.85	0.424	1.7	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	1.03	0.495	2.02	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.8	0.366	1.53	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.598	0.268	1.13	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.711	0.301	1.31	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.729	0.32	1.37	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.779	0.348	1.47	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.786	0.428	1.64	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.681	0.298	1.28	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.817	0.375	1.57	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.521	0.224	0.968	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.345	0.178	0.701	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.737	0.418	1.57	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.663	0.308	1.28	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.679	0.318	1.31	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.714	0.319	1.35	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.655	0.294	1.24	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.44	0.244	0.928	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.382	0.236	0.854	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.605	0.263	1.13	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.753	0.354	1.46	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.436	0.222	0.879	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.371	0.231	0.833	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.328	0.179	0.687	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.627	0.249	1.12	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.4	0.215	0.83	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.343	0.179	0.702	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.675	0.259	1.19	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.49	0.212	0.913	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.436	0.192	0.821	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.625	0.356	1.34	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.49	0.23	0.95	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.463	0.214	0.891	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.515	0.23	0.976	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.606	0.323	1.25	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.472	0.212	0.897	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.545	0.252	1.05	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.587	0.222	1.03	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.61	0.201	1.01	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.556	0.223	1	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.56	0.195	0.95	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.476	0.212	0.9	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.368	0.164	0.696	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.548	0.219	0.985	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.501	0.222	0.945	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.367	0.154	0.675	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.869	0.672	2.21	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.56	0.247	1.05	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.495	0.22	0.936	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.581	0.206	0.993	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.376	0.197	0.77	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.418	0.214	0.846	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.562	0.227	1.02	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.416	0.184	0.785	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.508	0.25	1.01	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.436	0.175	0.785	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.414	0.168	0.749	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.485	0.221	0.927	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.441	0.223	0.887	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.464	0.215	0.894	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.458	0.228	0.914	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.412	0.199	0.809	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.551	0.251	1.05	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.333	0.167	0.667	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.395	0.189	0.772	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.484	0.284	1.05	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.337	0.165	0.666	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.411	0.189	0.789	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.532	0.311	1.15	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.384	0.229	0.842	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.446	0.275	0.995	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.443	0.304	1.05	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1483  
**Lab Sample ID:** 5155001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32194  
**Batch ID:** 24142  
**Run Date:** 08/14/2013 20:00  
**Data File:** c14aug13a-10  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 23:36  
**Date Received:** 08/03/2013 10:50  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 931.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	21.5	21.5	pg/L	21.5
2051-61-8	PCB-2	U	21.5	21.5	pg/L	21.5
2051-62-9	PCB-3	U	21.5	21.5	pg/L	21.5
13029-08-8	PCB-4	U	21.5	21.5	pg/L	21.5
16605-91-7	PCB-5	U	21.5	21.5	pg/L	21.5
25569-80-6	PCB-6	U	21.5	21.5	pg/L	21.5
33284-50-3	PCB-7	U	21.5	21.5	pg/L	21.5
34883-43-7	PCB-8	U	21.5	21.5	pg/L	21.5
34883-39-1	PCB-9	U	21.5	21.5	pg/L	21.5
33146-45-1	PCB-10	U	21.5	21.5	pg/L	21.5
2050-67-1	PCB-11	U	107	107	pg/L	107
PCB-12/13	PCB-13/12	CU	42.9	42.9	pg/L	42.9
34883-41-5	PCB-14	U	21.5	21.5	pg/L	21.5
2050-68-2	PCB-15	U	21.5	21.5	pg/L	21.5
38444-78-9	PCB-16	U	21.5	21.5	pg/L	21.5
37680-66-3	PCB-17	U	21.5	21.5	pg/L	21.5
PCB-18/30	PCB-18/30	CU	42.9	42.9	pg/L	42.9
38444-73-4	PCB-19	U	21.5	21.5	pg/L	21.5
PCB-20/28	PCB-20/28	CU	42.9	42.9	pg/L	42.9
PCB-21/33	PCB-21/33	CU	42.9	42.9	pg/L	42.9
38444-85-8	PCB-22	U	21.5	21.5	pg/L	21.5
55720-44-0	PCB-23	U	21.5	21.5	pg/L	21.5
55702-45-9	PCB-24	U	21.5	21.5	pg/L	21.5
55712-37-3	PCB-25	U	21.5	21.5	pg/L	21.5
PCB-26/29	PCB-26/29	CU	42.9	42.9	pg/L	42.9
38444-76-7	PCB-27	U	21.5	21.5	pg/L	21.5
16606-02-3	PCB-31	U	21.5	21.5	pg/L	21.5
38444-77-8	PCB-32	U	21.5	21.5	pg/L	21.5
37680-68-5	PCB-34	U	21.5	21.5	pg/L	21.5
37680-69-6	PCB-35	U	21.5	21.5	pg/L	21.5
38444-87-0	PCB-36	U	21.5	21.5	pg/L	21.5
38444-90-5	PCB-37	U	21.5	21.5	pg/L	21.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1483  
**Lab Sample ID:** 5155001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32194  
**Batch ID:** 24142  
**Run Date:** 08/14/2013 20:00  
**Data File:** c14aug13a-10  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 23:36  
**Date Received:** 08/03/2013 10:50  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 931.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21.5	21.5	pg/L	21.5
38444-88-1	PCB-39	U	21.5	21.5	pg/L	21.5
PCB-40/71	PCB-40/71	CU	42.9	42.9	pg/L	42.9
52663-59-9	PCB-41	U	21.5	21.5	pg/L	21.5
36559-22-5	PCB-42	U	21.5	21.5	pg/L	21.5
70362-46-8	PCB-43	U	21.5	21.5	pg/L	21.5
PCB-44/47/65	PCB-44/65/47	CU	64.4	64.4	pg/L	64.4
PCB-45/51	PCB-45/51	CU	42.9	42.9	pg/L	42.9
41464-47-5	PCB-46	U	21.5	21.5	pg/L	21.5
70362-47-9	PCB-48	U	21.5	21.5	pg/L	21.5
PCB-49/69	PCB-69/49	CU	42.9	42.9	pg/L	42.9
PCB-50/53	PCB-50/53	CU	42.9	42.9	pg/L	42.9
35693-99-3	PCB-52	U	21.5	21.5	pg/L	21.5
15968-05-5	PCB-54	U	21.5	21.5	pg/L	21.5
74338-24-2	PCB-55	U	21.5	21.5	pg/L	21.5
41464-43-1	PCB-56	U	21.5	21.5	pg/L	21.5
70424-67-8	PCB-57	U	21.5	21.5	pg/L	21.5
41464-49-7	PCB-58	U	21.5	21.5	pg/L	21.5
PCB-59/62/75	PCB-59/62/75	CU	64.4	64.4	pg/L	64.4
33025-41-1	PCB-60	U	21.5	21.5	pg/L	21.5
PCB-61-76	PCB-61/76/70/74	CU	85.9	85.9	pg/L	85.9
74472-34-7	PCB-63	U	21.5	21.5	pg/L	21.5
52663-58-8	PCB-64	U	21.5	21.5	pg/L	21.5
32598-10-0	PCB-66	U	21.5	21.5	pg/L	21.5
73575-53-8	PCB-67	U	21.5	21.5	pg/L	21.5
73575-52-7	PCB-68	U	21.5	21.5	pg/L	21.5
41464-42-0	PCB-72	U	21.5	21.5	pg/L	21.5
74338-23-1	PCB-73	U	21.5	21.5	pg/L	21.5
32598-13-3	PCB-77	U	21.5	21.5	pg/L	21.5
70362-49-1	PCB-78	U	21.5	21.5	pg/L	21.5
41464-48-6	PCB-79	U	21.5	21.5	pg/L	21.5
33284-52-5	PCB-80	U	21.5	21.5	pg/L	21.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1483  
**Lab Sample ID:** 5155001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32194  
**Batch ID:** 24142  
**Run Date:** 08/14/2013 20:00  
**Data File:** c14aug13a-10  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 23:36  
**Date Received:** 08/03/2013 10:50  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 931.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21.5	21.5	pg/L	21.5
52663-62-4	PCB-82	U	21.5	21.5	pg/L	21.5
60145-20-2	PCB-83	U	21.5	21.5	pg/L	21.5
52663-60-2	PCB-84	U	21.5	21.5	pg/L	21.5
PCB-85-117	PCB-117/116/85	CU	64.4	64.4	pg/L	64.4
PCB-86-125	PCB-86/87/97/109/119/125	CU	129	129	pg/L	129
PCB-88/91	PCB-88/91	CU	42.9	42.9	pg/L	42.9
73575-57-2	PCB-89	U	21.5	21.5	pg/L	21.5
PCB-90-113	PCB-113/90/101	CU	64.4	64.4	pg/L	64.4
52663-61-3	PCB-92	U	21.5	21.5	pg/L	21.5
PCB-93/100	PCB-93/100	CU	42.9	42.9	pg/L	42.9
73575-55-0	PCB-94	U	21.5	21.5	pg/L	21.5
38379-99-6	PCB-95	U	21.9	21.5	pg/L	21.5
73575-54-9	PCB-96	U	21.5	21.5	pg/L	21.5
PCB-98/102	PCB-102/98	CU	42.9	42.9	pg/L	42.9
38380-01-7	PCB-99	U	21.5	21.5	pg/L	21.5
60145-21-3	PCB-103	U	21.5	21.5	pg/L	21.5
56558-16-8	PCB-104	U	21.5	21.5	pg/L	21.5
32598-14-4	PCB-105	U	21.5	21.5	pg/L	21.5
70424-69-0	PCB-106	U	21.5	21.5	pg/L	21.5
70424-68-9	PCB-107	U	21.5	21.5	pg/L	21.5
PCB-108/124	PCB-108/124	CU	42.9	42.9	pg/L	42.9
PCB-110/115	PCB-110/115	CU	42.9	42.9	pg/L	42.9
39635-32-0	PCB-111	U	21.5	21.5	pg/L	21.5
74472-36-9	PCB-112	U	21.5	21.5	pg/L	21.5
74472-37-0	PCB-114	U	21.5	21.5	pg/L	21.5
31508-00-6	PCB-118		26.8	24.9	pg/L	21.5
68194-12-7	PCB-120	U	21.5	21.5	pg/L	21.5
56558-18-0	PCB-121	U	21.5	21.5	pg/L	21.5
76842-07-4	PCB-122	U	21.5	21.5	pg/L	21.5
65510-44-3	PCB-123	U	21.5	21.5	pg/L	21.5
57465-28-8	PCB-126	U	21.5	21.5	pg/L	21.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1483  
**Lab Sample ID:** 5155001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32194  
**Batch ID:** 24142  
**Run Date:** 08/14/2013 20:00  
**Data File:** c14aug13a-10  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 23:36  
**Date Received:** 08/03/2013 10:50  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 931.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21.5	21.5	pg/L	21.5
PCB-128/166	PCB-128/166	CU	42.9	42.9	pg/L	42.9
PCB-129-163	PCB-138/163/129	C	71.7	70.4	pg/L	64.4
52663-66-8	PCB-130	U	21.5	21.5	pg/L	21.5
61798-70-7	PCB-131	U	21.5	21.5	pg/L	21.5
38380-05-1	PCB-132	U	21.5	21.5	pg/L	21.5
35694-04-3	PCB-133	U	21.5	21.5	pg/L	21.5
52704-70-8	PCB-134	U	21.5	21.5	pg/L	21.5
PCB-135/151	PCB-151/135	CU	42.9	42.9	pg/L	42.9
38411-22-2	PCB-136	U	21.5	21.5	pg/L	21.5
35694-06-5	PCB-137	U	21.5	21.5	pg/L	21.5
PCB-139/140	PCB-139/140	CU	42.9	42.9	pg/L	42.9
52712-04-6	PCB-141	U	21.5	21.5	pg/L	21.5
41411-61-4	PCB-142	U	21.5	21.5	pg/L	21.5
68194-15-0	PCB-143	U	21.5	21.5	pg/L	21.5
68194-14-9	PCB-144	U	21.5	21.5	pg/L	21.5
74472-40-5	PCB-145	U	21.5	21.5	pg/L	21.5
51908-16-8	PCB-146	U	21.5	21.5	pg/L	21.5
PCB-147/149	PCB-147/149	CU	42.9	42.9	pg/L	42.9
74472-41-6	PCB-148	U	21.5	21.5	pg/L	21.5
68194-08-1	PCB-150	U	21.5	21.5	pg/L	21.5
68194-09-2	PCB-152	U	21.5	21.5	pg/L	21.5
PCB-153/168	PCB-153/168	C	53.7	52.6	pg/L	42.9
60145-22-4	PCB-154	U	21.5	21.5	pg/L	21.5
33979-03-2	PCB-155	U	21.5	21.5	pg/L	21.5
PCB-156/157	PCB-156/157	CU	42.9	42.9	pg/L	42.9
74472-42-7	PCB-158	U	21.5	21.5	pg/L	21.5
39635-35-3	PCB-159	U	21.5	21.5	pg/L	21.5
41411-62-5	PCB-160	U	21.5	21.5	pg/L	21.5
74472-43-8	PCB-161	U	21.5	21.5	pg/L	21.5
39635-34-2	PCB-162	U	21.5	21.5	pg/L	21.5
74472-45-0	PCB-164	U	21.5	21.5	pg/L	21.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1483  
**Lab Sample ID:** 5155001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32194  
**Batch ID:** 24142  
**Run Date:** 08/14/2013 20:00  
**Data File:** c14aug13a-10  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 23:36  
**Date Received:** 08/03/2013 10:50  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 931.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21.5	21.5	pg/L	21.5
52663-72-6	PCB-167	U	21.5	21.5	pg/L	21.5
32774-16-6	PCB-169	U	21.5	21.5	pg/L	21.5
35065-30-6	PCB-170	U	21.5	21.5	pg/L	21.5
PCB-171/173	PCB-173/171	CU	42.9	42.9	pg/L	42.9
52663-74-8	PCB-172	U	21.5	21.5	pg/L	21.5
38411-25-5	PCB-174	U	21.5	21.5	pg/L	21.5
40186-70-7	PCB-175	U	21.5	21.5	pg/L	21.5
52663-65-7	PCB-176	U	21.5	21.5	pg/L	21.5
52663-70-4	PCB-177	U	21.5	21.5	pg/L	21.5
52663-67-9	PCB-178	U	21.5	21.5	pg/L	21.5
52663-64-6	PCB-179	U	21.5	21.5	pg/L	21.5
PCB-180/193	PCB-193/180	CU	42.9	42.9	pg/L	42.9
74472-47-2	PCB-181	U	21.5	21.5	pg/L	21.5
60145-23-5	PCB-182	U	21.5	21.5	pg/L	21.5
PCB-183/185	PCB-183/185	CU	42.9	42.9	pg/L	42.9
74472-48-3	PCB-184	U	21.5	21.5	pg/L	21.5
74472-49-4	PCB-186	U	21.5	21.5	pg/L	21.5
52663-68-0	PCB-187		29.5	28.5	pg/L	21.5
74487-85-7	PCB-188	U	21.5	21.5	pg/L	21.5
39635-31-9	PCB-189	U	21.5	21.5	pg/L	21.5
41411-64-7	PCB-190	U	21.5	21.5	pg/L	21.5
74472-50-7	PCB-191	U	21.5	21.5	pg/L	21.5
74472-51-8	PCB-192	U	21.5	21.5	pg/L	21.5
35694-08-7	PCB-194	U	21.5	21.5	pg/L	21.5
52663-78-2	PCB-195	U	21.5	21.5	pg/L	21.5
42740-50-1	PCB-196	U	21.5	21.5	pg/L	21.5
PCB-197/200	PCB-197/200	CU	42.9	42.9	pg/L	42.9
PCB-198/199	PCB-198/199	CU	42.9	42.9	pg/L	42.9
40186-71-8	PCB-201	U	21.5	21.5	pg/L	21.5
2136-99-4	PCB-202	U	21.5	21.5	pg/L	21.5
52663-76-0	PCB-203	U	21.5	21.5	pg/L	21.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1483  
**Lab Sample ID:** 5155001  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32194  
**Batch ID:** 24142  
**Run Date:** 08/14/2013 20:00  
**Data File:** c14aug13a-10  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 23:36  
**Date Received:** 08/03/2013 10:50  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
**Prep Method:** SW846 3520C  
**Aliquot:** 931.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
**Prep Basis:** As Received  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21.5	21.5	pg/L	21.5
74472-53-0	PCB-205	U	21.5	21.5	pg/L	21.5
40186-72-9	PCB-206	U	21.5	21.5	pg/L	21.5
52663-79-3	PCB-207	U	21.5	21.5	pg/L	21.5
52663-77-1	PCB-208	U	21.5	21.5	pg/L	21.5
2051-24-3	PCB-209	U	21.5	21.5	pg/L	21.5
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs	U	0	0	pg/L	
25429-29-2	Total Penta PCBs		48.7	24.9	pg/L	
26601-64-9	Total Hexa PCBs		125	123	pg/L	
28655-71-2	Total Hepta PCBs		29.5	28.5	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		204	176	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		958	2150	pg/L	44.6	(15%-150%)
13C-3-MoCB		1060	2150	pg/L	49.1	(15%-150%)
13C-4-DiCB		1320	2150	pg/L	61.6	(25%-150%)
13C-15-DiCB		1200	2150	pg/L	55.8	(25%-150%)
13C-19-TrCB		1380	2150	pg/L	64.2	(25%-150%)
13C-37-TrCB		1180	2150	pg/L	55.2	(25%-150%)
13C-54-TeCB		1470	2150	pg/L	68.3	(25%-150%)
13C-77-TeCB		1310	2150	pg/L	61.2	(25%-150%)
13C-81-TeCB		1330	2150	pg/L	61.9	(25%-150%)
13C-104-PeCB		1500	2150	pg/L	69.9	(25%-150%)
13C-105-PeCB		1260	2150	pg/L	58.8	(25%-150%)
13C-114-PeCB		1210	2150	pg/L	56.5	(25%-150%)
13C-118-PeCB		1270	2150	pg/L	59.1	(25%-150%)
13C-123-PeCB		1360	2150	pg/L	63.3	(25%-150%)
13C-126-PeCB		1360	2150	pg/L	63.3	(25%-150%)
13C-155-HxCB		1370	2150	pg/L	63.7	(25%-150%)
13C-156-HxCB	C	2510	4290	pg/L	58.5	(25%-150%)
13C-167-HxCB		1200	2150	pg/L	56.1	(25%-150%)
13C-169-HxCB		1450	2150	pg/L	67.8	(25%-150%)
13C-188-HpCB		1090	2150	pg/L	50.9	(25%-150%)
13C-189-HpCB		1160	2150	pg/L	53.9	(25%-150%)
13C-202-OcCB		1170	2150	pg/L	54.4	(25%-150%)
13C-205-OcCB		1510	2150	pg/L	70.1	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1483	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5155001	<b>Date Collected:</b> 07/25/2013 23:36	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668 Water	<b>Date Received:</b> 08/03/2013 10:50	
<b>Client ID:</b> WT_IPC-13-32194		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24142	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/14/2013 20:00	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c14aug13a-10		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24138	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 12-AUG-13	<b>Aliquot:</b> 931.7 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1700	2150	pg/L	79.3      (25%-150%)
13C-208-NoCB			1510	2150	pg/L	70.3      (25%-150%)
13C-209-DeCB			2100	2150	pg/L	97.6      (25%-150%)
13C-28-TrCB			1360	2150	pg/L	63.3      (30%-135%)
13C-111-PeCB			1470	2150	pg/L	68.7      (30%-135%)
13C-178-HpCB			1620	2150	pg/L	75.6      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1483  
**Lab Sample ID:** 5155002  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32459  
**Batch ID:** 24142  
**Run Date:** 08/14/2013 21:02  
**Data File:** c14aug13a-11  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:34  
**Date Received:** 08/03/2013 10:50  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 881.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	22.7	22.7	pg/L	22.7
2051-61-8	PCB-2	U	22.7	22.7	pg/L	22.7
2051-62-9	PCB-3	U	22.7	22.7	pg/L	22.7
13029-08-8	PCB-4	U	22.7	22.7	pg/L	22.7
16605-91-7	PCB-5	U	22.7	22.7	pg/L	22.7
25569-80-6	PCB-6	U	22.7	22.7	pg/L	22.7
33284-50-3	PCB-7	U	22.7	22.7	pg/L	22.7
34883-43-7	PCB-8	U	22.7	22.7	pg/L	22.7
34883-39-1	PCB-9	U	22.7	22.7	pg/L	22.7
33146-45-1	PCB-10	U	22.7	22.7	pg/L	22.7
2050-67-1	PCB-11	U	113	113	pg/L	113
PCB-12/13	PCB-13/12	CU	45.4	45.4	pg/L	45.4
34883-41-5	PCB-14	U	22.7	22.7	pg/L	22.7
2050-68-2	PCB-15	U	22.7	22.7	pg/L	22.7
38444-78-9	PCB-16	U	22.7	22.7	pg/L	22.7
37680-66-3	PCB-17	U	22.7	22.7	pg/L	22.7
PCB-18/30	PCB-18/30	CU	45.4	45.4	pg/L	45.4
38444-73-4	PCB-19	U	22.7	22.7	pg/L	22.7
PCB-20/28	PCB-20/28	CU	45.4	45.4	pg/L	45.4
PCB-21/33	PCB-21/33	CU	45.4	45.4	pg/L	45.4
38444-85-8	PCB-22	U	22.7	22.7	pg/L	22.7
55720-44-0	PCB-23	U	22.7	22.7	pg/L	22.7
55702-45-9	PCB-24	U	22.7	22.7	pg/L	22.7
55712-37-3	PCB-25	U	22.7	22.7	pg/L	22.7
PCB-26/29	PCB-26/29	CU	45.4	45.4	pg/L	45.4
38444-76-7	PCB-27	U	22.7	22.7	pg/L	22.7
16606-02-3	PCB-31	B	24.0	23.3	pg/L	22.7
38444-77-8	PCB-32	U	22.7	22.7	pg/L	22.7
37680-68-5	PCB-34	U	22.7	22.7	pg/L	22.7
37680-69-6	PCB-35	U	22.7	22.7	pg/L	22.7
38444-87-0	PCB-36	U	22.7	22.7	pg/L	22.7
38444-90-5	PCB-37	U	22.7	22.7	pg/L	22.7

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-1483  
Lab Sample ID: 5155002  
Client Sample: 1668 Water  
Client ID: WT\_IPC-13-32459  
Batch ID: 24142  
Run Date: 08/14/2013 21:02  
Data File: c14aug13a-11  
Prep Batch: 24138  
Prep Date: 12-AUG-13

Client: LANL001  
Date Collected: 07/25/2013 22:34  
Date Received: 08/03/2013 10:50  
Method: EPA Method 1668A  
Analyst: CLP  
Prep Method: SW846 3520C  
Aliquot: 881.1 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	22.7	22.7	pg/L	22.7
38444-88-1	PCB-39	U	22.7	22.7	pg/L	22.7
PCB-40/71	PCB-40/71	CU	45.4	45.4	pg/L	45.4
52663-59-9	PCB-41	U	22.7	22.7	pg/L	22.7
36559-22-5	PCB-42	U	22.7	22.7	pg/L	22.7
70362-46-8	PCB-43	U	22.7	22.7	pg/L	22.7
PCB-44/47/65	PCB-44/65/47	C	77.2	75.7	pg/L	68.1
PCB-45/51	PCB-45/51	CU	45.4	45.4	pg/L	45.4
41464-47-5	PCB-46	U	22.7	22.7	pg/L	22.7
70362-47-9	PCB-48	U	22.7	22.7	pg/L	22.7
PCB-49/69	PCB-69/49	CU	45.4	45.4	pg/L	45.4
PCB-50/53	PCB-50/53	CU	45.4	45.4	pg/L	45.4
35693-99-3	PCB-52		120	119	pg/L	22.7
15968-05-5	PCB-54	U	22.7	22.7	pg/L	22.7
74338-24-2	PCB-55	U	22.7	22.7	pg/L	22.7
41464-43-1	PCB-56		40.2	38.7	pg/L	22.7
70424-67-8	PCB-57	U	22.7	22.7	pg/L	22.7
41464-49-7	PCB-58	U	22.7	22.7	pg/L	22.7
PCB-59/62/75	PCB-59/62/75	CU	68.1	68.1	pg/L	68.1
33025-41-1	PCB-60	U	22.7	22.7	pg/L	22.7
PCB-61-76	PCB-61/76/70/74	C	202	201	pg/L	90.8
74472-34-7	PCB-63	U	22.7	22.7	pg/L	22.7
52663-58-8	PCB-64		31.1	30	pg/L	22.7
32598-10-0	PCB-66		53.5	52.4	pg/L	22.7
73575-53-8	PCB-67	U	22.7	22.7	pg/L	22.7
73575-52-7	PCB-68	U	22.7	22.7	pg/L	22.7
41464-42-0	PCB-72	U	22.7	22.7	pg/L	22.7
74338-23-1	PCB-73	U	22.7	22.7	pg/L	22.7
32598-13-3	PCB-77		54.8	53.4	pg/L	22.7
70362-49-1	PCB-78	U	22.7	22.7	pg/L	22.7
41464-48-6	PCB-79	U	22.7	22.7	pg/L	22.7
33284-52-5	PCB-80	U	22.7	22.7	pg/L	22.7

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

SDG Number: 2013-1483  
 Lab Sample ID: 5155002  
 Client Sample: 1668 Water  
 Client ID: WT\_IPC-13-32459  
 Batch ID: 24142  
 Run Date: 08/14/2013 21:02  
 Data File: c14aug13a-11  
 Prep Batch: 24138  
 Prep Date: 12-AUG-13

Client: LANL001  
 Date Collected: 07/25/2013 22:34  
 Date Received: 08/03/2013 10:50  
 Method: EPA Method 1668A  
 Analyst: CLP  
 Prep Method: SW846 3520C  
 Aliquot: 881.1 mL

Project: LANL00112  
 Matrix: WATER  
 Prep Basis: As Received  
 Instrument: HRP791  
 Dilution: 1  
 Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	22.7	22.7	pg/L	22.7
52663-62-4	PCB-82		73.3	71.6	pg/L	22.7
60145-20-2	PCB-83		27.5	25.8	pg/L	22.7
52663-60-2	PCB-84		119	118	pg/L	22.7
PCB-85-117	PCB-117/116/85	C	146	144	pg/L	68.1
PCB-86-125	PCB-86/87/97/109/119/125	C	452	450	pg/L	136
PCB-88/91	PCB-88/91	C	68.5	66.7	pg/L	45.4
73575-57-2	PCB-89	U	22.7	22.7	pg/L	22.7
PCB-90-113	PCB-113/90/101	C	576	575	pg/L	68.1
52663-61-3	PCB-92		95.7	94.2	pg/L	22.7
PCB-93/100	PCB-93/100	CU	45.4	45.4	pg/L	45.4
73575-55-0	PCB-94	U	22.7	22.7	pg/L	22.7
38379-99-6	PCB-95		325	324	pg/L	22.7
73575-54-9	PCB-96	U	22.7	22.7	pg/L	22.7
PCB-98/102	PCB-102/98	CU	45.4	45.4	pg/L	45.4
38380-01-7	PCB-99		362	361	pg/L	22.7
60145-21-3	PCB-103	U	22.7	22.7	pg/L	22.7
56558-16-8	PCB-104	U	22.7	22.7	pg/L	22.7
32598-14-4	PCB-105		400	399	pg/L	22.7
70424-69-0	PCB-106	U	22.7	22.7	pg/L	22.7
70424-68-9	PCB-107		69.8	68.4	pg/L	22.7
PCB-108/124	PCB-108/124	CU	45.4	45.4	pg/L	45.4
PCB-110/115	PCB-110/115	CU	45.4	45.4	pg/L	45.4
39635-32-0	PCB-111	U	22.7	22.7	pg/L	22.7
74472-36-9	PCB-112	U	22.7	22.7	pg/L	22.7
74472-37-0	PCB-114	U	22.7	22.7	pg/L	22.7
31508-00-6	PCB-118		750	748	pg/L	22.7
68194-12-7	PCB-120	U	22.7	22.7	pg/L	22.7
56558-18-0	PCB-121	U	22.7	22.7	pg/L	22.7
76842-07-4	PCB-122	U	22.7	22.7	pg/L	22.7
65510-44-3	PCB-123	U	22.7	22.7	pg/L	22.7
57465-28-8	PCB-126	U	22.7	22.7	pg/L	22.7

**Comments:**

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**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.



**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-1483  
Lab Sample ID: 5155002  
Client Sample: 1668 Water  
Client ID: WT\_IPC-13-32459  
Batch ID: 24142  
Run Date: 08/14/2013 21:02  
Data File: c14aug13a-11  
Prep Batch: 24138  
Prep Date: 12-AUG-13

Client: LANL001  
Date Collected: 07/25/2013 22:34  
Date Received: 08/03/2013 10:50  
Method: EPA Method 1668A  
Analyst: CLP  
Prep Method: SW846 3520C  
Aliquot: 881.1 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	22.7	22.7	pg/L	22.7
PCB-128/166	PCB-128/166	C	378	377	pg/L	45.4
PCB-129-163	PCB-138/163/129	C	2060	2060	pg/L	68.1
52663-66-8	PCB-130	U	22.7	22.7	pg/L	22.7
61798-70-7	PCB-131	U	22.7	22.7	pg/L	22.7
38380-05-1	PCB-132		579	578	pg/L	22.7
35694-04-3	PCB-133	U	22.7	22.7	pg/L	22.7
52704-70-8	PCB-134		58.4	56.8	pg/L	22.7
PCB-135/151	PCB-151/135	C	301	300	pg/L	45.4
38411-22-2	PCB-136		78.6	77.9	pg/L	22.7
35694-06-5	PCB-137		91.4	89.9	pg/L	22.7
PCB-139/140	PCB-139/140	CU	45.4	45.4	pg/L	45.4
52712-04-6	PCB-141		215	214	pg/L	22.7
41411-61-4	PCB-142	U	22.7	22.7	pg/L	22.7
68194-15-0	PCB-143	U	22.7	22.7	pg/L	22.7
68194-14-9	PCB-144		32.8	31.9	pg/L	22.7
74472-40-5	PCB-145	U	22.7	22.7	pg/L	22.7
51908-16-8	PCB-146		227	226	pg/L	22.7
PCB-147/149	PCB-147/149	C	1030	1030	pg/L	45.4
74472-41-6	PCB-148	U	22.7	22.7	pg/L	22.7
68194-08-1	PCB-150	U	22.7	22.7	pg/L	22.7
68194-09-2	PCB-152	U	22.7	22.7	pg/L	22.7
PCB-153/168	PCB-153/168	C	1430	1430	pg/L	45.4
60145-22-4	PCB-154	U	22.7	22.7	pg/L	22.7
33979-03-2	PCB-155	U	22.7	22.7	pg/L	22.7
PCB-156/157	PCB-156/157	C	248	247	pg/L	45.4
74472-42-7	PCB-158		182	181	pg/L	22.7
39635-35-3	PCB-159	U	22.7	22.7	pg/L	22.7
41411-62-5	PCB-160	U	22.7	22.7	pg/L	22.7
74472-43-8	PCB-161	U	22.7	22.7	pg/L	22.7
39635-34-2	PCB-162	U	22.7	22.7	pg/L	22.7
74472-45-0	PCB-164		144	143	pg/L	22.7

**Comments:**

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**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

SDG Number: 2013-1483  
Lab Sample ID: 5155002  
Client Sample: 1668 Water  
Client ID: WT\_IPC-13-32459  
Batch ID: 24142  
Run Date: 08/14/2013 21:02  
Data File: c14aug13a-11  
Prep Batch: 24138  
Prep Date: 12-AUG-13

Client: LANL001  
Date Collected: 07/25/2013 22:34  
Date Received: 08/03/2013 10:50  
Method: EPA Method 1668A  
Analyst: CLP  
Prep Method: SW846 3520C  
Aliquot: 881.1 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	22.7	22.7	pg/L	22.7
52663-72-6	PCB-167		110	110	pg/L	22.7
32774-16-6	PCB-169	U	22.7	22.7	pg/L	22.7
35065-30-6	PCB-170		457	456	pg/L	22.7
PCB-171/173	PCB-173/171	C	111	110	pg/L	45.4
52663-74-8	PCB-172		90.5	89.5	pg/L	22.7
38411-25-5	PCB-174		397	396	pg/L	22.7
40186-70-7	PCB-175	U	22.7	22.7	pg/L	22.7
52663-65-7	PCB-176		28.9	28.2	pg/L	22.7
52663-70-4	PCB-177		226	225	pg/L	22.7
52663-67-9	PCB-178		79.4	78.5	pg/L	22.7
52663-64-6	PCB-179		104	103	pg/L	22.7
PCB-180/193	PCB-193/180	C	1040	1040	pg/L	45.4
74472-47-2	PCB-181	U	22.7	22.7	pg/L	22.7
60145-23-5	PCB-182	U	22.7	22.7	pg/L	22.7
PCB-183/185	PCB-183/185	C	270	269	pg/L	45.4
74472-48-3	PCB-184	U	22.7	22.7	pg/L	22.7
74472-49-4	PCB-186	U	22.7	22.7	pg/L	22.7
52663-68-0	PCB-187		651	650	pg/L	22.7
74487-85-7	PCB-188	U	22.7	22.7	pg/L	22.7
39635-31-9	PCB-189	U	22.7	22.7	pg/L	22.7
41411-64-7	PCB-190		98.3	97.5	pg/L	22.7
74472-50-7	PCB-191	U	22.7	22.7	pg/L	22.7
74472-51-8	PCB-192	U	22.7	22.7	pg/L	22.7
35694-08-7	PCB-194		268	267	pg/L	22.7
52663-78-2	PCB-195		81.8	80.9	pg/L	22.7
42740-50-1	PCB-196		109	108	pg/L	22.7
PCB-197/200	PCB-197/200	CU	45.4	45.4	pg/L	45.4
PCB-198/199	PCB-198/199	C	333	332	pg/L	45.4
40186-71-8	PCB-201		26.3	25.7	pg/L	22.7
2136-99-4	PCB-202		52.1	51.4	pg/L	22.7
52663-76-0	PCB-203		247	246	pg/L	22.7

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1483  
**Lab Sample ID:** 5155002  
**Client Sample:** 1668 Water  
**Client ID:** WT\_IPC-13-32459  
**Batch ID:** 24142  
**Run Date:** 08/14/2013 21:02  
**Data File:** c14aug13a-11  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:34  
**Date Received:** 08/03/2013 10:50  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 881.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	22.7	22.7	pg/L	22.7
74472-53-0	PCB-205	U	22.7	22.7	pg/L	22.7
40186-72-9	PCB-206		122	121	pg/L	22.7
52663-79-3	PCB-207	U	22.7	22.7	pg/L	22.7
52663-77-1	PCB-208		27.4	26.4	pg/L	22.7
2051-24-3	PCB-209	U	22.7	22.7	pg/L	22.7
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		539	570	pg/L	
25429-29-2	Total Penta PCBs		3470	3440	pg/L	
26601-64-9	Total Hexa PCBs		7170	7150	pg/L	
28655-71-2	Total Hepta PCBs		3550	3540	pg/L	
55722-26-4	Total Octa PCBs		1120	1110	pg/L	
53742-07-7	Total Nona PCBs		149	147	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		16000	16000	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1050	2270	pg/L	46.5	(15%-150%)
13C-3-MoCB		1260	2270	pg/L	55.5	(15%-150%)
13C-4-DiCB		1590	2270	pg/L	69.9	(25%-150%)
13C-15-DiCB		1780	2270	pg/L	78.4	(25%-150%)
13C-19-TrCB		1840	2270	pg/L	80.9	(25%-150%)
13C-37-TrCB		1810	2270	pg/L	79.7	(25%-150%)
13C-54-TeCB		1960	2270	pg/L	86.5	(25%-150%)
13C-77-TeCB		2290	2270	pg/L	101	(25%-150%)
13C-81-TeCB		2250	2270	pg/L	99.2	(25%-150%)
13C-104-PeCB		1990	2270	pg/L	87.5	(25%-150%)
13C-105-PeCB		1980	2270	pg/L	87.3	(25%-150%)
13C-114-PeCB		1920	2270	pg/L	84.5	(25%-150%)
13C-118-PeCB		1970	2270	pg/L	86.8	(25%-150%)
13C-123-PeCB		2070	2270	pg/L	91.0	(25%-150%)
13C-126-PeCB		2210	2270	pg/L	97.2	(25%-150%)
13C-155-HxCB		1890	2270	pg/L	83.5	(25%-150%)
13C-156-HxCB	C	3870	4540	pg/L	85.2	(25%-150%)
13C-167-HxCB		1860	2270	pg/L	82.0	(25%-150%)
13C-169-HxCB		2290	2270	pg/L	101	(25%-150%)
13C-188-HpCB		1560	2270	pg/L	68.7	(25%-150%)
13C-189-HpCB		1790	2270	pg/L	78.8	(25%-150%)
13C-202-OcCB		1760	2270	pg/L	77.5	(25%-150%)
13C-205-OcCB		2280	2270	pg/L	100	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1483	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5155002	<b>Date Collected:</b> 07/25/2013 22:34	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668 Water	<b>Date Received:</b> 08/03/2013 10:50	
<b>Client ID:</b> WT_IPC-13-32459		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24142	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/14/2013 21:02	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c14aug13a-11		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24138	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 12-AUG-13	<b>Aliquot:</b> 881.1 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2590	2270	pg/L	114 (25%-150%)
13C-208-NoCB			2260	2270	pg/L	99.4 (25%-150%)
13C-209-DeCB			3200	2270	pg/L	141 (25%-150%)
13C-28-TrCB			1900	2270	pg/L	83.7 (30%-135%)
13C-111-PeCB			2210	2270	pg/L	97.3 (30%-135%)
13C-178-HpCB			2400	2270	pg/L	106 (30%-135%)

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.571	0.321	1.21	
3-Chlorobiphenyl (2)	pg/L	0.551	0.344	1.24	
4-Chlorobiphenyl (3)	pg/L	0.604	0.31	1.22	
2,2'-Dichlorobiphenyl (4)	pg/L	4.26	2.62	9.5	
2,3-Dichlorobiphenyl (5)	pg/L	3.78	2.51	8.8	
2,3'-Dichlorobiphenyl (6)	pg/L	3	1.94	6.89	
2,4-Dichlorobiphenyl (7)	pg/L	3.27	2.1	7.47	
2,4'-Dichlorobiphenyl (8)	pg/L	3.34	2.01	7.36	
2,5-Dichlorobiphenyl (9)	pg/L	3.1	2.15	7.41	
2,6-Dichlorobiphenyl (10)	pg/L	2.47	1.51	5.48	
3,3'-Dichlorobiphenyl (11)	pg/L	4.01	2.01	8.04	
3,4-Dichlorobiphenyl (12)	pg/L	4.26	2.2	8.67	
3,5-Dichlorobiphenyl (14)	pg/L	3.39	2.14	7.68	
4,4'-Dichlorobiphenyl (15)	pg/L	4.31	2.73	9.77	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.634	0.253	1.14	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.554	0.212	0.978	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.42	0.19	0.799	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.538	0.212	0.962	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.386	0.147	0.681	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.427	0.132	0.692	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.53	0.254	1.04	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.416	0.188	0.792	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.411	0.195	0.801	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.369	0.141	0.651	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.457	0.146	0.749	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.352	0.154	0.661	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.355	0.134	0.624	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.375	0.131	0.638	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.378	0.151	0.681	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.486	0.181	0.847	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.433	0.165	0.763	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.694	0.401	1.5	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.46	0.172	0.803	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.466	0.171	0.808	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.704	0.35	1.4	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.855	0.502	1.86	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.786	0.409	1.6	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.837	0.446	1.73	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.73	0.377	1.48	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.644	0.329	1.3	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.484	0.26	1	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.761	0.384	1.53	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.656	0.346	1.35	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.463	0.208	0.88	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.723	0.336	1.4	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.316	0.196	0.707	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.605	0.289	1.18	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.798	0.362	1.52	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.518	0.269	1.06	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.568	0.289	1.15	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.614	0.328	1.27	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.632	0.231	1.09	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.677	0.307	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.495	0.245	0.986	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.585	0.28	1.14	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.526	0.263	1.05	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.44	0.213	0.866	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.586	0.231	1.05	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.521	0.281	1.08	
2,3',5,6-Tetrachlorobiphenyl (73)	pg/L	0.562	0.302	1.17	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.699	0.325	1.35	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.606	0.26	1.13	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.497	0.22	0.937	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.507	0.236	0.979	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.658	0.299	1.26	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.886	0.378	1.64	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.901	0.396	1.69	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.876	0.415	1.71	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.764	0.289	1.34	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.825	0.319	1.46	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.963	0.41	1.78	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.804	0.371	1.55	
2,2',3,4,5'-Pentachlorobiphenyl (90)	pg/L	0.788	0.312	1.41	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.792	0.359	1.51	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.701	0.387	1.48	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.916	0.525	1.97	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.777	0.323	1.42	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.415	0.259	0.934	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.907	0.4	1.71	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.805	0.455	1.72	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.713	0.335	1.38	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.467	0.278	1.02	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.971	0.4	1.77	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.777	0.375	1.53	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.728	0.334	1.39	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.822	0.396	1.61	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.826	0.373	1.57	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.645	0.343	1.33	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.601	0.278	1.16	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.938	0.467	1.87	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	1.06	0.407	1.88	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.564	0.244	1.05	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.653	0.361	1.37	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.835	0.385	1.61	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.85	0.424	1.7	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	1.03	0.495	2.02	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.8	0.366	1.53	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.598	0.268	1.13	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.711	0.301	1.31	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.729	0.32	1.37	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.779	0.348	1.47	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.786	0.428	1.64	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.681	0.298	1.28	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.817	0.375	1.57	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.521	0.224	0.968	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.345	0.178	0.701	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.737	0.418	1.57	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.663	0.308	1.28	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.679	0.318	1.31	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.714	0.319	1.35	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.655	0.294	1.24	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.44	0.244	0.928	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.382	0.236	0.854	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.605	0.263	1.13	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.753	0.354	1.46	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.436	0.222	0.879	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.371	0.231	0.833	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.328	0.179	0.687	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.627	0.249	1.12	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.4	0.215	0.83	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.343	0.179	0.702	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.675	0.259	1.19	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.49	0.212	0.913	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.436	0.192	0.821	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.625	0.356	1.34	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.49	0.23	0.95	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.463	0.214	0.891	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.515	0.23	0.976	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.606	0.323	1.25	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.472	0.212	0.897	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.545	0.252	1.05	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.587	0.222	1.03	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.61	0.201	1.01	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.556	0.223	1	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.56	0.195	0.95	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.476	0.212	0.9	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.368	0.164	0.696	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.548	0.219	0.985	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.501	0.222	0.945	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.367	0.154	0.675	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.869	0.672	2.21	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.56	0.247	1.05	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.495	0.22	0.936	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.581	0.206	0.993	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.376	0.197	0.77	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.418	0.214	0.846	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.562	0.227	1.02	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.416	0.184	0.785	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.508	0.25	1.01	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.436	0.175	0.785	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.414	0.168	0.749	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.485	0.221	0.927	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.441	0.223	0.887	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.464	0.215	0.894	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.458	0.228	0.914	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.412	0.199	0.809	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.551	0.251	1.05	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.333	0.167	0.667	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.395	0.189	0.772	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.484	0.284	1.05	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.337	0.165	0.666	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.411	0.189	0.789	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.532	0.311	1.15	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.384	0.229	0.842	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.446	0.275	0.995	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.443	0.304	1.05	

\* = PQL adjusted to the MBCV.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1490  
**Lab Sample ID:** 5161001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39438  
**Batch ID:** 24142  
**Run Date:** 08/17/2013 00:59  
**Data File:** c16aug13a-9  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:56  
**Date Received:** 08/06/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 917.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	218	218	pg/L	218
2051-61-8	PCB-2	U	218	218	pg/L	218
2051-62-9	PCB-3	U	218	218	pg/L	218
13029-08-8	PCB-4	U	218	218	pg/L	218
16605-91-7	PCB-5	U	218	218	pg/L	218
25569-80-6	PCB-6	U	218	218	pg/L	218
33284-50-3	PCB-7	U	218	218	pg/L	218
34883-43-7	PCB-8	U	218	218	pg/L	218
34883-39-1	PCB-9	U	218	218	pg/L	218
33146-45-1	PCB-10	U	218	218	pg/L	218
2050-67-1	PCB-11	U	1090	1090	pg/L	1090
PCB-12/13	PCB-13/12	CU	436	436	pg/L	436
34883-41-5	PCB-14	U	218	218	pg/L	218
2050-68-2	PCB-15	U	218	218	pg/L	218
38444-78-9	PCB-16	U	218	218	pg/L	218
37680-66-3	PCB-17	U	218	218	pg/L	218
PCB-18/30	PCB-18/30	CU	436	436	pg/L	436
38444-73-4	PCB-19	U	218	218	pg/L	218
PCB-20/28	PCB-20/28	CU	436	436	pg/L	436
PCB-21/33	PCB-21/33	CU	436	436	pg/L	436
38444-85-8	PCB-22	U	218	218	pg/L	218
55720-44-0	PCB-23	U	218	218	pg/L	218
55702-45-9	PCB-24	U	218	218	pg/L	218
55712-37-3	PCB-25	U	218	218	pg/L	218
PCB-26/29	PCB-26/29	CU	436	436	pg/L	436
38444-76-7	PCB-27	U	218	218	pg/L	218
16606-02-3	PCB-31	U	218	218	pg/L	218
38444-77-8	PCB-32	U	218	218	pg/L	218
37680-68-5	PCB-34	U	218	218	pg/L	218
37680-69-6	PCB-35	U	218	218	pg/L	218
38444-87-0	PCB-36	U	218	218	pg/L	218
38444-90-5	PCB-37	U	218	218	pg/L	218

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 2 of 7

**SDG Number:** 2013-1490  
**Lab Sample ID:** 5161001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39438  
**Batch ID:** 24142  
**Run Date:** 08/17/2013 00:59  
**Data File:** c16aug13a-9  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:56  
**Date Received:** 08/06/2013 09:30  
  
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**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 917.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	218	218	pg/L	218
38444-88-1	PCB-39	U	218	218	pg/L	218
PCB-40/71	PCB-40/71	CU	436	436	pg/L	436
52663-59-9	PCB-41	U	218	218	pg/L	218
36559-22-5	PCB-42	U	218	218	pg/L	218
70362-46-8	PCB-43	U	218	218	pg/L	218
PCB-44/47/65	PCB-44/65/47	CU	654	654	pg/L	654
PCB-45/51	PCB-45/51	CU	436	436	pg/L	436
41464-47-5	PCB-46	U	218	218	pg/L	218
70362-47-9	PCB-48	U	218	218	pg/L	218
PCB-49/69	PCB-69/49	CU	436	436	pg/L	436
PCB-50/53	PCB-50/53	CU	436	436	pg/L	436
35693-99-3	PCB-52	U	218	218	pg/L	218
15968-05-5	PCB-54	U	218	218	pg/L	218
74338-24-2	PCB-55	U	218	218	pg/L	218
41464-43-1	PCB-56	U	218	218	pg/L	218
70424-67-8	PCB-57	U	218	218	pg/L	218
41464-49-7	PCB-58	U	218	218	pg/L	218
PCB-59/62/75	PCB-59/62/75	CU	654	654	pg/L	654
33025-41-1	PCB-60	U	218	218	pg/L	218
PCB-61-76	PCB-61/76/70/74	CU	872	872	pg/L	872
74472-34-7	PCB-63	U	218	218	pg/L	218
52663-58-8	PCB-64	U	218	218	pg/L	218
32598-10-0	PCB-66	U	218	218	pg/L	218
73575-53-8	PCB-67	U	218	218	pg/L	218
73575-52-7	PCB-68	U	218	218	pg/L	218
41464-42-0	PCB-72	U	218	218	pg/L	218
74338-23-1	PCB-73	U	218	218	pg/L	218
32598-13-3	PCB-77	U	218	218	pg/L	218
70362-49-1	PCB-78	U	218	218	pg/L	218
41464-48-6	PCB-79	U	218	218	pg/L	218
33284-52-5	PCB-80	U	218	218	pg/L	218

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1490  
**Lab Sample ID:** 5161001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39438  
**Batch ID:** 24142  
**Run Date:** 08/17/2013 00:59  
**Data File:** c16aug13a-9  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
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**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 917.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	218	218	pg/L	218
52663-62-4	PCB-82	U	218	218	pg/L	218
60145-20-2	PCB-83	U	218	218	pg/L	218
52663-60-2	PCB-84	U	218	218	pg/L	218
PCB-85-117	PCB-117/116/85	CU	654	654	pg/L	654
PCB-86-125	PCB-86/87/97/109/119/125	CU	1310	1310	pg/L	1310
PCB-88/91	PCB-88/91	CU	436	436	pg/L	436
73575-57-2	PCB-89	U	218	218	pg/L	218
PCB-90-113	PCB-113/90/101	CU	654	654	pg/L	654
52663-61-3	PCB-92	U	218	218	pg/L	218
PCB-93/100	PCB-93/100	CU	436	436	pg/L	436
73575-55-0	PCB-94	U	218	218	pg/L	218
38379-99-6	PCB-95	U	218	218	pg/L	218
73575-54-9	PCB-96	U	218	218	pg/L	218
PCB-98/102	PCB-102/98	CU	436	436	pg/L	436
38380-01-7	PCB-99	U	218	218	pg/L	218
60145-21-3	PCB-103	U	218	218	pg/L	218
56558-16-8	PCB-104	U	218	218	pg/L	218
32598-14-4	PCB-105	U	218	218	pg/L	218
70424-69-0	PCB-106	U	218	218	pg/L	218
70424-68-9	PCB-107	U	218	218	pg/L	218
PCB-108/124	PCB-108/124	CU	436	436	pg/L	436
PCB-110/115	PCB-110/115	CU	436	436	pg/L	436
39635-32-0	PCB-111	U	218	218	pg/L	218
74472-36-9	PCB-112	U	218	218	pg/L	218
74472-37-0	PCB-114	U	218	218	pg/L	218
31508-00-6	PCB-118	U	218	218	pg/L	218
68194-12-7	PCB-120	U	218	218	pg/L	218
56558-18-0	PCB-121	U	218	218	pg/L	218
76842-07-4	PCB-122	U	218	218	pg/L	218
65510-44-3	PCB-123	U	218	218	pg/L	218
57465-28-8	PCB-126	U	218	218	pg/L	218

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1490  
**Lab Sample ID:** 5161001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39438  
**Batch ID:** 24142  
**Run Date:** 08/17/2013 00:59  
**Data File:** c16aug13a-9  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:56  
**Date Received:** 08/06/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 917.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	218	218	pg/L	218
PCB-128/166	PCB-128/166	CU	436	436	pg/L	436
PCB-129-163	PCB-138/163/129	CU	654	654	pg/L	654
52663-66-8	PCB-130	U	218	218	pg/L	218
61798-70-7	PCB-131	U	218	218	pg/L	218
38380-05-1	PCB-132	U	218	218	pg/L	218
35694-04-3	PCB-133	U	218	218	pg/L	218
52704-70-8	PCB-134	U	218	218	pg/L	218
PCB-135/151	PCB-151/135	CU	436	436	pg/L	436
38411-22-2	PCB-136	U	218	218	pg/L	218
35694-06-5	PCB-137	U	218	218	pg/L	218
PCB-139/140	PCB-139/140	CU	436	436	pg/L	436
52712-04-6	PCB-141	U	218	218	pg/L	218
41411-61-4	PCB-142	U	218	218	pg/L	218
68194-15-0	PCB-143	U	218	218	pg/L	218
68194-14-9	PCB-144	U	218	218	pg/L	218
74472-40-5	PCB-145	U	218	218	pg/L	218
51908-16-8	PCB-146	U	218	218	pg/L	218
PCB-147/149	PCB-147/149	CU	436	436	pg/L	436
74472-41-6	PCB-148	U	218	218	pg/L	218
68194-08-1	PCB-150	U	218	218	pg/L	218
68194-09-2	PCB-152	U	218	218	pg/L	218
PCB-153/168	PCB-153/168	CU	436	436	pg/L	436
60145-22-4	PCB-154	U	218	218	pg/L	218
33979-03-2	PCB-155	U	218	218	pg/L	218
PCB-156/157	PCB-156/157	CU	436	436	pg/L	436
74472-42-7	PCB-158	U	218	218	pg/L	218
39635-35-3	PCB-159	U	218	218	pg/L	218
41411-62-5	PCB-160	U	218	218	pg/L	218
74472-43-8	PCB-161	U	218	218	pg/L	218
39635-34-2	PCB-162	U	218	218	pg/L	218
74472-45-0	PCB-164	U	218	218	pg/L	218

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1490  
**Lab Sample ID:** 5161001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39438  
**Batch ID:** 24142  
**Run Date:** 08/17/2013 00:59  
**Data File:** c16aug13a-9  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:56  
**Date Received:** 08/06/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 917.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	218	218	pg/L	218
52663-72-6	PCB-167	U	218	218	pg/L	218
32774-16-6	PCB-169	U	218	218	pg/L	218
35065-30-6	PCB-170	U	218	218	pg/L	218
PCB-171/173	PCB-173/171	CU	436	436	pg/L	436
52663-74-8	PCB-172	U	218	218	pg/L	218
38411-25-5	PCB-174	U	218	218	pg/L	218
40186-70-7	PCB-175	U	218	218	pg/L	218
52663-65-7	PCB-176	U	218	218	pg/L	218
52663-70-4	PCB-177	U	218	218	pg/L	218
52663-67-9	PCB-178	U	218	218	pg/L	218
52663-64-6	PCB-179	U	218	218	pg/L	218
PCB-180/193	PCB-193/180	CU	436	436	pg/L	436
74472-47-2	PCB-181	U	218	218	pg/L	218
60145-23-5	PCB-182	U	218	218	pg/L	218
PCB-183/185	PCB-183/185	CU	436	436	pg/L	436
74472-48-3	PCB-184	U	218	218	pg/L	218
74472-49-4	PCB-186	U	218	218	pg/L	218
52663-68-0	PCB-187	U	218	218	pg/L	218
74487-85-7	PCB-188	U	218	218	pg/L	218
39635-31-9	PCB-189	U	218	218	pg/L	218
41411-64-7	PCB-190	U	218	218	pg/L	218
74472-50-7	PCB-191	U	218	218	pg/L	218
74472-51-8	PCB-192	U	218	218	pg/L	218
35694-08-7	PCB-194	U	218	218	pg/L	218
52663-78-2	PCB-195	U	218	218	pg/L	218
42740-50-1	PCB-196	U	218	218	pg/L	218
PCB-197/200	PCB-197/200	CU	436	436	pg/L	436
PCB-198/199	PCB-198/199	CU	436	436	pg/L	436
40186-71-8	PCB-201	U	218	218	pg/L	218
2136-99-4	PCB-202	U	218	218	pg/L	218
52663-76-0	PCB-203	U	218	218	pg/L	218

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1490  
**Lab Sample ID:** 5161001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39438  
**Batch ID:** 24142  
**Run Date:** 08/17/2013 00:59  
**Data File:** c16aug13a-9  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 07/25/2013 22:56  
**Date Received:** 08/06/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 917.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	218	218	pg/L	218
74472-53-0	PCB-205	U	218	218	pg/L	218
40186-72-9	PCB-206	U	218	218	pg/L	218
52663-79-3	PCB-207	U	218	218	pg/L	218
52663-77-1	PCB-208	U	218	218	pg/L	218
2051-24-3	PCB-209	U	218	218	pg/L	218
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs	U	0	0	pg/L	
25429-29-2	Total Penta PCBs	U	0	0	pg/L	
26601-64-9	Total Hexa PCBs	U	0	0	pg/L	
28655-71-2	Total Hepta PCBs	U	0	0	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners	U	0	0	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1550	2180	pg/L	71.0	(15%-150%)
13C-3-MoCB		1620	2180	pg/L	74.3	(15%-150%)
13C-4-DiCB		1610	2180	pg/L	74.0	(25%-150%)
13C-15-DiCB		1630	2180	pg/L	75.0	(25%-150%)
13C-19-TrCB		1850	2180	pg/L	85.1	(25%-150%)
13C-37-TrCB		1830	2180	pg/L	84.0	(25%-150%)
13C-54-TeCB		1810	2180	pg/L	83.3	(25%-150%)
13C-77-TeCB		1510	2180	pg/L	69.4	(25%-150%)
13C-81-TeCB		1480	2180	pg/L	67.9	(25%-150%)
13C-104-PeCB		1920	2180	pg/L	88.3	(25%-150%)
13C-105-PeCB		1350	2180	pg/L	62.2	(25%-150%)
13C-114-PeCB		1320	2180	pg/L	60.4	(25%-150%)
13C-118-PeCB		1490	2180	pg/L	68.3	(25%-150%)
13C-123-PeCB		1460	2180	pg/L	66.8	(25%-150%)
13C-126-PeCB		1200	2180	pg/L	55.2	(25%-150%)
13C-155-HxCB		2330	2180	pg/L	107	(25%-150%)
13C-156-HxCB	C	3300	4360	pg/L	75.7	(25%-150%)
13C-167-HxCB		1600	2180	pg/L	73.5	(25%-150%)
13C-169-HxCB		1790	2180	pg/L	82.3	(25%-150%)
13C-188-HpCB		1520	2180	pg/L	69.7	(25%-150%)
13C-189-HpCB		1520	2180	pg/L	69.6	(25%-150%)
13C-202-OcCB		1420	2180	pg/L	65.2	(25%-150%)
13C-205-OcCB		1860	2180	pg/L	85.6	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1490	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5161001	<b>Date Collected:</b> 07/25/2013 22:56	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 08/06/2013 09:30	
<b>Client ID:</b> WT_IPC-13-39438		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24142	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/17/2013 00:59	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c16aug13a-9		<b>Dilution:</b> 10
<b>Prep Batch:</b> 24138	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 12-AUG-13	<b>Aliquot:</b> 917.7 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%</b>
						<b>Acceptable Limits</b>
13C-206-NoCB			1920	2180	pg/L	88.2 (25%-150%)
13C-208-NoCB			1640	2180	pg/L	75.3 (25%-150%)
13C-209-DeCB			2090	2180	pg/L	95.8 (25%-150%)
13C-28-TrCB			1940	2180	pg/L	88.9 (30%-135%)
13C-111-PeCB			1550	2180	pg/L	71.1 (30%-135%)
13C-178-HpCB			1740	2180	pg/L	80.0 (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.571	0.321	1.21	
3-Chlorobiphenyl (2)	pg/L	0.551	0.344	1.24	
4-Chlorobiphenyl (3)	pg/L	0.604	0.31	1.22	
2,2'-Dichlorobiphenyl (4)	pg/L	4.26	2.62	9.5	
2,3-Dichlorobiphenyl (5)	pg/L	3.78	2.51	8.8	
2,3'-Dichlorobiphenyl (6)	pg/L	3	1.94	6.89	
2,4-Dichlorobiphenyl (7)	pg/L	3.27	2.1	7.47	
2,4'-Dichlorobiphenyl (8)	pg/L	3.34	2.01	7.36	
2,5-Dichlorobiphenyl (9)	pg/L	3.1	2.15	7.41	
2,6-Dichlorobiphenyl (10)	pg/L	2.47	1.51	5.48	
3,3'-Dichlorobiphenyl (11)	pg/L	4.01	2.01	8.04	
3,4-Dichlorobiphenyl (12)	pg/L	4.26	2.2	8.67	
3,5-Dichlorobiphenyl (14)	pg/L	3.39	2.14	7.68	
4,4'-Dichlorobiphenyl (15)	pg/L	4.31	2.73	9.77	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.634	0.253	1.14	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.554	0.212	0.978	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.42	0.19	0.799	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.538	0.212	0.962	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.386	0.147	0.681	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.427	0.132	0.692	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.53	0.254	1.04	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.416	0.188	0.792	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.411	0.195	0.801	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.369	0.141	0.651	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.457	0.146	0.749	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.352	0.154	0.661	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.355	0.134	0.624	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.375	0.131	0.638	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.378	0.151	0.681	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.486	0.181	0.847	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.433	0.165	0.763	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.694	0.401	1.5	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.46	0.172	0.803	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.466	0.171	0.808	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.704	0.35	1.4	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.855	0.502	1.86	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.786	0.409	1.6	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.837	0.446	1.73	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.73	0.377	1.48	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.644	0.329	1.3	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.484	0.26	1	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.761	0.384	1.53	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.656	0.346	1.35	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.463	0.208	0.88	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.723	0.336	1.4	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.316	0.196	0.707	



# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.605	0.289	1.18	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.798	0.362	1.52	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.518	0.269	1.06	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.568	0.289	1.15	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.614	0.328	1.27	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.632	0.231	1.09	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.677	0.307	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.495	0.245	0.986	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.585	0.28	1.14	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.526	0.263	1.05	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.44	0.213	0.866	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.586	0.231	1.05	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.521	0.281	1.08	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.562	0.302	1.17	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.699	0.325	1.35	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.606	0.26	1.13	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.497	0.22	0.937	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.507	0.236	0.979	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.658	0.299	1.26	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.886	0.378	1.64	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.901	0.396	1.69	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.876	0.415	1.71	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.764	0.289	1.34	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.825	0.319	1.46	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.963	0.41	1.78	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.804	0.371	1.55	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.788	0.312	1.41	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.792	0.359	1.51	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.701	0.387	1.48	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.916	0.525	1.97	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.777	0.323	1.42	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.415	0.259	0.934	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.907	0.4	1.71	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.805	0.455	1.72	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.713	0.335	1.38	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.467	0.278	1.02	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.971	0.4	1.77	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.777	0.375	1.53	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.728	0.334	1.39	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.822	0.396	1.61	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.826	0.373	1.57	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.645	0.343	1.33	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.601	0.278	1.16	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.938	0.467	1.87	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	1.06	0.407	1.88	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.564	0.244	1.05	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.653	0.361	1.37	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.835	0.385	1.61	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.85	0.424	1.7	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	1.03	0.495	2.02	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.8	0.366	1.53	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.598	0.268	1.13	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.711	0.301	1.31	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.729	0.32	1.37	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.779	0.348	1.47	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.786	0.428	1.64	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.681	0.298	1.28	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.817	0.375	1.57	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.521	0.224	0.968	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.345	0.178	0.701	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.737	0.418	1.57	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.663	0.308	1.28	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.679	0.318	1.31	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.714	0.319	1.35	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.655	0.294	1.24	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.44	0.244	0.928	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.382	0.236	0.854	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.605	0.263	1.13	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.753	0.354	1.46	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.436	0.222	0.879	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.371	0.231	0.833	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.328	0.179	0.687	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.627	0.249	1.12	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.4	0.215	0.83	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.343	0.179	0.702	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.675	0.259	1.19	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.49	0.212	0.913	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.436	0.192	0.821	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.625	0.356	1.34	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.49	0.23	0.95	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.463	0.214	0.891	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.515	0.23	0.976	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.606	0.323	1.25	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.472	0.212	0.897	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.545	0.252	1.05	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.587	0.222	1.03	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.61	0.201	1.01	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.556	0.223	1	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.56	0.195	0.95	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.476	0.212	0.9	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.368	0.164	0.696	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.548	0.219	0.985	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.501	0.222	0.945	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.367	0.154	0.675	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.869	0.672	2.21	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.56	0.247	1.05	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.495	0.22	0.936	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.581	0.206	0.993	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.376	0.197	0.77	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.418	0.214	0.846	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.562	0.227	1.02	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.416	0.184	0.785	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.508	0.25	1.01	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.436	0.175	0.785	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.414	0.168	0.749	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.485	0.221	0.927	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.441	0.223	0.887	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.464	0.215	0.894	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.458	0.228	0.914	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.412	0.199	0.809	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.551	0.251	1.05	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.333	0.167	0.667	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.395	0.189	0.772	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.484	0.284	1.05	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.337	0.165	0.666	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.411	0.189	0.789	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.532	0.311	1.15	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.384	0.229	0.842	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.446	0.275	0.995	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.443	0.304	1.05	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1551  
**Lab Sample ID:** 5177001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39142  
**Batch ID:** 24142  
**Run Date:** 08/15/2013 15:03  
**Data File:** c14aug13a\_3-6  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 08/01/2013 16:35  
**Date Received:** 08/09/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 952.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	21	21	pg/L	21.0
2051-61-8	PCB-2	U	21	21	pg/L	21.0
2051-62-9	PCB-3	U	21	21	pg/L	21.0
13029-08-8	PCB-4	U	21	21	pg/L	21.0
16605-91-7	PCB-5	U	21	21	pg/L	21.0
25569-80-6	PCB-6	U	21	21	pg/L	21.0
33284-50-3	PCB-7	U	21	21	pg/L	21.0
34883-43-7	PCB-8	U	21	21	pg/L	21.0
34883-39-1	PCB-9	U	21	21	pg/L	21.0
33146-45-1	PCB-10	U	21	21	pg/L	21.0
2050-67-1	PCB-11	U	105	105	pg/L	105
PCB-12/13	PCB-13/12	CU	42	42	pg/L	42.0
34883-41-5	PCB-14	U	21	21	pg/L	21.0
2050-68-2	PCB-15	U	21	21	pg/L	21.0
38444-78-9	PCB-16	U	21	21	pg/L	21.0
37680-66-3	PCB-17	U	21	21	pg/L	21.0
PCB-18/30	PCB-18/30	CU	42	42	pg/L	42.0
38444-73-4	PCB-19	U	21	21	pg/L	21.0
PCB-20/28	PCB-20/28	C	47.0	46.3	pg/L	42.0
PCB-21/33	PCB-21/33	CU	42	42	pg/L	42.0
38444-85-8	PCB-22		22.3	21.3	pg/L	21.0
55720-44-0	PCB-23	U	21	21	pg/L	21.0
55702-45-9	PCB-24	U	21	21	pg/L	21.0
55712-37-3	PCB-25	U	21	21	pg/L	21.0
PCB-26/29	PCB-26/29	CU	42	42	pg/L	42.0
38444-76-7	PCB-27	U	21	21	pg/L	21.0
16606-02-3	PCB-31	B	30.3	29.6	pg/L	21.0
38444-77-8	PCB-32	U	21	21	pg/L	21.0
37680-68-5	PCB-34	U	21	21	pg/L	21.0
37680-69-6	PCB-35	U	21	21	pg/L	21.0
38444-87-0	PCB-36	U	21	21	pg/L	21.0
38444-90-5	PCB-37	U	21	21	pg/L	21.0

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 2 of 7

**SDG Number:** 2013-1551  
**Lab Sample ID:** 5177001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39142  
**Batch ID:** 24142  
**Run Date:** 08/15/2013 15:03  
**Data File:** c14aug13a\_3-6  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 08/01/2013 16:35  
**Date Received:** 08/09/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 952.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21	21	pg/L	21.0
38444-88-1	PCB-39	U	21	21	pg/L	21.0
PCB-40/71	PCB-40/71	CU	42	42	pg/L	42.0
52663-59-9	PCB-41	U	21	21	pg/L	21.0
36559-22-5	PCB-42	U	21	21	pg/L	21.0
70362-46-8	PCB-43	U	21	21	pg/L	21.0
PCB-44/47/65	PCB-44/65/47	C	112	111	pg/L	63.0
PCB-45/51	PCB-45/51	CU	42	42	pg/L	42.0
41464-47-5	PCB-46	U	21	21	pg/L	21.0
70362-47-9	PCB-48	U	21	21	pg/L	21.0
PCB-49/69	PCB-69/49	C	56.6	55.2	pg/L	42.0
PCB-50/53	PCB-50/53	CU	42	42	pg/L	42.0
35693-99-3	PCB-52		246	245	pg/L	21.0
15968-05-5	PCB-54	U	21	21	pg/L	21.0
74338-24-2	PCB-55	U	21	21	pg/L	21.0
41464-43-1	PCB-56		46.3	44.8	pg/L	21.0
70424-67-8	PCB-57	U	21	21	pg/L	21.0
41464-49-7	PCB-58	U	21	21	pg/L	21.0
PCB-59/62/75	PCB-59/62/75	CU	63	63	pg/L	63.0
33025-41-1	PCB-60		24.3	23.2	pg/L	21.0
PCB-61-76	PCB-61/76/70/74	C	263	262	pg/L	84.0
74472-34-7	PCB-63	U	21	21	pg/L	21.0
52663-58-8	PCB-64		42.0	40.9	pg/L	21.0
32598-10-0	PCB-66		78.9	77.9	pg/L	21.0
73575-53-8	PCB-67	U	21	21	pg/L	21.0
73575-52-7	PCB-68	U	21	21	pg/L	21.0
41464-42-0	PCB-72	U	21	21	pg/L	21.0
74338-23-1	PCB-73	U	21	21	pg/L	21.0
32598-13-3	PCB-77		28.7	27.4	pg/L	21.0
70362-49-1	PCB-78	U	21	21	pg/L	21.0
41464-48-6	PCB-79	U	21	21	pg/L	21.0
33284-52-5	PCB-80	U	21	21	pg/L	21.0

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1551  
**Lab Sample ID:** 5177001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39142  
**Batch ID:** 24142  
**Run Date:** 08/15/2013 15:03  
**Data File:** c14aug13a\_3-6  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 08/01/2013 16:35  
**Date Received:** 08/09/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 952.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21	21	pg/L	21.0
52663-62-4	PCB-82		73.5	71.8	pg/L	21.0
60145-20-2	PCB-83		41.8	40.1	pg/L	21.0
52663-60-2	PCB-84		168	166	pg/L	21.0
PCB-85-117	PCB-117/116/85	C	113	112	pg/L	63.0
PCB-86-125	PCB-86/87/97/109/119/125	C	625	623	pg/L	126
PCB-88/91	PCB-88/91	CU	42	42	pg/L	42.0
73575-57-2	PCB-89	U	21	21	pg/L	21.0
PCB-90-113	PCB-113/90/101	C	1500	1500	pg/L	63.0
52663-61-3	PCB-92		202	201	pg/L	21.0
PCB-93/100	PCB-93/100	CU	42	42	pg/L	42.0
73575-55-0	PCB-94	U	21	21	pg/L	21.0
38379-99-6	PCB-95		911	909	pg/L	21.0
73575-54-9	PCB-96	U	21	21	pg/L	21.0
PCB-98/102	PCB-102/98	CU	42	42	pg/L	42.0
38380-01-7	PCB-99		394	392	pg/L	21.0
60145-21-3	PCB-103	U	21	21	pg/L	21.0
56558-16-8	PCB-104	U	21	21	pg/L	21.0
32598-14-4	PCB-105		294	293	pg/L	21.0
70424-69-0	PCB-106	U	21	21	pg/L	21.0
70424-68-9	PCB-107		58.4	57	pg/L	21.0
PCB-108/124	PCB-108/124	C	44.4	42.7	pg/L	42.0
PCB-110/115	PCB-110/115	CU	42	42	pg/L	42.0
39635-32-0	PCB-111	U	21	21	pg/L	21.0
74472-36-9	PCB-112	U	21	21	pg/L	21.0
74472-37-0	PCB-114	U	21	21	pg/L	21.0
31508-00-6	PCB-118		868	866	pg/L	21.0
68194-12-7	PCB-120	U	21	21	pg/L	21.0
56558-18-0	PCB-121	U	21	21	pg/L	21.0
76842-07-4	PCB-122	U	21	21	pg/L	21.0
65510-44-3	PCB-123	U	21	21	pg/L	21.0
57465-28-8	PCB-126	U	21	21	pg/L	21.0

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1551  
**Lab Sample ID:** 5177001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39142  
**Batch ID:** 24142  
**Run Date:** 08/15/2013 15:03  
**Data File:** c14aug13a\_3-6  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 08/01/2013 16:35  
**Date Received:** 08/09/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 952.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21	21	pg/L	21.0
PCB-128/166	PCB-128/166	C	400	399	pg/L	42.0
PCB-129-163	PCB-138/163/129	C	4780	4770	pg/L	63.0
52663-66-8	PCB-130		180	178	pg/L	21.0
61798-70-7	PCB-131		34.3	32.8	pg/L	21.0
38380-05-1	PCB-132		1690	1690	pg/L	21.0
35694-04-3	PCB-133		47.3	46	pg/L	21.0
52704-70-8	PCB-134		183	181	pg/L	21.0
PCB-135/151	PCB-151/135	C	1870	1870	pg/L	42.0
38411-22-2	PCB-136		460	459	pg/L	21.0
35694-06-5	PCB-137		68.5	66.9	pg/L	21.0
PCB-139/140	PCB-139/140	CU	42	42	pg/L	42.0
52712-04-6	PCB-141		1060	1060	pg/L	21.0
41411-61-4	PCB-142	U	21	21	pg/L	21.0
68194-15-0	PCB-143	U	21	21	pg/L	21.0
68194-14-9	PCB-144		198	198	pg/L	21.0
74472-40-5	PCB-145	U	21	21	pg/L	21.0
51908-16-8	PCB-146		583	582	pg/L	21.0
PCB-147/149	PCB-147/149	C	4290	4290	pg/L	42.0
74472-41-6	PCB-148	U	21	21	pg/L	21.0
68194-08-1	PCB-150	U	21	21	pg/L	21.0
68194-09-2	PCB-152	U	21	21	pg/L	21.0
PCB-153/168	PCB-153/168	C	4960	4960	pg/L	42.0
60145-22-4	PCB-154	U	21	21	pg/L	21.0
33979-03-2	PCB-155	U	21	21	pg/L	21.0
PCB-156/157	PCB-156/157	C	360	359	pg/L	42.0
74472-42-7	PCB-158		384	383	pg/L	21.0
39635-35-3	PCB-159	U	21	21	pg/L	21.0
41411-62-5	PCB-160	U	21	21	pg/L	21.0
74472-43-8	PCB-161	U	21	21	pg/L	21.0
39635-34-2	PCB-162		65.5	64.6	pg/L	21.0
74472-45-0	PCB-164		328	327	pg/L	21.0

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1551  
**Lab Sample ID:** 5177001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39142  
**Batch ID:** 24142  
**Run Date:** 08/15/2013 15:03  
**Data File:** c14aug13a\_3-6  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 08/01/2013 16:35  
**Date Received:** 08/09/2013 10:15  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 952.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21	21	pg/L	21.0
52663-72-6	PCB-167		162	161	pg/L	21.0
32774-16-6	PCB-169	U	21	21	pg/L	21.0
35065-30-6	PCB-170		1750	1740	pg/L	21.0
PCB-171/173	PCB-173/171	C	537	536	pg/L	42.0
52663-74-8	PCB-172		317	316	pg/L	21.0
38411-25-5	PCB-174		2140	2140	pg/L	21.0
40186-70-7	PCB-175		75.3	74.4	pg/L	21.0
52663-65-7	PCB-176		225	225	pg/L	21.0
52663-70-4	PCB-177		1120	1120	pg/L	21.0
52663-67-9	PCB-178		374	373	pg/L	21.0
52663-64-6	PCB-179		745	744	pg/L	21.0
PCB-180/193	PCB-193/180	C	4480	4480	pg/L	42.0
74472-47-2	PCB-181	U	21	21	pg/L	21.0
60145-23-5	PCB-182	U	21	21	pg/L	21.0
PCB-183/185	PCB-183/185	C	1470	1470	pg/L	42.0
74472-48-3	PCB-184	U	21	21	pg/L	21.0
74472-49-4	PCB-186	U	21	21	pg/L	21.0
52663-68-0	PCB-187		3210	3200	pg/L	21.0
74487-85-7	PCB-188	U	21	21	pg/L	21.0
39635-31-9	PCB-189		70.0	69	pg/L	21.0
41411-64-7	PCB-190		377	376	pg/L	21.0
74472-50-7	PCB-191		72.4	71.6	pg/L	21.0
74472-51-8	PCB-192	U	21	21	pg/L	21.0
35694-08-7	PCB-194		743	742	pg/L	21.0
52663-78-2	PCB-195		338	337	pg/L	21.0
42740-50-1	PCB-196		398	397	pg/L	21.0
PCB-197/200	PCB-197/200	C	156	156	pg/L	42.0
PCB-198/199	PCB-198/199	C	979	978	pg/L	42.0
40186-71-8	PCB-201		96.2	95.5	pg/L	21.0
2136-99-4	PCB-202		132	131	pg/L	21.0
52663-76-0	PCB-203		694	693	pg/L	21.0

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1551  
**Lab Sample ID:** 5177001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-39142  
**Batch ID:** 24142  
**Run Date:** 08/15/2013 15:03  
**Data File:** c14aug13a\_3-6  
**Prep Batch:** 24138  
**Prep Date:** 12-AUG-13

**Client:** LANL001  
**Date Collected:** 08/01/2013 16:35  
**Date Received:** 08/09/2013 10:15  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
**Prep Method:** SW846 3520C  
**Aliquot:** 952.2 mL

**Project:** LANL00112  
**Matrix:** WATER  
**Prep Basis:** As Received  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21	21	pg/L	21.0
74472-53-0	PCB-205		46.1	45.3	pg/L	21.0
40186-72-9	PCB-206		147	146	pg/L	21.0
52663-79-3	PCB-207	U	21.7	21	pg/L	21.0
52663-77-1	PCB-208		27.8	26.8	pg/L	21.0
2051-24-3	PCB-209	U	21	21	pg/L	21.0
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		47.0	67.6	pg/L	
26914-33-0	Total Tetra PCBs		899	887	pg/L	
25429-29-2	Total Penta PCBs		5290	5270	pg/L	
26601-64-9	Total Hexa PCBs		22100	22100	pg/L	
28655-71-2	Total Hepta PCBs		17000	16900	pg/L	
55722-26-4	Total Octa PCBs		3580	3580	pg/L	
53742-07-7	Total Nona PCBs		197	173	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		49100	49000	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		936	2100	pg/L	44.6	(15%-150%)
13C-3-MoCB		1180	2100	pg/L	56.2	(15%-150%)
13C-4-DiCB		1460	2100	pg/L	69.4	(25%-150%)
13C-15-DiCB		1700	2100	pg/L	80.9	(25%-150%)
13C-19-TrCB		1710	2100	pg/L	81.3	(25%-150%)
13C-37-TrCB		1640	2100	pg/L	78.2	(25%-150%)
13C-54-TeCB		1620	2100	pg/L	77.2	(25%-150%)
13C-77-TeCB		2020	2100	pg/L	96.1	(25%-150%)
13C-81-TeCB		2010	2100	pg/L	95.6	(25%-150%)
13C-104-PeCB		1940	2100	pg/L	92.5	(25%-150%)
13C-105-PeCB		1810	2100	pg/L	86.4	(25%-150%)
13C-114-PeCB		1730	2100	pg/L	82.5	(25%-150%)
13C-118-PeCB		1800	2100	pg/L	85.6	(25%-150%)
13C-123-PeCB		1910	2100	pg/L	90.7	(25%-150%)
13C-126-PeCB		1960	2100	pg/L	93.5	(25%-150%)
13C-155-HxCB		1810	2100	pg/L	86.0	(25%-150%)
13C-156-HxCB	C	3640	4200	pg/L	86.7	(25%-150%)
13C-167-HxCB		1710	2100	pg/L	81.6	(25%-150%)
13C-169-HxCB		2040	2100	pg/L	96.9	(25%-150%)
13C-188-HpCB		1720	2100	pg/L	82.0	(25%-150%)
13C-189-HpCB		1830	2100	pg/L	87.3	(25%-150%)
13C-202-OcCB		1940	2100	pg/L	92.3	(25%-150%)
13C-205-OcCB		2090	2100	pg/L	99.5	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 7 of 7

<b>SDG Number:</b> 2013-1551	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5177001	<b>Date Collected:</b> 08/01/2013 16:35	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 08/09/2013 10:15	
<b>Client ID:</b> WT_IPC-13-39142		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24142	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/15/2013 15:03	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c14aug13a_3-6		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24138	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 12-AUG-13	<b>Aliquot:</b> 952.2 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2220	2100	pg/L	106      (25%-150%)
13C-208-NoCB			2270	2100	pg/L	108      (25%-150%)
13C-209-DeCB			2580	2100	pg/L	123      (25%-150%)
13C-28-TrCB			1630	2100	pg/L	77.5      (30%-135%)
13C-111-PeCB			2010	2100	pg/L	95.8      (30%-135%)
13C-178-HpCB			2130	2100	pg/L	102      (30%-135%)

**Comments:**

- B** The target analyte was detected in the associated blank.  
**C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.571	0.321	1.21	
3-Chlorobiphenyl (2)	pg/L	0.551	0.344	1.24	
4-Chlorobiphenyl (3)	pg/L	0.604	0.31	1.22	
2,2'-Dichlorobiphenyl (4)	pg/L	4.26	2.62	9.5	
2,3-Dichlorobiphenyl (5)	pg/L	3.78	2.51	8.8	
2,3'-Dichlorobiphenyl (6)	pg/L	3	1.94	6.89	
2,4-Dichlorobiphenyl (7)	pg/L	3.27	2.1	7.47	
2,4'-Dichlorobiphenyl (8)	pg/L	3.34	2.01	7.36	
2,5-Dichlorobiphenyl (9)	pg/L	3.1	2.15	7.41	
2,6-Dichlorobiphenyl (10)	pg/L	2.47	1.51	5.48	
3,3'-Dichlorobiphenyl (11)	pg/L	4.01	2.01	8.04	
3,4-Dichlorobiphenyl (12)	pg/L	4.26	2.2	8.67	
3,5-Dichlorobiphenyl (14)	pg/L	3.39	2.14	7.68	
4,4'-Dichlorobiphenyl (15)	pg/L	4.31	2.73	9.77	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.634	0.253	1.14	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.554	0.212	0.978	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.42	0.19	0.799	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.538	0.212	0.962	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.386	0.147	0.681	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.427	0.132	0.692	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.53	0.254	1.04	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.416	0.188	0.792	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.411	0.195	0.801	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.369	0.141	0.651	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.457	0.146	0.749	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.352	0.154	0.661	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.355	0.134	0.624	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.375	0.131	0.638	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.378	0.151	0.681	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.486	0.181	0.847	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.433	0.165	0.763	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.694	0.401	1.5	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.46	0.172	0.803	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.466	0.171	0.808	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.704	0.35	1.4	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.855	0.502	1.86	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.786	0.409	1.6	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.837	0.446	1.73	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.73	0.377	1.48	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.644	0.329	1.3	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.484	0.26	1	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.761	0.384	1.53	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.656	0.346	1.35	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.463	0.208	0.88	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.723	0.336	1.4	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.316	0.196	0.707	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.605	0.289	1.18	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.798	0.362	1.52	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.518	0.269	1.06	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.568	0.289	1.15	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.614	0.328	1.27	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.632	0.231	1.09	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.677	0.307	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.495	0.245	0.986	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.585	0.28	1.14	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.526	0.263	1.05	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.44	0.213	0.866	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.586	0.231	1.05	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.521	0.281	1.08	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.562	0.302	1.17	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.699	0.325	1.35	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.606	0.26	1.13	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.497	0.22	0.937	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.507	0.236	0.979	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.658	0.299	1.26	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.886	0.378	1.64	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.901	0.396	1.69	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.876	0.415	1.71	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.764	0.289	1.34	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.825	0.319	1.46	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.963	0.41	1.78	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.804	0.371	1.55	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.788	0.312	1.41	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.792	0.359	1.51	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.701	0.387	1.48	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.916	0.525	1.97	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.777	0.323	1.42	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.415	0.259	0.934	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.907	0.4	1.71	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.805	0.455	1.72	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.713	0.335	1.38	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.467	0.278	1.02	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.971	0.4	1.77	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.777	0.375	1.53	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.728	0.334	1.39	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.822	0.396	1.61	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.826	0.373	1.57	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.645	0.343	1.33	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.601	0.278	1.16	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.938	0.467	1.87	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	1.06	0.407	1.88	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.564	0.244	1.05	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.653	0.361	1.37	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.835	0.385	1.61	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.85	0.424	1.7	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	1.03	0.495	2.02	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.8	0.366	1.53	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.598	0.268	1.13	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.711	0.301	1.31	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.729	0.32	1.37	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.779	0.348	1.47	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.786	0.428	1.64	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.681	0.298	1.28	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.817	0.375	1.57	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.521	0.224	0.968	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.345	0.178	0.701	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.737	0.418	1.57	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.663	0.308	1.28	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.679	0.318	1.31	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.714	0.319	1.35	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.655	0.294	1.24	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.44	0.244	0.928	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.382	0.236	0.854	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.605	0.263	1.13	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.753	0.354	1.46	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.436	0.222	0.879	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.371	0.231	0.833	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.328	0.179	0.687	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.627	0.249	1.12	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.4	0.215	0.83	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.343	0.179	0.702	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.675	0.259	1.19	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.49	0.212	0.913	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.436	0.192	0.821	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.625	0.356	1.34	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.49	0.23	0.95	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.463	0.214	0.891	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.515	0.23	0.976	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.606	0.323	1.25	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.472	0.212	0.897	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.545	0.252	1.05	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.587	0.222	1.03	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.61	0.201	1.01	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.556	0.223	1	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.56	0.195	0.95	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.476	0.212	0.9	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.368	0.164	0.696	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.548	0.219	0.985	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.501	0.222	0.945	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.367	0.154	0.675	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.869	0.672	2.21	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.56	0.247	1.05	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.495	0.22	0.936	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.581	0.206	0.993	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.376	0.197	0.77	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.418	0.214	0.846	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.562	0.227	1.02	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.416	0.184	0.785	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.508	0.25	1.01	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.436	0.175	0.785	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.414	0.168	0.749	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.485	0.221	0.927	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.441	0.223	0.887	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.464	0.215	0.894	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.458	0.228	0.914	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.412	0.199	0.809	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.551	0.251	1.05	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.333	0.167	0.667	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.395	0.189	0.772	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.484	0.284	1.05	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.337	0.165	0.666	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.411	0.189	0.789	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.532	0.311	1.15	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.384	0.229	0.842	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.446	0.275	0.995	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.443	0.304	1.05	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1624  
**Lab Sample ID:** 5187001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32210  
**Batch ID:** 24172  
**Run Date:** 08/24/2013 10:50  
**Data File:** c23aug13a\_2-9  
**Prep Batch:** 24169  
**Prep Date:** 19-AUG-13

**Client:** LANL001  
**Date Collected:** 08/08/2013 11:59  
**Date Received:** 08/14/2013 09:45  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 888.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	225	225	pg/L	225
2051-61-8	PCB-2	U	225	225	pg/L	225
2051-62-9	PCB-3	U	225	225	pg/L	225
13029-08-8	PCB-4	U	225	225	pg/L	225
16605-91-7	PCB-5	U	225	225	pg/L	225
25569-80-6	PCB-6	U	225	225	pg/L	225
33284-50-3	PCB-7	U	225	225	pg/L	225
34883-43-7	PCB-8	U	225	225	pg/L	225
34883-39-1	PCB-9	U	225	225	pg/L	225
33146-45-1	PCB-10	U	225	225	pg/L	225
2050-67-1	PCB-11	U	1130	1130	pg/L	1130
PCB-12/13	PCB-13/12	CU	450	450	pg/L	450
34883-41-5	PCB-14	U	225	225	pg/L	225
2050-68-2	PCB-15	U	225	225	pg/L	225
38444-78-9	PCB-16	U	225	225	pg/L	225
37680-66-3	PCB-17	U	225	225	pg/L	225
PCB-18/30	PCB-18/30	CU	450	450	pg/L	450
38444-73-4	PCB-19	U	225	225	pg/L	225
PCB-20/28	PCB-20/28	CU	450	450	pg/L	450
PCB-21/33	PCB-21/33	CU	450	450	pg/L	450
38444-85-8	PCB-22	U	225	225	pg/L	225
55720-44-0	PCB-23	U	225	225	pg/L	225
55702-45-9	PCB-24	U	225	225	pg/L	225
55712-37-3	PCB-25	U	225	225	pg/L	225
PCB-26/29	PCB-26/29	CU	450	450	pg/L	450
38444-76-7	PCB-27	U	225	225	pg/L	225
16606-02-3	PCB-31	U	225	225	pg/L	225
38444-77-8	PCB-32	U	225	225	pg/L	225
37680-68-5	PCB-34	U	225	225	pg/L	225
37680-69-6	PCB-35	U	225	225	pg/L	225
38444-87-0	PCB-36	U	225	225	pg/L	225
38444-90-5	PCB-37	U	225	225	pg/L	225

**Comments:**

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**PCB Congeners**  
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**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	225	225	pg/L	225
38444-88-1	PCB-39	U	225	225	pg/L	225
PCB-40/71	PCB-40/71	CU	450	450	pg/L	450
52663-59-9	PCB-41	U	225	225	pg/L	225
36559-22-5	PCB-42	U	225	225	pg/L	225
70362-46-8	PCB-43	U	225	225	pg/L	225
PCB-44/47/65	PCB-44/65/47	CU	675	675	pg/L	675
PCB-45/51	PCB-45/51	CU	450	450	pg/L	450
41464-47-5	PCB-46	U	225	225	pg/L	225
70362-47-9	PCB-48	U	225	225	pg/L	225
PCB-49/69	PCB-69/49	CU	450	450	pg/L	450
PCB-50/53	PCB-50/53	CU	450	450	pg/L	450
35693-99-3	PCB-52		241	240	pg/L	225
15968-05-5	PCB-54	U	225	225	pg/L	225
74338-24-2	PCB-55	U	225	225	pg/L	225
41464-43-1	PCB-56		312	311	pg/L	225
70424-67-8	PCB-57	U	225	225	pg/L	225
41464-49-7	PCB-58	U	225	225	pg/L	225
PCB-59/62/75	PCB-59/62/75	CU	675	675	pg/L	675
33025-41-1	PCB-60	U	225	225	pg/L	225
PCB-61-76	PCB-61/76/70/74	CU	900	900	pg/L	900
74472-34-7	PCB-63	U	225	225	pg/L	225
52663-58-8	PCB-64	U	225	225	pg/L	225
32598-10-0	PCB-66		379	378	pg/L	225
73575-53-8	PCB-67	U	225	225	pg/L	225
73575-52-7	PCB-68	U	225	225	pg/L	225
41464-42-0	PCB-72	U	225	225	pg/L	225
74338-23-1	PCB-73	U	225	225	pg/L	225
32598-13-3	PCB-77	U	225	225	pg/L	225
70362-49-1	PCB-78	U	225	225	pg/L	225
41464-48-6	PCB-79	U	225	225	pg/L	225
33284-52-5	PCB-80	U	225	225	pg/L	225

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**PCB Congeners**  
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**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 888.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	225	225	pg/L	225
52663-62-4	PCB-82	U	225	225	pg/L	225
60145-20-2	PCB-83	U	225	225	pg/L	225
52663-60-2	PCB-84	U	225	225	pg/L	225
PCB-85-117	PCB-117/116/85	CU	675	675	pg/L	675
PCB-86-125	PCB-86/87/97/109/119/125	CU	1350	1350	pg/L	1350
PCB-88/91	PCB-88/91	CU	450	450	pg/L	450
73575-57-2	PCB-89	U	225	225	pg/L	225
PCB-90-113	PCB-113/90/101	C	1060	1060	pg/L	675
52663-61-3	PCB-92		234	232	pg/L	225
PCB-93/100	PCB-93/100	CU	450	450	pg/L	450
73575-55-0	PCB-94	U	225	225	pg/L	225
38379-99-6	PCB-95		558	556	pg/L	225
73575-54-9	PCB-96	U	225	225	pg/L	225
PCB-98/102	PCB-102/98	CU	450	450	pg/L	450
38380-01-7	PCB-99		888	887	pg/L	225
60145-21-3	PCB-103	U	225	225	pg/L	225
56558-16-8	PCB-104	U	225	225	pg/L	225
32598-14-4	PCB-105		753	751	pg/L	225
70424-69-0	PCB-106	U	225	225	pg/L	225
70424-68-9	PCB-107	U	225	225	pg/L	225
PCB-108/124	PCB-108/124	CU	450	450	pg/L	450
PCB-110/115	PCB-110/115	CU	450	450	pg/L	450
39635-32-0	PCB-111	U	225	225	pg/L	225
74472-36-9	PCB-112	U	225	225	pg/L	225
74472-37-0	PCB-114	U	225	225	pg/L	225
31508-00-6	PCB-118		1220	1210	pg/L	225
68194-12-7	PCB-120	U	225	225	pg/L	225
56558-18-0	PCB-121	U	225	225	pg/L	225
76842-07-4	PCB-122	U	225	225	pg/L	225
65510-44-3	PCB-123	U	225	225	pg/L	225
57465-28-8	PCB-126	U	225	225	pg/L	225

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**PCB Congeners**  
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**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	225	225	pg/L	225
PCB-128/166	PCB-128/166	C	568	567	pg/L	450
PCB-129-163	PCB-138/163/129	C	3610	3610	pg/L	675
52663-66-8	PCB-130	U	225	225	pg/L	225
61798-70-7	PCB-131	U	225	225	pg/L	225
38380-05-1	PCB-132		831	830	pg/L	225
35694-04-3	PCB-133	U	225	225	pg/L	225
52704-70-8	PCB-134	U	225	225	pg/L	225
PCB-135/151	PCB-151/135	C	711	710	pg/L	450
38411-22-2	PCB-136	U	225	225	pg/L	225
35694-06-5	PCB-137		319	318	pg/L	225
PCB-139/140	PCB-139/140	CU	450	450	pg/L	450
52712-04-6	PCB-141		238	236	pg/L	225
41411-61-4	PCB-142	U	225	225	pg/L	225
68194-15-0	PCB-143	U	225	225	pg/L	225
68194-14-9	PCB-144	U	225	225	pg/L	225
74472-40-5	PCB-145	U	225	225	pg/L	225
51908-16-8	PCB-146	U	225	225	pg/L	225
PCB-147/149	PCB-147/149	C	2040	2040	pg/L	450
74472-41-6	PCB-148	U	225	225	pg/L	225
68194-08-1	PCB-150	U	225	225	pg/L	225
68194-09-2	PCB-152	U	225	225	pg/L	225
PCB-153/168	PCB-153/168	C	2750	2750	pg/L	450
60145-22-4	PCB-154	U	225	225	pg/L	225
33979-03-2	PCB-155	U	225	225	pg/L	225
PCB-156/157	PCB-156/157	C	505	504	pg/L	450
74472-42-7	PCB-158		265	264	pg/L	225
39635-35-3	PCB-159	U	225	225	pg/L	225
41411-62-5	PCB-160	U	225	225	pg/L	225
74472-43-8	PCB-161	U	225	225	pg/L	225
39635-34-2	PCB-162	U	225	225	pg/L	225
74472-45-0	PCB-164	U	225	225	pg/L	225

**Comments:**

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**PCB Congeners**  
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**SDG Number:** 2013-1624  
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**Instrument:** HRP791  
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**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	225	225	pg/L	225
52663-72-6	PCB-167	U	225	225	pg/L	225
32774-16-6	PCB-169	U	225	225	pg/L	225
35065-30-6	PCB-170		534	533	pg/L	225
PCB-171/173	PCB-173/171	CU	450	450	pg/L	450
52663-74-8	PCB-172	U	225	225	pg/L	225
38411-25-5	PCB-174		433	432	pg/L	225
40186-70-7	PCB-175	U	225	225	pg/L	225
52663-65-7	PCB-176	U	225	225	pg/L	225
52663-70-4	PCB-177	U	225	225	pg/L	225
52663-67-9	PCB-178	U	225	225	pg/L	225
52663-64-6	PCB-179	U	225	225	pg/L	225
PCB-180/193	PCB-193/180	C	1120	1120	pg/L	450
74472-47-2	PCB-181	U	225	225	pg/L	225
60145-23-5	PCB-182	U	225	225	pg/L	225
PCB-183/185	PCB-183/185	CU	450	450	pg/L	450
74472-48-3	PCB-184	U	225	225	pg/L	225
74472-49-4	PCB-186	U	225	225	pg/L	225
52663-68-0	PCB-187		817	816	pg/L	225
74487-85-7	PCB-188	U	225	225	pg/L	225
39635-31-9	PCB-189	U	225	225	pg/L	225
41411-64-7	PCB-190	U	225	225	pg/L	225
74472-50-7	PCB-191	U	225	225	pg/L	225
74472-51-8	PCB-192	U	225	225	pg/L	225
35694-08-7	PCB-194	U	225	225	pg/L	225
52663-78-2	PCB-195	U	225	225	pg/L	225
42740-50-1	PCB-196	U	225	225	pg/L	225
PCB-197/200	PCB-197/200	CU	450	450	pg/L	450
PCB-198/199	PCB-198/199	CU	450	450	pg/L	450
40186-71-8	PCB-201	U	225	225	pg/L	225
2136-99-4	PCB-202	U	225	225	pg/L	225
52663-76-0	PCB-203	U	225	225	pg/L	225

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Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1624  
**Lab Sample ID:** 5187001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32210  
**Batch ID:** 24172  
**Run Date:** 08/24/2013 10:50  
**Data File:** c23aug13a\_2-9  
**Prep Batch:** 24169  
**Prep Date:** 19-AUG-13

**Client:** LANL001  
**Date Collected:** 08/08/2013 11:59  
**Date Received:** 08/14/2013 09:45  
  
**Method:** EPA Method 1668A  
**Analyst:** CLP  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 888.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 10  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	225	225	pg/L	225
74472-53-0	PCB-205	U	225	225	pg/L	225
40186-72-9	PCB-206	U	225	225	pg/L	225
52663-79-3	PCB-207	U	225	225	pg/L	225
52663-77-1	PCB-208	U	225	225	pg/L	225
2051-24-3	PCB-209	U	225	225	pg/L	225
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		932	928	pg/L	
25429-29-2	Total Penta PCBs		4710	4700	pg/L	
26601-64-9	Total Hexa PCBs		11800	11800	pg/L	
28655-71-2	Total Hepta PCBs		2900	2900	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		20400	20400	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1370	2250	pg/L	60.7	(15%-150%)
13C-3-MoCB		1530	2250	pg/L	67.9	(15%-150%)
13C-4-DiCB		1590	2250	pg/L	70.8	(25%-150%)
13C-15-DiCB		1760	2250	pg/L	78.3	(25%-150%)
13C-19-TrCB		1930	2250	pg/L	85.6	(25%-150%)
13C-37-TrCB		2070	2250	pg/L	92.0	(25%-150%)
13C-54-TeCB		2090	2250	pg/L	92.9	(25%-150%)
13C-77-TeCB		2120	2250	pg/L	94.3	(25%-150%)
13C-81-TeCB		2120	2250	pg/L	94.4	(25%-150%)
13C-104-PeCB		2100	2250	pg/L	93.4	(25%-150%)
13C-105-PeCB		1750	2250	pg/L	77.8	(25%-150%)
13C-114-PeCB		1710	2250	pg/L	75.9	(25%-150%)
13C-118-PeCB		1820	2250	pg/L	81.0	(25%-150%)
13C-123-PeCB		1930	2250	pg/L	85.9	(25%-150%)
13C-126-PeCB		1660	2250	pg/L	73.6	(25%-150%)
13C-155-HxCB		2460	2250	pg/L	109	(25%-150%)
13C-156-HxCB	C	3770	4500	pg/L	83.8	(25%-150%)
13C-167-HxCB		1780	2250	pg/L	79.1	(25%-150%)
13C-169-HxCB		2000	2250	pg/L	88.8	(25%-150%)
13C-188-HpCB		1750	2250	pg/L	77.9	(25%-150%)
13C-189-HpCB		1830	2250	pg/L	81.4	(25%-150%)
13C-202-OcCB		1740	2250	pg/L	77.3	(25%-150%)
13C-205-OcCB		2090	2250	pg/L	93.0	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1624	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5187001	<b>Date Collected:</b> 08/08/2013 11:59	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 08/14/2013 09:45	
<b>Client ID:</b> WT_IPC-13-32210		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24172	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/24/2013 10:50	<b>Analyst:</b> CLP	<b>Instrument:</b> HRP791
<b>Data File:</b> c23aug13a_2-9		<b>Dilution:</b> 10
<b>Prep Batch:</b> 24169	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 19-AUG-13	<b>Aliquot:</b> 888.5 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%</b>
						<b>Acceptable Limits</b>
13C-206-NoCB			2120	2250	pg/L	94.3 (25%-150%)
13C-208-NoCB			1940	2250	pg/L	86.0 (25%-150%)
13C-209-DeCB			2480	2250	pg/L	110 (25%-150%)
13C-28-TrCB			2250	2250	pg/L	99.9 (30%-135%)
13C-111-PeCB			2070	2250	pg/L	91.8 (30%-135%)
13C-178-HpCB			2200	2250	pg/L	97.9 (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.571	0.321	1.21	
3-Chlorobiphenyl (2)	pg/L	0.551	0.344	1.24	
4-Chlorobiphenyl (3)	pg/L	0.604	0.31	1.22	
2,2'-Dichlorobiphenyl (4)	pg/L	4.26	2.62	9.5	
2,3-Dichlorobiphenyl (5)	pg/L	3.78	2.51	8.8	
2,3'-Dichlorobiphenyl (6)	pg/L	3	1.94	6.89	
2,4-Dichlorobiphenyl (7)	pg/L	3.27	2.1	7.47	
2,4'-Dichlorobiphenyl (8)	pg/L	3.34	2.01	7.36	
2,5-Dichlorobiphenyl (9)	pg/L	3.1	2.15	7.41	
2,6-Dichlorobiphenyl (10)	pg/L	2.47	1.51	5.48	
3,3'-Dichlorobiphenyl (11)	pg/L	4.01	2.01	8.04	
3,4-Dichlorobiphenyl (12)	pg/L	4.26	2.2	8.67	
3,5-Dichlorobiphenyl (14)	pg/L	3.39	2.14	7.68	
4,4'-Dichlorobiphenyl (15)	pg/L	4.31	2.73	9.77	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.634	0.253	1.14	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.554	0.212	0.978	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.42	0.19	0.799	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.538	0.212	0.962	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.386	0.147	0.681	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.427	0.132	0.692	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.53	0.254	1.04	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.416	0.188	0.792	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.411	0.195	0.801	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.369	0.141	0.651	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.457	0.146	0.749	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.352	0.154	0.661	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.355	0.134	0.624	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.375	0.131	0.638	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.378	0.151	0.681	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.486	0.181	0.847	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.433	0.165	0.763	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.694	0.401	1.5	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.46	0.172	0.803	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.466	0.171	0.808	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.704	0.35	1.4	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.855	0.502	1.86	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.786	0.409	1.6	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.837	0.446	1.73	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.73	0.377	1.48	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.644	0.329	1.3	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.484	0.26	1	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.761	0.384	1.53	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.656	0.346	1.35	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.463	0.208	0.88	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.723	0.336	1.4	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.316	0.196	0.707	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.605	0.289	1.18	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.798	0.362	1.52	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.518	0.269	1.06	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.568	0.289	1.15	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.614	0.328	1.27	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.632	0.231	1.09	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.677	0.307	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.495	0.245	0.986	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.585	0.28	1.14	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.526	0.263	1.05	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.44	0.213	0.866	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.586	0.231	1.05	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.521	0.281	1.08	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	0.562	0.302	1.17	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.699	0.325	1.35	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.606	0.26	1.13	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.497	0.22	0.937	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.507	0.236	0.979	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.658	0.299	1.26	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.886	0.378	1.64	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.901	0.396	1.69	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.876	0.415	1.71	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.764	0.289	1.34	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.825	0.319	1.46	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.963	0.41	1.78	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.804	0.371	1.55	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.788	0.312	1.41	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.792	0.359	1.51	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.701	0.387	1.48	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.916	0.525	1.97	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.777	0.323	1.42	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.415	0.259	0.934	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.907	0.4	1.71	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.805	0.455	1.72	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.713	0.335	1.38	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.467	0.278	1.02	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.971	0.4	1.77	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.777	0.375	1.53	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.728	0.334	1.39	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.822	0.396	1.61	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.826	0.373	1.57	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.645	0.343	1.33	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.601	0.278	1.16	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.938	0.467	1.87	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	1.06	0.407	1.88	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.564	0.244	1.05	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.653	0.361	1.37	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.835	0.385	1.61	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.85	0.424	1.7	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	1.03	0.495	2.02	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.8	0.366	1.53	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.598	0.268	1.13	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.711	0.301	1.31	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.729	0.32	1.37	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.779	0.348	1.47	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.786	0.428	1.64	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.681	0.298	1.28	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.817	0.375	1.57	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.521	0.224	0.968	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.345	0.178	0.701	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.737	0.418	1.57	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.663	0.308	1.28	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.679	0.318	1.31	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.714	0.319	1.35	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.655	0.294	1.24	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.44	0.244	0.928	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.382	0.236	0.854	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.605	0.263	1.13	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.753	0.354	1.46	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.436	0.222	0.879	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.371	0.231	0.833	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.328	0.179	0.687	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.627	0.249	1.12	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.4	0.215	0.83	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.343	0.179	0.702	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.675	0.259	1.19	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.49	0.212	0.913	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.436	0.192	0.821	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.625	0.356	1.34	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.49	0.23	0.95	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.463	0.214	0.891	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.515	0.23	0.976	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.606	0.323	1.25	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.472	0.212	0.897	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.545	0.252	1.05	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.587	0.222	1.03	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.61	0.201	1.01	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.556	0.223	1	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.56	0.195	0.95	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.476	0.212	0.9	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.368	0.164	0.696	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.548	0.219	0.985	



# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.501	0.222	0.945	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.367	0.154	0.675	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.869	0.672	2.21	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.56	0.247	1.05	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.495	0.22	0.936	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.581	0.206	0.993	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.376	0.197	0.77	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.418	0.214	0.846	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.562	0.227	1.02	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.416	0.184	0.785	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.508	0.25	1.01	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.436	0.175	0.785	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.414	0.168	0.749	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.485	0.221	0.927	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.441	0.223	0.887	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.464	0.215	0.894	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.458	0.228	0.914	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.412	0.199	0.809	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.551	0.251	1.05	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.333	0.167	0.667	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.395	0.189	0.772	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.484	0.284	1.05	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.337	0.165	0.666	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.411	0.189	0.789	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.532	0.311	1.15	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.384	0.229	0.842	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.446	0.275	0.995	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.443	0.304	1.05	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1728  
**Lab Sample ID:** 5229001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-34608  
**Batch ID:** 24251  
**Run Date:** 08/29/2013 02:03  
**Data File:** c28aug13a-10  
**Prep Batch:** 24248  
**Prep Date:** 27-AUG-13

**Client:** LANL001  
**Date Collected:** 08/18/2013 14:22  
**Date Received:** 08/23/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 793 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	25.2	25.2	pg/L	25.2
2051-61-8	PCB-2	U	25.2	25.2	pg/L	25.2
2051-62-9	PCB-3	U	25.2	25.2	pg/L	25.2
13029-08-8	PCB-4	U	25.2	25.2	pg/L	25.2
16605-91-7	PCB-5	U	25.2	25.2	pg/L	25.2
25569-80-6	PCB-6	U	25.2	25.2	pg/L	25.2
33284-50-3	PCB-7	U	25.2	25.2	pg/L	25.2
34883-43-7	PCB-8	U	25.2	25.2	pg/L	25.2
34883-39-1	PCB-9	U	25.2	25.2	pg/L	25.2
33146-45-1	PCB-10	U	25.2	25.2	pg/L	25.2
2050-67-1	PCB-11	U	126	126	pg/L	126
PCB-12/13	PCB-13/12	CU	50.4	50.4	pg/L	50.4
34883-41-5	PCB-14	U	25.2	25.2	pg/L	25.2
2050-68-2	PCB-15	U	25.2	25.2	pg/L	25.2
38444-78-9	PCB-16	U	25.2	25.2	pg/L	25.2
37680-66-3	PCB-17	U	25.2	25.2	pg/L	25.2
PCB-18/30	PCB-18/30	CU	50.4	50.4	pg/L	50.4
38444-73-4	PCB-19	U	25.2	25.2	pg/L	25.2
PCB-20/28	PCB-20/28	C	61.3	60.7	pg/L	50.4
PCB-21/33	PCB-21/33	CU	50.4	50.4	pg/L	50.4
38444-85-8	PCB-22		34.1	33.1	pg/L	25.2
55720-44-0	PCB-23	U	25.2	25.2	pg/L	25.2
55702-45-9	PCB-24	U	25.2	25.2	pg/L	25.2
55712-37-3	PCB-25	U	25.2	25.2	pg/L	25.2
PCB-26/29	PCB-26/29	CU	50.4	50.4	pg/L	50.4
38444-76-7	PCB-27	U	25.2	25.2	pg/L	25.2
16606-02-3	PCB-31		47.8	47.2	pg/L	25.2
38444-77-8	PCB-32	U	25.2	25.2	pg/L	25.2
37680-68-5	PCB-34	U	25.2	25.2	pg/L	25.2
37680-69-6	PCB-35	U	25.2	25.2	pg/L	25.2
38444-87-0	PCB-36	U	25.2	25.2	pg/L	25.2
38444-90-5	PCB-37		35.3	33.8	pg/L	25.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1728  
**Lab Sample ID:** 5229001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-34608  
**Batch ID:** 24251  
**Run Date:** 08/29/2013 02:03  
**Data File:** c28aug13a-10  
**Prep Batch:** 24248  
**Prep Date:** 27-AUG-13

**Client:** LANL001  
**Date Collected:** 08/18/2013 14:22  
**Date Received:** 08/23/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 793 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	25.2	25.2	pg/L	25.2
38444-88-1	PCB-39	U	25.2	25.2	pg/L	25.2
PCB-40/71	PCB-40/71	CU	50.4	50.4	pg/L	50.4
52663-59-9	PCB-41	U	25.2	25.2	pg/L	25.2
36559-22-5	PCB-42	U	25.2	25.2	pg/L	25.2
70362-46-8	PCB-43	U	25.2	25.2	pg/L	25.2
PCB-44/47/65	PCB-44/65/47	CU	75.7	75.7	pg/L	75.7
PCB-45/51	PCB-45/51	CU	50.4	50.4	pg/L	50.4
41464-47-5	PCB-46	U	25.2	25.2	pg/L	25.2
70362-47-9	PCB-48	U	25.2	25.2	pg/L	25.2
PCB-49/69	PCB-69/49	C	66.2	64.8	pg/L	50.4
PCB-50/53	PCB-50/53	CU	50.4	50.4	pg/L	50.4
35693-99-3	PCB-52	U	25.2	25.2	pg/L	25.2
15968-05-5	PCB-54	U	25.2	25.2	pg/L	25.2
74338-24-2	PCB-55	U	25.2	25.2	pg/L	25.2
41464-43-1	PCB-56		54.0	52.5	pg/L	25.2
70424-67-8	PCB-57	U	25.2	25.2	pg/L	25.2
41464-49-7	PCB-58	U	25.2	25.2	pg/L	25.2
PCB-59/62/75	PCB-59/62/75	CU	75.7	75.7	pg/L	75.7
33025-41-1	PCB-60		30.4	29.3	pg/L	25.2
PCB-61-76	PCB-61/76/70/74	C	328	326	pg/L	101
74472-34-7	PCB-63	U	25.2	25.2	pg/L	25.2
52663-58-8	PCB-64		51.1	50	pg/L	25.2
32598-10-0	PCB-66		77.1	76	pg/L	25.2
73575-53-8	PCB-67	U	25.2	25.2	pg/L	25.2
73575-52-7	PCB-68	U	25.2	25.2	pg/L	25.2
41464-42-0	PCB-72	U	25.2	25.2	pg/L	25.2
74338-23-1	PCB-73	U	25.2	25.2	pg/L	25.2
32598-13-3	PCB-77		77.0	75.7	pg/L	25.2
70362-49-1	PCB-78	U	25.2	25.2	pg/L	25.2
41464-48-6	PCB-79	U	25.2	25.2	pg/L	25.2
33284-52-5	PCB-80	U	25.2	25.2	pg/L	25.2

**Comments:**

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**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1728  
**Lab Sample ID:** 5229001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-34608  
**Batch ID:** 24251  
**Run Date:** 08/29/2013 02:03  
**Data File:** c28aug13a-10  
**Prep Batch:** 24248  
**Prep Date:** 27-AUG-13

**Client:** LANL001  
**Date Collected:** 08/18/2013 14:22  
**Date Received:** 08/23/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 793 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	25.2	25.2	pg/L	25.2
52663-62-4	PCB-82		111	109	pg/L	25.2
60145-20-2	PCB-83		46.5	44.8	pg/L	25.2
52663-60-2	PCB-84		239	238	pg/L	25.2
PCB-85-117	PCB-117/116/85	C	139	138	pg/L	75.7
PCB-86-125	PCB-86/87/97/109/119/125	C	666	665	pg/L	151
PCB-88/91	PCB-88/91	C	108	106	pg/L	50.4
73575-57-2	PCB-89	U	25.2	25.2	pg/L	25.2
PCB-90-113	PCB-113/90/101	C	945	944	pg/L	75.7
52663-61-3	PCB-92		154	152	pg/L	25.2
PCB-93/100	PCB-93/100	CU	50.4	50.4	pg/L	50.4
73575-55-0	PCB-94	U	25.2	25.2	pg/L	25.2
38379-99-6	PCB-95		688	686	pg/L	25.2
73575-54-9	PCB-96	U	25.2	25.2	pg/L	25.2
PCB-98/102	PCB-102/98	CU	50.4	50.4	pg/L	50.4
38380-01-7	PCB-99		430	428	pg/L	25.2
60145-21-3	PCB-103	U	25.2	25.2	pg/L	25.2
56558-16-8	PCB-104	U	25.2	25.2	pg/L	25.2
32598-14-4	PCB-105		393	391	pg/L	25.2
70424-69-0	PCB-106	U	25.2	25.2	pg/L	25.2
70424-68-9	PCB-107		60.8	59.4	pg/L	25.2
PCB-108/124	PCB-108/124	CU	50.4	50.4	pg/L	50.4
PCB-110/115	PCB-110/115	CU	50.4	50.4	pg/L	50.4
39635-32-0	PCB-111	U	25.2	25.2	pg/L	25.2
74472-36-9	PCB-112	U	25.2	25.2	pg/L	25.2
74472-37-0	PCB-114	U	25.2	25.2	pg/L	25.2
31508-00-6	PCB-118		897	895	pg/L	25.2
68194-12-7	PCB-120	U	25.2	25.2	pg/L	25.2
56558-18-0	PCB-121	U	25.2	25.2	pg/L	25.2
76842-07-4	PCB-122	U	25.2	25.2	pg/L	25.2
65510-44-3	PCB-123	U	25.2	25.2	pg/L	25.2
57465-28-8	PCB-126	U	25.2	25.2	pg/L	25.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1728  
**Lab Sample ID:** 5229001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-34608  
**Batch ID:** 24251  
**Run Date:** 08/29/2013 02:03  
**Data File:** c28aug13a-10  
**Prep Batch:** 24248  
**Prep Date:** 27-AUG-13

**Client:** LANL001  
**Date Collected:** 08/18/2013 14:22  
**Date Received:** 08/23/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 793 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	25.2	25.2	pg/L	25.2
PCB-128/166	PCB-128/166	C	295	294	pg/L	50.4
PCB-129-163	PCB-138/163/129	C	1650	1650	pg/L	75.7
52663-66-8	PCB-130		97.6	96.2	pg/L	25.2
61798-70-7	PCB-131	U	25.2	25.2	pg/L	25.2
38380-05-1	PCB-132		653	651	pg/L	25.2
35694-04-3	PCB-133	U	25.2	25.2	pg/L	25.2
52704-70-8	PCB-134		69.3	67.7	pg/L	25.2
PCB-135/151	PCB-151/135	C	345	344	pg/L	50.4
38411-22-2	PCB-136		110	110	pg/L	25.2
35694-06-5	PCB-137		91.4	89.8	pg/L	25.2
PCB-139/140	PCB-139/140	CU	50.4	50.4	pg/L	50.4
52712-04-6	PCB-141		267	265	pg/L	25.2
41411-61-4	PCB-142	U	25.2	25.2	pg/L	25.2
68194-15-0	PCB-143	U	25.2	25.2	pg/L	25.2
68194-14-9	PCB-144		48.0	47.1	pg/L	25.2
74472-40-5	PCB-145	U	25.2	25.2	pg/L	25.2
51908-16-8	PCB-146		174	173	pg/L	25.2
PCB-147/149	PCB-147/149	C	969	967	pg/L	50.4
74472-41-6	PCB-148	U	25.2	25.2	pg/L	25.2
68194-08-1	PCB-150	U	25.2	25.2	pg/L	25.2
68194-09-2	PCB-152	U	25.2	25.2	pg/L	25.2
PCB-153/168	PCB-153/168	C	1170	1170	pg/L	50.4
60145-22-4	PCB-154	U	25.2	25.2	pg/L	25.2
33979-03-2	PCB-155	U	25.2	25.2	pg/L	25.2
PCB-156/157	PCB-156/157	C	207	206	pg/L	50.4
74472-42-7	PCB-158		159	158	pg/L	25.2
39635-35-3	PCB-159	U	25.2	25.2	pg/L	25.2
41411-62-5	PCB-160	U	25.2	25.2	pg/L	25.2
74472-43-8	PCB-161	U	25.2	25.2	pg/L	25.2
39635-34-2	PCB-162	U	25.2	25.2	pg/L	25.2
74472-45-0	PCB-164		114	113	pg/L	25.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
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**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1728  
**Lab Sample ID:** 5229001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-34608  
**Batch ID:** 24251  
**Run Date:** 08/29/2013 02:03  
**Data File:** c28aug13a-10  
**Prep Batch:** 24248  
**Prep Date:** 27-AUG-13

**Client:** LANL001  
**Date Collected:** 08/18/2013 14:22  
**Date Received:** 08/23/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 793 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	25.2	25.2	pg/L	25.2
52663-72-6	PCB-167		82.4	81.5	pg/L	25.2
32774-16-6	PCB-169	U	25.2	25.2	pg/L	25.2
35065-30-6	PCB-170		303	302	pg/L	25.2
PCB-171/173	PCB-173/171	C	75.8	74.8	pg/L	50.4
52663-74-8	PCB-172		50.9	49.9	pg/L	25.2
38411-25-5	PCB-174		247	246	pg/L	25.2
40186-70-7	PCB-175	U	25.2	25.2	pg/L	25.2
52663-65-7	PCB-176	U	25.2	25.2	pg/L	25.2
52663-70-4	PCB-177		142	141	pg/L	25.2
52663-67-9	PCB-178		47.2	46.2	pg/L	25.2
52663-64-6	PCB-179		71.3	70.6	pg/L	25.2
PCB-180/193	PCB-193/180	C	625	622	pg/L	50.4
74472-47-2	PCB-181	U	25.2	25.2	pg/L	25.2
60145-23-5	PCB-182	U	25.2	25.2	pg/L	25.2
PCB-183/185	PCB-183/185	C	179	178	pg/L	50.4
74472-48-3	PCB-184	U	25.2	25.2	pg/L	25.2
74472-49-4	PCB-186	U	25.2	25.2	pg/L	25.2
52663-68-0	PCB-187		364	363	pg/L	25.2
74487-85-7	PCB-188	U	25.2	25.2	pg/L	25.2
39635-31-9	PCB-189	U	25.2	25.2	pg/L	25.2
41411-64-7	PCB-190		63.9	63.1	pg/L	25.2
74472-50-7	PCB-191	U	25.2	25.2	pg/L	25.2
74472-51-8	PCB-192	U	25.2	25.2	pg/L	25.2
35694-08-7	PCB-194		114	113	pg/L	25.2
52663-78-2	PCB-195		41.3	40.4	pg/L	25.2
42740-50-1	PCB-196		49.9	48.9	pg/L	25.2
PCB-197/200	PCB-197/200	CU	50.4	50.4	pg/L	50.4
PCB-198/199	PCB-198/199	C	131	130	pg/L	50.4
40186-71-8	PCB-201	U	25.2	25.2	pg/L	25.2
2136-99-4	PCB-202	U	25.2	25.2	pg/L	25.2
52663-76-0	PCB-203		96.7	95.6	pg/L	25.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1728  
**Lab Sample ID:** 5229001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-34608  
**Batch ID:** 24251  
**Run Date:** 08/29/2013 02:03  
**Data File:** c28aug13a-10  
**Prep Batch:** 24248  
**Prep Date:** 27-AUG-13

**Client:** LANL001  
**Date Collected:** 08/18/2013 14:22  
**Date Received:** 08/23/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 793 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	25.2	25.2	pg/L	25.2
74472-53-0	PCB-205	U	25.2	25.2	pg/L	25.2
40186-72-9	PCB-206		58.1	57	pg/L	25.2
52663-79-3	PCB-207	U	25.2	25.2	pg/L	25.2
52663-77-1	PCB-208	U	25.2	25.2	pg/L	25.2
2051-24-3	PCB-209	U	25.2	25.2	pg/L	25.2
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		179	175	pg/L	
26914-33-0	Total Tetra PCBs		684	675	pg/L	
25429-29-2	Total Penta PCBs		4880	4860	pg/L	
26601-64-9	Total Hexa PCBs		6500	6480	pg/L	
28655-71-2	Total Hepta PCBs		2170	2160	pg/L	
55722-26-4	Total Octa PCBs		433	428	pg/L	
53742-07-7	Total Nona PCBs		58.1	57	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		14900	14800	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1130	2520	pg/L	44.7	(15%-150%)
13C-3-MoCB		1210	2520	pg/L	47.9	(15%-150%)
13C-4-DiCB		1270	2520	pg/L	50.4	(25%-150%)
13C-15-DiCB		1440	2520	pg/L	57.2	(25%-150%)
13C-19-TrCB		1470	2520	pg/L	58.4	(25%-150%)
13C-37-TrCB		1690	2520	pg/L	67.2	(25%-150%)
13C-54-TeCB		1650	2520	pg/L	65.3	(25%-150%)
13C-77-TeCB		1980	2520	pg/L	78.4	(25%-150%)
13C-81-TeCB		1980	2520	pg/L	78.6	(25%-150%)
13C-104-PeCB		1630	2520	pg/L	64.4	(25%-150%)
13C-105-PeCB		1810	2520	pg/L	71.7	(25%-150%)
13C-114-PeCB		1750	2520	pg/L	69.3	(25%-150%)
13C-118-PeCB		1830	2520	pg/L	72.5	(25%-150%)
13C-123-PeCB		1940	2520	pg/L	77.1	(25%-150%)
13C-126-PeCB		1950	2520	pg/L	77.2	(25%-150%)
13C-155-HxCB		1650	2520	pg/L	65.4	(25%-150%)
13C-156-HxCB	C	3420	5040	pg/L	67.9	(25%-150%)
13C-167-HxCB		1660	2520	pg/L	65.8	(25%-150%)
13C-169-HxCB		1980	2520	pg/L	78.5	(25%-150%)
13C-188-HpCB		1510	2520	pg/L	59.8	(25%-150%)
13C-189-HpCB		1720	2520	pg/L	68.1	(25%-150%)
13C-202-OcCB		1650	2520	pg/L	65.4	(25%-150%)
13C-205-OcCB		2000	2520	pg/L	79.1	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1728	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5229001	<b>Date Collected:</b> 08/18/2013 14:22	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 08/23/2013 09:30	
<b>Client ID:</b> WT_IPC-13-34608		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24251	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 08/29/2013 02:03	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c28aug13a-10		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24248	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 27-AUG-13	<b>Aliquot:</b> 793 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%</b>
						<b>Acceptable Limits</b>
13C-206-NoCB			2000	2520	pg/L	79.2 (25%-150%)
13C-208-NoCB			1980	2520	pg/L	78.5 (25%-150%)
13C-209-DeCB			2110	2520	pg/L	83.7 (25%-150%)
13C-28-TrCB			1860	2520	pg/L	73.6 (30%-135%)
13C-111-PeCB			1970	2520	pg/L	78.1 (30%-135%)
13C-178-HpCB			1960	2520	pg/L	77.7 (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.



# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	0.571	0.321	1.21	
3-Chlorobiphenyl (2)	pg/L	0.551	0.344	1.24	
4-Chlorobiphenyl (3)	pg/L	0.604	0.31	1.22	
2,2'-Dichlorobiphenyl (4)	pg/L	4.26	2.62	9.5	
2,3-Dichlorobiphenyl (5)	pg/L	3.78	2.51	8.8	
2,3'-Dichlorobiphenyl (6)	pg/L	3	1.94	6.89	
2,4-Dichlorobiphenyl (7)	pg/L	3.27	2.1	7.47	
2,4'-Dichlorobiphenyl (8)	pg/L	3.34	2.01	7.36	
2,5-Dichlorobiphenyl (9)	pg/L	3.1	2.15	7.41	
2,6-Dichlorobiphenyl (10)	pg/L	2.47	1.51	5.48	
3,3'-Dichlorobiphenyl (11)	pg/L	4.01	2.01	8.04	
3,4-Dichlorobiphenyl (12)	pg/L	4.26	2.2	8.67	
3,5-Dichlorobiphenyl (14)	pg/L	3.39	2.14	7.68	
4,4'-Dichlorobiphenyl (15)	pg/L	4.31	2.73	9.77	
2,2',3-Trichlorobiphenyl (16)	pg/L	0.634	0.253	1.14	
2,2',4-Trichlorobiphenyl (17)	pg/L	0.554	0.212	0.978	
2,2',5-Trichlorobiphenyl (18)	pg/L	0.42	0.19	0.799	
2,2',6-Trichlorobiphenyl (19)	pg/L	0.538	0.212	0.962	
2,3,3'-Trichlorobiphenyl (20)	pg/L	0.386	0.147	0.681	
2,3,4-Trichlorobiphenyl (21)	pg/L	0.427	0.132	0.692	
2,3,4'-Trichlorobiphenyl (22)	pg/L	0.53	0.254	1.04	
2,3,5-Trichlorobiphenyl (23)	pg/L	0.416	0.188	0.792	
2,3,6-Trichlorobiphenyl (24)	pg/L	0.411	0.195	0.801	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.369	0.141	0.651	
2,3',5-Trichlorobiphenyl (26)	pg/L	0.457	0.146	0.749	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.352	0.154	0.661	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.355	0.134	0.624	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.375	0.131	0.638	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.378	0.151	0.681	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.486	0.181	0.847	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.433	0.165	0.763	
3,4,4'-Trichlorobiphenyl (37)	pg/L	0.694	0.401	1.5	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.46	0.172	0.803	
3,4',5-Trichlorobiphenyl (39)	pg/L	0.466	0.171	0.808	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	0.704	0.35	1.4	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	0.855	0.502	1.86	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	0.786	0.409	1.6	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	0.837	0.446	1.73	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	0.73	0.377	1.48	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	0.644	0.329	1.3	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	0.484	0.26	1	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	0.761	0.384	1.53	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	0.656	0.346	1.35	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	0.463	0.208	0.88	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	0.723	0.336	1.4	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.316	0.196	0.707	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	0.605	0.289	1.18	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	0.798	0.362	1.52	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	0.518	0.269	1.06	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	0.568	0.289	1.15	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	0.614	0.328	1.27	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	0.632	0.231	1.09	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	0.677	0.307	1.29	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	0.495	0.245	0.986	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	0.585	0.28	1.14	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	0.526	0.263	1.05	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	0.44	0.213	0.866	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	0.586	0.231	1.05	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	0.521	0.281	1.08	
2,3',5,6-Tetrachlorobiphenyl (73)	pg/L	0.562	0.302	1.17	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	0.699	0.325	1.35	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	0.606	0.26	1.13	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	0.497	0.22	0.937	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	0.507	0.236	0.979	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	0.658	0.299	1.26	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	0.886	0.378	1.64	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	0.901	0.396	1.69	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	0.876	0.415	1.71	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	0.764	0.289	1.34	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	0.825	0.319	1.46	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	0.963	0.41	1.78	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	0.804	0.371	1.55	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	0.788	0.312	1.41	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	0.792	0.359	1.51	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	0.701	0.387	1.48	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	0.916	0.525	1.97	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	0.777	0.323	1.42	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	0.415	0.259	0.934	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	0.907	0.4	1.71	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	0.805	0.455	1.72	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	0.713	0.335	1.38	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	0.467	0.278	1.02	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	0.971	0.4	1.77	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	0.777	0.375	1.53	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	0.728	0.334	1.39	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	0.822	0.396	1.61	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	0.826	0.373	1.57	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	0.645	0.343	1.33	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	0.601	0.278	1.16	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	0.938	0.467	1.87	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	1.06	0.407	1.88	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	0.564	0.244	1.05	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	0.653	0.361	1.37	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	0.835	0.385	1.61	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	0.85	0.424	1.7	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	1.03	0.495	2.02	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	0.8	0.366	1.53	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	0.598	0.268	1.13	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	0.711	0.301	1.31	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	0.729	0.32	1.37	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	0.779	0.348	1.47	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	0.786	0.428	1.64	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	0.681	0.298	1.28	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	0.817	0.375	1.57	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	0.521	0.224	0.968	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	0.345	0.178	0.701	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	0.737	0.418	1.57	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	0.663	0.308	1.28	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	0.679	0.318	1.31	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	0.714	0.319	1.35	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	0.655	0.294	1.24	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	0.44	0.244	0.928	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	0.382	0.236	0.854	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	0.605	0.263	1.13	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	0.753	0.354	1.46	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	0.436	0.222	0.879	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	0.371	0.231	0.833	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.328	0.179	0.687	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	0.627	0.249	1.12	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	0.4	0.215	0.83	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.343	0.179	0.702	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	0.675	0.259	1.19	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	0.49	0.212	0.913	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	0.436	0.192	0.821	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	0.625	0.356	1.34	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	0.49	0.23	0.95	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	0.463	0.214	0.891	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	0.515	0.23	0.976	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	0.606	0.323	1.25	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	0.472	0.212	0.897	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	0.545	0.252	1.05	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	0.587	0.222	1.03	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	0.61	0.201	1.01	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	0.556	0.223	1	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	0.56	0.195	0.95	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	0.476	0.212	0.9	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	0.368	0.164	0.696	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	0.548	0.219	0.985	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-AUG-13 to 31-AUG-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	0.501	0.222	0.945	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	0.367	0.154	0.675	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	0.869	0.672	2.21	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	0.56	0.247	1.05	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	0.495	0.22	0.936	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	0.581	0.206	0.993	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	0.376	0.197	0.77	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	0.418	0.214	0.846	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	0.562	0.227	1.02	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	0.416	0.184	0.785	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	0.508	0.25	1.01	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	0.436	0.175	0.785	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	0.414	0.168	0.749	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	0.485	0.221	0.927	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	0.441	0.223	0.887	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	0.464	0.215	0.894	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	0.458	0.228	0.914	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	0.412	0.199	0.809	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	0.551	0.251	1.05	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	0.333	0.167	0.667	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	0.395	0.189	0.772	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	0.484	0.284	1.05	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	0.337	0.165	0.666	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	0.411	0.189	0.789	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	0.532	0.311	1.15	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	0.384	0.229	0.842	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	0.446	0.275	0.995	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	0.443	0.304	1.05	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1907  
**Lab Sample ID:** 5327001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32514  
**Batch ID:** 24441  
**Run Date:** 09/27/2013 13:39  
**Data File:** c27sep13a-5  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 23:43  
**Date Received:** 09/17/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 617.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	32.4	32.4	pg/L	32.4
2051-61-8	PCB-2	U	32.4	32.4	pg/L	32.4
2051-62-9	PCB-3	U	32.4	32.4	pg/L	32.4
13029-08-8	PCB-4	U	32.4	32.4	pg/L	32.4
16605-91-7	PCB-5	U	33.4	33.4	pg/L	33.4
25569-80-6	PCB-6	U	32.4	32.4	pg/L	32.4
33284-50-3	PCB-7	U	32.4	32.4	pg/L	32.4
34883-43-7	PCB-8	U	32.4	32.4	pg/L	32.4
34883-39-1	PCB-9	U	32.4	32.4	pg/L	32.4
33146-45-1	PCB-10	U	32.4	32.4	pg/L	32.4
2050-67-1	PCB-11	U	162	162	pg/L	162
PCB-12/13	PCB-13/12	CU	64.8	64.8	pg/L	64.8
34883-41-5	PCB-14	U	32.4	32.4	pg/L	32.4
2050-68-2	PCB-15	U	32.4	32.4	pg/L	32.4
38444-78-9	PCB-16	U	32.4	32.4	pg/L	32.4
37680-66-3	PCB-17	U	32.4	32.4	pg/L	32.4
PCB-18/30	PCB-18/30	CU	64.8	64.8	pg/L	64.8
38444-73-4	PCB-19	U	32.4	32.4	pg/L	32.4
PCB-20/28	PCB-20/28	CU	64.8	64.8	pg/L	64.8
PCB-21/33	PCB-21/33	CU	64.8	64.8	pg/L	64.8
38444-85-8	PCB-22	U	32.4	32.4	pg/L	32.4
55720-44-0	PCB-23	U	32.4	32.4	pg/L	32.4
55702-45-9	PCB-24	U	32.4	32.4	pg/L	32.4
55712-37-3	PCB-25	U	32.4	32.4	pg/L	32.4
PCB-26/29	PCB-26/29	CU	64.8	64.8	pg/L	64.8
38444-76-7	PCB-27	U	32.4	32.4	pg/L	32.4
16606-02-3	PCB-31	U	32.4	32.4	pg/L	32.4
38444-77-8	PCB-32	U	32.4	32.4	pg/L	32.4
37680-68-5	PCB-34	U	32.4	32.4	pg/L	32.4
37680-69-6	PCB-35	U	32.4	32.4	pg/L	32.4
38444-87-0	PCB-36	U	32.4	32.4	pg/L	32.4
38444-90-5	PCB-37	U	32.4	32.4	pg/L	32.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1907  
**Lab Sample ID:** 5327001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32514  
**Batch ID:** 24441  
**Run Date:** 09/27/2013 13:39  
**Data File:** c27sep13a-5  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 23:43  
**Date Received:** 09/17/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 617.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	32.4	32.4	pg/L	32.4
38444-88-1	PCB-39	U	32.4	32.4	pg/L	32.4
PCB-40/71	PCB-40/71	CU	64.8	64.8	pg/L	64.8
52663-59-9	PCB-41	U	32.4	32.4	pg/L	32.4
36559-22-5	PCB-42	U	32.4	32.4	pg/L	32.4
70362-46-8	PCB-43	U	32.4	32.4	pg/L	32.4
PCB-44/47/65	PCB-44/65/47	CU	97.2	97.2	pg/L	97.2
PCB-45/51	PCB-45/51	CU	64.8	64.8	pg/L	64.8
41464-47-5	PCB-46	U	32.4	32.4	pg/L	32.4
70362-47-9	PCB-48	U	32.4	32.4	pg/L	32.4
PCB-49/69	PCB-69/49	CU	64.8	64.8	pg/L	64.8
PCB-50/53	PCB-50/53	CU	64.8	64.8	pg/L	64.8
35693-99-3	PCB-52		48.6	45.2	pg/L	32.4
15968-05-5	PCB-54	U	32.4	32.4	pg/L	32.4
74338-24-2	PCB-55	U	32.4	32.4	pg/L	32.4
41464-43-1	PCB-56	U	32.4	32.4	pg/L	32.4
70424-67-8	PCB-57	U	32.4	32.4	pg/L	32.4
41464-49-7	PCB-58	U	32.4	32.4	pg/L	32.4
PCB-59/62/75	PCB-59/62/75	CU	97.2	97.2	pg/L	97.2
33025-41-1	PCB-60	U	32.4	32.4	pg/L	32.4
PCB-61-76	PCB-61/76/70/74	CU	130	130	pg/L	130
74472-34-7	PCB-63	U	32.4	32.4	pg/L	32.4
52663-58-8	PCB-64	U	32.4	32.4	pg/L	32.4
32598-10-0	PCB-66	U	32.4	32.4	pg/L	32.4
73575-53-8	PCB-67	U	32.4	32.4	pg/L	32.4
73575-52-7	PCB-68	U	32.4	32.4	pg/L	32.4
41464-42-0	PCB-72	U	32.4	32.4	pg/L	32.4
74338-23-1	PCB-73	U	32.4	32.4	pg/L	32.4
32598-13-3	PCB-77	U	32.4	32.4	pg/L	32.4
70362-49-1	PCB-78	U	32.4	32.4	pg/L	32.4
41464-48-6	PCB-79	U	32.4	32.4	pg/L	32.4
33284-52-5	PCB-80	U	32.4	32.4	pg/L	32.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1907  
**Lab Sample ID:** 5327001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32514  
**Batch ID:** 24441  
**Run Date:** 09/27/2013 13:39  
**Data File:** c27sep13a-5  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 23:43  
**Date Received:** 09/17/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 617.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	32.4	32.4	pg/L	32.4
52663-62-4	PCB-82	U	32.4	32.4	pg/L	32.4
60145-20-2	PCB-83	U	32.4	32.4	pg/L	32.4
52663-60-2	PCB-84		58.1	52.8	pg/L	32.4
PCB-85-117	PCB-117/116/85	CU	97.2	97.2	pg/L	97.2
PCB-86-125	PCB-86/87/97/109/119/125	CU	194	194	pg/L	194
PCB-88/91	PCB-88/91	CU	64.8	64.8	pg/L	64.8
73575-57-2	PCB-89	U	32.4	32.4	pg/L	32.4
PCB-90-113	PCB-113/90/101	C	235	231	pg/L	97.2
52663-61-3	PCB-92		43.0	38.4	pg/L	32.4
PCB-93/100	PCB-93/100	CU	64.8	64.8	pg/L	64.8
73575-55-0	PCB-94	U	32.4	32.4	pg/L	32.4
38379-99-6	PCB-95		178	174	pg/L	32.4
73575-54-9	PCB-96	U	32.4	32.4	pg/L	32.4
PCB-98/102	PCB-102/98	CU	64.8	64.8	pg/L	64.8
38380-01-7	PCB-99		124	117	pg/L	32.4
60145-21-3	PCB-103	U	32.4	32.4	pg/L	32.4
56558-16-8	PCB-104	U	32.4	32.4	pg/L	32.4
32598-14-4	PCB-105		102	96.2	pg/L	32.4
70424-69-0	PCB-106	U	32.4	32.4	pg/L	32.4
70424-68-9	PCB-107	U	32.4	32.4	pg/L	32.4
PCB-108/124	PCB-108/124	CU	64.8	64.8	pg/L	64.8
PCB-110/115	PCB-110/115	CU	64.8	64.8	pg/L	64.8
39635-32-0	PCB-111	U	32.4	32.4	pg/L	32.4
74472-36-9	PCB-112	U	32.4	32.4	pg/L	32.4
74472-37-0	PCB-114	U	32.4	32.4	pg/L	32.4
31508-00-6	PCB-118		212	207	pg/L	32.4
68194-12-7	PCB-120	U	32.4	32.4	pg/L	32.4
56558-18-0	PCB-121	U	32.4	32.4	pg/L	32.4
76842-07-4	PCB-122	U	32.4	32.4	pg/L	32.4
65510-44-3	PCB-123	U	32.4	32.4	pg/L	32.4
57465-28-8	PCB-126	U	32.4	32.4	pg/L	32.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1907  
**Lab Sample ID:** 5327001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32514  
**Batch ID:** 24441  
**Run Date:** 09/27/2013 13:39  
**Data File:** c27sep13a-5  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 23:43  
**Date Received:** 09/17/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 617.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	32.4	32.4	pg/L	32.4
PCB-128/166	PCB-128/166	C	114	111	pg/L	64.8
PCB-129-163	PCB-138/163/129	C	687	684	pg/L	97.2
52663-66-8	PCB-130		41.0	37.8	pg/L	32.4
61798-70-7	PCB-131	U	32.4	32.4	pg/L	32.4
38380-05-1	PCB-132		272	268	pg/L	32.4
35694-04-3	PCB-133	U	32.4	32.4	pg/L	32.4
52704-70-8	PCB-134	U	32.4	32.4	pg/L	32.4
PCB-135/151	PCB-151/135	C	178	175	pg/L	64.8
38411-22-2	PCB-136		49.8	47.9	pg/L	32.4
35694-06-5	PCB-137		38.6	34.2	pg/L	32.4
PCB-139/140	PCB-139/140	CU	64.8	64.8	pg/L	64.8
52712-04-6	PCB-141		117	114	pg/L	32.4
41411-61-4	PCB-142	U	32.4	32.4	pg/L	32.4
68194-15-0	PCB-143	U	32.4	32.4	pg/L	32.4
68194-14-9	PCB-144	U	32.4	32.4	pg/L	32.4
74472-40-5	PCB-145	U	32.4	32.4	pg/L	32.4
51908-16-8	PCB-146		72.7	69.8	pg/L	32.4
PCB-147/149	PCB-147/149	C	492	489	pg/L	64.8
74472-41-6	PCB-148	U	32.4	32.4	pg/L	32.4
68194-08-1	PCB-150	U	32.4	32.4	pg/L	32.4
68194-09-2	PCB-152	U	32.4	32.4	pg/L	32.4
PCB-153/168	PCB-153/168	C	510	508	pg/L	64.8
60145-22-4	PCB-154	U	32.4	32.4	pg/L	32.4
33979-03-2	PCB-155	U	32.4	32.4	pg/L	32.4
PCB-156/157	PCB-156/157	C	71.1	67.9	pg/L	64.8
74472-42-7	PCB-158		56.6	54.4	pg/L	32.4
39635-35-3	PCB-159	U	32.4	32.4	pg/L	32.4
41411-62-5	PCB-160	U	32.4	32.4	pg/L	32.4
74472-43-8	PCB-161	U	32.4	32.4	pg/L	32.4
39635-34-2	PCB-162	U	32.4	32.4	pg/L	32.4
74472-45-0	PCB-164		52.4	50.1	pg/L	32.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1907  
**Lab Sample ID:** 5327001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32514  
**Batch ID:** 24441  
**Run Date:** 09/27/2013 13:39  
**Data File:** c27sep13a-5  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 23:43  
**Date Received:** 09/17/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 617.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	32.4	32.4	pg/L	32.4
52663-72-6	PCB-167	U	32.4	32.4	pg/L	32.4
32774-16-6	PCB-169	U	32.4	32.4	pg/L	32.4
35065-30-6	PCB-170		167	164	pg/L	32.4
PCB-171/173	PCB-173/171	CU	64.8	64.8	pg/L	64.8
52663-74-8	PCB-172	U	32.4	32.4	pg/L	32.4
38411-25-5	PCB-174		172	170	pg/L	32.4
40186-70-7	PCB-175	U	32.4	32.4	pg/L	32.4
52663-65-7	PCB-176	U	32.4	32.4	pg/L	32.4
52663-70-4	PCB-177		96.3	93.5	pg/L	32.4
52663-67-9	PCB-178	U	32.6	32.4	pg/L	32.4
52663-64-6	PCB-179		56.8	54.7	pg/L	32.4
PCB-180/193	PCB-193/180	CU	64.8	64.8	pg/L	64.8
74472-47-2	PCB-181	U	32.4	32.4	pg/L	32.4
60145-23-5	PCB-182	U	32.4	32.4	pg/L	32.4
PCB-183/185	PCB-183/185	C	111	108	pg/L	64.8
74472-48-3	PCB-184	U	32.4	32.4	pg/L	32.4
74472-49-4	PCB-186	U	32.4	32.4	pg/L	32.4
52663-68-0	PCB-187		241	238	pg/L	32.4
74487-85-7	PCB-188	U	32.4	32.4	pg/L	32.4
39635-31-9	PCB-189	U	32.4	32.4	pg/L	32.4
41411-64-7	PCB-190		37.6	35.4	pg/L	32.4
74472-50-7	PCB-191	U	32.4	32.4	pg/L	32.4
74472-51-8	PCB-192	U	32.4	32.4	pg/L	32.4
35694-08-7	PCB-194		69.9	67.3	pg/L	32.4
52663-78-2	PCB-195	U	32.4	32.4	pg/L	32.4
42740-50-1	PCB-196	U	32.4	32.4	pg/L	32.4
PCB-197/200	PCB-197/200	CU	64.8	64.8	pg/L	64.8
PCB-198/199	PCB-198/199	C	86.0	83.2	pg/L	64.8
40186-71-8	PCB-201	U	32.4	32.4	pg/L	32.4
2136-99-4	PCB-202	U	32.4	32.4	pg/L	32.4
52663-76-0	PCB-203		62.2	59	pg/L	32.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 2013-1907  
**Lab Sample ID:** 5327001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32514  
**Batch ID:** 24441  
**Run Date:** 09/27/2013 13:39  
**Data File:** c27sep13a-5  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 23:43  
**Date Received:** 09/17/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 617.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	32.4	32.4	pg/L	32.4
74472-53-0	PCB-205	U	32.4	32.4	pg/L	32.4
40186-72-9	PCB-206	U	32.4	32.4	pg/L	32.4
52663-79-3	PCB-207	U	32.4	32.4	pg/L	32.4
52663-77-1	PCB-208	U	32.4	32.4	pg/L	32.4
2051-24-3	PCB-209	U	32.4	32.4	pg/L	32.4
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		48.6	45.2	pg/L	
25429-29-2	Total Penta PCBs		951	916	pg/L	
26601-64-9	Total Hexa PCBs		2750	2710	pg/L	
28655-71-2	Total Hepta PCBs		915	863	pg/L	
55722-26-4	Total Octa PCBs		218	210	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		4890	4740	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1060	3240	pg/L	32.6	(15%-150%)
13C-3-MoCB		1170	3240	pg/L	36.0	(15%-150%)
13C-4-DiCB		1430	3240	pg/L	44.1	(25%-150%)
13C-15-DiCB		1550	3240	pg/L	47.8	(25%-150%)
13C-19-TrCB		1560	3240	pg/L	48.0	(25%-150%)
13C-37-TrCB		1630	3240	pg/L	50.4	(25%-150%)
13C-54-TeCB		1730	3240	pg/L	53.2	(25%-150%)
13C-77-TeCB		1840	3240	pg/L	56.7	(25%-150%)
13C-81-TeCB		1800	3240	pg/L	55.5	(25%-150%)
13C-104-PeCB		1670	3240	pg/L	51.4	(25%-150%)
13C-105-PeCB		1530	3240	pg/L	47.1	(25%-150%)
13C-114-PeCB		1470	3240	pg/L	45.3	(25%-150%)
13C-118-PeCB		1560	3240	pg/L	48.2	(25%-150%)
13C-123-PeCB		1640	3240	pg/L	50.5	(25%-150%)
13C-126-PeCB		1650	3240	pg/L	51.0	(25%-150%)
13C-155-HxCB		1760	3240	pg/L	54.3	(25%-150%)
13C-156-HxCB	C	2930	6480	pg/L	45.1	(25%-150%)
13C-167-HxCB		1420	3240	pg/L	43.9	(25%-150%)
13C-169-HxCB		1680	3240	pg/L	51.7	(25%-150%)
13C-188-HpCB		1610	3240	pg/L	49.7	(25%-150%)
13C-189-HpCB		1500	3240	pg/L	46.4	(25%-150%)
13C-202-OcCB		1660	3240	pg/L	51.2	(25%-150%)
13C-205-OcCB		1710	3240	pg/L	52.7	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-1907	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5327001	<b>Date Collected:</b> 09/10/2013 23:43	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/17/2013 09:30	
<b>Client ID:</b> WT_IPC-13-32514		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24441	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 09/27/2013 13:39	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c27sep13a-5		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24438	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 22-SEP-13	<b>Aliquot:</b> 617.1 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1920	3240	pg/L	59.1      (25%-150%)
13C-208-NoCB			1960	3240	pg/L	60.3      (25%-150%)
13C-209-DeCB			2370	3240	pg/L	73.3      (25%-150%)
13C-28-TrCB			2050	3240	pg/L	63.1      (30%-135%)
13C-111-PeCB			2420	3240	pg/L	74.6      (30%-135%)
13C-178-HpCB			2660	3240	pg/L	82.1      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	1.14	0.62	2.38	
3-Chlorobiphenyl (2)	pg/L	1.07	0.54	2.14	
4-Chlorobiphenyl (3)	pg/L	1.13	0.57	2.27	
2,2'-Dichlorobiphenyl (4)	pg/L	7.23	4.8	16.8	
2,3-Dichlorobiphenyl (5)	pg/L	8.29	6.14	20.6	*
2,3'-Dichlorobiphenyl (6)	pg/L	5.36	4.06	13.5	
2,4-Dichlorobiphenyl (7)	pg/L	7.54	5.69	18.9	
2,4'-Dichlorobiphenyl (8)	pg/L	5.15	3.88	12.9	
2,5-Dichlorobiphenyl (9)	pg/L	5.31	4.06	13.4	
2,6-Dichlorobiphenyl (10)	pg/L	4.56	3.19	10.9	
3,3'-Dichlorobiphenyl (11)	pg/L	6.21	3.94	14.1	
3,4-Dichlorobiphenyl (12)	pg/L	7.37	4.5	16.4	
3,5-Dichlorobiphenyl (14)	pg/L	5.54	3.89	13.3	
4,4'-Dichlorobiphenyl (15)	pg/L	6.55	4.56	15.7	
2,2',3-Trichlorobiphenyl (16)	pg/L	1.98	0.963	3.9	
2,2',4-Trichlorobiphenyl (17)	pg/L	1.43	0.661	2.76	
2,2',5-Trichlorobiphenyl (18)	pg/L	1.32	0.575	2.47	
2,2',6-Trichlorobiphenyl (19)	pg/L	1.36	0.658	2.68	
2,3,3'-Trichlorobiphenyl (20)	pg/L	2.29	2.76	7.8	
2,3,4-Trichlorobiphenyl (21)	pg/L	1.12	0.376	1.87	
2,3,4'-Trichlorobiphenyl (22)	pg/L	1.49	0.577	2.64	
2,3,5-Trichlorobiphenyl (23)	pg/L	1.48	0.622	2.72	
2,3,6-Trichlorobiphenyl (24)	pg/L	1.43	0.63	2.69	
2,3',4-Trichlorobiphenyl (25)	pg/L	1.03	0.419	1.86	
2,3',5-Trichlorobiphenyl (26)	pg/L	1.05	0.365	1.78	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.982	0.457	1.9	
2,4',5-Trichlorobiphenyl (31)	pg/L	1.23	0.929	3.08	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.928	0.422	1.77	
2',3,5-Trichlorobiphenyl (34)	pg/L	1	0.425	1.85	
3,3',4-Trichlorobiphenyl (35)	pg/L	1.01	0.326	1.67	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.927	0.311	1.55	
3,4,4'-Trichlorobiphenyl (37)	pg/L	1.72	1.37	4.45	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.993	0.318	1.63	
3,4',5-Trichlorobiphenyl (39)	pg/L	1.3	0.433	2.17	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	1.96	1.04	4.04	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	1.98	1.12	4.21	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	2.04	1.11	4.25	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	2.38	1.35	5.08	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	1.74	0.889	3.51	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	1.51	0.406	2.32	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	1.33	0.566	2.47	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	2.39	1.3	4.99	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	1.61	0.778	3.17	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	1.29	0.483	2.26	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	1.64	0.898	3.44	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.708	0.29	1.29	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	1.71	0.695	3.1	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	1.48	0.528	2.53	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	1.15	0.495	2.14	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	1.68	0.721	3.12	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	1.49	0.739	2.97	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	1.91	1.05	4.01	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	1.44	0.51	2.46	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	1.12	0.471	2.06	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	1.44	0.742	2.92	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	2.03	1.92	5.87	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	1.13	0.468	2.06	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	1.51	0.633	2.77	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	1.09	0.473	2.04	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	1.79	1.03	3.86	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	1.47	0.556	2.58	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	1.27	0.475	2.22	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	1.1	0.422	1.94	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	1.14	0.458	2.05	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	1.42	0.579	2.58	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	2.73	1.17	5.08	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	2.79	1.24	5.27	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	2.79	1.27	5.32	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	2.35	0.907	4.16	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	2.39	0.864	4.12	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	2.91	1.11	5.14	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	2.52	1.15	4.81	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	2.45	0.908	4.27	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	2.42	1.09	4.6	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	2.79	1.29	5.37	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	3.61	1.69	6.99	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	2.33	1.03	4.38	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	1.26	0.542	2.35	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	2.8	1.1	5	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	3.31	1.54	6.38	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	2.15	1.01	4.17	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	1.21	0.449	2.1	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	2.68	1.41	5.49	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	2.15	1.18	4.51	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	2.13	1.18	4.48	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	2.5	1.33	5.16	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	2.59	0.758	4.1	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	2.55	1.12	4.79	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	1.83	0.795	3.42	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	2.68	1.42	5.52	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	2.51	1.2	4.92	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	1.76	0.773	3.3	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	2.54	1.16	4.87	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	2.35	1.27	4.88	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	2.36	1.26	4.87	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	3.05	1.6	6.25	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	2.27	1.17	4.6	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	1.72	0.564	2.84	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	1.72	0.553	2.83	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	1.93	0.66	3.25	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	2.07	0.761	3.6	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	2.6	0.964	4.53	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	1.79	0.639	3.06	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	2.15	0.816	3.78	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	1.69	0.593	2.87	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	1.06	0.448	1.95	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	2.6	0.934	4.47	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	1.94	0.722	3.38	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	1.78	0.622	3.02	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	1.85	0.672	3.19	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	1.69	0.661	3.01	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	1.38	0.556	2.49	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	1.54	0.656	2.85	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	1.68	0.624	2.93	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	1.95	0.733	3.42	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	1.36	0.558	2.47	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	1.49	0.65	2.79	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	1.04	0.451	1.94	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	1.74	0.449	2.64	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	1.28	0.531	2.34	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.976	0.379	1.73	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	1.94	0.642	3.22	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	1.32	0.449	2.22	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	1.33	0.451	2.24	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	2.08	0.723	3.53	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	1.32	0.469	2.26	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	1.84	0.616	3.08	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	1.37	0.472	2.32	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	2.04	0.735	3.51	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	1.52	0.523	2.56	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	1.71	0.478	2.67	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	1.64	0.559	2.76	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	1.7	0.511	2.72	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	1.62	0.576	2.77	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	1.57	0.582	2.74	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	1.48	0.575	2.63	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	1.14	0.478	2.1	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	1.63	0.586	2.8	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	1.55	0.609	2.77	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	1.12	0.478	2.08	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	1.64	0.58	2.8	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	2.14	0.791	3.72	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	1.55	0.596	2.74	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	1.76	0.563	2.89	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	1.52	0.635	2.79	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	1.66	0.675	3.01	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	1.97	0.749	3.47	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	1.26	0.525	2.3	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	1.7	0.576	2.85	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	1.28	0.437	2.15	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	1.22	0.436	2.1	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	1.83	0.653	3.14	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	1.52	0.563	2.64	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	1.61	0.598	2.8	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	1.41	0.484	2.37	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	1.29	0.391	2.08	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	1.74	0.49	2.72	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	1.07	0.398	1.87	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	1.25	0.476	2.2	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	1.86	0.658	3.18	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	1.09	0.402	1.89	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	1.37	0.489	2.35	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	1.93	0.78	3.49	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	1.44	0.582	2.61	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	1.66	0.666	2.99	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	1.63	0.824	3.28	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-1922  
**Lab Sample ID:** 5336001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32197  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 20:31  
**Data File:** c01oct13a-6  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/18/2013 09:39  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 943 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	21.2	21.2	pg/L	21.2
2051-61-8	PCB-2	U	21.2	21.2	pg/L	21.2
2051-62-9	PCB-3	U	21.2	21.2	pg/L	21.2
13029-08-8	PCB-4		96.4	79.6	pg/L	21.2
16605-91-7	PCB-5	U	21.8	21.8	pg/L	21.8
25569-80-6	PCB-6	U	21.2	21.2	pg/L	21.2
33284-50-3	PCB-7	U	21.2	21.2	pg/L	21.2
34883-43-7	PCB-8		143	130	pg/L	21.2
34883-39-1	PCB-9	U	21.2	21.2	pg/L	21.2
33146-45-1	PCB-10	U	21.2	21.2	pg/L	21.2
2050-67-1	PCB-11		239	224	pg/L	106
PCB-12/13	PCB-13/12	CU	42.4	42.4	pg/L	42.4
34883-41-5	PCB-14	U	21.2	21.2	pg/L	21.2
2050-68-2	PCB-15		111	95.6	pg/L	21.2
38444-78-9	PCB-16		270	266	pg/L	21.2
37680-66-3	PCB-17		197	195	pg/L	21.2
PCB-18/30	PCB-18/30	C	497	495	pg/L	42.4
38444-73-4	PCB-19		84.8	82.2	pg/L	21.2
PCB-20/28	PCB-20/28	C	546	538	pg/L	42.4
PCB-21/33	PCB-21/33	C	262	260	pg/L	42.4
38444-85-8	PCB-22		295	292	pg/L	21.2
55720-44-0	PCB-23	U	21.2	21.2	pg/L	21.2
55702-45-9	PCB-24	U	21.2	21.2	pg/L	21.2
55712-37-3	PCB-25		36.6	34.8	pg/L	21.2
PCB-26/29	PCB-26/29	C	84.1	82.3	pg/L	42.4
38444-76-7	PCB-27		36.0	34.1	pg/L	21.2
16606-02-3	PCB-31		472	469	pg/L	21.2
38444-77-8	PCB-32		130	128	pg/L	21.2
37680-68-5	PCB-34	U	21.2	21.2	pg/L	21.2
37680-69-6	PCB-35	U	21.2	21.2	pg/L	21.2
38444-87-0	PCB-36	U	21.2	21.2	pg/L	21.2
38444-90-5	PCB-37		378	373	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-1922  
**Lab Sample ID:** 5336001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32197  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 20:31  
**Data File:** c01oct13a-6  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/18/2013 09:39  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 943 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21.2	21.2	pg/L	21.2
38444-88-1	PCB-39	U	21.2	21.2	pg/L	21.2
PCB-40/71	PCB-40/71	C	455	451	pg/L	42.4
52663-59-9	PCB-41		89.2	85	pg/L	21.2
36559-22-5	PCB-42		234	230	pg/L	21.2
70362-46-8	PCB-43	U	21.2	21.2	pg/L	21.2
PCB-44/47/65	PCB-44/65/47	C	1130	1120	pg/L	63.6
PCB-45/51	PCB-45/51	C	161	158	pg/L	42.4
41464-47-5	PCB-46		57.2	54.8	pg/L	21.2
70362-47-9	PCB-48		188	183	pg/L	21.2
PCB-49/69	PCB-69/49	C	837	834	pg/L	42.4
PCB-50/53	PCB-50/53	C	127	125	pg/L	42.4
35693-99-3	PCB-52		1520	1520	pg/L	21.2
15968-05-5	PCB-54	U	21.2	21.2	pg/L	21.2
74338-24-2	PCB-55		24.6	21.5	pg/L	21.2
41464-43-1	PCB-56		515	512	pg/L	21.2
70424-67-8	PCB-57	U	21.2	21.2	pg/L	21.2
41464-49-7	PCB-58	U	21.2	21.2	pg/L	21.2
PCB-59/62/75	PCB-59/62/75	C	79.0	76.1	pg/L	63.6
33025-41-1	PCB-60		270	266	pg/L	21.2
PCB-61-76	PCB-61/76/70/74	C	2230	2220	pg/L	84.8
74472-34-7	PCB-63	U	21.2	21.2	pg/L	21.2
52663-58-8	PCB-64		321	318	pg/L	21.2
32598-10-0	PCB-66		890	884	pg/L	21.2
73575-53-8	PCB-67	U	21.2	21.2	pg/L	21.2
73575-52-7	PCB-68	U	21.2	21.2	pg/L	21.2
41464-42-0	PCB-72	U	21.2	21.2	pg/L	21.2
74338-23-1	PCB-73	U	21.2	21.2	pg/L	21.2
32598-13-3	PCB-77		270	268	pg/L	21.2
70362-49-1	PCB-78	U	21.2	21.2	pg/L	21.2
41464-48-6	PCB-79		39.2	37.3	pg/L	21.2
33284-52-5	PCB-80	U	21.2	21.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-1922  
Lab Sample ID: 5336001  
Client Sample: 1668A Water  
Client ID: WT\_IPC-13-32197  
Batch ID: 24441  
Run Date: 10/01/2013 20:31  
Data File: c01oct13a-6  
Prep Batch: 24438  
Prep Date: 22-SEP-13

Client: LANL001  
Date Collected: 09/13/2013 07:01  
Date Received: 09/18/2013 09:39  
Method: EPA Method 1668A  
Analyst: MJC  
Prep Method: SW846 3520C  
Aliquot: 943 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21.2	21.2	pg/L	21.2
52663-62-4	PCB-82		472	467	pg/L	21.2
60145-20-2	PCB-83		171	166	pg/L	21.2
52663-60-2	PCB-84		1040	1040	pg/L	21.2
PCB-85-117	PCB-117/116/85	C	967	963	pg/L	63.6
PCB-86-125	PCB-86/87/97/109/119/125	C	3430	3430	pg/L	127
PCB-88/91	PCB-88/91	C	596	591	pg/L	42.4
73575-57-2	PCB-89	U	25.4	21.2	pg/L	21.2
PCB-90-113	PCB-113/90/101	C	5480	5480	pg/L	63.6
52663-61-3	PCB-92		853	848	pg/L	21.2
PCB-93/100	PCB-93/100	CU	42.4	42.4	pg/L	42.4
73575-55-0	PCB-94	U	21.2	21.2	pg/L	21.2
38379-99-6	PCB-95		3250	3250	pg/L	21.2
73575-54-9	PCB-96	U	21.2	21.2	pg/L	21.2
PCB-98/102	PCB-102/98	C	76.0	71	pg/L	42.4
38380-01-7	PCB-99		3140	3130	pg/L	21.2
60145-21-3	PCB-103	U	21.2	21.2	pg/L	21.2
56558-16-8	PCB-104	U	21.2	21.2	pg/L	21.2
32598-14-4	PCB-105		1970	1970	pg/L	21.2
70424-69-0	PCB-106	U	21.2	21.2	pg/L	21.2
70424-68-9	PCB-107		272	267	pg/L	21.2
PCB-108/124	PCB-108/124	C	238	232	pg/L	42.4
PCB-110/115	PCB-110/115	CU	42.4	42.4	pg/L	42.4
39635-32-0	PCB-111	U	21.2	21.2	pg/L	21.2
74472-36-9	PCB-112	U	21.2	21.2	pg/L	21.2
74472-37-0	PCB-114		55.8	50.3	pg/L	21.2
31508-00-6	PCB-118		4160	4160	pg/L	21.2
68194-12-7	PCB-120	U	21.2	21.2	pg/L	21.2
56558-18-0	PCB-121	U	21.2	21.2	pg/L	21.2
76842-07-4	PCB-122		52.0	47.1	pg/L	21.2
65510-44-3	PCB-123		81.8	77	pg/L	21.2
57465-28-8	PCB-126		30.4	24.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1922  
**Lab Sample ID:** 5336001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32197  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 20:31  
**Data File:** c01oct13a-6  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/18/2013 09:39  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 943 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21.2	21.2	pg/L	21.2
PCB-128/166	PCB-128/166	C	1130	1120	pg/L	42.4
PCB-129-163	PCB-138/163/129	C	7080	7070	pg/L	63.6
52663-66-8	PCB-130		369	366	pg/L	21.2
61798-70-7	PCB-131		79.2	75.6	pg/L	21.2
38380-05-1	PCB-132		2660	2650	pg/L	21.2
35694-04-3	PCB-133		70.3	67.2	pg/L	21.2
52704-70-8	PCB-134		319	315	pg/L	21.2
PCB-135/151	PCB-151/135	C	1980	1980	pg/L	42.4
38411-22-2	PCB-136		581	579	pg/L	21.2
35694-06-5	PCB-137		410	405	pg/L	21.2
PCB-139/140	PCB-139/140	C	108	104	pg/L	42.4
52712-04-6	PCB-141		1170	1160	pg/L	21.2
41411-61-4	PCB-142	U	21.2	21.2	pg/L	21.2
68194-15-0	PCB-143	U	21.2	21.2	pg/L	21.2
68194-14-9	PCB-144		211	209	pg/L	21.2
74472-40-5	PCB-145	U	21.2	21.2	pg/L	21.2
51908-16-8	PCB-146		742	739	pg/L	21.2
PCB-147/149	PCB-147/149	C	5110	5100	pg/L	42.4
74472-41-6	PCB-148	U	21.2	21.2	pg/L	21.2
68194-08-1	PCB-150	U	21.2	21.2	pg/L	21.2
68194-09-2	PCB-152	U	21.2	21.2	pg/L	21.2
PCB-153/168	PCB-153/168	C	5770	5760	pg/L	42.4
60145-22-4	PCB-154		38.9	36.6	pg/L	21.2
33979-03-2	PCB-155	U	21.2	21.2	pg/L	21.2
PCB-156/157	PCB-156/157	C	905	901	pg/L	42.4
74472-42-7	PCB-158		623	621	pg/L	21.2
39635-35-3	PCB-159	U	21.2	21.2	pg/L	21.2
41411-62-5	PCB-160	U	21.2	21.2	pg/L	21.2
74472-43-8	PCB-161	U	21.2	21.2	pg/L	21.2
39635-34-2	PCB-162		27.0	23.9	pg/L	21.2
74472-45-0	PCB-164		438	436	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 2013-1922  
**Lab Sample ID:** 5336001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32197  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 20:31  
**Data File:** c01oct13a-6  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/18/2013 09:39  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 943 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21.2	21.2	pg/L	21.2
52663-72-6	PCB-167		305	302	pg/L	21.2
32774-16-6	PCB-169	U	21.2	21.2	pg/L	21.2
35065-30-6	PCB-170		1530	1530	pg/L	21.2
PCB-171/173	PCB-173/171	C	409	406	pg/L	42.4
52663-74-8	PCB-172		258	255	pg/L	21.2
38411-25-5	PCB-174		1690	1690	pg/L	21.2
40186-70-7	PCB-175		56.7	54	pg/L	21.2
52663-65-7	PCB-176		167	165	pg/L	21.2
52663-70-4	PCB-177		886	883	pg/L	21.2
52663-67-9	PCB-178		316	313	pg/L	21.2
52663-64-6	PCB-179		651	649	pg/L	21.2
PCB-180/193	PCB-193/180	CU	42.4	42.4	pg/L	42.4
74472-47-2	PCB-181	U	21.2	21.2	pg/L	21.2
60145-23-5	PCB-182	U	21.2	21.2	pg/L	21.2
PCB-183/185	PCB-183/185	C	1260	1260	pg/L	42.4
74472-48-3	PCB-184	U	21.2	21.2	pg/L	21.2
74472-49-4	PCB-186	U	21.2	21.2	pg/L	21.2
52663-68-0	PCB-187		3070	3060	pg/L	21.2
74487-85-7	PCB-188	U	21.2	21.2	pg/L	21.2
39635-31-9	PCB-189	U	21.2	21.2	pg/L	21.2
41411-64-7	PCB-190		347	345	pg/L	21.2
74472-50-7	PCB-191		57.3	55.3	pg/L	21.2
74472-51-8	PCB-192	U	21.2	21.2	pg/L	21.2
35694-08-7	PCB-194		1010	1010	pg/L	21.2
52663-78-2	PCB-195		320	318	pg/L	21.2
42740-50-1	PCB-196		508	506	pg/L	21.2
PCB-197/200	PCB-197/200	C	214	212	pg/L	42.4
PCB-198/199	PCB-198/199	C	1760	1760	pg/L	42.4
40186-71-8	PCB-201		145	143	pg/L	21.2
2136-99-4	PCB-202		309	307	pg/L	21.2
52663-76-0	PCB-203		1310	1310	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-1922  
**Lab Sample ID:** 5336001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32197  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 20:31  
**Data File:** c01oct13a-6  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/18/2013 09:39  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
**Prep Method:** SW846 3520C  
**Aliquot:** 943 mL

**Project:** LANL00112  
**Matrix:** WATER  
**Prep Basis:** As Received  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21.2	21.2	pg/L	21.2
74472-53-0	PCB-205		45.4	43.1	pg/L	21.2
40186-72-9	PCB-206		703	699	pg/L	21.2
52663-79-3	PCB-207		82.8	80.2	pg/L	21.2
52663-77-1	PCB-208		187	184	pg/L	21.2
2051-24-3	PCB-209		144	141	pg/L	21.2
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs		589	529	pg/L	
25323-68-6	Total Tri PCBs		3290	3250	pg/L	
26914-33-0	Total Tetra PCBs		9430	9370	pg/L	
25429-29-2	Total Penta PCBs		26400	26300	pg/L	
26601-64-9	Total Hexa PCBs		30100	30000	pg/L	
28655-71-2	Total Hepta PCBs		10700	10700	pg/L	
55722-26-4	Total Octa PCBs		5620	5600	pg/L	
53742-07-7	Total Nona PCBs		972	963	pg/L	
DECACB(Tot)	Total Deca PCB		144	141	pg/L	
1336-36-3	Total PCB Congeners		87200	86800	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		850	2120	pg/L	40.1	(15%-150%)
13C-3-MoCB		902	2120	pg/L	42.5	(15%-150%)
13C-4-DiCB		1030	2120	pg/L	48.6	(25%-150%)
13C-15-DiCB		1030	2120	pg/L	48.6	(25%-150%)
13C-19-TrCB		1050	2120	pg/L	49.4	(25%-150%)
13C-37-TrCB		1050	2120	pg/L	49.6	(25%-150%)
13C-54-TeCB		1150	2120	pg/L	54.1	(25%-150%)
13C-77-TeCB		1270	2120	pg/L	59.7	(25%-150%)
13C-81-TeCB		1260	2120	pg/L	59.6	(25%-150%)
13C-104-PeCB		1340	2120	pg/L	63.0	(25%-150%)
13C-105-PeCB		1140	2120	pg/L	53.5	(25%-150%)
13C-114-PeCB		1100	2120	pg/L	51.7	(25%-150%)
13C-118-PeCB		1160	2120	pg/L	54.6	(25%-150%)
13C-123-PeCB		1220	2120	pg/L	57.7	(25%-150%)
13C-126-PeCB		1220	2120	pg/L	57.5	(25%-150%)
13C-155-HxCB		1490	2120	pg/L	70.2	(25%-150%)
13C-156-HxCB	C	2290	4240	pg/L	54.0	(25%-150%)
13C-167-HxCB		1120	2120	pg/L	52.7	(25%-150%)
13C-169-HxCB		1300	2120	pg/L	61.1	(25%-150%)
13C-188-HpCB		1590	2120	pg/L	75.1	(25%-150%)
13C-189-HpCB		1370	2120	pg/L	64.6	(25%-150%)
13C-202-OcCB		1640	2120	pg/L	77.4	(25%-150%)
13C-205-OcCB		1550	2120	pg/L	73.1	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-1922	Client: LANL001	Project: LANL00112
Lab Sample ID: 5336001	Date Collected: 09/13/2013 07:01	Matrix: WATER
Client Sample: 1668A Water	Date Received: 09/18/2013 09:39	
Client ID: WT_IPC-13-32197		Prep Basis: As Received
Batch ID: 24441	Method: EPA Method 1668A	
Run Date: 10/01/2013 20:31	Analyst: MJC	Instrument: HRP791
Data File: c01oct13a-6		Dilution: 1
Prep Batch: 24438	Prep Method: SW846 3520C	Prep SOP Ref: CF-OA-E-001
Prep Date: 22-SEP-13	Aliquot: 943 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		Qual	Result	Nominal	Units	Recovery%      Acceptable Limits
13C-206-NoCB			1630	2120	pg/L	76.7      (25%-150%)
13C-208-NoCB			1800	2120	pg/L	84.7      (25%-150%)
13C-209-DeCB			1880	2120	pg/L	88.5      (25%-150%)
13C-28-TrCB			1300	2120	pg/L	61.2      (30%-135%)
13C-111-PeCB			1580	2120	pg/L	74.6      (30%-135%)
13C-178-HpCB			1590	2120	pg/L	75.2      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	1.14	0.62	2.38	
3-Chlorobiphenyl (2)	pg/L	1.07	0.54	2.14	
4-Chlorobiphenyl (3)	pg/L	1.13	0.57	2.27	
2,2'-Dichlorobiphenyl (4)	pg/L	7.23	4.8	16.8	
2,3-Dichlorobiphenyl (5)	pg/L	8.29	6.14	20.6	*
2,3'-Dichlorobiphenyl (6)	pg/L	5.36	4.06	13.5	
2,4-Dichlorobiphenyl (7)	pg/L	7.54	5.69	18.9	
2,4'-Dichlorobiphenyl (8)	pg/L	5.15	3.88	12.9	
2,5-Dichlorobiphenyl (9)	pg/L	5.31	4.06	13.4	
2,6-Dichlorobiphenyl (10)	pg/L	4.56	3.19	10.9	
3,3'-Dichlorobiphenyl (11)	pg/L	6.21	3.94	14.1	
3,4-Dichlorobiphenyl (12)	pg/L	7.37	4.5	16.4	
3,5-Dichlorobiphenyl (14)	pg/L	5.54	3.89	13.3	
4,4'-Dichlorobiphenyl (15)	pg/L	6.55	4.56	15.7	
2,2',3-Trichlorobiphenyl (16)	pg/L	1.98	0.963	3.9	
2,2',4-Trichlorobiphenyl (17)	pg/L	1.43	0.661	2.76	
2,2',5-Trichlorobiphenyl (18)	pg/L	1.32	0.575	2.47	
2,2',6-Trichlorobiphenyl (19)	pg/L	1.36	0.658	2.68	
2,3,3'-Trichlorobiphenyl (20)	pg/L	2.29	2.76	7.8	
2,3,4-Trichlorobiphenyl (21)	pg/L	1.12	0.376	1.87	
2,3,4'-Trichlorobiphenyl (22)	pg/L	1.49	0.577	2.64	
2,3,5-Trichlorobiphenyl (23)	pg/L	1.48	0.622	2.72	
2,3,6-Trichlorobiphenyl (24)	pg/L	1.43	0.63	2.69	
2,3',4-Trichlorobiphenyl (25)	pg/L	1.03	0.419	1.86	
2,3',5-Trichlorobiphenyl (26)	pg/L	1.05	0.365	1.78	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.982	0.457	1.9	
2,4',5-Trichlorobiphenyl (31)	pg/L	1.23	0.929	3.08	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.928	0.422	1.77	
2',3,5-Trichlorobiphenyl (34)	pg/L	1	0.425	1.85	
3,3',4-Trichlorobiphenyl (35)	pg/L	1.01	0.326	1.67	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.927	0.311	1.55	
3,4,4'-Trichlorobiphenyl (37)	pg/L	1.72	1.37	4.45	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.993	0.318	1.63	
3,4',5-Trichlorobiphenyl (39)	pg/L	1.3	0.433	2.17	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	1.96	1.04	4.04	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	1.98	1.12	4.21	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	2.04	1.11	4.25	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	2.38	1.35	5.08	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	1.74	0.889	3.51	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	1.51	0.406	2.32	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	1.33	0.566	2.47	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	2.39	1.3	4.99	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	1.61	0.778	3.17	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	1.29	0.483	2.26	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	1.64	0.898	3.44	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.708	0.29	1.29	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	1.71	0.695	3.1	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	1.48	0.528	2.53	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	1.15	0.495	2.14	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	1.68	0.721	3.12	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	1.49	0.739	2.97	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	1.91	1.05	4.01	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	1.44	0.51	2.46	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	1.12	0.471	2.06	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	1.44	0.742	2.92	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	2.03	1.92	5.87	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	1.13	0.468	2.06	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	1.51	0.633	2.77	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	1.09	0.473	2.04	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	1.79	1.03	3.86	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	1.47	0.556	2.58	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	1.27	0.475	2.22	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	1.1	0.422	1.94	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	1.14	0.458	2.05	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	1.42	0.579	2.58	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	2.73	1.17	5.08	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	2.79	1.24	5.27	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	2.79	1.27	5.32	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	2.35	0.907	4.16	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	2.39	0.864	4.12	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	2.91	1.11	5.14	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	2.52	1.15	4.81	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	2.45	0.908	4.27	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	2.42	1.09	4.6	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	2.79	1.29	5.37	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	3.61	1.69	6.99	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	2.33	1.03	4.38	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	1.26	0.542	2.35	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	2.8	1.1	5	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	3.31	1.54	6.38	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	2.15	1.01	4.17	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	1.21	0.449	2.1	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	2.68	1.41	5.49	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	2.15	1.18	4.51	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	2.13	1.18	4.48	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	2.5	1.33	5.16	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	2.59	0.758	4.1	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	2.55	1.12	4.79	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	1.83	0.795	3.42	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	2.68	1.42	5.52	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	2.51	1.2	4.92	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	1.76	0.773	3.3	



# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	2.54	1.16	4.87	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	2.35	1.27	4.88	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	2.36	1.26	4.87	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	3.05	1.6	6.25	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	2.27	1.17	4.6	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	1.72	0.564	2.84	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	1.72	0.553	2.83	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	1.93	0.66	3.25	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	2.07	0.761	3.6	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	2.6	0.964	4.53	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	1.79	0.639	3.06	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	2.15	0.816	3.78	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	1.69	0.593	2.87	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	1.06	0.448	1.95	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	2.6	0.934	4.47	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	1.94	0.722	3.38	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	1.78	0.622	3.02	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	1.85	0.672	3.19	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	1.69	0.661	3.01	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	1.38	0.556	2.49	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	1.54	0.656	2.85	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	1.68	0.624	2.93	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	1.95	0.733	3.42	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	1.36	0.558	2.47	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	1.49	0.65	2.79	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	1.04	0.451	1.94	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	1.74	0.449	2.64	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	1.28	0.531	2.34	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.976	0.379	1.73	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	1.94	0.642	3.22	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	1.32	0.449	2.22	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	1.33	0.451	2.24	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	2.08	0.723	3.53	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	1.32	0.469	2.26	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	1.84	0.616	3.08	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	1.37	0.472	2.32	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	2.04	0.735	3.51	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	1.52	0.523	2.56	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	1.71	0.478	2.67	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	1.64	0.559	2.76	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	1.7	0.511	2.72	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	1.62	0.576	2.77	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	1.57	0.582	2.74	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	1.48	0.575	2.63	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	1.14	0.478	2.1	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	1.63	0.586	2.8	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	1.55	0.609	2.77	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	1.12	0.478	2.08	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	1.64	0.58	2.8	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	2.14	0.791	3.72	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	1.55	0.596	2.74	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	1.76	0.563	2.89	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	1.52	0.635	2.79	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	1.66	0.675	3.01	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	1.97	0.749	3.47	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	1.26	0.525	2.3	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	1.7	0.576	2.85	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	1.28	0.437	2.15	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	1.22	0.436	2.1	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	1.83	0.653	3.14	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	1.52	0.563	2.64	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	1.61	0.598	2.8	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	1.41	0.484	2.37	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	1.29	0.391	2.08	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	1.74	0.49	2.72	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	1.07	0.398	1.87	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	1.25	0.476	2.2	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	1.86	0.658	3.18	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	1.09	0.402	1.89	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	1.37	0.489	2.35	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	1.93	0.78	3.49	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	1.44	0.582	2.61	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	1.66	0.666	2.99	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	1.63	0.824	3.28	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32149  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 21:35  
**Data File:** c01oct13a-7  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 14:45  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 837 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	23.9	23.9	pg/L	23.9
2051-61-8	PCB-2	U	23.9	23.9	pg/L	23.9
2051-62-9	PCB-3	U	23.9	23.9	pg/L	23.9
13029-08-8	PCB-4	U	23.9	23.9	pg/L	23.9
16605-91-7	PCB-5	U	24.6	24.6	pg/L	24.6
25569-80-6	PCB-6	U	23.9	23.9	pg/L	23.9
33284-50-3	PCB-7	U	23.9	23.9	pg/L	23.9
34883-43-7	PCB-8	U	23.9	23.9	pg/L	23.9
34883-39-1	PCB-9	U	23.9	23.9	pg/L	23.9
33146-45-1	PCB-10	U	23.9	23.9	pg/L	23.9
2050-67-1	PCB-11	U	119	119	pg/L	119
PCB-12/13	PCB-13/12	CU	47.8	47.8	pg/L	47.8
34883-41-5	PCB-14	U	23.9	23.9	pg/L	23.9
2050-68-2	PCB-15	U	23.9	23.9	pg/L	23.9
38444-78-9	PCB-16	U	23.9	23.9	pg/L	23.9
37680-66-3	PCB-17	U	23.9	23.9	pg/L	23.9
PCB-18/30	PCB-18/30	CU	47.8	47.8	pg/L	47.8
38444-73-4	PCB-19	U	23.9	23.9	pg/L	23.9
PCB-20/28	PCB-20/28	CU	47.8	47.8	pg/L	47.8
PCB-21/33	PCB-21/33	CU	47.8	47.8	pg/L	47.8
38444-85-8	PCB-22	U	23.9	23.9	pg/L	23.9
55720-44-0	PCB-23	U	23.9	23.9	pg/L	23.9
55702-45-9	PCB-24	U	23.9	23.9	pg/L	23.9
55712-37-3	PCB-25	U	23.9	23.9	pg/L	23.9
PCB-26/29	PCB-26/29	CU	47.8	47.8	pg/L	47.8
38444-76-7	PCB-27	U	23.9	23.9	pg/L	23.9
16606-02-3	PCB-31	U	23.9	23.9	pg/L	23.9
38444-77-8	PCB-32	U	23.9	23.9	pg/L	23.9
37680-68-5	PCB-34	U	23.9	23.9	pg/L	23.9
37680-69-6	PCB-35	U	23.9	23.9	pg/L	23.9
38444-87-0	PCB-36	U	23.9	23.9	pg/L	23.9
38444-90-5	PCB-37	U	23.9	23.9	pg/L	23.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 7

**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32149  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 21:35  
**Data File:** c01oct13a-7  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 14:45  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 837 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	23.9	23.9	pg/L	23.9
38444-88-1	PCB-39	U	23.9	23.9	pg/L	23.9
PCB-40/71	PCB-40/71	CU	47.8	47.8	pg/L	47.8
52663-59-9	PCB-41	U	23.9	23.9	pg/L	23.9
36559-22-5	PCB-42	U	23.9	23.9	pg/L	23.9
70362-46-8	PCB-43	U	23.9	23.9	pg/L	23.9
PCB-44/47/65	PCB-44/65/47	CU	71.7	71.7	pg/L	71.7
PCB-45/51	PCB-45/51	CU	47.8	47.8	pg/L	47.8
41464-47-5	PCB-46	U	23.9	23.9	pg/L	23.9
70362-47-9	PCB-48	U	23.9	23.9	pg/L	23.9
PCB-49/69	PCB-69/49	CU	47.8	47.8	pg/L	47.8
PCB-50/53	PCB-50/53	CU	47.8	47.8	pg/L	47.8
35693-99-3	PCB-52		45.9	42.4	pg/L	23.9
15968-05-5	PCB-54	U	23.9	23.9	pg/L	23.9
74338-24-2	PCB-55	U	23.9	23.9	pg/L	23.9
41464-43-1	PCB-56	U	23.9	23.9	pg/L	23.9
70424-67-8	PCB-57	U	23.9	23.9	pg/L	23.9
41464-49-7	PCB-58	U	23.9	23.9	pg/L	23.9
PCB-59/62/75	PCB-59/62/75	CU	71.7	71.7	pg/L	71.7
33025-41-1	PCB-60	U	23.9	23.9	pg/L	23.9
PCB-61-76	PCB-61/76/70/74	CU	95.6	95.6	pg/L	95.6
74472-34-7	PCB-63	U	23.9	23.9	pg/L	23.9
52663-58-8	PCB-64	U	23.9	23.9	pg/L	23.9
32598-10-0	PCB-66	U	23.9	23.9	pg/L	23.9
73575-53-8	PCB-67	U	23.9	23.9	pg/L	23.9
73575-52-7	PCB-68	U	23.9	23.9	pg/L	23.9
41464-42-0	PCB-72	U	23.9	23.9	pg/L	23.9
74338-23-1	PCB-73	U	23.9	23.9	pg/L	23.9
32598-13-3	PCB-77	U	23.9	23.9	pg/L	23.9
70362-49-1	PCB-78	U	23.9	23.9	pg/L	23.9
41464-48-6	PCB-79	U	23.9	23.9	pg/L	23.9
33284-52-5	PCB-80	U	23.9	23.9	pg/L	23.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32149  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 21:35  
**Data File:** c01oct13a-7  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 14:45  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 837 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	23.9	23.9	pg/L	23.9
52663-62-4	PCB-82	U	23.9	23.9	pg/L	23.9
60145-20-2	PCB-83	U	23.9	23.9	pg/L	23.9
52663-60-2	PCB-84	U	23.9	23.9	pg/L	23.9
PCB-85-117	PCB-117/116/85	CU	71.7	71.7	pg/L	71.7
PCB-86-125	PCB-86/87/97/109/119/125	CU	143	143	pg/L	143
PCB-88/91	PCB-88/91	CU	47.8	47.8	pg/L	47.8
73575-57-2	PCB-89	U	23.9	23.9	pg/L	23.9
PCB-90-113	PCB-113/90/101	C	90.1	85.8	pg/L	71.7
52663-61-3	PCB-92	U	23.9	23.9	pg/L	23.9
PCB-93/100	PCB-93/100	CU	47.8	47.8	pg/L	47.8
73575-55-0	PCB-94	U	23.9	23.9	pg/L	23.9
38379-99-6	PCB-95		53.4	49	pg/L	23.9
73575-54-9	PCB-96	U	23.9	23.9	pg/L	23.9
PCB-98/102	PCB-102/98	CU	47.8	47.8	pg/L	47.8
38380-01-7	PCB-99		45.3	38.9	pg/L	23.9
60145-21-3	PCB-103	U	23.9	23.9	pg/L	23.9
56558-16-8	PCB-104	U	23.9	23.9	pg/L	23.9
32598-14-4	PCB-105		59.2	53.7	pg/L	23.9
70424-69-0	PCB-106	U	23.9	23.9	pg/L	23.9
70424-68-9	PCB-107	U	23.9	23.9	pg/L	23.9
PCB-108/124	PCB-108/124	CU	47.8	47.8	pg/L	47.8
PCB-110/115	PCB-110/115	CU	47.8	47.8	pg/L	47.8
39635-32-0	PCB-111	U	23.9	23.9	pg/L	23.9
74472-36-9	PCB-112	U	23.9	23.9	pg/L	23.9
74472-37-0	PCB-114	U	23.9	23.9	pg/L	23.9
31508-00-6	PCB-118		110	106	pg/L	23.9
68194-12-7	PCB-120	U	23.9	23.9	pg/L	23.9
56558-18-0	PCB-121	U	23.9	23.9	pg/L	23.9
76842-07-4	PCB-122	U	23.9	23.9	pg/L	23.9
65510-44-3	PCB-123	U	23.9	23.9	pg/L	23.9
57465-28-8	PCB-126	U	23.9	23.9	pg/L	23.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32149  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 21:35  
**Data File:** c01oct13a-7  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 14:45  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 837 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	23.9	23.9	pg/L	23.9
PCB-128/166	PCB-128/166	CU	47.8	47.8	pg/L	47.8
PCB-129-163	PCB-138/163/129	C	163	160	pg/L	71.7
52663-66-8	PCB-130	U	23.9	23.9	pg/L	23.9
61798-70-7	PCB-131	U	23.9	23.9	pg/L	23.9
38380-05-1	PCB-132		55.0	50.5	pg/L	23.9
35694-04-3	PCB-133	U	23.9	23.9	pg/L	23.9
52704-70-8	PCB-134	U	23.9	23.9	pg/L	23.9
PCB-135/151	PCB-151/135	CU	47.8	47.8	pg/L	47.8
38411-22-2	PCB-136	U	23.9	23.9	pg/L	23.9
35694-06-5	PCB-137	U	23.9	23.9	pg/L	23.9
PCB-139/140	PCB-139/140	CU	47.8	47.8	pg/L	47.8
52712-04-6	PCB-141	U	23.9	23.9	pg/L	23.9
41411-61-4	PCB-142	U	23.9	23.9	pg/L	23.9
68194-15-0	PCB-143	U	23.9	23.9	pg/L	23.9
68194-14-9	PCB-144	U	23.9	23.9	pg/L	23.9
74472-40-5	PCB-145	U	23.9	23.9	pg/L	23.9
51908-16-8	PCB-146	U	23.9	23.9	pg/L	23.9
PCB-147/149	PCB-147/149	C	92.6	89.2	pg/L	47.8
74472-41-6	PCB-148	U	23.9	23.9	pg/L	23.9
68194-08-1	PCB-150	U	23.9	23.9	pg/L	23.9
68194-09-2	PCB-152	U	23.9	23.9	pg/L	23.9
PCB-153/168	PCB-153/168	C	113	110	pg/L	47.8
60145-22-4	PCB-154	U	23.9	23.9	pg/L	23.9
33979-03-2	PCB-155	U	23.9	23.9	pg/L	23.9
PCB-156/157	PCB-156/157	CU	47.8	47.8	pg/L	47.8
74472-42-7	PCB-158	U	23.9	23.9	pg/L	23.9
39635-35-3	PCB-159	U	23.9	23.9	pg/L	23.9
41411-62-5	PCB-160	U	23.9	23.9	pg/L	23.9
74472-43-8	PCB-161	U	23.9	23.9	pg/L	23.9
39635-34-2	PCB-162	U	23.9	23.9	pg/L	23.9
74472-45-0	PCB-164	U	23.9	23.9	pg/L	23.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32149  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 21:35  
**Data File:** c01oct13a-7  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 14:45  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 837 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	23.9	23.9	pg/L	23.9
52663-72-6	PCB-167	U	23.9	23.9	pg/L	23.9
32774-16-6	PCB-169	U	23.9	23.9	pg/L	23.9
35065-30-6	PCB-170		33.0	30.3	pg/L	23.9
PCB-171/173	PCB-173/171	CU	47.8	47.8	pg/L	47.8
52663-74-8	PCB-172	U	23.9	23.9	pg/L	23.9
38411-25-5	PCB-174	U	23.9	23.9	pg/L	23.9
40186-70-7	PCB-175	U	23.9	23.9	pg/L	23.9
52663-65-7	PCB-176	U	23.9	23.9	pg/L	23.9
52663-70-4	PCB-177	U	23.9	23.9	pg/L	23.9
52663-67-9	PCB-178	U	23.9	23.9	pg/L	23.9
52663-64-6	PCB-179	U	23.9	23.9	pg/L	23.9
PCB-180/193	PCB-193/180	CU	47.8	47.8	pg/L	47.8
74472-47-2	PCB-181	U	23.9	23.9	pg/L	23.9
60145-23-5	PCB-182	U	23.9	23.9	pg/L	23.9
PCB-183/185	PCB-183/185	CU	47.8	47.8	pg/L	47.8
74472-48-3	PCB-184	U	23.9	23.9	pg/L	23.9
74472-49-4	PCB-186	U	23.9	23.9	pg/L	23.9
52663-68-0	PCB-187		38.2	34.7	pg/L	23.9
74487-85-7	PCB-188	U	23.9	23.9	pg/L	23.9
39635-31-9	PCB-189	U	23.9	23.9	pg/L	23.9
41411-64-7	PCB-190	U	23.9	23.9	pg/L	23.9
74472-50-7	PCB-191	U	23.9	23.9	pg/L	23.9
74472-51-8	PCB-192	U	23.9	23.9	pg/L	23.9
35694-08-7	PCB-194	U	23.9	23.9	pg/L	23.9
52663-78-2	PCB-195	U	23.9	23.9	pg/L	23.9
42740-50-1	PCB-196	U	23.9	23.9	pg/L	23.9
PCB-197/200	PCB-197/200	CU	47.8	47.8	pg/L	47.8
PCB-198/199	PCB-198/199	CU	47.8	47.8	pg/L	47.8
40186-71-8	PCB-201	U	23.9	23.9	pg/L	23.9
2136-99-4	PCB-202	U	23.9	23.9	pg/L	23.9
52663-76-0	PCB-203	U	23.9	23.9	pg/L	23.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32149  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 21:35  
**Data File:** c01oct13a-7  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/10/2013 14:45  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 837 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	23.9	23.9	pg/L	23.9
74472-53-0	PCB-205	U	23.9	23.9	pg/L	23.9
40186-72-9	PCB-206	U	23.9	23.9	pg/L	23.9
52663-79-3	PCB-207	U	23.9	23.9	pg/L	23.9
52663-77-1	PCB-208	U	23.9	23.9	pg/L	23.9
2051-24-3	PCB-209	U	23.9	23.9	pg/L	23.9
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		45.9	42.4	pg/L	
25429-29-2	Total Penta PCBs		358	333	pg/L	
26601-64-9	Total Hexa PCBs		424	410	pg/L	
28655-71-2	Total Hepta PCBs		71.2	65	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		899	851	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1080	2390	pg/L	45.4	(15%-150%)
13C-3-MoCB		1070	2390	pg/L	44.9	(15%-150%)
13C-4-DiCB		1240	2390	pg/L	52.0	(25%-150%)
13C-15-DiCB		937	2390	pg/L	39.2	(25%-150%)
13C-19-TrCB		1090	2390	pg/L	45.8	(25%-150%)
13C-37-TrCB		795	2390	pg/L	33.3	(25%-150%)
13C-54-TeCB		1090	2390	pg/L	45.4	(25%-150%)
13C-77-TeCB		933	2390	pg/L	39.0	(25%-150%)
13C-81-TeCB		949	2390	pg/L	39.7	(25%-150%)
13C-104-PeCB		1200	2390	pg/L	50.3	(25%-150%)
13C-105-PeCB		942	2390	pg/L	39.4	(25%-150%)
13C-114-PeCB		933	2390	pg/L	39.1	(25%-150%)
13C-118-PeCB		991	2390	pg/L	41.5	(25%-150%)
13C-123-PeCB		1050	2390	pg/L	43.9	(25%-150%)
13C-126-PeCB		994	2390	pg/L	41.6	(25%-150%)
13C-155-HxCB		1430	2390	pg/L	59.9	(25%-150%)
13C-156-HxCB	C	2120	4780	pg/L	44.4	(25%-150%)
13C-167-HxCB		1050	2390	pg/L	44.1	(25%-150%)
13C-169-HxCB		1250	2390	pg/L	52.1	(25%-150%)
13C-188-HpCB		1350	2390	pg/L	56.3	(25%-150%)
13C-189-HpCB		1290	2390	pg/L	53.9	(25%-150%)
13C-202-OcCB		1440	2390	pg/L	60.5	(25%-150%)
13C-205-OcCB		1560	2390	pg/L	65.1	(25%-150%)



**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-2014	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5345001	<b>Date Collected:</b> 09/10/2013 14:45	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/20/2013 09:40	
<b>Client ID:</b> WT_IPC-13-32149		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24441	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/01/2013 21:35	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c01oct13a-7		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24438	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 22-SEP-13	<b>Aliquot:</b> 837 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1740	2390	pg/L	72.9      (25%-150%)
13C-208-NoCB			1750	2390	pg/L	73.4      (25%-150%)
13C-209-DeCB			2070	2390	pg/L	86.4      (25%-150%)
13C-28-TrCB			1620	2390	pg/L	67.9      (30%-135%)
13C-111-PeCB			1860	2390	pg/L	77.8      (30%-135%)
13C-178-HpCB			1850	2390	pg/L	77.4      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32034  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 22:38  
**Data File:** c01oct13a-8  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 17:05  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 800.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	25	25	pg/L	25.0
2051-61-8	PCB-2	U	25	25	pg/L	25.0
2051-62-9	PCB-3	U	25	25	pg/L	25.0
13029-08-8	PCB-4	U	25	25	pg/L	25.0
16605-91-7	PCB-5	U	25.7	25.7	pg/L	25.7
25569-80-6	PCB-6	U	25	25	pg/L	25.0
33284-50-3	PCB-7	U	25	25	pg/L	25.0
34883-43-7	PCB-8	U	25	25	pg/L	25.0
34883-39-1	PCB-9	U	25	25	pg/L	25.0
33146-45-1	PCB-10	U	25	25	pg/L	25.0
2050-67-1	PCB-11	U	125	125	pg/L	125
PCB-12/13	PCB-13/12	CU	50	50	pg/L	50.0
34883-41-5	PCB-14	U	25	25	pg/L	25.0
2050-68-2	PCB-15	U	25	25	pg/L	25.0
38444-78-9	PCB-16	U	25	25	pg/L	25.0
37680-66-3	PCB-17	U	25	25	pg/L	25.0
PCB-18/30	PCB-18/30	CU	50	50	pg/L	50.0
38444-73-4	PCB-19	U	25	25	pg/L	25.0
PCB-20/28	PCB-20/28	CU	50	50	pg/L	50.0
PCB-21/33	PCB-21/33	CU	50	50	pg/L	50.0
38444-85-8	PCB-22	U	25	25	pg/L	25.0
55720-44-0	PCB-23	U	25	25	pg/L	25.0
55702-45-9	PCB-24	U	25	25	pg/L	25.0
55712-37-3	PCB-25	U	25	25	pg/L	25.0
PCB-26/29	PCB-26/29	CU	50	50	pg/L	50.0
38444-76-7	PCB-27	U	25	25	pg/L	25.0
16606-02-3	PCB-31	U	25	25	pg/L	25.0
38444-77-8	PCB-32	U	25	25	pg/L	25.0
37680-68-5	PCB-34	U	25	25	pg/L	25.0
37680-69-6	PCB-35	U	25	25	pg/L	25.0
38444-87-0	PCB-36	U	25	25	pg/L	25.0
38444-90-5	PCB-37	U	25	25	pg/L	25.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32034  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 22:38  
**Data File:** c01oct13a-8  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 17:05  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 800.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	25	25	pg/L	25.0
38444-88-1	PCB-39	U	25	25	pg/L	25.0
PCB-40/71	PCB-40/71	CU	50	50	pg/L	50.0
52663-59-9	PCB-41	U	25	25	pg/L	25.0
36559-22-5	PCB-42	U	25	25	pg/L	25.0
70362-46-8	PCB-43	U	25	25	pg/L	25.0
PCB-44/47/65	PCB-44/65/47	CU	74.9	74.9	pg/L	74.9
PCB-45/51	PCB-45/51	CU	50	50	pg/L	50.0
41464-47-5	PCB-46	U	25	25	pg/L	25.0
70362-47-9	PCB-48	U	25	25	pg/L	25.0
PCB-49/69	PCB-69/49	CU	50	50	pg/L	50.0
PCB-50/53	PCB-50/53	CU	50	50	pg/L	50.0
35693-99-3	PCB-52	U	25	25	pg/L	25.0
15968-05-5	PCB-54	U	25	25	pg/L	25.0
74338-24-2	PCB-55	U	25	25	pg/L	25.0
41464-43-1	PCB-56	U	25	25	pg/L	25.0
70424-67-8	PCB-57	U	25	25	pg/L	25.0
41464-49-7	PCB-58	U	25	25	pg/L	25.0
PCB-59/62/75	PCB-59/62/75	CU	74.9	74.9	pg/L	74.9
33025-41-1	PCB-60	U	25	25	pg/L	25.0
PCB-61-76	PCB-61/76/70/74	CU	99.9	99.9	pg/L	99.9
74472-34-7	PCB-63	U	25	25	pg/L	25.0
52663-58-8	PCB-64	U	25	25	pg/L	25.0
32598-10-0	PCB-66	U	25	25	pg/L	25.0
73575-53-8	PCB-67	U	25	25	pg/L	25.0
73575-52-7	PCB-68	U	25	25	pg/L	25.0
41464-42-0	PCB-72	U	25	25	pg/L	25.0
74338-23-1	PCB-73	U	25	25	pg/L	25.0
32598-13-3	PCB-77	U	25	25	pg/L	25.0
70362-49-1	PCB-78	U	25	25	pg/L	25.0
41464-48-6	PCB-79	U	25	25	pg/L	25.0
33284-52-5	PCB-80	U	25	25	pg/L	25.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32034  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 22:38  
**Data File:** c01oct13a-8  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 17:05  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 800.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	25	25	pg/L	25.0
52663-62-4	PCB-82	U	25	25	pg/L	25.0
60145-20-2	PCB-83	U	25	25	pg/L	25.0
52663-60-2	PCB-84	U	25	25	pg/L	25.0
PCB-85-117	PCB-117/116/85	CU	74.9	74.9	pg/L	74.9
PCB-86-125	PCB-86/87/97/109/119/125	CU	150	150	pg/L	150
PCB-88/91	PCB-88/91	CU	50	50	pg/L	50.0
73575-57-2	PCB-89	U	25	25	pg/L	25.0
PCB-90-113	PCB-113/90/101	CU	74.9	74.9	pg/L	74.9
52663-61-3	PCB-92	U	25	25	pg/L	25.0
PCB-93/100	PCB-93/100	CU	50	50	pg/L	50.0
73575-55-0	PCB-94	U	25	25	pg/L	25.0
38379-99-6	PCB-95	U	25	25	pg/L	25.0
73575-54-9	PCB-96	U	25	25	pg/L	25.0
PCB-98/102	PCB-102/98	CU	50	50	pg/L	50.0
38380-01-7	PCB-99	U	25	25	pg/L	25.0
60145-21-3	PCB-103	U	25	25	pg/L	25.0
56558-16-8	PCB-104	U	25	25	pg/L	25.0
32598-14-4	PCB-105	U	25	25	pg/L	25.0
70424-69-0	PCB-106	U	25	25	pg/L	25.0
70424-68-9	PCB-107	U	25	25	pg/L	25.0
PCB-108/124	PCB-108/124	CU	50	50	pg/L	50.0
PCB-110/115	PCB-110/115	CU	50	50	pg/L	50.0
39635-32-0	PCB-111	U	25	25	pg/L	25.0
74472-36-9	PCB-112	U	25	25	pg/L	25.0
74472-37-0	PCB-114	U	25	25	pg/L	25.0
31508-00-6	PCB-118	U	25	25	pg/L	25.0
68194-12-7	PCB-120	U	25	25	pg/L	25.0
56558-18-0	PCB-121	U	25	25	pg/L	25.0
76842-07-4	PCB-122	U	25	25	pg/L	25.0
65510-44-3	PCB-123	U	25	25	pg/L	25.0
57465-28-8	PCB-126	U	25	25	pg/L	25.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32034  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 22:38  
**Data File:** c01oct13a-8  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 17:05  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 800.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	25	25	pg/L	25.0
PCB-128/166	PCB-128/166	CU	50	50	pg/L	50.0
PCB-129-163	PCB-138/163/129	CU	74.9	74.9	pg/L	74.9
52663-66-8	PCB-130	U	25	25	pg/L	25.0
61798-70-7	PCB-131	U	25	25	pg/L	25.0
38380-05-1	PCB-132	U	25	25	pg/L	25.0
35694-04-3	PCB-133	U	25	25	pg/L	25.0
52704-70-8	PCB-134	U	25	25	pg/L	25.0
PCB-135/151	PCB-151/135	CU	50	50	pg/L	50.0
38411-22-2	PCB-136	U	25	25	pg/L	25.0
35694-06-5	PCB-137	U	25	25	pg/L	25.0
PCB-139/140	PCB-139/140	CU	50	50	pg/L	50.0
52712-04-6	PCB-141	U	25	25	pg/L	25.0
41411-61-4	PCB-142	U	25	25	pg/L	25.0
68194-15-0	PCB-143	U	25	25	pg/L	25.0
68194-14-9	PCB-144	U	25	25	pg/L	25.0
74472-40-5	PCB-145	U	25	25	pg/L	25.0
51908-16-8	PCB-146	U	25	25	pg/L	25.0
PCB-147/149	PCB-147/149	CU	50	50	pg/L	50.0
74472-41-6	PCB-148	U	25	25	pg/L	25.0
68194-08-1	PCB-150	U	25	25	pg/L	25.0
68194-09-2	PCB-152	U	25	25	pg/L	25.0
PCB-153/168	PCB-153/168	CU	50	50	pg/L	50.0
60145-22-4	PCB-154	U	25	25	pg/L	25.0
33979-03-2	PCB-155	U	25	25	pg/L	25.0
PCB-156/157	PCB-156/157	CU	50	50	pg/L	50.0
74472-42-7	PCB-158	U	25	25	pg/L	25.0
39635-35-3	PCB-159	U	25	25	pg/L	25.0
41411-62-5	PCB-160	U	25	25	pg/L	25.0
74472-43-8	PCB-161	U	25	25	pg/L	25.0
39635-34-2	PCB-162	U	25	25	pg/L	25.0
74472-45-0	PCB-164	U	25	25	pg/L	25.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32034  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 22:38  
**Data File:** c01oct13a-8  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 17:05  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 800.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	25	25	pg/L	25.0
52663-72-6	PCB-167	U	25	25	pg/L	25.0
32774-16-6	PCB-169	U	25	25	pg/L	25.0
35065-30-6	PCB-170	U	25	25	pg/L	25.0
PCB-171/173	PCB-173/171	CU	50	50	pg/L	50.0
52663-74-8	PCB-172	U	25	25	pg/L	25.0
38411-25-5	PCB-174	U	25	25	pg/L	25.0
40186-70-7	PCB-175	U	25	25	pg/L	25.0
52663-65-7	PCB-176	U	25	25	pg/L	25.0
52663-70-4	PCB-177	U	25	25	pg/L	25.0
52663-67-9	PCB-178	U	25	25	pg/L	25.0
52663-64-6	PCB-179	U	25	25	pg/L	25.0
PCB-180/193	PCB-193/180	CU	50	50	pg/L	50.0
74472-47-2	PCB-181	U	25	25	pg/L	25.0
60145-23-5	PCB-182	U	25	25	pg/L	25.0
PCB-183/185	PCB-183/185	CU	50	50	pg/L	50.0
74472-48-3	PCB-184	U	25	25	pg/L	25.0
74472-49-4	PCB-186	U	25	25	pg/L	25.0
52663-68-0	PCB-187	U	25	25	pg/L	25.0
74487-85-7	PCB-188	U	25	25	pg/L	25.0
39635-31-9	PCB-189	U	25	25	pg/L	25.0
41411-64-7	PCB-190	U	25	25	pg/L	25.0
74472-50-7	PCB-191	U	25	25	pg/L	25.0
74472-51-8	PCB-192	U	25	25	pg/L	25.0
35694-08-7	PCB-194	U	25	25	pg/L	25.0
52663-78-2	PCB-195	U	25	25	pg/L	25.0
42740-50-1	PCB-196	U	25	25	pg/L	25.0
PCB-197/200	PCB-197/200	CU	50	50	pg/L	50.0
PCB-198/199	PCB-198/199	CU	50	50	pg/L	50.0
40186-71-8	PCB-201	U	25	25	pg/L	25.0
2136-99-4	PCB-202	U	25	25	pg/L	25.0
52663-76-0	PCB-203	U	25	25	pg/L	25.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32034  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 22:38  
**Data File:** c01oct13a-8  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 17:05  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 800.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	25	25	pg/L	25.0
74472-53-0	PCB-205	U	25	25	pg/L	25.0
40186-72-9	PCB-206	U	25	25	pg/L	25.0
52663-79-3	PCB-207	U	25	25	pg/L	25.0
52663-77-1	PCB-208	U	25	25	pg/L	25.0
2051-24-3	PCB-209	U	25	25	pg/L	25.0
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs	U	0	0	pg/L	
25429-29-2	Total Penta PCBs	U	0	0	pg/L	
26601-64-9	Total Hexa PCBs	U	0	0	pg/L	
28655-71-2	Total Hepta PCBs	U	0	0	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners	U	0	0	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		768	2500	pg/L	30.8	(15%-150%)
13C-3-MoCB		798	2500	pg/L	31.9	(15%-150%)
13C-4-DiCB		945	2500	pg/L	37.8	(25%-150%)
13C-15-DiCB		924	2500	pg/L	37.0	(25%-150%)
13C-19-TrCB		985	2500	pg/L	39.4	(25%-150%)
13C-37-TrCB		975	2500	pg/L	39.1	(25%-150%)
13C-54-TeCB		1120	2500	pg/L	45.0	(25%-150%)
13C-77-TeCB		1120	2500	pg/L	45.0	(25%-150%)
13C-81-TeCB		1130	2500	pg/L	45.2	(25%-150%)
13C-104-PeCB		1160	2500	pg/L	46.4	(25%-150%)
13C-105-PeCB		1020	2500	pg/L	40.7	(25%-150%)
13C-114-PeCB		980	2500	pg/L	39.3	(25%-150%)
13C-118-PeCB		1030	2500	pg/L	41.3	(25%-150%)
13C-123-PeCB		1080	2500	pg/L	43.1	(25%-150%)
13C-126-PeCB		1040	2500	pg/L	41.8	(25%-150%)
13C-155-HxCB		1210	2500	pg/L	48.3	(25%-150%)
13C-156-HxCB	C	2030	5000	pg/L	40.7	(25%-150%)
13C-167-HxCB		995	2500	pg/L	39.8	(25%-150%)
13C-169-HxCB		1180	2500	pg/L	47.2	(25%-150%)
13C-188-HpCB		1000	2500	pg/L	40.1	(25%-150%)
13C-189-HpCB		1090	2500	pg/L	43.6	(25%-150%)
13C-202-OcCB		1110	2500	pg/L	44.4	(25%-150%)
13C-205-OcCB		1300	2500	pg/L	52.0	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 2013-2014	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5345002	<b>Date Collected:</b> 09/13/2013 17:05	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/20/2013 09:40	
<b>Client ID:</b> WT_IPC-13-32034		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24441	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/01/2013 22:38	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c01oct13a-8		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24438	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 22-SEP-13	<b>Aliquot:</b> 800.7 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1440	2500	pg/L	57.6      (25%-150%)
13C-208-NoCB			1380	2500	pg/L	55.1      (25%-150%)
13C-209-DeCB			1750	2500	pg/L	70.0      (25%-150%)
13C-28-TrCB			1200	2500	pg/L	48.2      (30%-135%)
13C-111-PeCB			1530	2500	pg/L	61.3      (30%-135%)
13C-178-HpCB			1550	2500	pg/L	61.9      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data
- U** Analyte was analyzed for , but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32509  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 23:42  
**Data File:** c01oct13a-9  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:22  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 901.4 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	22.2	22.2	pg/L	22.2
2051-61-8	PCB-2	U	22.2	22.2	pg/L	22.2
2051-62-9	PCB-3	U	22.2	22.2	pg/L	22.2
13029-08-8	PCB-4	U	22.2	22.2	pg/L	22.2
16605-91-7	PCB-5	U	22.9	22.9	pg/L	22.9
25569-80-6	PCB-6	U	22.2	22.2	pg/L	22.2
33284-50-3	PCB-7	U	22.2	22.2	pg/L	22.2
34883-43-7	PCB-8	U	22.2	22.2	pg/L	22.2
34883-39-1	PCB-9	U	22.2	22.2	pg/L	22.2
33146-45-1	PCB-10	U	22.2	22.2	pg/L	22.2
2050-67-1	PCB-11	U	111	111	pg/L	111
PCB-12/13	PCB-13/12	CU	44.4	44.4	pg/L	44.4
34883-41-5	PCB-14	U	22.2	22.2	pg/L	22.2
2050-68-2	PCB-15	U	22.2	22.2	pg/L	22.2
38444-78-9	PCB-16	U	22.2	22.2	pg/L	22.2
37680-66-3	PCB-17	U	22.2	22.2	pg/L	22.2
PCB-18/30	PCB-18/30	CU	44.4	44.4	pg/L	44.4
38444-73-4	PCB-19	U	22.2	22.2	pg/L	22.2
PCB-20/28	PCB-20/28	CU	44.4	44.4	pg/L	44.4
PCB-21/33	PCB-21/33	CU	44.4	44.4	pg/L	44.4
38444-85-8	PCB-22	U	22.2	22.2	pg/L	22.2
55720-44-0	PCB-23	U	22.2	22.2	pg/L	22.2
55702-45-9	PCB-24	U	22.2	22.2	pg/L	22.2
55712-37-3	PCB-25	U	22.2	22.2	pg/L	22.2
PCB-26/29	PCB-26/29	CU	44.4	44.4	pg/L	44.4
38444-76-7	PCB-27	U	22.2	22.2	pg/L	22.2
16606-02-3	PCB-31	U	22.2	22.2	pg/L	22.2
38444-77-8	PCB-32	U	22.2	22.2	pg/L	22.2
37680-68-5	PCB-34	U	22.2	22.2	pg/L	22.2
37680-69-6	PCB-35	U	22.2	22.2	pg/L	22.2
38444-87-0	PCB-36	U	22.2	22.2	pg/L	22.2
38444-90-5	PCB-37	U	22.2	22.2	pg/L	22.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 2 of 7

**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32509  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 23:42  
**Data File:** c01oct13a-9  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:22  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 901.4 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	22.2	22.2	pg/L	22.2
38444-88-1	PCB-39	U	22.2	22.2	pg/L	22.2
PCB-40/71	PCB-40/71	CU	44.4	44.4	pg/L	44.4
52663-59-9	PCB-41	U	22.2	22.2	pg/L	22.2
36559-22-5	PCB-42	U	22.2	22.2	pg/L	22.2
70362-46-8	PCB-43	U	22.2	22.2	pg/L	22.2
PCB-44/47/65	PCB-44/65/47	CU	66.6	66.6	pg/L	66.6
PCB-45/51	PCB-45/51	CU	44.4	44.4	pg/L	44.4
41464-47-5	PCB-46	U	22.2	22.2	pg/L	22.2
70362-47-9	PCB-48	U	22.2	22.2	pg/L	22.2
PCB-49/69	PCB-69/49	CU	44.4	44.4	pg/L	44.4
PCB-50/53	PCB-50/53	CU	44.4	44.4	pg/L	44.4
35693-99-3	PCB-52		50.9	47.4	pg/L	22.2
15968-05-5	PCB-54	U	22.2	22.2	pg/L	22.2
74338-24-2	PCB-55	U	22.2	22.2	pg/L	22.2
41464-43-1	PCB-56	U	22.2	22.2	pg/L	22.2
70424-67-8	PCB-57	U	22.2	22.2	pg/L	22.2
41464-49-7	PCB-58	U	22.2	22.2	pg/L	22.2
PCB-59/62/75	PCB-59/62/75	CU	66.6	66.6	pg/L	66.6
33025-41-1	PCB-60	U	22.2	22.2	pg/L	22.2
PCB-61-76	PCB-61/76/70/74	C	92.3	89.8	pg/L	88.8
74472-34-7	PCB-63	U	22.2	22.2	pg/L	22.2
52663-58-8	PCB-64	U	22.2	22.2	pg/L	22.2
32598-10-0	PCB-66	U	27.0	22.2	pg/L	22.2
73575-53-8	PCB-67	U	22.2	22.2	pg/L	22.2
73575-52-7	PCB-68	U	22.2	22.2	pg/L	22.2
41464-42-0	PCB-72	U	22.2	22.2	pg/L	22.2
74338-23-1	PCB-73	U	22.2	22.2	pg/L	22.2
32598-13-3	PCB-77	U	22.2	22.2	pg/L	22.2
70362-49-1	PCB-78	U	22.2	22.2	pg/L	22.2
41464-48-6	PCB-79	U	22.2	22.2	pg/L	22.2
33284-52-5	PCB-80	U	22.2	22.2	pg/L	22.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-2014  
Lab Sample ID: 5345003  
Client Sample: 1668A Water  
Client ID: WT\_IPC-13-32509  
Batch ID: 24441  
Run Date: 10/01/2013 23:42  
Data File: c01oct13a-9  
Prep Batch: 24438  
Prep Date: 22-SEP-13

Client: LANL001  
Date Collected: 09/13/2013 06:22  
Date Received: 09/20/2013 09:40  
Method: EPA Method 1668A  
Analyst: MJC  
Prep Method: SW846 3520C  
Aliquot: 901.4 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	22.2	22.2	pg/L	22.2
52663-62-4	PCB-82	U	22.8	22.2	pg/L	22.2
60145-20-2	PCB-83	U	22.2	22.2	pg/L	22.2
52663-60-2	PCB-84		42.6	37.3	pg/L	22.2
PCB-85-117	PCB-117/116/85	CU	66.6	66.6	pg/L	66.6
PCB-86-125	PCB-86/87/97/109/119/125	CU	133	133	pg/L	133
PCB-88/91	PCB-88/91	CU	44.4	44.4	pg/L	44.4
73575-57-2	PCB-89	U	22.2	22.2	pg/L	22.2
PCB-90-113	PCB-113/90/101	C	154	150	pg/L	66.6
52663-61-3	PCB-92	U	25.5	22.2	pg/L	22.2
PCB-93/100	PCB-93/100	CU	44.4	44.4	pg/L	44.4
73575-55-0	PCB-94	U	22.2	22.2	pg/L	22.2
38379-99-6	PCB-95		102	97.5	pg/L	22.2
73575-54-9	PCB-96	U	22.2	22.2	pg/L	22.2
PCB-98/102	PCB-102/98	CU	44.4	44.4	pg/L	44.4
38380-01-7	PCB-99		80.6	74.2	pg/L	22.2
60145-21-3	PCB-103	U	22.2	22.2	pg/L	22.2
56558-16-8	PCB-104	U	22.2	22.2	pg/L	22.2
32598-14-4	PCB-105		88.5	83	pg/L	22.2
70424-69-0	PCB-106	U	22.2	22.2	pg/L	22.2
70424-68-9	PCB-107	U	22.2	22.2	pg/L	22.2
PCB-108/124	PCB-108/124	CU	44.4	44.4	pg/L	44.4
PCB-110/115	PCB-110/115	CU	44.4	44.4	pg/L	44.4
39635-32-0	PCB-111	U	22.2	22.2	pg/L	22.2
74472-36-9	PCB-112	U	22.2	22.2	pg/L	22.2
74472-37-0	PCB-114	U	22.2	22.2	pg/L	22.2
31508-00-6	PCB-118		169	164	pg/L	22.2
68194-12-7	PCB-120	U	22.2	22.2	pg/L	22.2
56558-18-0	PCB-121	U	22.2	22.2	pg/L	22.2
76842-07-4	PCB-122	U	22.2	22.2	pg/L	22.2
65510-44-3	PCB-123	U	22.2	22.2	pg/L	22.2
57465-28-8	PCB-126	U	22.2	22.2	pg/L	22.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32509  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 23:42  
**Data File:** c01oct13a-9  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:22  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 901.4 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	22.2	22.2	pg/L	22.2
PCB-128/166	PCB-128/166	CU	44.4	44.4	pg/L	44.4
PCB-129-163	PCB-138/163/129	C	228	225	pg/L	66.6
52663-66-8	PCB-130	U	22.2	22.2	pg/L	22.2
61798-70-7	PCB-131	U	22.2	22.2	pg/L	22.2
38380-05-1	PCB-132		91.9	87.4	pg/L	22.2
35694-04-3	PCB-133	U	22.2	22.2	pg/L	22.2
52704-70-8	PCB-134	U	22.2	22.2	pg/L	22.2
PCB-135/151	PCB-151/135	C	49.7	46.9	pg/L	44.4
38411-22-2	PCB-136	U	22.2	22.2	pg/L	22.2
35694-06-5	PCB-137	U	22.2	22.2	pg/L	22.2
PCB-139/140	PCB-139/140	CU	44.4	44.4	pg/L	44.4
52712-04-6	PCB-141		32.6	29.6	pg/L	22.2
41411-61-4	PCB-142	U	22.2	22.2	pg/L	22.2
68194-15-0	PCB-143	U	22.2	22.2	pg/L	22.2
68194-14-9	PCB-144	U	22.2	22.2	pg/L	22.2
74472-40-5	PCB-145	U	22.2	22.2	pg/L	22.2
51908-16-8	PCB-146	U	23.1	22.2	pg/L	22.2
PCB-147/149	PCB-147/149	C	135	132	pg/L	44.4
74472-41-6	PCB-148	U	22.2	22.2	pg/L	22.2
68194-08-1	PCB-150	U	22.2	22.2	pg/L	22.2
68194-09-2	PCB-152	U	22.2	22.2	pg/L	22.2
PCB-153/168	PCB-153/168	C	153	150	pg/L	44.4
60145-22-4	PCB-154	U	22.2	22.2	pg/L	22.2
33979-03-2	PCB-155	U	22.2	22.2	pg/L	22.2
PCB-156/157	PCB-156/157	CU	44.4	44.4	pg/L	44.4
74472-42-7	PCB-158	U	23.1	22.2	pg/L	22.2
39635-35-3	PCB-159	U	22.2	22.2	pg/L	22.2
41411-62-5	PCB-160	U	22.2	22.2	pg/L	22.2
74472-43-8	PCB-161	U	22.2	22.2	pg/L	22.2
39635-34-2	PCB-162	U	22.2	22.2	pg/L	22.2
74472-45-0	PCB-164	U	22.2	22.2	pg/L	22.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32509  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 23:42  
**Data File:** c01oct13a-9  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:22  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 901.4 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	22.2	22.2	pg/L	22.2
52663-72-6	PCB-167	U	22.2	22.2	pg/L	22.2
32774-16-6	PCB-169	U	22.2	22.2	pg/L	22.2
35065-30-6	PCB-170		50.2	47.5	pg/L	22.2
PCB-171/173	PCB-173/171	CU	44.4	44.4	pg/L	44.4
52663-74-8	PCB-172	U	22.2	22.2	pg/L	22.2
38411-25-5	PCB-174		38.5	35.8	pg/L	22.2
40186-70-7	PCB-175	U	22.2	22.2	pg/L	22.2
52663-65-7	PCB-176	U	22.2	22.2	pg/L	22.2
52663-70-4	PCB-177	U	22.2	22.2	pg/L	22.2
52663-67-9	PCB-178	U	22.2	22.2	pg/L	22.2
52663-64-6	PCB-179	U	22.2	22.2	pg/L	22.2
PCB-180/193	PCB-193/180	CU	44.4	44.4	pg/L	44.4
74472-47-2	PCB-181	U	22.2	22.2	pg/L	22.2
60145-23-5	PCB-182	U	22.2	22.2	pg/L	22.2
PCB-183/185	PCB-183/185	CU	44.4	44.4	pg/L	44.4
74472-48-3	PCB-184	U	22.2	22.2	pg/L	22.2
74472-49-4	PCB-186	U	22.2	22.2	pg/L	22.2
52663-68-0	PCB-187		52.4	48.9	pg/L	22.2
74487-85-7	PCB-188	U	22.2	22.2	pg/L	22.2
39635-31-9	PCB-189	U	22.2	22.2	pg/L	22.2
41411-64-7	PCB-190	U	22.2	22.2	pg/L	22.2
74472-50-7	PCB-191	U	22.2	22.2	pg/L	22.2
74472-51-8	PCB-192	U	22.2	22.2	pg/L	22.2
35694-08-7	PCB-194	U	22.2	22.2	pg/L	22.2
52663-78-2	PCB-195	U	22.2	22.2	pg/L	22.2
42740-50-1	PCB-196	U	22.2	22.2	pg/L	22.2
PCB-197/200	PCB-197/200	CU	44.4	44.4	pg/L	44.4
PCB-198/199	PCB-198/199	CU	44.4	44.4	pg/L	44.4
40186-71-8	PCB-201	U	22.2	22.2	pg/L	22.2
2136-99-4	PCB-202	U	22.2	22.2	pg/L	22.2
52663-76-0	PCB-203	U	22.2	22.2	pg/L	22.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2014  
**Lab Sample ID:** 5345003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32509  
**Batch ID:** 24441  
**Run Date:** 10/01/2013 23:42  
**Data File:** c01oct13a-9  
**Prep Batch:** 24438  
**Prep Date:** 22-SEP-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:22  
**Date Received:** 09/20/2013 09:40  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 901.4 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	22.2	22.2	pg/L	22.2
74472-53-0	PCB-205	U	22.2	22.2	pg/L	22.2
40186-72-9	PCB-206	U	22.2	22.2	pg/L	22.2
52663-79-3	PCB-207	U	22.2	22.2	pg/L	22.2
52663-77-1	PCB-208	U	22.2	22.2	pg/L	22.2
2051-24-3	PCB-209	U	22.2	22.2	pg/L	22.2
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		170	137	pg/L	
25429-29-2	Total Penta PCBs		685	606	pg/L	
26601-64-9	Total Hexa PCBs		737	671	pg/L	
28655-71-2	Total Hepta PCBs		141	132	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		1730	1550	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		931	2220	pg/L	42.0	(15%-150%)
13C-3-MoCB		977	2220	pg/L	44.0	(15%-150%)
13C-4-DiCB		1160	2220	pg/L	52.1	(25%-150%)
13C-15-DiCB		1130	2220	pg/L	50.7	(25%-150%)
13C-19-TrCB		1180	2220	pg/L	53.2	(25%-150%)
13C-37-TrCB		1130	2220	pg/L	50.8	(25%-150%)
13C-54-TeCB		1220	2220	pg/L	55.2	(25%-150%)
13C-77-TeCB		1370	2220	pg/L	61.7	(25%-150%)
13C-81-TeCB		1340	2220	pg/L	60.5	(25%-150%)
13C-104-PeCB		1320	2220	pg/L	59.6	(25%-150%)
13C-105-PeCB		1180	2220	pg/L	53.3	(25%-150%)
13C-114-PeCB		1140	2220	pg/L	51.4	(25%-150%)
13C-118-PeCB		1200	2220	pg/L	54.2	(25%-150%)
13C-123-PeCB		1260	2220	pg/L	56.6	(25%-150%)
13C-126-PeCB		1300	2220	pg/L	58.4	(25%-150%)
13C-155-HxCB		1390	2220	pg/L	62.8	(25%-150%)
13C-156-HxCB	C	2480	4440	pg/L	55.9	(25%-150%)
13C-167-HxCB		1210	2220	pg/L	54.4	(25%-150%)
13C-169-HxCB		1510	2220	pg/L	67.9	(25%-150%)
13C-188-HpCB		1250	2220	pg/L	56.5	(25%-150%)
13C-189-HpCB		1390	2220	pg/L	62.5	(25%-150%)
13C-202-OcCB		1380	2220	pg/L	62.1	(25%-150%)
13C-205-OcCB		1600	2220	pg/L	72.2	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-2014	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5345003	<b>Date Collected:</b> 09/13/2013 06:22	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/20/2013 09:40	
<b>Client ID:</b> WT_IPC-13-32509		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24441	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/01/2013 23:42	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c01oct13a-9		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24438	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 22-SEP-13	<b>Aliquot:</b> 901.4 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1720	2220	pg/L	77.7      (25%-150%)
13C-208-NoCB			1670	2220	pg/L	75.3      (25%-150%)
13C-209-DeCB			1970	2220	pg/L	89.0      (25%-150%)
13C-28-TrCB			1210	2220	pg/L	54.5      (30%-135%)
13C-111-PeCB			1520	2220	pg/L	68.3      (30%-135%)
13C-178-HpCB			1530	2220	pg/L	68.9      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	1.14	0.62	2.38	
3-Chlorobiphenyl (2)	pg/L	1.07	0.54	2.14	
4-Chlorobiphenyl (3)	pg/L	1.13	0.57	2.27	
2,2'-Dichlorobiphenyl (4)	pg/L	7.23	4.8	16.8	
2,3-Dichlorobiphenyl (5)	pg/L	8.29	6.14	20.6	*
2,3'-Dichlorobiphenyl (6)	pg/L	5.36	4.06	13.5	
2,4-Dichlorobiphenyl (7)	pg/L	7.54	5.69	18.9	
2,4'-Dichlorobiphenyl (8)	pg/L	5.15	3.88	12.9	
2,5-Dichlorobiphenyl (9)	pg/L	5.31	4.06	13.4	
2,6-Dichlorobiphenyl (10)	pg/L	4.56	3.19	10.9	
3,3'-Dichlorobiphenyl (11)	pg/L	6.21	3.94	14.1	
3,4-Dichlorobiphenyl (12)	pg/L	7.37	4.5	16.4	
3,5-Dichlorobiphenyl (14)	pg/L	5.54	3.89	13.3	
4,4'-Dichlorobiphenyl (15)	pg/L	6.55	4.56	15.7	
2,2',3-Trichlorobiphenyl (16)	pg/L	1.98	0.963	3.9	
2,2',4-Trichlorobiphenyl (17)	pg/L	1.43	0.661	2.76	
2,2',5-Trichlorobiphenyl (18)	pg/L	1.32	0.575	2.47	
2,2',6-Trichlorobiphenyl (19)	pg/L	1.36	0.658	2.68	
2,3,3'-Trichlorobiphenyl (20)	pg/L	2.29	2.76	7.8	
2,3,4-Trichlorobiphenyl (21)	pg/L	1.12	0.376	1.87	
2,3,4'-Trichlorobiphenyl (22)	pg/L	1.49	0.577	2.64	
2,3,5-Trichlorobiphenyl (23)	pg/L	1.48	0.622	2.72	
2,3,6-Trichlorobiphenyl (24)	pg/L	1.43	0.63	2.69	
2,3',4-Trichlorobiphenyl (25)	pg/L	1.03	0.419	1.86	
2,3',5-Trichlorobiphenyl (26)	pg/L	1.05	0.365	1.78	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.982	0.457	1.9	
2,4',5-Trichlorobiphenyl (31)	pg/L	1.23	0.929	3.08	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.928	0.422	1.77	
2',3,5-Trichlorobiphenyl (34)	pg/L	1	0.425	1.85	
3,3',4-Trichlorobiphenyl (35)	pg/L	1.01	0.326	1.67	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.927	0.311	1.55	
3,4,4'-Trichlorobiphenyl (37)	pg/L	1.72	1.37	4.45	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.993	0.318	1.63	
3,4',5-Trichlorobiphenyl (39)	pg/L	1.3	0.433	2.17	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	1.96	1.04	4.04	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	1.98	1.12	4.21	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	2.04	1.11	4.25	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	2.38	1.35	5.08	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	1.74	0.889	3.51	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	1.51	0.406	2.32	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	1.33	0.566	2.47	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	2.39	1.3	4.99	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	1.61	0.778	3.17	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	1.29	0.483	2.26	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	1.64	0.898	3.44	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.708	0.29	1.29	



# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	1.71	0.695	3.1	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	1.48	0.528	2.53	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	1.15	0.495	2.14	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	1.68	0.721	3.12	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	1.49	0.739	2.97	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	1.91	1.05	4.01	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	1.44	0.51	2.46	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	1.12	0.471	2.06	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	1.44	0.742	2.92	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	2.03	1.92	5.87	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	1.13	0.468	2.06	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	1.51	0.633	2.77	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	1.09	0.473	2.04	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	1.79	1.03	3.86	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	1.47	0.556	2.58	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	1.27	0.475	2.22	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	1.1	0.422	1.94	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	1.14	0.458	2.05	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	1.42	0.579	2.58	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	2.73	1.17	5.08	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	2.79	1.24	5.27	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	2.79	1.27	5.32	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	2.35	0.907	4.16	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	2.39	0.864	4.12	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	2.91	1.11	5.14	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	2.52	1.15	4.81	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	2.45	0.908	4.27	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	2.42	1.09	4.6	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	2.79	1.29	5.37	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	3.61	1.69	6.99	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	2.33	1.03	4.38	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	1.26	0.542	2.35	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	2.8	1.1	5	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	3.31	1.54	6.38	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	2.15	1.01	4.17	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	1.21	0.449	2.1	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	2.68	1.41	5.49	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	2.15	1.18	4.51	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	2.13	1.18	4.48	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	2.5	1.33	5.16	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	2.59	0.758	4.1	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	2.55	1.12	4.79	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	1.83	0.795	3.42	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	2.68	1.42	5.52	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	2.51	1.2	4.92	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	1.76	0.773	3.3	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	2.54	1.16	4.87	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	2.35	1.27	4.88	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	2.36	1.26	4.87	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	3.05	1.6	6.25	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	2.27	1.17	4.6	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	1.72	0.564	2.84	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	1.72	0.553	2.83	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	1.93	0.66	3.25	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	2.07	0.761	3.6	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	2.6	0.964	4.53	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	1.79	0.639	3.06	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	2.15	0.816	3.78	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	1.69	0.593	2.87	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	1.06	0.448	1.95	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	2.6	0.934	4.47	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	1.94	0.722	3.38	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	1.78	0.622	3.02	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	1.85	0.672	3.19	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	1.69	0.661	3.01	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	1.38	0.556	2.49	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	1.54	0.656	2.85	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	1.68	0.624	2.93	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	1.95	0.733	3.42	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	1.36	0.558	2.47	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	1.49	0.65	2.79	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	1.04	0.451	1.94	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	1.74	0.449	2.64	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	1.28	0.531	2.34	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.976	0.379	1.73	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	1.94	0.642	3.22	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	1.32	0.449	2.22	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	1.33	0.451	2.24	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	2.08	0.723	3.53	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	1.32	0.469	2.26	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	1.84	0.616	3.08	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	1.37	0.472	2.32	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	2.04	0.735	3.51	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	1.52	0.523	2.56	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	1.71	0.478	2.67	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	1.64	0.559	2.76	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	1.7	0.511	2.72	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	1.62	0.576	2.77	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	1.57	0.582	2.74	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	1.48	0.575	2.63	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	1.14	0.478	2.1	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	1.63	0.586	2.8	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-SEP-13 to 30-SEP-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	1.55	0.609	2.77	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	1.12	0.478	2.08	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	1.64	0.58	2.8	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	2.14	0.791	3.72	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	1.55	0.596	2.74	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	1.76	0.563	2.89	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	1.52	0.635	2.79	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	1.66	0.675	3.01	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	1.97	0.749	3.47	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	1.26	0.525	2.3	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	1.7	0.576	2.85	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	1.28	0.437	2.15	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	1.22	0.436	2.1	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	1.83	0.653	3.14	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	1.52	0.563	2.64	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	1.61	0.598	2.8	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	1.41	0.484	2.37	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	1.29	0.391	2.08	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	1.74	0.49	2.72	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	1.07	0.398	1.87	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	1.25	0.476	2.2	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	1.86	0.658	3.18	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	1.09	0.402	1.89	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	1.37	0.489	2.35	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	1.93	0.78	3.49	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	1.44	0.582	2.61	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	1.66	0.666	2.99	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	1.63	0.824	3.28	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32187  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 00:36  
**Data File:** c09oct13d-9  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:27  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	20.9	20.9	pg/L	20.9
2051-61-8	PCB-2	U	20.9	20.9	pg/L	20.9
2051-62-9	PCB-3	U	20.9	20.9	pg/L	20.9
13029-08-8	PCB-4	U	20.9	20.9	pg/L	20.9
16605-91-7	PCB-5	U	20.9	20.9	pg/L	20.9
25569-80-6	PCB-6	U	20.9	20.9	pg/L	20.9
33284-50-3	PCB-7	U	20.9	20.9	pg/L	20.9
34883-43-7	PCB-8	U	20.9	20.9	pg/L	20.9
34883-39-1	PCB-9	U	20.9	20.9	pg/L	20.9
33146-45-1	PCB-10	U	20.9	20.9	pg/L	20.9
2050-67-1	PCB-11	U	105	105	pg/L	105
PCB-12/13	PCB-13/12	CU	41.8	41.8	pg/L	41.8
34883-41-5	PCB-14	U	20.9	20.9	pg/L	20.9
2050-68-2	PCB-15	U	20.9	20.9	pg/L	20.9
38444-78-9	PCB-16	U	20.9	20.9	pg/L	20.9
37680-66-3	PCB-17	U	20.9	20.9	pg/L	20.9
PCB-18/30	PCB-18/30	CU	41.8	41.8	pg/L	41.8
38444-73-4	PCB-19	U	20.9	20.9	pg/L	20.9
PCB-20/28	PCB-20/28	CU	41.8	41.8	pg/L	41.8
PCB-21/33	PCB-21/33	CU	41.8	41.8	pg/L	41.8
38444-85-8	PCB-22	U	20.9	20.9	pg/L	20.9
55720-44-0	PCB-23	U	20.9	20.9	pg/L	20.9
55702-45-9	PCB-24	U	20.9	20.9	pg/L	20.9
55712-37-3	PCB-25	U	20.9	20.9	pg/L	20.9
PCB-26/29	PCB-26/29	CU	41.8	41.8	pg/L	41.8
38444-76-7	PCB-27	U	20.9	20.9	pg/L	20.9
16606-02-3	PCB-31	U	20.9	20.9	pg/L	20.9
38444-77-8	PCB-32	U	20.9	20.9	pg/L	20.9
37680-68-5	PCB-34	U	20.9	20.9	pg/L	20.9
37680-69-6	PCB-35	U	20.9	20.9	pg/L	20.9
38444-87-0	PCB-36	U	20.9	20.9	pg/L	20.9
38444-90-5	PCB-37	U	20.9	20.9	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 2 of 7

**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32187  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 00:36  
**Data File:** c09oct13d-9  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:27  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	20.9	20.9	pg/L	20.9
38444-88-1	PCB-39	U	20.9	20.9	pg/L	20.9
PCB-40/71	PCB-40/71	CU	41.8	41.8	pg/L	41.8
52663-59-9	PCB-41	U	20.9	20.9	pg/L	20.9
36559-22-5	PCB-42	U	20.9	20.9	pg/L	20.9
70362-46-8	PCB-43	U	20.9	20.9	pg/L	20.9
PCB-44/47/65	PCB-44/65/47	CU	62.7	62.7	pg/L	62.7
PCB-45/51	PCB-45/51	CU	41.8	41.8	pg/L	41.8
41464-47-5	PCB-46	U	20.9	20.9	pg/L	20.9
70362-47-9	PCB-48	U	20.9	20.9	pg/L	20.9
PCB-49/69	PCB-69/49	CU	41.8	41.8	pg/L	41.8
PCB-50/53	PCB-50/53	CU	41.8	41.8	pg/L	41.8
35693-99-3	PCB-52	U	20.9	20.9	pg/L	20.9
15968-05-5	PCB-54	U	20.9	20.9	pg/L	20.9
74338-24-2	PCB-55	U	20.9	20.9	pg/L	20.9
41464-43-1	PCB-56	U	20.9	20.9	pg/L	20.9
70424-67-8	PCB-57	U	20.9	20.9	pg/L	20.9
41464-49-7	PCB-58	U	20.9	20.9	pg/L	20.9
PCB-59/62/75	PCB-59/62/75	CU	62.7	62.7	pg/L	62.7
33025-41-1	PCB-60	U	20.9	20.9	pg/L	20.9
PCB-61-76	PCB-61/76/70/74	CU	83.6	83.6	pg/L	83.6
74472-34-7	PCB-63	U	20.9	20.9	pg/L	20.9
52663-58-8	PCB-64	U	20.9	20.9	pg/L	20.9
32598-10-0	PCB-66	U	20.9	20.9	pg/L	20.9
73575-53-8	PCB-67	U	20.9	20.9	pg/L	20.9
73575-52-7	PCB-68	U	20.9	20.9	pg/L	20.9
41464-42-0	PCB-72	U	20.9	20.9	pg/L	20.9
74338-23-1	PCB-73	U	20.9	20.9	pg/L	20.9
32598-13-3	PCB-77	U	20.9	20.9	pg/L	20.9
70362-49-1	PCB-78	U	20.9	20.9	pg/L	20.9
41464-48-6	PCB-79	U	20.9	20.9	pg/L	20.9
33284-52-5	PCB-80	U	20.9	20.9	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32187  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 00:36  
**Data File:** c09oct13d-9  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:27  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	20.9	20.9	pg/L	20.9
52663-62-4	PCB-82	U	20.9	20.9	pg/L	20.9
60145-20-2	PCB-83	U	20.9	20.9	pg/L	20.9
52663-60-2	PCB-84	U	20.9	20.9	pg/L	20.9
PCB-85-117	PCB-117/116/85	CU	62.7	62.7	pg/L	62.7
PCB-86-125	PCB-86/87/97/109/119/125	CU	125	125	pg/L	125
PCB-88/91	PCB-88/91	CU	41.8	41.8	pg/L	41.8
73575-57-2	PCB-89	U	20.9	20.9	pg/L	20.9
PCB-90-113	PCB-113/90/101	CU	62.7	62.7	pg/L	62.7
52663-61-3	PCB-92	U	20.9	20.9	pg/L	20.9
PCB-93/100	PCB-93/100	CU	41.8	41.8	pg/L	41.8
73575-55-0	PCB-94	U	20.9	20.9	pg/L	20.9
38379-99-6	PCB-95	U	22.0	20.9	pg/L	20.9
73575-54-9	PCB-96	U	20.9	20.9	pg/L	20.9
PCB-98/102	PCB-102/98	CU	41.8	41.8	pg/L	41.8
38380-01-7	PCB-99	U	20.9	20.9	pg/L	20.9
60145-21-3	PCB-103	U	20.9	20.9	pg/L	20.9
56558-16-8	PCB-104	U	20.9	20.9	pg/L	20.9
32598-14-4	PCB-105	U	20.9	20.9	pg/L	20.9
70424-69-0	PCB-106	U	20.9	20.9	pg/L	20.9
70424-68-9	PCB-107	U	20.9	20.9	pg/L	20.9
PCB-108/124	PCB-108/124	CU	41.8	41.8	pg/L	41.8
PCB-110/115	PCB-110/115	CU	43.0	41.8	pg/L	41.8
39635-32-0	PCB-111	U	20.9	20.9	pg/L	20.9
74472-36-9	PCB-112	U	20.9	20.9	pg/L	20.9
74472-37-0	PCB-114	U	20.9	20.9	pg/L	20.9
31508-00-6	PCB-118	U	21.4	20.9	pg/L	20.9
68194-12-7	PCB-120	U	20.9	20.9	pg/L	20.9
56558-18-0	PCB-121	U	20.9	20.9	pg/L	20.9
76842-07-4	PCB-122	U	20.9	20.9	pg/L	20.9
65510-44-3	PCB-123	U	20.9	20.9	pg/L	20.9
57465-28-8	PCB-126	U	20.9	20.9	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32187  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 00:36  
**Data File:** c09oct13d-9  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:27  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	20.9	20.9	pg/L	20.9
PCB-128/166	PCB-128/166	CU	41.8	41.8	pg/L	41.8
PCB-129-163	PCB-138/163/129	C	233	230	pg/L	62.7
52663-66-8	PCB-130	U	20.9	20.9	pg/L	20.9
61798-70-7	PCB-131	U	20.9	20.9	pg/L	20.9
38380-05-1	PCB-132		52.7	47.6	pg/L	20.9
35694-04-3	PCB-133	U	20.9	20.9	pg/L	20.9
52704-70-8	PCB-134	U	20.9	20.9	pg/L	20.9
PCB-135/151	PCB-151/135	C	84.0	80.9	pg/L	41.8
38411-22-2	PCB-136	U	20.9	20.9	pg/L	20.9
35694-06-5	PCB-137	U	20.9	20.9	pg/L	20.9
PCB-139/140	PCB-139/140	CU	41.8	41.8	pg/L	41.8
52712-04-6	PCB-141		58.9	55.5	pg/L	20.9
41411-61-4	PCB-142	U	20.9	20.9	pg/L	20.9
68194-15-0	PCB-143	U	20.9	20.9	pg/L	20.9
68194-14-9	PCB-144	U	20.9	20.9	pg/L	20.9
74472-40-5	PCB-145	U	20.9	20.9	pg/L	20.9
51908-16-8	PCB-146		46.2	42.9	pg/L	20.9
PCB-147/149	PCB-147/149	C	211	207	pg/L	41.8
74472-41-6	PCB-148	U	20.9	20.9	pg/L	20.9
68194-08-1	PCB-150	U	20.9	20.9	pg/L	20.9
68194-09-2	PCB-152	U	20.9	20.9	pg/L	20.9
PCB-153/168	PCB-153/168	C	268	265	pg/L	41.8
60145-22-4	PCB-154	U	20.9	20.9	pg/L	20.9
33979-03-2	PCB-155	U	20.9	20.9	pg/L	20.9
PCB-156/157	PCB-156/157	CU	41.8	41.8	pg/L	41.8
74472-42-7	PCB-158	U	20.9	20.9	pg/L	20.9
39635-35-3	PCB-159	U	20.9	20.9	pg/L	20.9
41411-62-5	PCB-160	U	20.9	20.9	pg/L	20.9
74472-43-8	PCB-161	U	20.9	20.9	pg/L	20.9
39635-34-2	PCB-162	U	20.9	20.9	pg/L	20.9
74472-45-0	PCB-164	U	20.9	20.9	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32187  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 00:36  
**Data File:** c09oct13d-9  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:27  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	20.9	20.9	pg/L	20.9
52663-72-6	PCB-167	U	20.9	20.9	pg/L	20.9
32774-16-6	PCB-169	U	20.9	20.9	pg/L	20.9
35065-30-6	PCB-170		106	103	pg/L	20.9
PCB-171/173	PCB-173/171	CU	41.8	41.8	pg/L	41.8
52663-74-8	PCB-172	U	22.7	20.9	pg/L	20.9
38411-25-5	PCB-174		138	135	pg/L	20.9
40186-70-7	PCB-175	U	20.9	20.9	pg/L	20.9
52663-65-7	PCB-176	U	20.9	20.9	pg/L	20.9
52663-70-4	PCB-177		72.0	69.1	pg/L	20.9
52663-67-9	PCB-178		28.7	25.8	pg/L	20.9
52663-64-6	PCB-179		38.3	36.1	pg/L	20.9
PCB-180/193	PCB-193/180	C	315	310	pg/L	41.8
74472-47-2	PCB-181	U	20.9	20.9	pg/L	20.9
60145-23-5	PCB-182	U	20.9	20.9	pg/L	20.9
PCB-183/185	PCB-183/185	C	61.0	58	pg/L	41.8
74472-48-3	PCB-184	U	20.9	20.9	pg/L	20.9
74472-49-4	PCB-186	U	20.9	20.9	pg/L	20.9
52663-68-0	PCB-187		218	214	pg/L	20.9
74487-85-7	PCB-188	U	20.9	20.9	pg/L	20.9
39635-31-9	PCB-189	U	20.9	20.9	pg/L	20.9
41411-64-7	PCB-190		24.6	22.4	pg/L	20.9
74472-50-7	PCB-191	U	20.9	20.9	pg/L	20.9
74472-51-8	PCB-192	U	20.9	20.9	pg/L	20.9
35694-08-7	PCB-194		58.5	55.8	pg/L	20.9
52663-78-2	PCB-195		26.5	23.6	pg/L	20.9
42740-50-1	PCB-196		28.0	25.3	pg/L	20.9
PCB-197/200	PCB-197/200	CU	41.8	41.8	pg/L	41.8
PCB-198/199	PCB-198/199	C	86.1	83	pg/L	41.8
40186-71-8	PCB-201	U	20.9	20.9	pg/L	20.9
2136-99-4	PCB-202	U	20.9	20.9	pg/L	20.9
52663-76-0	PCB-203		58.7	55.2	pg/L	20.9

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32187  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 00:36  
**Data File:** c09oct13d-9  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:27  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 956.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	20.9	20.9	pg/L	20.9
74472-53-0	PCB-205	U	20.9	20.9	pg/L	20.9
40186-72-9	PCB-206	U	20.9	20.9	pg/L	20.9
52663-79-3	PCB-207	U	20.9	20.9	pg/L	20.9
52663-77-1	PCB-208	U	20.9	20.9	pg/L	20.9
2051-24-3	PCB-209	U	20.9	20.9	pg/L	20.9
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs	U	0	0	pg/L	
25429-29-2	Total Penta PCBs	U	86.4	0	pg/L	
26601-64-9	Total Hexa PCBs		954	929	pg/L	
28655-71-2	Total Hepta PCBs		1020	974	pg/L	
55722-26-4	Total Octa PCBs		258	243	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		2320	2150	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		679	2090	pg/L	32.5	(15%-150%)
13C-3-MoCB		868	2090	pg/L	41.5	(15%-150%)
13C-4-DiCB		943	2090	pg/L	45.1	(25%-150%)
13C-15-DiCB		1170	2090	pg/L	56.2	(25%-150%)
13C-19-TrCB		1230	2090	pg/L	58.6	(25%-150%)
13C-37-TrCB		1300	2090	pg/L	62.2	(25%-150%)
13C-54-TeCB		1080	2090	pg/L	51.6	(25%-150%)
13C-77-TeCB		1360	2090	pg/L	65.0	(25%-150%)
13C-81-TeCB		1360	2090	pg/L	65.1	(25%-150%)
13C-104-PeCB		1050	2090	pg/L	50.3	(25%-150%)
13C-105-PeCB		1170	2090	pg/L	55.8	(25%-150%)
13C-114-PeCB		1130	2090	pg/L	54.1	(25%-150%)
13C-118-PeCB		1190	2090	pg/L	56.9	(25%-150%)
13C-123-PeCB		1260	2090	pg/L	60.3	(25%-150%)
13C-126-PeCB		1200	2090	pg/L	57.3	(25%-150%)
13C-155-HxCB		1390	2090	pg/L	66.5	(25%-150%)
13C-156-HxCB	C	2180	4180	pg/L	52.2	(25%-150%)
13C-167-HxCB		1090	2090	pg/L	52.2	(25%-150%)
13C-169-HxCB		1220	2090	pg/L	58.3	(25%-150%)
13C-188-HpCB		1600	2090	pg/L	76.6	(25%-150%)
13C-189-HpCB		1270	2090	pg/L	60.9	(25%-150%)
13C-202-OcCB		1760	2090	pg/L	84.3	(25%-150%)
13C-205-OcCB		1870	2090	pg/L	89.7	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-2074	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5357001	<b>Date Collected:</b> 09/13/2013 06:27	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/24/2013 10:00	
<b>Client ID:</b> WT_IPC-13-32187		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24507	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/10/2013 00:36	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c09oct13d-9		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24505	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 06-OCT-13	<b>Aliquot:</b> 956.7 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%</b>
						<b>Acceptable Limits</b>
13C-206-NoCB			2190	2090	pg/L	105 (25%-150%)
13C-208-NoCB			2120	2090	pg/L	101 (25%-150%)
13C-209-DeCB			2300	2090	pg/L	110 (25%-150%)
13C-28-TrCB			1520	2090	pg/L	72.7 (30%-135%)
13C-111-PeCB			1730	2090	pg/L	82.8 (30%-135%)
13C-178-HpCB			1770	2090	pg/L	84.9 (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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SDG Number: 2013-2074  
 Lab Sample ID: 5357002  
 Client Sample: 1668A Water  
 Client ID: WT\_IPC-13-32511  
 Batch ID: 24507  
 Run Date: 10/10/2013 01:40  
 Data File: c09oct13d-10  
 Prep Batch: 24505  
 Prep Date: 06-OCT-13

Client: LANL001  
 Date Collected: 09/13/2013 06:52  
 Date Received: 09/24/2013 10:00  
 Method: EPA Method 1668A  
 Analyst: MJC  
 Prep Method: SW846 3520C  
 Aliquot: 865.9 mL

Project: LANL00112  
 Matrix: WATER  
 Prep Basis: As Received  
 Instrument: HRP791  
 Dilution: 1  
 Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	23.1	23.1	pg/L	23.1
2051-61-8	PCB-2	U	23.1	23.1	pg/L	23.1
2051-62-9	PCB-3	U	23.1	23.1	pg/L	23.1
13029-08-8	PCB-4	U	23.1	23.1	pg/L	23.1
16605-91-7	PCB-5	U	23.1	23.1	pg/L	23.1
25569-80-6	PCB-6	U	23.1	23.1	pg/L	23.1
33284-50-3	PCB-7	U	23.1	23.1	pg/L	23.1
34883-43-7	PCB-8	U	23.1	23.1	pg/L	23.1
34883-39-1	PCB-9	U	23.1	23.1	pg/L	23.1
33146-45-1	PCB-10	U	23.1	23.1	pg/L	23.1
2050-67-1	PCB-11	U	115	115	pg/L	115
PCB-12/13	PCB-13/12	CU	46.2	46.2	pg/L	46.2
34883-41-5	PCB-14	U	23.1	23.1	pg/L	23.1
2050-68-2	PCB-15	U	23.1	23.1	pg/L	23.1
38444-78-9	PCB-16		28.5	25.1	pg/L	23.1
37680-66-3	PCB-17	U	25.5	23.1	pg/L	23.1
PCB-18/30	PCB-18/30	C	71.8	69.6	pg/L	46.2
38444-73-4	PCB-19	U	23.1	23.1	pg/L	23.1
PCB-20/28	PCB-20/28	C	104	98.4	pg/L	46.2
PCB-21/33	PCB-21/33	CU	46.2	46.2	pg/L	46.2
38444-85-8	PCB-22		30.5	28.1	pg/L	23.1
55720-44-0	PCB-23	U	23.1	23.1	pg/L	23.1
55702-45-9	PCB-24	U	23.1	23.1	pg/L	23.1
55712-37-3	PCB-25	U	23.1	23.1	pg/L	23.1
PCB-26/29	PCB-26/29	CU	46.2	46.2	pg/L	46.2
38444-76-7	PCB-27	U	23.1	23.1	pg/L	23.1
16606-02-3	PCB-31		102	100	pg/L	23.1
38444-77-8	PCB-32	U	23.1	23.1	pg/L	23.1
37680-68-5	PCB-34	U	23.1	23.1	pg/L	23.1
37680-69-6	PCB-35	U	23.1	23.1	pg/L	23.1
38444-87-0	PCB-36	U	23.1	23.1	pg/L	23.1
38444-90-5	PCB-37		74.8	71.3	pg/L	23.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32511  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 01:40  
**Data File:** c09oct13d-10  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:52  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 865.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	23.1	23.1	pg/L	23.1
38444-88-1	PCB-39	U	23.1	23.1	pg/L	23.1
PCB-40/71	PCB-40/71	C	208	204	pg/L	46.2
52663-59-9	PCB-41	U	23.1	23.1	pg/L	23.1
36559-22-5	PCB-42		107	103	pg/L	23.1
70362-46-8	PCB-43	U	23.1	23.1	pg/L	23.1
PCB-44/47/65	PCB-44/65/47	C	885	882	pg/L	69.3
PCB-45/51	PCB-45/51	CU	46.2	46.2	pg/L	46.2
41464-47-5	PCB-46	U	23.1	23.1	pg/L	23.1
70362-47-9	PCB-48		61.0	56.3	pg/L	23.1
PCB-49/69	PCB-69/49	C	454	451	pg/L	46.2
PCB-50/53	PCB-50/53	CU	46.2	46.2	pg/L	46.2
35693-99-3	PCB-52		2090	2090	pg/L	23.1
15968-05-5	PCB-54	U	23.1	23.1	pg/L	23.1
74338-24-2	PCB-55	U	23.1	23.1	pg/L	23.1
41464-43-1	PCB-56		304	302	pg/L	23.1
70424-67-8	PCB-57	U	23.1	23.1	pg/L	23.1
41464-49-7	PCB-58	U	23.1	23.1	pg/L	23.1
PCB-59/62/75	PCB-59/62/75	CU	69.3	69.3	pg/L	69.3
33025-41-1	PCB-60		92.9	89.4	pg/L	23.1
PCB-61-76	PCB-61/76/70/74	C	2470	2470	pg/L	92.4
74472-34-7	PCB-63	U	23.1	23.1	pg/L	23.1
52663-58-8	PCB-64		312	309	pg/L	23.1
32598-10-0	PCB-66		508	503	pg/L	23.1
73575-53-8	PCB-67	U	23.1	23.1	pg/L	23.1
73575-52-7	PCB-68	U	23.1	23.1	pg/L	23.1
41464-42-0	PCB-72	U	23.1	23.1	pg/L	23.1
74338-23-1	PCB-73	U	23.1	23.1	pg/L	23.1
32598-13-3	PCB-77		383	381	pg/L	23.1
70362-49-1	PCB-78	U	23.1	23.1	pg/L	23.1
41464-48-6	PCB-79		65.2	63.3	pg/L	23.1
33284-52-5	PCB-80	U	23.1	23.1	pg/L	23.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32511  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 01:40  
**Data File:** c09oct13d-10  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:52  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 865.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	23.1	23.1	pg/L	23.1
52663-62-4	PCB-82		947	943	pg/L	23.1
60145-20-2	PCB-83		438	433	pg/L	23.1
52663-60-2	PCB-84		2110	2100	pg/L	23.1
PCB-85-117	PCB-117/116/85	C	1870	1860	pg/L	69.3
PCB-86-125	PCB-86/87/97/109/119/125	C	7400	7400	pg/L	139
PCB-88/91	PCB-88/91	C	937	932	pg/L	46.2
73575-57-2	PCB-89		35.6	31	pg/L	23.1
PCB-90-113	PCB-113/90/101	C	10800	10800	pg/L	69.3
52663-61-3	PCB-92		1760	1760	pg/L	23.1
PCB-93/100	PCB-93/100	CU	46.2	46.2	pg/L	46.2
73575-55-0	PCB-94	U	23.7	23.1	pg/L	23.1
38379-99-6	PCB-95		5390	5390	pg/L	23.1
73575-54-9	PCB-96	U	23.1	23.1	pg/L	23.1
PCB-98/102	PCB-102/98	C	122	117	pg/L	46.2
38380-01-7	PCB-99		4650	4640	pg/L	23.1
60145-21-3	PCB-103	U	23.1	23.1	pg/L	23.1
56558-16-8	PCB-104	U	23.1	23.1	pg/L	23.1
32598-14-4	PCB-105		4450	4450	pg/L	23.1
70424-69-0	PCB-106	U	23.1	23.1	pg/L	23.1
70424-68-9	PCB-107		777	773	pg/L	23.1
PCB-108/124	PCB-108/124	C	525	521	pg/L	46.2
PCB-110/115	PCB-110/115	C	15400	15400	pg/L	46.2
39635-32-0	PCB-111	U	23.1	23.1	pg/L	23.1
74472-36-9	PCB-112	U	23.1	23.1	pg/L	23.1
74472-37-0	PCB-114		139	135	pg/L	23.1
31508-00-6	PCB-118		10000	10000	pg/L	23.1
68194-12-7	PCB-120	U	23.1	23.1	pg/L	23.1
56558-18-0	PCB-121	U	23.1	23.1	pg/L	23.1
76842-07-4	PCB-122		102	97.3	pg/L	23.1
65510-44-3	PCB-123		151	147	pg/L	23.1
57465-28-8	PCB-126		190	184	pg/L	23.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32511  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 01:40  
**Data File:** c09oct13d-10  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:52  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 865.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	23.1	23.1	pg/L	23.1
PCB-128/166	PCB-128/166	C	3520	3520	pg/L	46.2
PCB-129-163	PCB-138/163/129	C	20200	20200	pg/L	69.3
52663-66-8	PCB-130		1090	1090	pg/L	23.1
61798-70-7	PCB-131		221	217	pg/L	23.1
38380-05-1	PCB-132		6710	6710	pg/L	23.1
35694-04-3	PCB-133		171	168	pg/L	23.1
52704-70-8	PCB-134		718	714	pg/L	23.1
PCB-135/151	PCB-151/135	C	3720	3710	pg/L	46.2
38411-22-2	PCB-136		1060	1060	pg/L	23.1
35694-06-5	PCB-137		1100	1090	pg/L	23.1
PCB-139/140	PCB-139/140	C	278	274	pg/L	46.2
52712-04-6	PCB-141		2900	2900	pg/L	23.1
41411-61-4	PCB-142	U	23.1	23.1	pg/L	23.1
68194-15-0	PCB-143	U	23.1	23.1	pg/L	23.1
68194-14-9	PCB-144		392	390	pg/L	23.1
74472-40-5	PCB-145	U	23.1	23.1	pg/L	23.1
51908-16-8	PCB-146		2180	2180	pg/L	23.1
PCB-147/149	PCB-147/149	C	10600	10600	pg/L	46.2
74472-41-6	PCB-148	U	23.1	23.1	pg/L	23.1
68194-08-1	PCB-150	U	23.1	23.1	pg/L	23.1
68194-09-2	PCB-152	U	23.1	23.1	pg/L	23.1
PCB-153/168	PCB-153/168	C	12600	12600	pg/L	46.2
60145-22-4	PCB-154		96.8	94.4	pg/L	23.1
33979-03-2	PCB-155	U	23.1	23.1	pg/L	23.1
PCB-156/157	PCB-156/157	C	2300	2300	pg/L	46.2
74472-42-7	PCB-158		1980	1980	pg/L	23.1
39635-35-3	PCB-159		62.0	59.6	pg/L	23.1
41411-62-5	PCB-160	U	23.1	23.1	pg/L	23.1
74472-43-8	PCB-161	U	23.1	23.1	pg/L	23.1
39635-34-2	PCB-162		131	128	pg/L	23.1
74472-45-0	PCB-164		1470	1460	pg/L	23.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32511  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 01:40  
**Data File:** c09oct13d-10  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:52  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 865.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	23.1	23.1	pg/L	23.1
52663-72-6	PCB-167		870	868	pg/L	23.1
32774-16-6	PCB-169	U	23.1	23.1	pg/L	23.1
35065-30-6	PCB-170		2110	2110	pg/L	23.1
PCB-171/173	PCB-173/171	C	603	600	pg/L	46.2
52663-74-8	PCB-172		299	297	pg/L	23.1
38411-25-5	PCB-174		1950	1950	pg/L	23.1
40186-70-7	PCB-175		58.3	55.6	pg/L	23.1
52663-65-7	PCB-176		148	145	pg/L	23.1
52663-70-4	PCB-177		1060	1060	pg/L	23.1
52663-67-9	PCB-178		319	316	pg/L	23.1
52663-64-6	PCB-179		511	509	pg/L	23.1
PCB-180/193	PCB-193/180	CU	46.2	46.2	pg/L	46.2
74472-47-2	PCB-181		38.7	34.8	pg/L	23.1
60145-23-5	PCB-182	U	23.1	23.1	pg/L	23.1
PCB-183/185	PCB-183/185	C	958	955	pg/L	46.2
74472-48-3	PCB-184	U	23.1	23.1	pg/L	23.1
74472-49-4	PCB-186	U	23.1	23.1	pg/L	23.1
52663-68-0	PCB-187		2530	2530	pg/L	23.1
74487-85-7	PCB-188	U	23.1	23.1	pg/L	23.1
39635-31-9	PCB-189		102	99.3	pg/L	23.1
41411-64-7	PCB-190		396	394	pg/L	23.1
74472-50-7	PCB-191		67.7	65.5	pg/L	23.1
74472-51-8	PCB-192	U	23.1	23.1	pg/L	23.1
35694-08-7	PCB-194		463	460	pg/L	23.1
52663-78-2	PCB-195		216	214	pg/L	23.1
42740-50-1	PCB-196		214	211	pg/L	23.1
PCB-197/200	PCB-197/200	C	83.4	81.1	pg/L	46.2
PCB-198/199	PCB-198/199	C	604	600	pg/L	46.2
40186-71-8	PCB-201		44.0	41.8	pg/L	23.1
2136-99-4	PCB-202		96.7	94.4	pg/L	23.1
52663-76-0	PCB-203		443	440	pg/L	23.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32511  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 01:40  
**Data File:** c09oct13d-10  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:52  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 865.9 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	23.1	23.1	pg/L	23.1
74472-53-0	PCB-205		33.1	30.8	pg/L	23.1
40186-72-9	PCB-206		108	105	pg/L	23.1
52663-79-3	PCB-207	U	23.1	23.1	pg/L	23.1
52663-77-1	PCB-208	U	23.1	23.1	pg/L	23.1
2051-24-3	PCB-209	U	23.1	23.1	pg/L	23.1
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		437	393	pg/L	
26914-33-0	Total Tetra PCBs		7940	7900	pg/L	
25429-29-2	Total Penta PCBs		68300	68100	pg/L	
26601-64-9	Total Hexa PCBs		74400	74300	pg/L	
28655-71-2	Total Hepta PCBs		11200	11100	pg/L	
55722-26-4	Total Octa PCBs		2200	2170	pg/L	
53742-07-7	Total Nona PCBs		108	105	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		164000	164000	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		904	2310	pg/L	39.1	(15%-150%)
13C-3-MoCB		1050	2310	pg/L	45.2	(15%-150%)
13C-4-DiCB		1110	2310	pg/L	48.1	(25%-150%)
13C-15-DiCB		1270	2310	pg/L	54.8	(25%-150%)
13C-19-TrCB		1360	2310	pg/L	59.1	(25%-150%)
13C-37-TrCB		1370	2310	pg/L	59.4	(25%-150%)
13C-54-TeCB		1140	2310	pg/L	49.5	(25%-150%)
13C-77-TeCB		1370	2310	pg/L	59.3	(25%-150%)
13C-81-TeCB		1380	2310	pg/L	59.9	(25%-150%)
13C-104-PeCB		1130	2310	pg/L	49.0	(25%-150%)
13C-105-PeCB		1160	2310	pg/L	50.3	(25%-150%)
13C-114-PeCB		1110	2310	pg/L	48.0	(25%-150%)
13C-118-PeCB		1190	2310	pg/L	51.6	(25%-150%)
13C-123-PeCB		1250	2310	pg/L	53.9	(25%-150%)
13C-126-PeCB		1160	2310	pg/L	50.2	(25%-150%)
13C-155-HxCB		1440	2310	pg/L	62.2	(25%-150%)
13C-156-HxCB	C	2090	4620	pg/L	45.2	(25%-150%)
13C-167-HxCB		1040	2310	pg/L	45.1	(25%-150%)
13C-169-HxCB		1180	2310	pg/L	51.0	(25%-150%)
13C-188-HpCB		1570	2310	pg/L	68.1	(25%-150%)
13C-189-HpCB		1160	2310	pg/L	50.0	(25%-150%)
13C-202-OcCB		1680	2310	pg/L	72.9	(25%-150%)
13C-205-OcCB		1760	2310	pg/L	76.0	(25%-150%)



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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<b>SDG Number:</b> 2013-2074	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5357002	<b>Date Collected:</b> 09/13/2013 06:52	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/24/2013 10:00	
<b>Client ID:</b> WT_IPC-13-32511		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24507	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/10/2013 01:40	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c09oct13d-10		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24505	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 06-OCT-13	<b>Aliquot:</b> 865.9 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%</b>
						<b>Acceptable Limits</b>
13C-206-NoCB			2110	2310	pg/L	91.5 (25%-150%)
13C-208-NoCB			2050	2310	pg/L	88.8 (25%-150%)
13C-209-DeCB			2270	2310	pg/L	98.1 (25%-150%)
13C-28-TrCB			1680	2310	pg/L	72.7 (30%-135%)
13C-111-PeCB			1810	2310	pg/L	78.3 (30%-135%)
13C-178-HpCB			1850	2310	pg/L	80.0 (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32159  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 02:43  
**Data File:** c09oct13d-11  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:01  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 945.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	UJ	21.2	21.2	pg/L	21.2
2051-61-8	PCB-2	UJ	21.2	21.2	pg/L	21.2
2051-62-9	PCB-3	UJ	21.2	21.2	pg/L	21.2
13029-08-8	PCB-4	UJ	21.2	21.2	pg/L	21.2
16605-91-7	PCB-5	UJ	21.2	21.2	pg/L	21.2
25569-80-6	PCB-6	UJ	21.2	21.2	pg/L	21.2
33284-50-3	PCB-7	UJ	21.2	21.2	pg/L	21.2
34883-43-7	PCB-8	UJ	21.2	21.2	pg/L	21.2
34883-39-1	PCB-9	UJ	21.2	21.2	pg/L	21.2
33146-45-1	PCB-10	UJ	21.2	21.2	pg/L	21.2
2050-67-1	PCB-11	UJ	106	106	pg/L	106
PCB-12/13	PCB-13/12	CUJ	42.3	42.3	pg/L	42.3
34883-41-5	PCB-14	UJ	21.2	21.2	pg/L	21.2
2050-68-2	PCB-15	UJ	21.2	21.2	pg/L	21.2
38444-78-9	PCB-16	UJ	21.2	21.2	pg/L	21.2
37680-66-3	PCB-17	UJ	21.2	21.2	pg/L	21.2
PCB-18/30	PCB-18/30	CUJ	42.3	42.3	pg/L	42.3
38444-73-4	PCB-19	UJ	21.2	21.2	pg/L	21.2
PCB-20/28	PCB-20/28	CUJ	42.3	42.3	pg/L	42.3
PCB-21/33	PCB-21/33	CUJ	42.3	42.3	pg/L	42.3
38444-85-8	PCB-22	UJ	21.2	21.2	pg/L	21.2
55720-44-0	PCB-23	UJ	21.2	21.2	pg/L	21.2
55702-45-9	PCB-24	UJ	21.2	21.2	pg/L	21.2
55712-37-3	PCB-25	UJ	21.2	21.2	pg/L	21.2
PCB-26/29	PCB-26/29	CUJ	42.3	42.3	pg/L	42.3
38444-76-7	PCB-27	UJ	21.2	21.2	pg/L	21.2
16606-02-3	PCB-31	UJ	21.2	21.2	pg/L	21.2
38444-77-8	PCB-32	UJ	21.2	21.2	pg/L	21.2
37680-68-5	PCB-34	UJ	21.2	21.2	pg/L	21.2
37680-69-6	PCB-35	UJ	21.2	21.2	pg/L	21.2
38444-87-0	PCB-36	UJ	21.2	21.2	pg/L	21.2
38444-90-5	PCB-37	UJ	21.2	21.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**J** Value is estimated  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32159  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 02:43  
**Data File:** c09oct13d-11  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:01  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 945.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21.2	21.2	pg/L	21.2
38444-88-1	PCB-39	U	21.2	21.2	pg/L	21.2
PCB-40/71	PCB-40/71	CU	42.3	42.3	pg/L	42.3
52663-59-9	PCB-41	U	21.2	21.2	pg/L	21.2
36559-22-5	PCB-42	U	21.2	21.2	pg/L	21.2
70362-46-8	PCB-43	U	21.2	21.2	pg/L	21.2
PCB-44/47/65	PCB-44/65/47	CU	63.5	63.5	pg/L	63.5
PCB-45/51	PCB-45/51	CU	42.3	42.3	pg/L	42.3
41464-47-5	PCB-46	U	21.2	21.2	pg/L	21.2
70362-47-9	PCB-48	U	21.2	21.2	pg/L	21.2
PCB-49/69	PCB-69/49	CU	42.3	42.3	pg/L	42.3
PCB-50/53	PCB-50/53	CU	42.3	42.3	pg/L	42.3
35693-99-3	PCB-52	U	21.2	21.2	pg/L	21.2
15968-05-5	PCB-54	U	21.2	21.2	pg/L	21.2
74338-24-2	PCB-55	U	21.2	21.2	pg/L	21.2
41464-43-1	PCB-56	U	21.2	21.2	pg/L	21.2
70424-67-8	PCB-57	U	21.2	21.2	pg/L	21.2
41464-49-7	PCB-58	U	21.2	21.2	pg/L	21.2
PCB-59/62/75	PCB-59/62/75	CU	63.5	63.5	pg/L	63.5
33025-41-1	PCB-60	U	21.2	21.2	pg/L	21.2
PCB-61-76	PCB-61/76/70/74	CU	84.6	84.6	pg/L	84.6
74472-34-7	PCB-63	U	21.2	21.2	pg/L	21.2
52663-58-8	PCB-64	U	21.2	21.2	pg/L	21.2
32598-10-0	PCB-66	U	21.2	21.2	pg/L	21.2
73575-53-8	PCB-67	U	21.2	21.2	pg/L	21.2
73575-52-7	PCB-68	U	21.2	21.2	pg/L	21.2
41464-42-0	PCB-72	U	21.2	21.2	pg/L	21.2
74338-23-1	PCB-73	U	21.2	21.2	pg/L	21.2
32598-13-3	PCB-77	U	21.2	21.2	pg/L	21.2
70362-49-1	PCB-78	U	21.2	21.2	pg/L	21.2
41464-48-6	PCB-79	U	21.2	21.2	pg/L	21.2
33284-52-5	PCB-80	U	21.2	21.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**J** Value is estimated  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-2074  
Lab Sample ID: 5357003  
Client Sample: 1668A Water  
Client ID: WT\_IPC-13-32159  
Batch ID: 24507  
Run Date: 10/10/2013 02:43  
Data File: c09oct13d-11  
Prep Batch: 24505  
Prep Date: 06-OCT-13

Client: LANL001  
Date Collected: 09/13/2013 06:01  
Date Received: 09/24/2013 10:00  
  
Method: EPA Method 1668A  
Analyst: MJC  
  
Prep Method: SW846 3520C  
Aliquot: 945.6 mL

Project: LANL00112  
Matrix: WATER  
  
Prep Basis: As Received  
  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21.2	21.2	pg/L	21.2
52663-62-4	PCB-82	U	21.2	21.2	pg/L	21.2
60145-20-2	PCB-83	U	21.2	21.2	pg/L	21.2
52663-60-2	PCB-84	U	21.2	21.2	pg/L	21.2
PCB-85-117	PCB-117/116/85	CU	63.5	63.5	pg/L	63.5
PCB-86-125	PCB-86/87/97/109/119/125	CU	127	127	pg/L	127
PCB-88/91	PCB-88/91	CU	42.3	42.3	pg/L	42.3
73575-57-2	PCB-89	U	21.2	21.2	pg/L	21.2
PCB-90-113	PCB-113/90/101	CU	66.7	63.5	pg/L	63.5
52663-61-3	PCB-92	U	21.2	21.2	pg/L	21.2
PCB-93/100	PCB-93/100	CU	42.3	42.3	pg/L	42.3
73575-55-0	PCB-94	U	21.2	21.2	pg/L	21.2
38379-99-6	PCB-95	U	22.8	21.2	pg/L	21.2
73575-54-9	PCB-96	U	21.2	21.2	pg/L	21.2
PCB-98/102	PCB-102/98	CU	42.3	42.3	pg/L	42.3
38380-01-7	PCB-99		48.3	42.2	pg/L	21.2
60145-21-3	PCB-103	U	21.2	21.2	pg/L	21.2
56558-16-8	PCB-104	U	21.2	21.2	pg/L	21.2
32598-14-4	PCB-105		33.8	28.9	pg/L	21.2
70424-69-0	PCB-106	U	21.2	21.2	pg/L	21.2
70424-68-9	PCB-107	U	21.2	21.2	pg/L	21.2
PCB-108/124	PCB-108/124	CU	42.3	42.3	pg/L	42.3
PCB-110/115	PCB-110/115	C	97.1	92.6	pg/L	42.3
39635-32-0	PCB-111	U	21.2	21.2	pg/L	21.2
74472-36-9	PCB-112	U	21.2	21.2	pg/L	21.2
74472-37-0	PCB-114	U	21.2	21.2	pg/L	21.2
31508-00-6	PCB-118		71.2	66.8	pg/L	21.2
68194-12-7	PCB-120	U	21.2	21.2	pg/L	21.2
56558-18-0	PCB-121	U	21.2	21.2	pg/L	21.2
76842-07-4	PCB-122	U	21.2	21.2	pg/L	21.2
65510-44-3	PCB-123	U	21.2	21.2	pg/L	21.2
57465-28-8	PCB-126	U	21.2	21.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**J** Value is estimated  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

Page 4 of 7

**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32159  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 02:43  
**Data File:** c09oct13d-11  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:01  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 945.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21.2	21.2	pg/L	21.2
PCB-128/166	PCB-128/166	CU	42.3	42.3	pg/L	42.3
PCB-129-163	PCB-138/163/129	C	173	170	pg/L	63.5
52663-66-8	PCB-130	U	21.2	21.2	pg/L	21.2
61798-70-7	PCB-131	U	21.2	21.2	pg/L	21.2
38380-05-1	PCB-132		34.6	29.5	pg/L	21.2
35694-04-3	PCB-133	U	21.2	21.2	pg/L	21.2
52704-70-8	PCB-134	U	21.2	21.2	pg/L	21.2
PCB-135/151	PCB-151/135	CU	42.3	42.3	pg/L	42.3
38411-22-2	PCB-136	U	21.2	21.2	pg/L	21.2
35694-06-5	PCB-137	U	21.2	21.2	pg/L	21.2
PCB-139/140	PCB-139/140	CU	42.3	42.3	pg/L	42.3
52712-04-6	PCB-141		25.7	22.4	pg/L	21.2
41411-61-4	PCB-142	U	21.2	21.2	pg/L	21.2
68194-15-0	PCB-143	U	21.2	21.2	pg/L	21.2
68194-14-9	PCB-144	U	21.2	21.2	pg/L	21.2
74472-40-5	PCB-145	U	21.2	21.2	pg/L	21.2
51908-16-8	PCB-146	U	21.2	21.2	pg/L	21.2
PCB-147/149	PCB-147/149	C	62.7	58.9	pg/L	42.3
74472-41-6	PCB-148	U	21.2	21.2	pg/L	21.2
68194-08-1	PCB-150	U	21.2	21.2	pg/L	21.2
68194-09-2	PCB-152	U	21.2	21.2	pg/L	21.2
PCB-153/168	PCB-153/168	C	129	126	pg/L	42.3
60145-22-4	PCB-154	U	21.2	21.2	pg/L	21.2
33979-03-2	PCB-155	U	21.2	21.2	pg/L	21.2
PCB-156/157	PCB-156/157	CU	42.3	42.3	pg/L	42.3
74472-42-7	PCB-158	U	21.2	21.2	pg/L	21.2
39635-35-3	PCB-159	U	21.2	21.2	pg/L	21.2
41411-62-5	PCB-160	U	21.2	21.2	pg/L	21.2
74472-43-8	PCB-161	U	21.2	21.2	pg/L	21.2
39635-34-2	PCB-162	U	21.2	21.2	pg/L	21.2
74472-45-0	PCB-164	U	21.2	21.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**J** Value is estimated  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32159  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 02:43  
**Data File:** c09oct13d-11  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:01  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 945.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21.2	21.2	pg/L	21.2
52663-72-6	PCB-167	U	21.2	21.2	pg/L	21.2
32774-16-6	PCB-169	U	21.2	21.2	pg/L	21.2
35065-30-6	PCB-170		25.4	22.6	pg/L	21.2
PCB-171/173	PCB-173/171	CU	42.3	42.3	pg/L	42.3
52663-74-8	PCB-172	U	21.2	21.2	pg/L	21.2
38411-25-5	PCB-174	U	21.2	21.2	pg/L	21.2
40186-70-7	PCB-175	U	21.2	21.2	pg/L	21.2
52663-65-7	PCB-176	U	21.2	21.2	pg/L	21.2
52663-70-4	PCB-177	U	21.2	21.2	pg/L	21.2
52663-67-9	PCB-178	U	21.2	21.2	pg/L	21.2
52663-64-6	PCB-179	U	21.2	21.2	pg/L	21.2
PCB-180/193	PCB-193/180	C	55.9	50.9	pg/L	42.3
74472-47-2	PCB-181	U	21.2	21.2	pg/L	21.2
60145-23-5	PCB-182	U	21.2	21.2	pg/L	21.2
PCB-183/185	PCB-183/185	CU	42.3	42.3	pg/L	42.3
74472-48-3	PCB-184	U	21.2	21.2	pg/L	21.2
74472-49-4	PCB-186	U	21.2	21.2	pg/L	21.2
52663-68-0	PCB-187	U	21.7	21.2	pg/L	21.2
74487-85-7	PCB-188	U	21.2	21.2	pg/L	21.2
39635-31-9	PCB-189	U	21.2	21.2	pg/L	21.2
41411-64-7	PCB-190	U	21.2	21.2	pg/L	21.2
74472-50-7	PCB-191	U	21.2	21.2	pg/L	21.2
74472-51-8	PCB-192	U	21.2	21.2	pg/L	21.2
35694-08-7	PCB-194	U	21.2	21.2	pg/L	21.2
52663-78-2	PCB-195	U	21.2	21.2	pg/L	21.2
42740-50-1	PCB-196	U	21.2	21.2	pg/L	21.2
PCB-197/200	PCB-197/200	CU	42.3	42.3	pg/L	42.3
PCB-198/199	PCB-198/199	CU	42.3	42.3	pg/L	42.3
40186-71-8	PCB-201	U	21.2	21.2	pg/L	21.2
2136-99-4	PCB-202	U	21.2	21.2	pg/L	21.2
52663-76-0	PCB-203	U	21.2	21.2	pg/L	21.2

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**J** Value is estimated  
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**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2074  
**Lab Sample ID:** 5357003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32159  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 02:43  
**Data File:** c09oct13d-11  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:01  
**Date Received:** 09/24/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 945.6 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21.2	21.2	pg/L	21.2
74472-53-0	PCB-205	U	21.2	21.2	pg/L	21.2
40186-72-9	PCB-206	U	21.2	21.2	pg/L	21.2
52663-79-3	PCB-207	U	21.2	21.2	pg/L	21.2
52663-77-1	PCB-208	U	21.2	21.2	pg/L	21.2
2051-24-3	PCB-209	U	21.2	21.2	pg/L	21.2
27323-18-8	Total Mono PCBs	UJ	0	0	pg/L	
25512-42-9	Total Di PCBs	UJ	0	0	pg/L	
25323-68-6	Total Tri PCBs	UJ	0	0	pg/L	
26914-33-0	Total Tetra PCBs	U	0	0	pg/L	
25429-29-2	Total Penta PCBs		340	231	pg/L	
26601-64-9	Total Hexa PCBs		425	407	pg/L	
28655-71-2	Total Hepta PCBs		103	73.5	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners	J	868	711	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		0.00	2120	pg/L	0.00 *	(15%-150%)
13C-3-MoCB		0.00	2120	pg/L	0.00 *	(15%-150%)
13C-4-DiCB		13.3	2120	pg/L	0.629 *	(25%-150%)
13C-15-DiCB		226	2120	pg/L	10.7 *	(25%-150%)
13C-19-TrCB		92.8	2120	pg/L	4.39 *	(25%-150%)
13C-37-TrCB		688	2120	pg/L	32.5	(25%-150%)
13C-54-TeCB		191	2120	pg/L	9.03 *	(25%-150%)
13C-77-TeCB		1150	2120	pg/L	54.2	(25%-150%)
13C-81-TeCB		1130	2120	pg/L	53.2	(25%-150%)
13C-104-PeCB		477	2120	pg/L	22.6 *	(25%-150%)
13C-105-PeCB		1060	2120	pg/L	50.3	(25%-150%)
13C-114-PeCB		971	2120	pg/L	45.9	(25%-150%)
13C-118-PeCB		1040	2120	pg/L	49.3	(25%-150%)
13C-123-PeCB		1080	2120	pg/L	51.1	(25%-150%)
13C-126-PeCB		1140	2120	pg/L	54.1	(25%-150%)
13C-155-HxCB		922	2120	pg/L	43.6	(25%-150%)
13C-156-HxCB	C	2080	4230	pg/L	49.1	(25%-150%)
13C-167-HxCB		1020	2120	pg/L	48.3	(25%-150%)
13C-169-HxCB		1180	2120	pg/L	55.9	(25%-150%)
13C-188-HpCB		1260	2120	pg/L	59.6	(25%-150%)
13C-189-HpCB		1110	2120	pg/L	52.5	(25%-150%)
13C-202-OcCB		1520	2120	pg/L	71.9	(25%-150%)
13C-205-OcCB		1750	2120	pg/L	83.0	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-2074	Client: LANL001	Project: LANL00112
Lab Sample ID: 5357003	Date Collected: 09/13/2013 06:01	Matrix: WATER
Client Sample: 1668A Water	Date Received: 09/24/2013 10:00	
Client ID: WT_IPC-13-32159		Prep Basis: As Received
Batch ID: 24507	Method: EPA Method 1668A	
Run Date: 10/10/2013 02:43	Analyst: MJC	Instrument: HRP791
Data File: c09oct13d-11		Dilution: 1
Prep Batch: 24505	Prep Method: SW846 3520C	Prep SOP Ref: CF-OA-E-001
Prep Date: 06-OCT-13	Aliquot: 945.6 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2100	2120	pg/L	99.4      (25%-150%)
13C-208-NoCB			1970	2120	pg/L	93.2      (25%-150%)
13C-209-DeCB			2230	2120	pg/L	105      (25%-150%)
13C-28-TrCB			525	2120	pg/L	24.8 *      (30%-135%)
13C-111-PeCB			1370	2120	pg/L	65.0      (30%-135%)
13C-178-HpCB			1630	2120	pg/L	76.9      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**J** Value is estimated  
**U** Analyte was analyzed for , but not detected above the specified detection limit.



# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	1.11	0.599	2.31	
3-Chlorobiphenyl (2)	pg/L	1.01	0.498	2.01	
4-Chlorobiphenyl (3)	pg/L	1.03	0.516	2.06	
2,2'-Dichlorobiphenyl (4)	pg/L	5.7	4.03	13.8	
2,3-Dichlorobiphenyl (5)	pg/L	6.26	5.08	16.4	
2,3'-Dichlorobiphenyl (6)	pg/L	4.03	3.34	10.7	
2,4-Dichlorobiphenyl (7)	pg/L	5.67	4.66	15	
2,4'-Dichlorobiphenyl (8)	pg/L	3.86	3.18	10.2	
2,5-Dichlorobiphenyl (9)	pg/L	3.98	3.35	10.7	
2,6-Dichlorobiphenyl (10)	pg/L	3.65	2.66	8.98	
3,3'-Dichlorobiphenyl (11)	pg/L	4.75	3.07	10.9	
3,4-Dichlorobiphenyl (12)	pg/L	5.62	3.73	13.1	
3,5-Dichlorobiphenyl (14)	pg/L	4.14	3.24	10.6	
4,4'-Dichlorobiphenyl (15)	pg/L	4.83	3.86	12.5	
2,2',3-Trichlorobiphenyl (16)	pg/L	1.76	0.818	3.4	
2,2',4-Trichlorobiphenyl (17)	pg/L	1.31	0.586	2.48	
2,2',5-Trichlorobiphenyl (18)	pg/L	1.23	0.485	2.2	
2,2',6-Trichlorobiphenyl (19)	pg/L	1.24	0.55	2.34	
2,3,3'-Trichlorobiphenyl (20)	pg/L	1.74	2.04	5.83	
2,3,4-Trichlorobiphenyl (21)	pg/L	1.09	0.312	1.72	
2,3,4'-Trichlorobiphenyl (22)	pg/L	1.36	0.511	2.38	
2,3,5-Trichlorobiphenyl (23)	pg/L	1.35	0.548	2.44	
2,3,6-Trichlorobiphenyl (24)	pg/L	1.32	0.575	2.47	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.94	0.367	1.67	
2,3',5-Trichlorobiphenyl (26)	pg/L	1.01	0.327	1.66	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.896	0.405	1.71	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.871	0.345	1.56	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.848	0.372	1.59	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.915	0.377	1.67	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.966	0.303	1.57	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.889	0.291	1.47	
3,4,4'-Trichlorobiphenyl (37)	pg/L	1.41	1.06	3.53	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.956	0.306	1.57	
3,4',5-Trichlorobiphenyl (39)	pg/L	1.25	0.414	2.08	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	1.82	0.959	3.74	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	1.87	1.09	4.06	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	1.88	1.04	3.95	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	2.17	1.27	4.71	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	1.64	0.819	3.28	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	1.68	0.474	2.63	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	1.28	0.616	2.52	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	2.23	1.24	4.71	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	1.56	0.709	2.98	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	1.28	0.508	2.29	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	1.6	0.866	3.33	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.664	0.275	1.21	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	1.57	0.686	2.94	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	1.36	0.54	2.44	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	1.06	0.493	2.04	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	1.54	0.713	2.96	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	1.44	0.664	2.77	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	1.67	0.914	3.49	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	1.41	0.431	2.28	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	1.03	0.472	1.98	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	1.34	0.695	2.73	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	2.07	1.63	5.34	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	1.03	0.468	1.97	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	1.41	0.621	2.65	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	1.01	0.481	1.97	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	1.69	0.978	3.64	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	1.32	0.58	2.48	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	1.15	0.465	2.08	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	1	0.407	1.82	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	1.04	0.458	1.96	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	1.27	0.563	2.4	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	2.3	1.23	4.77	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	2.36	1.32	4.99	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	2.37	1.35	5.07	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	2.01	0.954	3.92	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	2.19	0.87	3.93	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	2.56	1.17	4.89	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	2.14	1.22	4.59	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	2.12	0.951	4.03	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	2.05	1.16	4.37	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	2.39	1.37	5.14	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	3.06	1.79	6.64	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	2.02	1.05	4.12	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	1.12	0.603	2.32	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	2.45	1.15	4.74	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	2.79	1.63	6.06	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	1.83	1.07	3.97	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	1.03	0.486	2	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	2.17	1.36	4.89	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	1.79	1.1	4	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	1.8	1.1	4.01	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	2.09	1.25	4.58	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	2.4	1.06	4.52	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	2.14	1.16	4.47	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	1.54	0.833	3.21	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	2.21	1.35	4.91	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	2.1	1.17	4.43	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	1.46	0.784	3.02	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	2.15	1.24	4.63	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	1.96	1.19	4.34	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	1.98	1.21	4.4	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	2.45	1.52	5.49	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	1.88	1.1	4.08	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	1.64	0.771	3.18	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	1.68	0.76	3.2	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	1.84	0.903	3.64	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	2.02	1.05	4.13	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	2.51	1.29	5.09	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	1.71	0.868	3.45	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	2.13	1.17	4.48	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	1.64	0.719	3.08	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	1	0.56	2.13	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	2.5	1.28	5.07	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	1.87	0.953	3.78	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	1.69	0.826	3.35	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	1.78	0.9	3.58	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	1.6	0.799	3.2	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	1.31	0.681	2.67	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	1.46	0.807	3.08	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	1.61	0.84	3.29	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	1.9	0.947	3.8	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	1.28	0.653	2.59	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	1.41	0.784	2.98	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.987	0.559	2.1	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	1.68	0.688	3.06	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	1.2	0.621	2.44	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.887	0.409	1.71	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	1.77	0.803	3.38	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	1.25	0.605	2.45	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	1.24	0.589	2.42	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	1.93	0.958	3.85	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	1.27	0.64	2.55	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	1.71	0.811	3.33	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	1.31	0.632	2.57	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	1.96	0.998	3.95	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	1.41	0.672	2.75	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	1.53	0.674	2.88	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	1.53	0.631	2.8	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	1.66	0.591	2.85	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	1.54	0.654	2.85	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	1.5	0.66	2.82	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	1.39	0.664	2.71	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	1.07	0.536	2.14	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	1.55	0.673	2.9	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	1.45	0.702	2.86	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	1.05	0.535	2.12	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	1.89	1.55	5	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	2.04	0.898	3.84	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	1.45	0.683	2.81	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	1.75	0.648	3.04	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	1.42	0.719	2.86	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	1.55	0.771	3.09	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	1.85	0.868	3.58	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	1.13	0.541	2.21	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	1.53	0.668	2.86	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	1.19	0.489	2.16	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	1.15	0.491	2.13	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	1.73	0.736	3.2	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	1.43	0.615	2.66	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	1.5	0.667	2.83	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	1.37	0.666	2.7	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	1.3	0.538	2.38	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	1.73	0.697	3.13	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	1.05	0.529	2.1	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	1.19	0.567	2.32	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	1.81	0.876	3.56	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	1.06	0.534	2.13	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	1.25	0.564	2.37	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	1.92	0.787	3.49	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	1.45	0.6	2.64	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	1.63	0.653	2.93	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	1.51	0.831	3.17	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32154  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 06:07  
**Data File:** c09oct13d\_2-3  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:18  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	22.1	22.1	pg/L	22.1
2051-61-8	PCB-2	U	22.1	22.1	pg/L	22.1
2051-62-9	PCB-3	U	22.1	22.1	pg/L	22.1
13029-08-8	PCB-4	U	22.1	22.1	pg/L	22.1
16605-91-7	PCB-5	U	22.1	22.1	pg/L	22.1
25569-80-6	PCB-6	U	22.1	22.1	pg/L	22.1
33284-50-3	PCB-7	U	22.1	22.1	pg/L	22.1
34883-43-7	PCB-8	U	22.1	22.1	pg/L	22.1
34883-39-1	PCB-9	U	22.1	22.1	pg/L	22.1
33146-45-1	PCB-10	U	22.1	22.1	pg/L	22.1
2050-67-1	PCB-11	U	110	110	pg/L	110
PCB-12/13	PCB-13/12	CU	44.1	44.1	pg/L	44.1
34883-41-5	PCB-14	U	22.1	22.1	pg/L	22.1
2050-68-2	PCB-15	U	22.1	22.1	pg/L	22.1
38444-78-9	PCB-16	U	22.1	22.1	pg/L	22.1
37680-66-3	PCB-17	U	22.1	22.1	pg/L	22.1
PCB-18/30	PCB-18/30	CU	44.1	44.1	pg/L	44.1
38444-73-4	PCB-19	U	22.1	22.1	pg/L	22.1
PCB-20/28	PCB-20/28	CU	44.1	44.1	pg/L	44.1
PCB-21/33	PCB-21/33	CU	44.1	44.1	pg/L	44.1
38444-85-8	PCB-22	U	22.1	22.1	pg/L	22.1
55720-44-0	PCB-23	U	22.1	22.1	pg/L	22.1
55702-45-9	PCB-24	U	22.1	22.1	pg/L	22.1
55712-37-3	PCB-25	U	22.1	22.1	pg/L	22.1
PCB-26/29	PCB-26/29	CU	44.1	44.1	pg/L	44.1
38444-76-7	PCB-27	U	22.1	22.1	pg/L	22.1
16606-02-3	PCB-31		24.0	22.5	pg/L	22.1
38444-77-8	PCB-32	U	22.1	22.1	pg/L	22.1
37680-68-5	PCB-34	U	22.1	22.1	pg/L	22.1
37680-69-6	PCB-35	U	22.1	22.1	pg/L	22.1
38444-87-0	PCB-36	U	22.1	22.1	pg/L	22.1
38444-90-5	PCB-37	U	25.3	22.1	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32154  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 06:07  
**Data File:** c09oct13d\_2-3  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:18  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	22.1	22.1	pg/L	22.1
38444-88-1	PCB-39	U	22.1	22.1	pg/L	22.1
PCB-40/71	PCB-40/71	CU	44.1	44.1	pg/L	44.1
52663-59-9	PCB-41	U	22.1	22.1	pg/L	22.1
36559-22-5	PCB-42	U	22.8	22.1	pg/L	22.1
70362-46-8	PCB-43	U	22.1	22.1	pg/L	22.1
PCB-44/47/65	PCB-44/65/47	C	123	119	pg/L	66.2
PCB-45/51	PCB-45/51	CU	44.1	44.1	pg/L	44.1
41464-47-5	PCB-46	U	22.1	22.1	pg/L	22.1
70362-47-9	PCB-48	U	22.1	22.1	pg/L	22.1
PCB-49/69	PCB-69/49	C	58.3	55.3	pg/L	44.1
PCB-50/53	PCB-50/53	CU	44.1	44.1	pg/L	44.1
35693-99-3	PCB-52		213	210	pg/L	22.1
15968-05-5	PCB-54	U	22.1	22.1	pg/L	22.1
74338-24-2	PCB-55	U	22.1	22.1	pg/L	22.1
41464-43-1	PCB-56		54.7	52.3	pg/L	22.1
70424-67-8	PCB-57	U	22.1	22.1	pg/L	22.1
41464-49-7	PCB-58	U	22.1	22.1	pg/L	22.1
PCB-59/62/75	PCB-59/62/75	CU	66.2	66.2	pg/L	66.2
33025-41-1	PCB-60		25.6	22.2	pg/L	22.1
PCB-61-76	PCB-61/76/70/74	C	223	221	pg/L	88.3
74472-34-7	PCB-63	U	22.1	22.1	pg/L	22.1
52663-58-8	PCB-64		53.0	50.2	pg/L	22.1
32598-10-0	PCB-66		72.4	67.1	pg/L	22.1
73575-53-8	PCB-67	U	22.1	22.1	pg/L	22.1
73575-52-7	PCB-68	U	22.1	22.1	pg/L	22.1
41464-42-0	PCB-72	U	22.1	22.1	pg/L	22.1
74338-23-1	PCB-73	U	22.1	22.1	pg/L	22.1
32598-13-3	PCB-77		36.7	34.2	pg/L	22.1
70362-49-1	PCB-78	U	22.1	22.1	pg/L	22.1
41464-48-6	PCB-79	U	22.1	22.1	pg/L	22.1
33284-52-5	PCB-80	U	22.1	22.1	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32154  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 06:07  
**Data File:** c09oct13d\_2-3  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:18  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	22.1	22.1	pg/L	22.1
52663-62-4	PCB-82		79.9	75.1	pg/L	22.1
60145-20-2	PCB-83		40.0	35	pg/L	22.1
52663-60-2	PCB-84		173	168	pg/L	22.1
PCB-85-117	PCB-117/116/85	C	165	161	pg/L	66.2
PCB-86-125	PCB-86/87/97/109/119/125	C	516	512	pg/L	132
PCB-88/91	PCB-88/91	C	107	102	pg/L	44.1
73575-57-2	PCB-89	U	22.1	22.1	pg/L	22.1
PCB-90-113	PCB-113/90/101	C	722	718	pg/L	66.2
52663-61-3	PCB-92		132	128	pg/L	22.1
PCB-93/100	PCB-93/100	CU	44.1	44.1	pg/L	44.1
73575-55-0	PCB-94	U	22.1	22.1	pg/L	22.1
38379-99-6	PCB-95		518	514	pg/L	22.1
73575-54-9	PCB-96	U	22.1	22.1	pg/L	22.1
PCB-98/102	PCB-102/98	CU	44.1	44.1	pg/L	44.1
38380-01-7	PCB-99		378	372	pg/L	22.1
60145-21-3	PCB-103	U	22.1	22.1	pg/L	22.1
56558-16-8	PCB-104	U	22.1	22.1	pg/L	22.1
32598-14-4	PCB-105		328	323	pg/L	22.1
70424-69-0	PCB-106	U	22.1	22.1	pg/L	22.1
70424-68-9	PCB-107		66.1	62.1	pg/L	22.1
PCB-108/124	PCB-108/124	CU	44.1	44.1	pg/L	44.1
PCB-110/115	PCB-110/115	C	1430	1420	pg/L	44.1
39635-32-0	PCB-111	U	22.1	22.1	pg/L	22.1
74472-36-9	PCB-112	U	22.1	22.1	pg/L	22.1
74472-37-0	PCB-114	U	22.1	22.1	pg/L	22.1
31508-00-6	PCB-118		570	565	pg/L	22.1
68194-12-7	PCB-120	U	22.1	22.1	pg/L	22.1
56558-18-0	PCB-121	U	22.1	22.1	pg/L	22.1
76842-07-4	PCB-122	U	22.1	22.1	pg/L	22.1
65510-44-3	PCB-123	U	22.1	22.1	pg/L	22.1
57465-28-8	PCB-126	U	22.1	22.1	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32154  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 06:07  
**Data File:** c09oct13d\_2-3  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:18  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	22.1	22.1	pg/L	22.1
PCB-128/166	PCB-128/166	C	373	369	pg/L	44.1
PCB-129-163	PCB-138/163/129	C	2240	2240	pg/L	66.2
52663-66-8	PCB-130		131	128	pg/L	22.1
61798-70-7	PCB-131	U	22.1	22.1	pg/L	22.1
38380-05-1	PCB-132		669	664	pg/L	22.1
35694-04-3	PCB-133	U	23.6	22.1	pg/L	22.1
52704-70-8	PCB-134		73.0	68.5	pg/L	22.1
PCB-135/151	PCB-151/135	C	413	410	pg/L	44.1
38411-22-2	PCB-136		115	113	pg/L	22.1
35694-06-5	PCB-137		106	101	pg/L	22.1
PCB-139/140	PCB-139/140	CU	44.1	44.1	pg/L	44.1
52712-04-6	PCB-141		291	287	pg/L	22.1
41411-61-4	PCB-142	U	22.1	22.1	pg/L	22.1
68194-15-0	PCB-143	U	22.1	22.1	pg/L	22.1
68194-14-9	PCB-144		38.5	35.8	pg/L	22.1
74472-40-5	PCB-145	U	22.1	22.1	pg/L	22.1
51908-16-8	PCB-146		287	284	pg/L	22.1
PCB-147/149	PCB-147/149	C	1410	1400	pg/L	44.1
74472-41-6	PCB-148	U	22.1	22.1	pg/L	22.1
68194-08-1	PCB-150	U	22.1	22.1	pg/L	22.1
68194-09-2	PCB-152	U	22.1	22.1	pg/L	22.1
PCB-153/168	PCB-153/168	C	1370	1360	pg/L	44.1
60145-22-4	PCB-154	U	22.1	22.1	pg/L	22.1
33979-03-2	PCB-155	U	22.1	22.1	pg/L	22.1
PCB-156/157	PCB-156/157	C	176	173	pg/L	44.1
74472-42-7	PCB-158		196	193	pg/L	22.1
39635-35-3	PCB-159	U	22.1	22.1	pg/L	22.1
41411-62-5	PCB-160	U	22.1	22.1	pg/L	22.1
74472-43-8	PCB-161	U	22.1	22.1	pg/L	22.1
39635-34-2	PCB-162	U	22.1	22.1	pg/L	22.1
74472-45-0	PCB-164		176	173	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32154  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 06:07  
**Data File:** c09oct13d\_2-3  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:18  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	22.1	22.1	pg/L	22.1
52663-72-6	PCB-167		84.3	81.5	pg/L	22.1
32774-16-6	PCB-169	U	22.1	22.1	pg/L	22.1
35065-30-6	PCB-170		411	409	pg/L	22.1
PCB-171/173	PCB-173/171	C	123	120	pg/L	44.1
52663-74-8	PCB-172		77.1	74.2	pg/L	22.1
38411-25-5	PCB-174		483	480	pg/L	22.1
40186-70-7	PCB-175	U	22.1	22.1	pg/L	22.1
52663-65-7	PCB-176		31.5	29.4	pg/L	22.1
52663-70-4	PCB-177		239	236	pg/L	22.1
52663-67-9	PCB-178		76.5	73.6	pg/L	22.1
52663-64-6	PCB-179		117	115	pg/L	22.1
PCB-180/193	PCB-193/180	CU	44.1	44.1	pg/L	44.1
74472-47-2	PCB-181	U	22.1	22.1	pg/L	22.1
60145-23-5	PCB-182	U	22.1	22.1	pg/L	22.1
PCB-183/185	PCB-183/185	C	247	244	pg/L	44.1
74472-48-3	PCB-184	U	22.1	22.1	pg/L	22.1
74472-49-4	PCB-186	U	22.1	22.1	pg/L	22.1
52663-68-0	PCB-187		597	594	pg/L	22.1
74487-85-7	PCB-188	U	22.1	22.1	pg/L	22.1
39635-31-9	PCB-189	U	22.1	22.1	pg/L	22.1
41411-64-7	PCB-190		80.8	78.6	pg/L	22.1
74472-50-7	PCB-191	U	22.1	22.1	pg/L	22.1
74472-51-8	PCB-192	U	22.1	22.1	pg/L	22.1
35694-08-7	PCB-194		173	170	pg/L	22.1
52663-78-2	PCB-195		67.3	64.4	pg/L	22.1
42740-50-1	PCB-196		85.6	82.9	pg/L	22.1
PCB-197/200	PCB-197/200	CU	44.1	44.1	pg/L	44.1
PCB-198/199	PCB-198/199	C	258	255	pg/L	44.1
40186-71-8	PCB-201	U	22.1	22.1	pg/L	22.1
2136-99-4	PCB-202		41.5	39.2	pg/L	22.1
52663-76-0	PCB-203		172	169	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32154  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 06:07  
**Data File:** c09oct13d\_2-3  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:18  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	22.1	22.1	pg/L	22.1
74472-53-0	PCB-205	U	22.1	22.1	pg/L	22.1
40186-72-9	PCB-206		142	139	pg/L	22.1
52663-79-3	PCB-207	U	22.1	22.1	pg/L	22.1
52663-77-1	PCB-208		45.4	42.5	pg/L	22.1
2051-24-3	PCB-209		39.0	35.8	pg/L	22.1
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		49.3	22.5	pg/L	
26914-33-0	Total Tetra PCBs		883	832	pg/L	
25429-29-2	Total Penta PCBs		5220	5160	pg/L	
26601-64-9	Total Hexa PCBs		8170	8080	pg/L	
28655-71-2	Total Hepta PCBs		2480	2450	pg/L	
55722-26-4	Total Octa PCBs		798	781	pg/L	
53742-07-7	Total Nona PCBs		188	181	pg/L	
DECACB(Tot)	Total Deca PCB		39.0	35.8	pg/L	
1336-36-3	Total PCB Congeners		17800	17500	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		868	2210	pg/L	39.3	(15%-150%)
13C-3-MoCB		969	2210	pg/L	43.9	(15%-150%)
13C-4-DiCB		1010	2210	pg/L	45.8	(25%-150%)
13C-15-DiCB		1080	2210	pg/L	48.9	(25%-150%)
13C-19-TrCB		1200	2210	pg/L	54.5	(25%-150%)
13C-37-TrCB		956	2210	pg/L	43.3	(25%-150%)
13C-54-TeCB		847	2210	pg/L	38.4	(25%-150%)
13C-77-TeCB		1060	2210	pg/L	48.0	(25%-150%)
13C-81-TeCB		1080	2210	pg/L	49.0	(25%-150%)
13C-104-PeCB		834	2210	pg/L	37.8	(25%-150%)
13C-105-PeCB		957	2210	pg/L	43.3	(25%-150%)
13C-114-PeCB		948	2210	pg/L	42.9	(25%-150%)
13C-118-PeCB		990	2210	pg/L	44.9	(25%-150%)
13C-123-PeCB		1050	2210	pg/L	47.4	(25%-150%)
13C-126-PeCB		1060	2210	pg/L	48.1	(25%-150%)
13C-155-HxCB		1080	2210	pg/L	49.1	(25%-150%)
13C-156-HxCB	C	1890	4410	pg/L	42.7	(25%-150%)
13C-167-HxCB		924	2210	pg/L	41.9	(25%-150%)
13C-169-HxCB		1110	2210	pg/L	50.2	(25%-150%)
13C-188-HpCB		1300	2210	pg/L	58.8	(25%-150%)
13C-189-HpCB		1100	2210	pg/L	49.9	(25%-150%)
13C-202-OcCB		1480	2210	pg/L	67.2	(25%-150%)
13C-205-OcCB		1590	2210	pg/L	71.9	(25%-150%)

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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SDG Number: 2013-2104	Client: LANL001	Project: LANL00112
Lab Sample ID: 5365001	Date Collected: 09/13/2013 07:18	Matrix: WATER
Client Sample: 1668A Water	Date Received: 09/25/2013 10:00	
Client ID: WT_IPC-13-32154		Prep Basis: As Received
Batch ID: 24507	Method: EPA Method 1668A	
Run Date: 10/10/2013 06:07	Analyst: MJC	Instrument: HRP791
Data File: c09oct13d_2-3		Dilution: 1
Prep Batch: 24505	Prep Method: SW846 3520C	Prep SOP Ref: CF-OA-E-001
Prep Date: 06-OCT-13	Aliquot: 906.1 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%</b>
						<b>Acceptable Limits</b>
13C-206-NoCB			1790	2210	pg/L	80.9 (25%-150%)
13C-208-NoCB			1820	2210	pg/L	82.3 (25%-150%)
13C-209-DeCB			1840	2210	pg/L	83.4 (25%-150%)
13C-28-TrCB			1640	2210	pg/L	74.3 (30%-135%)
13C-111-PeCB			1750	2210	pg/L	79.2 (30%-135%)
13C-178-HpCB			1700	2210	pg/L	76.9 (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32212  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 07:10  
**Data File:** c09oct13d\_2-4  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:38  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	22.1	22.1	pg/L	22.1
2051-61-8	PCB-2	U	22.1	22.1	pg/L	22.1
2051-62-9	PCB-3	U	22.1	22.1	pg/L	22.1
13029-08-8	PCB-4	U	22.1	22.1	pg/L	22.1
16605-91-7	PCB-5	U	22.1	22.1	pg/L	22.1
25569-80-6	PCB-6	U	22.1	22.1	pg/L	22.1
33284-50-3	PCB-7	U	22.1	22.1	pg/L	22.1
34883-43-7	PCB-8	U	22.1	22.1	pg/L	22.1
34883-39-1	PCB-9	U	22.1	22.1	pg/L	22.1
33146-45-1	PCB-10	U	22.1	22.1	pg/L	22.1
2050-67-1	PCB-11	U	110	110	pg/L	110
PCB-12/13	PCB-13/12	CU	44.1	44.1	pg/L	44.1
34883-41-5	PCB-14	U	22.1	22.1	pg/L	22.1
2050-68-2	PCB-15	U	22.1	22.1	pg/L	22.1
38444-78-9	PCB-16	U	22.1	22.1	pg/L	22.1
37680-66-3	PCB-17	U	22.1	22.1	pg/L	22.1
PCB-18/30	PCB-18/30	CU	44.1	44.1	pg/L	44.1
38444-73-4	PCB-19	U	22.1	22.1	pg/L	22.1
PCB-20/28	PCB-20/28	CU	44.1	44.1	pg/L	44.1
PCB-21/33	PCB-21/33	CU	44.1	44.1	pg/L	44.1
38444-85-8	PCB-22	U	22.1	22.1	pg/L	22.1
55720-44-0	PCB-23	U	22.1	22.1	pg/L	22.1
55702-45-9	PCB-24	U	22.1	22.1	pg/L	22.1
55712-37-3	PCB-25	U	22.1	22.1	pg/L	22.1
PCB-26/29	PCB-26/29	CU	44.1	44.1	pg/L	44.1
38444-76-7	PCB-27	U	22.1	22.1	pg/L	22.1
16606-02-3	PCB-31		33.8	32.3	pg/L	22.1
38444-77-8	PCB-32	U	22.1	22.1	pg/L	22.1
37680-68-5	PCB-34	U	22.1	22.1	pg/L	22.1
37680-69-6	PCB-35	U	22.1	22.1	pg/L	22.1
38444-87-0	PCB-36	U	22.1	22.1	pg/L	22.1
38444-90-5	PCB-37		27.1	23.6	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32212  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 07:10  
**Data File:** c09oct13d\_2-4  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:38  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	22.1	22.1	pg/L	22.1
38444-88-1	PCB-39	U	22.1	22.1	pg/L	22.1
PCB-40/71	PCB-40/71	CU	44.1	44.1	pg/L	44.1
52663-59-9	PCB-41	U	22.1	22.1	pg/L	22.1
36559-22-5	PCB-42	U	22.1	22.1	pg/L	22.1
70362-46-8	PCB-43	U	22.1	22.1	pg/L	22.1
PCB-44/47/65	PCB-44/65/47	C	112	108	pg/L	66.2
PCB-45/51	PCB-45/51	CU	44.1	44.1	pg/L	44.1
41464-47-5	PCB-46	U	22.1	22.1	pg/L	22.1
70362-47-9	PCB-48	U	22.1	22.1	pg/L	22.1
PCB-49/69	PCB-69/49	C	56.6	53.6	pg/L	44.1
PCB-50/53	PCB-50/53	CU	44.1	44.1	pg/L	44.1
35693-99-3	PCB-52		214	211	pg/L	22.1
15968-05-5	PCB-54	U	22.1	22.1	pg/L	22.1
74338-24-2	PCB-55	U	22.1	22.1	pg/L	22.1
41464-43-1	PCB-56		57.6	55.1	pg/L	22.1
70424-67-8	PCB-57	U	22.1	22.1	pg/L	22.1
41464-49-7	PCB-58	U	22.1	22.1	pg/L	22.1
PCB-59/62/75	PCB-59/62/75	CU	66.2	66.2	pg/L	66.2
33025-41-1	PCB-60		33.1	29.6	pg/L	22.1
PCB-61-76	PCB-61/76/70/74	C	247	245	pg/L	88.3
74472-34-7	PCB-63	U	22.1	22.1	pg/L	22.1
52663-58-8	PCB-64		45.7	43	pg/L	22.1
32598-10-0	PCB-66		77.4	72	pg/L	22.1
73575-53-8	PCB-67	U	22.1	22.1	pg/L	22.1
73575-52-7	PCB-68	U	22.1	22.1	pg/L	22.1
41464-42-0	PCB-72	U	22.1	22.1	pg/L	22.1
74338-23-1	PCB-73	U	22.1	22.1	pg/L	22.1
32598-13-3	PCB-77		61.9	59.4	pg/L	22.1
70362-49-1	PCB-78	U	22.1	22.1	pg/L	22.1
41464-48-6	PCB-79	U	22.1	22.1	pg/L	22.1
33284-52-5	PCB-80	U	22.1	22.1	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32212  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 07:10  
**Data File:** c09oct13d\_2-4  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:38  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	22.1	22.1	pg/L	22.1
52663-62-4	PCB-82		91.8	87	pg/L	22.1
60145-20-2	PCB-83		131	126	pg/L	22.1
52663-60-2	PCB-84		308	303	pg/L	22.1
PCB-85-117	PCB-117/116/85	C	176	172	pg/L	66.2
PCB-86-125	PCB-86/87/97/109/119/125	C	1200	1200	pg/L	132
PCB-88/91	PCB-88/91	C	157	152	pg/L	44.1
73575-57-2	PCB-89	U	22.1	22.1	pg/L	22.1
PCB-90-113	PCB-113/90/101	C	6520	6520	pg/L	66.2
52663-61-3	PCB-92		713	709	pg/L	22.1
PCB-93/100	PCB-93/100	CU	44.1	44.1	pg/L	44.1
73575-55-0	PCB-94	U	22.1	22.1	pg/L	22.1
38379-99-6	PCB-95		3590	3580	pg/L	22.1
73575-54-9	PCB-96	U	22.1	22.1	pg/L	22.1
PCB-98/102	PCB-102/98	CU	44.1	44.1	pg/L	44.1
38380-01-7	PCB-99		524	518	pg/L	22.1
60145-21-3	PCB-103	U	22.1	22.1	pg/L	22.1
56558-16-8	PCB-104	U	22.1	22.1	pg/L	22.1
32598-14-4	PCB-105		348	343	pg/L	22.1
70424-69-0	PCB-106	U	22.1	22.1	pg/L	22.1
70424-68-9	PCB-107		155	151	pg/L	22.1
PCB-108/124	PCB-108/124	C	89.8	85.2	pg/L	44.1
PCB-110/115	PCB-110/115	C	4950	4950	pg/L	44.1
39635-32-0	PCB-111	U	22.1	22.1	pg/L	22.1
74472-36-9	PCB-112	U	22.1	22.1	pg/L	22.1
74472-37-0	PCB-114	U	22.1	22.1	pg/L	22.1
31508-00-6	PCB-118		1780	1770	pg/L	22.1
68194-12-7	PCB-120		25.5	22.5	pg/L	22.1
56558-18-0	PCB-121	U	22.1	22.1	pg/L	22.1
76842-07-4	PCB-122	U	22.1	22.1	pg/L	22.1
65510-44-3	PCB-123	U	22.1	22.1	pg/L	22.1
57465-28-8	PCB-126		110	104	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32212  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 07:10  
**Data File:** c09oct13d\_2-4  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:38  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	22.1	22.1	pg/L	22.1
PCB-128/166	PCB-128/166	C	2620	2620	pg/L	44.1
PCB-129-163	PCB-138/163/129	C	46300	46300	pg/L	66.2
52663-66-8	PCB-130		1390	1380	pg/L	22.1
61798-70-7	PCB-131		188	184	pg/L	22.1
38380-05-1	PCB-132		13200	13200	pg/L	22.1
35694-04-3	PCB-133		426	423	pg/L	22.1
52704-70-8	PCB-134		1200	1190	pg/L	22.1
PCB-135/151	PCB-151/135	C	17600	17600	pg/L	44.1
38411-22-2	PCB-136		3550	3550	pg/L	22.1
35694-06-5	PCB-137		259	254	pg/L	22.1
PCB-139/140	PCB-139/140	C	129	125	pg/L	44.1
52712-04-6	PCB-141		12700	12700	pg/L	22.1
41411-61-4	PCB-142	U	22.1	22.1	pg/L	22.1
68194-15-0	PCB-143	U	22.1	22.1	pg/L	22.1
68194-14-9	PCB-144		1740	1740	pg/L	22.1
74472-40-5	PCB-145	U	22.1	22.1	pg/L	22.1
51908-16-8	PCB-146		6960	6960	pg/L	22.1
PCB-147/149	PCB-147/149	C	41000	41000	pg/L	44.1
74472-41-6	PCB-148	U	22.1	22.1	pg/L	22.1
68194-08-1	PCB-150		28.9	26	pg/L	22.1
68194-09-2	PCB-152	U	22.1	22.1	pg/L	22.1
PCB-153/168	PCB-153/168	C	45100	45100	pg/L	44.1
60145-22-4	PCB-154		155	153	pg/L	22.1
33979-03-2	PCB-155	U	22.1	22.1	pg/L	22.1
PCB-156/157	PCB-156/157	C	2270	2270	pg/L	44.1
74472-42-7	PCB-158		3850	3850	pg/L	22.1
39635-35-3	PCB-159	U	22.1	22.1	pg/L	22.1
41411-62-5	PCB-160	U	22.1	22.1	pg/L	22.1
74472-43-8	PCB-161	U	22.1	22.1	pg/L	22.1
39635-34-2	PCB-162	U	22.1	22.1	pg/L	22.1
74472-45-0	PCB-164		4090	4090	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32212  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 07:10  
**Data File:** c09oct13d\_2-4  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:38  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	22.1	22.1	pg/L	22.1
52663-72-6	PCB-167		1340	1340	pg/L	22.1
32774-16-6	PCB-169	U	22.1	22.1	pg/L	22.1
35065-30-6	PCB-170		24500	24500	pg/L	22.1
PCB-171/173	PCB-173/171	C	7220	7210	pg/L	44.1
52663-74-8	PCB-172		4430	4430	pg/L	22.1
38411-25-5	PCB-174		32700	32700	pg/L	22.1
40186-70-7	PCB-175		864	861	pg/L	22.1
52663-65-7	PCB-176		2360	2360	pg/L	22.1
52663-70-4	PCB-177		14800	14800	pg/L	22.1
52663-67-9	PCB-178		4720	4720	pg/L	22.1
52663-64-6	PCB-179		8200	8200	pg/L	22.1
PCB-180/193	PCB-193/180	CU	44.1	44.1	pg/L	44.1
74472-47-2	PCB-181		59.3	55.4	pg/L	22.1
60145-23-5	PCB-182		53.8	51	pg/L	22.1
PCB-183/185	PCB-183/185	C	17200	17200	pg/L	44.1
74472-48-3	PCB-184	U	22.1	22.1	pg/L	22.1
74472-49-4	PCB-186	U	22.1	22.1	pg/L	22.1
52663-68-0	PCB-187		38200	38200	pg/L	22.1
74487-85-7	PCB-188	U	22.1	22.1	pg/L	22.1
39635-31-9	PCB-189		866	863	pg/L	22.1
41411-64-7	PCB-190		5080	5080	pg/L	22.1
74472-50-7	PCB-191		925	922	pg/L	22.1
74472-51-8	PCB-192	U	22.1	22.1	pg/L	22.1
35694-08-7	PCB-194		12500	12400	pg/L	22.1
52663-78-2	PCB-195		5270	5270	pg/L	22.1
42740-50-1	PCB-196		5990	5990	pg/L	22.1
PCB-197/200	PCB-197/200	C	2030	2020	pg/L	44.1
PCB-198/199	PCB-198/199	C	15000	15000	pg/L	44.1
40186-71-8	PCB-201		1240	1240	pg/L	22.1
2136-99-4	PCB-202		2130	2130	pg/L	22.1
52663-76-0	PCB-203		9890	9890	pg/L	22.1

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2104  
**Lab Sample ID:** 5365002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32212  
**Batch ID:** 24507  
**Run Date:** 10/10/2013 07:10  
**Data File:** c09oct13d\_2-4  
**Prep Batch:** 24505  
**Prep Date:** 06-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:38  
**Date Received:** 09/25/2013 10:00  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 906.1 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	22.1	22.1	pg/L	22.1
74472-53-0	PCB-205		666	663	pg/L	22.1
40186-72-9	PCB-206		2360	2360	pg/L	22.1
52663-79-3	PCB-207		245	243	pg/L	22.1
52663-77-1	PCB-208		374	371	pg/L	22.1
2051-24-3	PCB-209		37.8	34.6	pg/L	22.1
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		60.9	55.9	pg/L	
26914-33-0	Total Tetra PCBs		905	877	pg/L	
25429-29-2	Total Penta PCBs		20900	20800	pg/L	
26601-64-9	Total Hexa PCBs		206000	206000	pg/L	
28655-71-2	Total Hepta PCBs		162000	162000	pg/L	
55722-26-4	Total Octa PCBs		54600	54600	pg/L	
53742-07-7	Total Nona PCBs		2980	2970	pg/L	
DECACB(Tot)	Total Deca PCB		37.8	34.6	pg/L	
1336-36-3	Total PCB Congeners		448000	447000	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		782	2210	pg/L	35.4	(15%-150%)
13C-3-MoCB		938	2210	pg/L	42.5	(15%-150%)
13C-4-DiCB		990	2210	pg/L	44.8	(25%-150%)
13C-15-DiCB		1160	2210	pg/L	52.3	(25%-150%)
13C-19-TrCB		1280	2210	pg/L	58.1	(25%-150%)
13C-37-TrCB		1260	2210	pg/L	57.0	(25%-150%)
13C-54-TeCB		1010	2210	pg/L	45.8	(25%-150%)
13C-77-TeCB		1440	2210	pg/L	65.4	(25%-150%)
13C-81-TeCB		1480	2210	pg/L	67.3	(25%-150%)
13C-104-PeCB		975	2210	pg/L	44.2	(25%-150%)
13C-105-PeCB		1160	2210	pg/L	52.6	(25%-150%)
13C-114-PeCB		1120	2210	pg/L	50.8	(25%-150%)
13C-118-PeCB		1190	2210	pg/L	53.9	(25%-150%)
13C-123-PeCB		1240	2210	pg/L	56.3	(25%-150%)
13C-126-PeCB		1220	2210	pg/L	55.3	(25%-150%)
13C-155-HxCB		1220	2210	pg/L	55.1	(25%-150%)
13C-156-HxCB	C	1990	4410	pg/L	45.1	(25%-150%)
13C-167-HxCB		987	2210	pg/L	44.7	(25%-150%)
13C-169-HxCB		1150	2210	pg/L	51.9	(25%-150%)
13C-188-HpCB		1330	2210	pg/L	60.3	(25%-150%)
13C-189-HpCB		1010	2210	pg/L	45.8	(25%-150%)
13C-202-OcCB		1470	2210	pg/L	66.4	(25%-150%)
13C-205-OcCB		1580	2210	pg/L	71.7	(25%-150%)

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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<b>SDG Number:</b> 2013-2104	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5365002	<b>Date Collected:</b> 09/13/2013 07:38	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/25/2013 10:00	
<b>Client ID:</b> WT_IPC-13-32212		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24507	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/10/2013 07:10	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c09oct13d_2-4		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24505	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 06-OCT-13	<b>Aliquot:</b> 906.1 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			1910	2210	pg/L	86.5      (25%-150%)
13C-208-NoCB			1850	2210	pg/L	83.8      (25%-150%)
13C-209-DeCB			2090	2210	pg/L	94.5      (25%-150%)
13C-28-TrCB			1580	2210	pg/L	71.7      (30%-135%)
13C-111-PeCB			1860	2210	pg/L	84.3      (30%-135%)
13C-178-HpCB			1760	2210	pg/L	79.7      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	1.11	0.599	2.31	
3-Chlorobiphenyl (2)	pg/L	1.01	0.498	2.01	
4-Chlorobiphenyl (3)	pg/L	1.03	0.516	2.06	
2,2'-Dichlorobiphenyl (4)	pg/L	5.7	4.03	13.8	
2,3-Dichlorobiphenyl (5)	pg/L	6.26	5.08	16.4	
2,3'-Dichlorobiphenyl (6)	pg/L	4.03	3.34	10.7	
2,4-Dichlorobiphenyl (7)	pg/L	5.67	4.66	15	
2,4'-Dichlorobiphenyl (8)	pg/L	3.86	3.18	10.2	
2,5-Dichlorobiphenyl (9)	pg/L	3.98	3.35	10.7	
2,6-Dichlorobiphenyl (10)	pg/L	3.65	2.66	8.98	
3,3'-Dichlorobiphenyl (11)	pg/L	4.75	3.07	10.9	
3,4-Dichlorobiphenyl (12)	pg/L	5.62	3.73	13.1	
3,5-Dichlorobiphenyl (14)	pg/L	4.14	3.24	10.6	
4,4'-Dichlorobiphenyl (15)	pg/L	4.83	3.86	12.5	
2,2',3-Trichlorobiphenyl (16)	pg/L	1.76	0.818	3.4	
2,2',4-Trichlorobiphenyl (17)	pg/L	1.31	0.586	2.48	
2,2',5-Trichlorobiphenyl (18)	pg/L	1.23	0.485	2.2	
2,2',6-Trichlorobiphenyl (19)	pg/L	1.24	0.55	2.34	
2,3,3'-Trichlorobiphenyl (20)	pg/L	1.74	2.04	5.83	
2,3,4-Trichlorobiphenyl (21)	pg/L	1.09	0.312	1.72	
2,3,4'-Trichlorobiphenyl (22)	pg/L	1.36	0.511	2.38	
2,3,5-Trichlorobiphenyl (23)	pg/L	1.35	0.548	2.44	
2,3,6-Trichlorobiphenyl (24)	pg/L	1.32	0.575	2.47	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.94	0.367	1.67	
2,3',5-Trichlorobiphenyl (26)	pg/L	1.01	0.327	1.66	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.896	0.405	1.71	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.871	0.345	1.56	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.848	0.372	1.59	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.915	0.377	1.67	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.966	0.303	1.57	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.889	0.291	1.47	
3,4,4'-Trichlorobiphenyl (37)	pg/L	1.41	1.06	3.53	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.956	0.306	1.57	
3,4',5-Trichlorobiphenyl (39)	pg/L	1.25	0.414	2.08	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	1.82	0.959	3.74	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	1.87	1.09	4.06	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	1.88	1.04	3.95	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	2.17	1.27	4.71	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	1.64	0.819	3.28	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	1.68	0.474	2.63	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	1.28	0.616	2.52	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	2.23	1.24	4.71	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	1.56	0.709	2.98	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	1.28	0.508	2.29	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	1.6	0.866	3.33	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.664	0.275	1.21	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	1.57	0.686	2.94	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	1.36	0.54	2.44	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	1.06	0.493	2.04	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	1.54	0.713	2.96	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	1.44	0.664	2.77	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	1.67	0.914	3.49	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	1.41	0.431	2.28	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	1.03	0.472	1.98	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	1.34	0.695	2.73	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	2.07	1.63	5.34	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	1.03	0.468	1.97	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	1.41	0.621	2.65	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	1.01	0.481	1.97	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	1.69	0.978	3.64	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	1.32	0.58	2.48	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	1.15	0.465	2.08	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	1	0.407	1.82	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	1.04	0.458	1.96	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	1.27	0.563	2.4	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	2.3	1.23	4.77	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	2.36	1.32	4.99	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	2.37	1.35	5.07	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	2.01	0.954	3.92	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	2.19	0.87	3.93	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	2.56	1.17	4.89	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	2.14	1.22	4.59	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	2.12	0.951	4.03	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	2.05	1.16	4.37	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	2.39	1.37	5.14	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	3.06	1.79	6.64	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	2.02	1.05	4.12	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	1.12	0.603	2.32	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	2.45	1.15	4.74	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	2.79	1.63	6.06	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	1.83	1.07	3.97	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	1.03	0.486	2	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	2.17	1.36	4.89	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	1.79	1.1	4	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	1.8	1.1	4.01	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	2.09	1.25	4.58	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	2.4	1.06	4.52	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	2.14	1.16	4.47	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	1.54	0.833	3.21	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	2.21	1.35	4.91	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	2.1	1.17	4.43	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	1.46	0.784	3.02	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	2.15	1.24	4.63	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	1.96	1.19	4.34	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	1.98	1.21	4.4	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	2.45	1.52	5.49	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	1.88	1.1	4.08	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	1.64	0.771	3.18	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	1.68	0.76	3.2	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	1.84	0.903	3.64	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	2.02	1.05	4.13	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	2.51	1.29	5.09	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	1.71	0.868	3.45	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	2.13	1.17	4.48	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	1.64	0.719	3.08	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	1	0.56	2.13	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	2.5	1.28	5.07	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	1.87	0.953	3.78	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	1.69	0.826	3.35	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	1.78	0.9	3.58	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	1.6	0.799	3.2	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	1.31	0.681	2.67	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	1.46	0.807	3.08	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	1.61	0.84	3.29	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	1.9	0.947	3.8	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	1.28	0.653	2.59	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	1.41	0.784	2.98	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.987	0.559	2.1	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	1.68	0.688	3.06	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	1.2	0.621	2.44	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.887	0.409	1.71	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	1.77	0.803	3.38	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	1.25	0.605	2.45	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	1.24	0.589	2.42	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	1.93	0.958	3.85	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	1.27	0.64	2.55	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	1.71	0.811	3.33	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	1.31	0.632	2.57	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	1.96	0.998	3.95	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	1.41	0.672	2.75	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	1.53	0.674	2.88	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	1.53	0.631	2.8	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	1.66	0.591	2.85	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	1.54	0.654	2.85	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	1.5	0.66	2.82	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	1.39	0.664	2.71	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	1.07	0.536	2.14	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	1.55	0.673	2.9	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	1.45	0.702	2.86	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	1.05	0.535	2.12	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	1.89	1.55	5	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	2.04	0.898	3.84	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	1.45	0.683	2.81	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	1.75	0.648	3.04	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	1.42	0.719	2.86	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	1.55	0.771	3.09	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	1.85	0.868	3.58	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	1.13	0.541	2.21	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	1.53	0.668	2.86	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	1.19	0.489	2.16	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	1.15	0.491	2.13	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	1.73	0.736	3.2	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	1.43	0.615	2.66	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	1.5	0.667	2.83	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	1.37	0.666	2.7	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	1.3	0.538	2.38	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	1.73	0.697	3.13	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	1.05	0.529	2.1	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	1.19	0.567	2.32	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	1.81	0.876	3.56	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	1.06	0.534	2.13	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	1.25	0.564	2.37	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	1.92	0.787	3.49	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	1.45	0.6	2.64	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	1.63	0.653	2.93	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	1.51	0.831	3.17	

\* = PQL adjusted to the MBCV.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32481  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 04:26  
**Data File:** c09oct13d\_8-5  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:30  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 893.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	22.4	22.4	pg/L	22.4
2051-61-8	PCB-2	U	22.4	22.4	pg/L	22.4
2051-62-9	PCB-3	U	22.4	22.4	pg/L	22.4
13029-08-8	PCB-4	U	22.4	22.4	pg/L	22.4
16605-91-7	PCB-5	U	22.4	22.4	pg/L	22.4
25569-80-6	PCB-6	U	22.4	22.4	pg/L	22.4
33284-50-3	PCB-7	U	22.4	22.4	pg/L	22.4
34883-43-7	PCB-8	U	22.4	22.4	pg/L	22.4
34883-39-1	PCB-9	U	22.4	22.4	pg/L	22.4
33146-45-1	PCB-10	U	22.4	22.4	pg/L	22.4
2050-67-1	PCB-11	U	112	112	pg/L	112
PCB-12/13	PCB-13/12	CU	44.8	44.8	pg/L	44.8
34883-41-5	PCB-14	U	22.4	22.4	pg/L	22.4
2050-68-2	PCB-15	U	22.4	22.4	pg/L	22.4
38444-78-9	PCB-16		34.5	31.1	pg/L	22.4
37680-66-3	PCB-17		47.6	45.2	pg/L	22.4
PCB-18/30	PCB-18/30	C	97.9	95.7	pg/L	44.8
38444-73-4	PCB-19	U	22.4	22.4	pg/L	22.4
PCB-20/28	PCB-20/28	C	269	263	pg/L	44.8
PCB-21/33	PCB-21/33	CU	44.8	44.8	pg/L	44.8
38444-85-8	PCB-22		129	127	pg/L	22.4
55720-44-0	PCB-23	U	22.4	22.4	pg/L	22.4
55702-45-9	PCB-24	U	22.4	22.4	pg/L	22.4
55712-37-3	PCB-25	U	22.4	22.4	pg/L	22.4
PCB-26/29	PCB-26/29	CU	44.8	44.8	pg/L	44.8
38444-76-7	PCB-27	U	22.4	22.4	pg/L	22.4
16606-02-3	PCB-31		160	158	pg/L	22.4
38444-77-8	PCB-32		43.9	42.3	pg/L	22.4
37680-68-5	PCB-34	U	22.4	22.4	pg/L	22.4
37680-69-6	PCB-35	U	22.4	22.4	pg/L	22.4
38444-87-0	PCB-36	U	22.4	22.4	pg/L	22.4
38444-90-5	PCB-37		157	154	pg/L	22.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32481  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 04:26  
**Data File:** c09oct13d\_8-5  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:30  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 893.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	22.4	22.4	pg/L	22.4
38444-88-1	PCB-39	U	22.4	22.4	pg/L	22.4
PCB-40/71	PCB-40/71	C	286	282	pg/L	44.8
52663-59-9	PCB-41		39.7	35.7	pg/L	22.4
36559-22-5	PCB-42		195	191	pg/L	22.4
70362-46-8	PCB-43	U	22.4	22.4	pg/L	22.4
PCB-44/47/65	PCB-44/65/47	C	755	752	pg/L	67.1
PCB-45/51	PCB-45/51	C	99.0	96.4	pg/L	44.8
41464-47-5	PCB-46		34.7	32.2	pg/L	22.4
70362-47-9	PCB-48		112	108	pg/L	22.4
PCB-49/69	PCB-69/49	C	444	441	pg/L	44.8
PCB-50/53	PCB-50/53	C	79.4	77.1	pg/L	44.8
35693-99-3	PCB-52		984	981	pg/L	22.4
15968-05-5	PCB-54	U	22.4	22.4	pg/L	22.4
74338-24-2	PCB-55	U	22.4	22.4	pg/L	22.4
41464-43-1	PCB-56		423	421	pg/L	22.4
70424-67-8	PCB-57	U	22.4	22.4	pg/L	22.4
41464-49-7	PCB-58	U	22.4	22.4	pg/L	22.4
PCB-59/62/75	PCB-59/62/75	CU	67.1	67.1	pg/L	67.1
33025-41-1	PCB-60		267	263	pg/L	22.4
PCB-61-76	PCB-61/76/70/74	C	1620	1610	pg/L	89.5
74472-34-7	PCB-63		24.7	22.7	pg/L	22.4
52663-58-8	PCB-64		397	394	pg/L	22.4
32598-10-0	PCB-66		646	641	pg/L	22.4
73575-53-8	PCB-67	U	22.4	22.4	pg/L	22.4
73575-52-7	PCB-68	U	22.4	22.4	pg/L	22.4
41464-42-0	PCB-72	U	22.4	22.4	pg/L	22.4
74338-23-1	PCB-73	U	22.4	22.4	pg/L	22.4
32598-13-3	PCB-77		242	240	pg/L	22.4
70362-49-1	PCB-78	U	22.4	22.4	pg/L	22.4
41464-48-6	PCB-79		28.6	26.8	pg/L	22.4
33284-52-5	PCB-80	U	22.4	22.4	pg/L	22.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32481  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 04:26  
**Data File:** c09oct13d\_8-5  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:30  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 893.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	22.4	22.4	pg/L	22.4
52663-62-4	PCB-82		436	431	pg/L	22.4
60145-20-2	PCB-83		154	149	pg/L	22.4
52663-60-2	PCB-84		868	863	pg/L	22.4
PCB-85-117	PCB-117/116/85	C	701	697	pg/L	67.1
PCB-86-125	PCB-86/87/97/109/119/125	C	2430	2430	pg/L	134
PCB-88/91	PCB-88/91	C	400	395	pg/L	44.8
73575-57-2	PCB-89	U	22.4	22.4	pg/L	22.4
PCB-90-113	PCB-113/90/101	C	3120	3110	pg/L	67.1
52663-61-3	PCB-92		490	486	pg/L	22.4
PCB-93/100	PCB-93/100	CU	44.8	44.8	pg/L	44.8
73575-55-0	PCB-94	U	22.4	22.4	pg/L	22.4
38379-99-6	PCB-95		1880	1870	pg/L	22.4
73575-54-9	PCB-96	U	22.4	22.4	pg/L	22.4
PCB-98/102	PCB-102/98	C	71.4	66.6	pg/L	44.8
38380-01-7	PCB-99		1530	1520	pg/L	22.4
60145-21-3	PCB-103	U	22.4	22.4	pg/L	22.4
56558-16-8	PCB-104	U	22.4	22.4	pg/L	22.4
32598-14-4	PCB-105		1740	1730	pg/L	22.4
70424-69-0	PCB-106	U	22.4	22.4	pg/L	22.4
70424-68-9	PCB-107		309	305	pg/L	22.4
PCB-108/124	PCB-108/124	C	179	174	pg/L	44.8
PCB-110/115	PCB-110/115	C	5780	5770	pg/L	44.8
39635-32-0	PCB-111	U	22.4	22.4	pg/L	22.4
74472-36-9	PCB-112	U	22.4	22.4	pg/L	22.4
74472-37-0	PCB-114		68.1	63.2	pg/L	22.4
31508-00-6	PCB-118		3270	3260	pg/L	22.4
68194-12-7	PCB-120	U	22.4	22.4	pg/L	22.4
56558-18-0	PCB-121	U	22.4	22.4	pg/L	22.4
76842-07-4	PCB-122		50.2	45.9	pg/L	22.4
65510-44-3	PCB-123		68.1	63.7	pg/L	22.4
57465-28-8	PCB-126		70.8	65.3	pg/L	22.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32481  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 04:26  
**Data File:** c09oct13d\_8-5  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:30  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 893.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	22.4	22.4	pg/L	22.4
PCB-128/166	PCB-128/166	C	1410	1410	pg/L	44.8
PCB-129-163	PCB-138/163/129	C	8160	8150	pg/L	67.1
52663-66-8	PCB-130		417	413	pg/L	22.4
61798-70-7	PCB-131		87.4	83.3	pg/L	22.4
38380-05-1	PCB-132		2760	2750	pg/L	22.4
35694-04-3	PCB-133		63.9	60.4	pg/L	22.4
52704-70-8	PCB-134		286	282	pg/L	22.4
PCB-135/151	PCB-151/135	C	1540	1540	pg/L	44.8
38411-22-2	PCB-136		508	506	pg/L	22.4
35694-06-5	PCB-137		398	393	pg/L	22.4
PCB-139/140	PCB-139/140	C	109	106	pg/L	44.8
52712-04-6	PCB-141		1250	1250	pg/L	22.4
41411-61-4	PCB-142	U	22.4	22.4	pg/L	22.4
68194-15-0	PCB-143	U	22.4	22.4	pg/L	22.4
68194-14-9	PCB-144		176	173	pg/L	22.4
74472-40-5	PCB-145	U	22.4	22.4	pg/L	22.4
51908-16-8	PCB-146		838	835	pg/L	22.4
PCB-147/149	PCB-147/149	C	5060	5060	pg/L	44.8
74472-41-6	PCB-148	U	22.4	22.4	pg/L	22.4
68194-08-1	PCB-150	U	22.4	22.4	pg/L	22.4
68194-09-2	PCB-152	U	22.4	22.4	pg/L	22.4
PCB-153/168	PCB-153/168	C	4950	4950	pg/L	44.8
60145-22-4	PCB-154		44.3	41.8	pg/L	22.4
33979-03-2	PCB-155	U	22.4	22.4	pg/L	22.4
PCB-156/157	PCB-156/157	C	852	849	pg/L	44.8
74472-42-7	PCB-158		809	806	pg/L	22.4
39635-35-3	PCB-159	U	22.4	22.4	pg/L	22.4
41411-62-5	PCB-160	U	22.4	22.4	pg/L	22.4
74472-43-8	PCB-161	U	22.4	22.4	pg/L	22.4
39635-34-2	PCB-162	U	22.4	22.4	pg/L	22.4
74472-45-0	PCB-164		603	601	pg/L	22.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
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**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32481  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 04:26  
**Data File:** c09oct13d\_8-5  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:30  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 893.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	22.4	22.4	pg/L	22.4
52663-72-6	PCB-167		321	318	pg/L	22.4
32774-16-6	PCB-169	U	22.4	22.4	pg/L	22.4
35065-30-6	PCB-170		1260	1260	pg/L	22.4
PCB-171/173	PCB-173/171	C	410	407	pg/L	44.8
52663-74-8	PCB-172		208	206	pg/L	22.4
38411-25-5	PCB-174		1550	1540	pg/L	22.4
40186-70-7	PCB-175		50.0	47.3	pg/L	22.4
52663-65-7	PCB-176		138	136	pg/L	22.4
52663-70-4	PCB-177		732	729	pg/L	22.4
52663-67-9	PCB-178		256	253	pg/L	22.4
52663-64-6	PCB-179		470	468	pg/L	22.4
PCB-180/193	PCB-193/180	CU	44.8	44.8	pg/L	44.8
74472-47-2	PCB-181	U	22.4	22.4	pg/L	22.4
60145-23-5	PCB-182	U	22.4	22.4	pg/L	22.4
PCB-183/185	PCB-183/185	C	793	790	pg/L	44.8
74472-48-3	PCB-184	U	22.4	22.4	pg/L	22.4
74472-49-4	PCB-186	U	22.4	22.4	pg/L	22.4
52663-68-0	PCB-187		1900	1900	pg/L	22.4
74487-85-7	PCB-188	U	22.4	22.4	pg/L	22.4
39635-31-9	PCB-189		70.4	67.5	pg/L	22.4
41411-64-7	PCB-190		248	246	pg/L	22.4
74472-50-7	PCB-191		53.1	51	pg/L	22.4
74472-51-8	PCB-192	U	22.4	22.4	pg/L	22.4
35694-08-7	PCB-194		456	453	pg/L	22.4
52663-78-2	PCB-195		200	197	pg/L	22.4
42740-50-1	PCB-196		249	246	pg/L	22.4
PCB-197/200	PCB-197/200	C	102	99.3	pg/L	44.8
PCB-198/199	PCB-198/199	C	640	637	pg/L	44.8
40186-71-8	PCB-201		67.7	65.6	pg/L	22.4
2136-99-4	PCB-202		116	113	pg/L	22.4
52663-76-0	PCB-203		438	435	pg/L	22.4

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383001  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32481  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 04:26  
**Data File:** c09oct13d\_8-5  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:30  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 893.7 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	22.4	22.4	pg/L	22.4
74472-53-0	PCB-205		31.4	29	pg/L	22.4
40186-72-9	PCB-206		140	136	pg/L	22.4
52663-79-3	PCB-207	U	22.4	22.4	pg/L	22.4
52663-77-1	PCB-208		36.3	33.4	pg/L	22.4
2051-24-3	PCB-209	U	22.4	22.4	pg/L	22.4
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		939	916	pg/L	
26914-33-0	Total Tetra PCBs		6670	6620	pg/L	
25429-29-2	Total Penta PCBs		23600	23500	pg/L	
26601-64-9	Total Hexa PCBs		30600	30600	pg/L	
28655-71-2	Total Hepta PCBs		8140	8100	pg/L	
55722-26-4	Total Octa PCBs		2300	2270	pg/L	
53742-07-7	Total Nona PCBs		176	170	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		72400	72100	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1170	2240	pg/L	52.2	(15%-150%)
13C-3-MoCB		1390	2240	pg/L	62.0	(15%-150%)
13C-4-DiCB		1460	2240	pg/L	65.2	(25%-150%)
13C-15-DiCB		1600	2240	pg/L	71.6	(25%-150%)
13C-19-TrCB		1690	2240	pg/L	75.5	(25%-150%)
13C-37-TrCB		1470	2240	pg/L	65.5	(25%-150%)
13C-54-TeCB		1100	2240	pg/L	49.0	(25%-150%)
13C-77-TeCB		1520	2240	pg/L	67.8	(25%-150%)
13C-81-TeCB		1540	2240	pg/L	68.6	(25%-150%)
13C-104-PeCB		1490	2240	pg/L	66.4	(25%-150%)
13C-105-PeCB		1250	2240	pg/L	55.8	(25%-150%)
13C-114-PeCB		1190	2240	pg/L	53.4	(25%-150%)
13C-118-PeCB		1290	2240	pg/L	57.8	(25%-150%)
13C-123-PeCB		1360	2240	pg/L	61.0	(25%-150%)
13C-126-PeCB		1230	2240	pg/L	54.8	(25%-150%)
13C-155-HxCB		1870	2240	pg/L	83.5	(25%-150%)
13C-156-HxCB	C	2430	4480	pg/L	54.3	(25%-150%)
13C-167-HxCB		1220	2240	pg/L	54.5	(25%-150%)
13C-169-HxCB		1330	2240	pg/L	59.4	(25%-150%)
13C-188-HpCB		1900	2240	pg/L	84.9	(25%-150%)
13C-189-HpCB		1240	2240	pg/L	55.5	(25%-150%)
13C-202-OcCB		2060	2240	pg/L	91.9	(25%-150%)
13C-205-OcCB		2050	2240	pg/L	91.8	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-2136	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5383001	<b>Date Collected:</b> 09/13/2013 07:30	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/26/2013 09:30	
<b>Client ID:</b> WT_IPC-13-32481		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24585	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/13/2013 04:26	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c09oct13d_8-5		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24583	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 09-OCT-13	<b>Aliquot:</b> 893.7 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2290	2240	pg/L	103      (25%-150%)
13C-208-NoCB			2350	2240	pg/L	105      (25%-150%)
13C-209-DeCB			2260	2240	pg/L	101      (25%-150%)
13C-28-TrCB			1760	2240	pg/L	78.8      (30%-135%)
13C-111-PeCB			1850	2240	pg/L	82.7      (30%-135%)
13C-178-HpCB			1800	2240	pg/L	80.3      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32460  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 05:29  
**Data File:** c09oct13d\_8-6  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/15/2013 17:11  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	21.6	21.6	pg/L	21.6
2051-61-8	PCB-2	U	21.6	21.6	pg/L	21.6
2051-62-9	PCB-3	U	21.6	21.6	pg/L	21.6
13029-08-8	PCB-4	U	21.6	21.6	pg/L	21.6
16605-91-7	PCB-5	U	21.6	21.6	pg/L	21.6
25569-80-6	PCB-6	U	21.6	21.6	pg/L	21.6
33284-50-3	PCB-7	U	21.6	21.6	pg/L	21.6
34883-43-7	PCB-8	U	21.6	21.6	pg/L	21.6
34883-39-1	PCB-9	U	21.6	21.6	pg/L	21.6
33146-45-1	PCB-10	U	21.6	21.6	pg/L	21.6
2050-67-1	PCB-11	U	108	108	pg/L	108
PCB-12/13	PCB-13/12	CU	43.1	43.1	pg/L	43.1
34883-41-5	PCB-14	U	21.6	21.6	pg/L	21.6
2050-68-2	PCB-15	U	21.6	21.6	pg/L	21.6
38444-78-9	PCB-16	U	21.6	21.6	pg/L	21.6
37680-66-3	PCB-17	U	21.6	21.6	pg/L	21.6
PCB-18/30	PCB-18/30	CU	43.1	43.1	pg/L	43.1
38444-73-4	PCB-19	U	21.6	21.6	pg/L	21.6
PCB-20/28	PCB-20/28	CU	43.1	43.1	pg/L	43.1
PCB-21/33	PCB-21/33	CU	43.1	43.1	pg/L	43.1
38444-85-8	PCB-22	U	21.6	21.6	pg/L	21.6
55720-44-0	PCB-23	U	21.6	21.6	pg/L	21.6
55702-45-9	PCB-24	U	21.6	21.6	pg/L	21.6
55712-37-3	PCB-25	U	21.6	21.6	pg/L	21.6
PCB-26/29	PCB-26/29	CU	43.1	43.1	pg/L	43.1
38444-76-7	PCB-27	U	21.6	21.6	pg/L	21.6
16606-02-3	PCB-31	U	21.6	21.6	pg/L	21.6
38444-77-8	PCB-32	U	21.6	21.6	pg/L	21.6
37680-68-5	PCB-34	U	21.6	21.6	pg/L	21.6
37680-69-6	PCB-35	U	21.6	21.6	pg/L	21.6
38444-87-0	PCB-36	U	21.6	21.6	pg/L	21.6
38444-90-5	PCB-37	U	21.6	21.6	pg/L	21.6

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32460  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 05:29  
**Data File:** c09oct13d\_8-6  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/15/2013 17:11  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21.6	21.6	pg/L	21.6
38444-88-1	PCB-39	U	21.6	21.6	pg/L	21.6
PCB-40/71	PCB-40/71	CU	43.1	43.1	pg/L	43.1
52663-59-9	PCB-41	U	21.6	21.6	pg/L	21.6
36559-22-5	PCB-42	U	21.6	21.6	pg/L	21.6
70362-46-8	PCB-43	U	21.6	21.6	pg/L	21.6
PCB-44/47/65	PCB-44/65/47	C	96.0	92.7	pg/L	64.7
PCB-45/51	PCB-45/51	CU	43.1	43.1	pg/L	43.1
41464-47-5	PCB-46	U	21.6	21.6	pg/L	21.6
70362-47-9	PCB-48	U	21.6	21.6	pg/L	21.6
PCB-49/69	PCB-69/49	CU	43.3	43.1	pg/L	43.1
PCB-50/53	PCB-50/53	CU	43.1	43.1	pg/L	43.1
35693-99-3	PCB-52		184	180	pg/L	21.6
15968-05-5	PCB-54	U	21.6	21.6	pg/L	21.6
74338-24-2	PCB-55	U	21.6	21.6	pg/L	21.6
41464-43-1	PCB-56		35.8	33.4	pg/L	21.6
70424-67-8	PCB-57	U	21.6	21.6	pg/L	21.6
41464-49-7	PCB-58	U	21.6	21.6	pg/L	21.6
PCB-59/62/75	PCB-59/62/75	CU	64.7	64.7	pg/L	64.7
33025-41-1	PCB-60	U	21.6	21.6	pg/L	21.6
PCB-61-76	PCB-61/76/70/74	C	210	208	pg/L	86.2
74472-34-7	PCB-63	U	21.6	21.6	pg/L	21.6
52663-58-8	PCB-64		24.3	21.6	pg/L	21.6
32598-10-0	PCB-66		38.8	33.4	pg/L	21.6
73575-53-8	PCB-67	U	21.6	21.6	pg/L	21.6
73575-52-7	PCB-68	U	21.6	21.6	pg/L	21.6
41464-42-0	PCB-72	U	21.6	21.6	pg/L	21.6
74338-23-1	PCB-73	U	21.6	21.6	pg/L	21.6
32598-13-3	PCB-77		26.8	24.3	pg/L	21.6
70362-49-1	PCB-78	U	21.6	21.6	pg/L	21.6
41464-48-6	PCB-79	U	21.6	21.6	pg/L	21.6
33284-52-5	PCB-80	U	21.6	21.6	pg/L	21.6

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-2136  
 Lab Sample ID: 5383002  
 Client Sample: 1668A Water  
 Client ID: WT\_IPC-13-32460  
 Batch ID: 24585  
 Run Date: 10/13/2013 05:29  
 Data File: c09oct13d\_8-6  
 Prep Batch: 24583  
 Prep Date: 09-OCT-13

Client: LANL001  
 Date Collected: 09/15/2013 17:11  
 Date Received: 09/26/2013 09:30  
 Method: EPA Method 1668A  
 Analyst: MJC  
 Prep Method: SW846 3520C  
 Aliquot: 927.8 mL

Project: LANL00112  
 Matrix: WATER  
 Prep Basis: As Received  
 Instrument: HRP791  
 Dilution: 1  
 Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21.6	21.6	pg/L	21.6
52663-62-4	PCB-82		53.1	48.3	pg/L	21.6
60145-20-2	PCB-83	U	22.1	21.6	pg/L	21.6
52663-60-2	PCB-84		142	137	pg/L	21.6
PCB-85-117	PCB-117/116/85	C	85.1	81.2	pg/L	64.7
PCB-86-125	PCB-86/87/97/109/119/125	C	333	330	pg/L	129
PCB-88/91	PCB-88/91	C	58.1	53.2	pg/L	43.1
73575-57-2	PCB-89	U	21.6	21.6	pg/L	21.6
PCB-90-113	PCB-113/90/101	C	442	438	pg/L	64.7
52663-61-3	PCB-92		71.7	67.3	pg/L	21.6
PCB-93/100	PCB-93/100	CU	43.1	43.1	pg/L	43.1
73575-55-0	PCB-94	U	21.6	21.6	pg/L	21.6
38379-99-6	PCB-95		312	308	pg/L	21.6
73575-54-9	PCB-96	U	21.6	21.6	pg/L	21.6
PCB-98/102	PCB-102/98	CU	43.1	43.1	pg/L	43.1
38380-01-7	PCB-99		196	190	pg/L	21.6
60145-21-3	PCB-103	U	21.6	21.6	pg/L	21.6
56558-16-8	PCB-104	U	21.6	21.6	pg/L	21.6
32598-14-4	PCB-105		145	140	pg/L	21.6
70424-69-0	PCB-106	U	21.6	21.6	pg/L	21.6
70424-68-9	PCB-107		40.2	36.2	pg/L	21.6
PCB-108/124	PCB-108/124	CU	43.1	43.1	pg/L	43.1
PCB-110/115	PCB-110/115	C	640	636	pg/L	43.1
39635-32-0	PCB-111	U	21.6	21.6	pg/L	21.6
74472-36-9	PCB-112	U	21.6	21.6	pg/L	21.6
74472-37-0	PCB-114	U	21.6	21.6	pg/L	21.6
31508-00-6	PCB-118		285	281	pg/L	21.6
68194-12-7	PCB-120	U	21.6	21.6	pg/L	21.6
56558-18-0	PCB-121	U	21.6	21.6	pg/L	21.6
76842-07-4	PCB-122	U	21.6	21.6	pg/L	21.6
65510-44-3	PCB-123	U	21.6	21.6	pg/L	21.6
57465-28-8	PCB-126	U	21.6	21.6	pg/L	21.6

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32460  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 05:29  
**Data File:** c09oct13d\_8-6  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/15/2013 17:11  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21.6	21.6	pg/L	21.6
PCB-128/166	PCB-128/166	C	123	120	pg/L	43.1
PCB-129-163	PCB-138/163/129	C	705	702	pg/L	64.7
52663-66-8	PCB-130		41.4	37.7	pg/L	21.6
61798-70-7	PCB-131	U	21.6	21.6	pg/L	21.6
38380-05-1	PCB-132		260	255	pg/L	21.6
35694-04-3	PCB-133	U	21.6	21.6	pg/L	21.6
52704-70-8	PCB-134		29.7	25.3	pg/L	21.6
PCB-135/151	PCB-151/135	C	117	114	pg/L	43.1
38411-22-2	PCB-136		50.9	48.8	pg/L	21.6
35694-06-5	PCB-137		36.3	31.2	pg/L	21.6
PCB-139/140	PCB-139/140	CU	43.1	43.1	pg/L	43.1
52712-04-6	PCB-141		94.7	91.3	pg/L	21.6
41411-61-4	PCB-142	U	21.6	21.6	pg/L	21.6
68194-15-0	PCB-143	U	21.6	21.6	pg/L	21.6
68194-14-9	PCB-144	U	21.6	21.6	pg/L	21.6
74472-40-5	PCB-145	U	21.6	21.6	pg/L	21.6
51908-16-8	PCB-146		86.2	82.9	pg/L	21.6
PCB-147/149	PCB-147/149	C	449	445	pg/L	43.1
74472-41-6	PCB-148	U	21.6	21.6	pg/L	21.6
68194-08-1	PCB-150	U	21.6	21.6	pg/L	21.6
68194-09-2	PCB-152	U	21.6	21.6	pg/L	21.6
PCB-153/168	PCB-153/168	C	428	425	pg/L	43.1
60145-22-4	PCB-154	U	21.6	21.6	pg/L	21.6
33979-03-2	PCB-155	U	21.6	21.6	pg/L	21.6
PCB-156/157	PCB-156/157	C	62.1	58.8	pg/L	43.1
74472-42-7	PCB-158		69.2	66.8	pg/L	21.6
39635-35-3	PCB-159	U	21.6	21.6	pg/L	21.6
41411-62-5	PCB-160	U	21.6	21.6	pg/L	21.6
74472-43-8	PCB-161	U	21.6	21.6	pg/L	21.6
39635-34-2	PCB-162	U	21.6	21.6	pg/L	21.6
74472-45-0	PCB-164		52.0	49.4	pg/L	21.6

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32460  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 05:29  
**Data File:** c09oct13d\_8-6  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/15/2013 17:11  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21.6	21.6	pg/L	21.6
52663-72-6	PCB-167		25.4	22.6	pg/L	21.6
32774-16-6	PCB-169	U	21.6	21.6	pg/L	21.6
35065-30-6	PCB-170		97.2	94.4	pg/L	21.6
PCB-171/173	PCB-173/171	CU	43.1	43.1	pg/L	43.1
52663-74-8	PCB-172	U	21.6	21.6	pg/L	21.6
38411-25-5	PCB-174		105	102	pg/L	21.6
40186-70-7	PCB-175	U	21.6	21.6	pg/L	21.6
52663-65-7	PCB-176	U	21.6	21.6	pg/L	21.6
52663-70-4	PCB-177		53.3	50.4	pg/L	21.6
52663-67-9	PCB-178	U	21.6	21.6	pg/L	21.6
52663-64-6	PCB-179		28.0	25.9	pg/L	21.6
PCB-180/193	PCB-193/180	CU	43.1	43.1	pg/L	43.1
74472-47-2	PCB-181	U	21.6	21.6	pg/L	21.6
60145-23-5	PCB-182	U	21.6	21.6	pg/L	21.6
PCB-183/185	PCB-183/185	C	55.5	52.5	pg/L	43.1
74472-48-3	PCB-184	U	21.6	21.6	pg/L	21.6
74472-49-4	PCB-186	U	21.6	21.6	pg/L	21.6
52663-68-0	PCB-187		148	144	pg/L	21.6
74487-85-7	PCB-188	U	21.6	21.6	pg/L	21.6
39635-31-9	PCB-189	U	21.6	21.6	pg/L	21.6
41411-64-7	PCB-190	U	21.6	21.6	pg/L	21.6
74472-50-7	PCB-191	U	21.6	21.6	pg/L	21.6
74472-51-8	PCB-192	U	21.6	21.6	pg/L	21.6
35694-08-7	PCB-194		55.1	52.4	pg/L	21.6
52663-78-2	PCB-195	U	21.6	21.6	pg/L	21.6
42740-50-1	PCB-196		26.3	23.6	pg/L	21.6
PCB-197/200	PCB-197/200	CU	43.1	43.1	pg/L	43.1
PCB-198/199	PCB-198/199	C	72.6	69.4	pg/L	43.1
40186-71-8	PCB-201	U	21.6	21.6	pg/L	21.6
2136-99-4	PCB-202	U	21.6	21.6	pg/L	21.6
52663-76-0	PCB-203		50.3	46.8	pg/L	21.6

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383002  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32460  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 05:29  
**Data File:** c09oct13d\_8-6  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/15/2013 17:11  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 927.8 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21.6	21.6	pg/L	21.6
74472-53-0	PCB-205	U	21.6	21.6	pg/L	21.6
40186-72-9	PCB-206		29.4	25.9	pg/L	21.6
52663-79-3	PCB-207	U	21.6	21.6	pg/L	21.6
52663-77-1	PCB-208	U	21.6	21.6	pg/L	21.6
2051-24-3	PCB-209	U	21.6	21.6	pg/L	21.6
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		659	594	pg/L	
25429-29-2	Total Penta PCBs		2830	2750	pg/L	
26601-64-9	Total Hexa PCBs		2630	2580	pg/L	
28655-71-2	Total Hepta PCBs		487	470	pg/L	
55722-26-4	Total Octa PCBs		204	192	pg/L	
53742-07-7	Total Nona PCBs		29.4	25.9	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		6840	6600	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1100	2160	pg/L	51.1	(15%-150%)
13C-3-MoCB		1240	2160	pg/L	57.6	(15%-150%)
13C-4-DiCB		1320	2160	pg/L	61.1	(25%-150%)
13C-15-DiCB		1480	2160	pg/L	68.5	(25%-150%)
13C-19-TrCB		1460	2160	pg/L	67.5	(25%-150%)
13C-37-TrCB		1420	2160	pg/L	65.8	(25%-150%)
13C-54-TeCB		918	2160	pg/L	42.6	(25%-150%)
13C-77-TeCB		1650	2160	pg/L	76.7	(25%-150%)
13C-81-TeCB		1660	2160	pg/L	77.2	(25%-150%)
13C-104-PeCB		1280	2160	pg/L	59.2	(25%-150%)
13C-105-PeCB		1330	2160	pg/L	61.6	(25%-150%)
13C-114-PeCB		1270	2160	pg/L	58.9	(25%-150%)
13C-118-PeCB		1350	2160	pg/L	62.9	(25%-150%)
13C-123-PeCB		1410	2160	pg/L	65.5	(25%-150%)
13C-126-PeCB		1410	2160	pg/L	65.6	(25%-150%)
13C-155-HxCB		1470	2160	pg/L	68.1	(25%-150%)
13C-156-HxCB	C	2530	4310	pg/L	58.8	(25%-150%)
13C-167-HxCB		1260	2160	pg/L	58.3	(25%-150%)
13C-169-HxCB		1470	2160	pg/L	68.1	(25%-150%)
13C-188-HpCB		1430	2160	pg/L	66.5	(25%-150%)
13C-189-HpCB		1180	2160	pg/L	54.8	(25%-150%)
13C-202-OcCB		1650	2160	pg/L	76.6	(25%-150%)
13C-205-OcCB		2020	2160	pg/L	93.6	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

<b>SDG Number:</b> 2013-2136	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5383002	<b>Date Collected:</b> 09/15/2013 17:11	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/26/2013 09:30	
<b>Client ID:</b> WT_IPC-13-32460		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24585	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/13/2013 05:29	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c09oct13d_8-6		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24583	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 09-OCT-13	<b>Aliquot:</b> 927.8 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2270	2160	pg/L	105      (25%-150%)
13C-208-NoCB			2130	2160	pg/L	98.6      (25%-150%)
13C-209-DeCB			2200	2160	pg/L	102      (25%-150%)
13C-28-TrCB			1560	2160	pg/L	72.5      (30%-135%)
13C-111-PeCB			1810	2160	pg/L	84.2      (30%-135%)
13C-178-HpCB			1660	2160	pg/L	77.0      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data
- U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32203  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 06:33  
**Data File:** c09oct13d\_8-7  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:37  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	21.5	21.5	pg/L	21.5
2051-61-8	PCB-2	U	21.5	21.5	pg/L	21.5
2051-62-9	PCB-3	U	21.5	21.5	pg/L	21.5
13029-08-8	PCB-4	U	21.5	21.5	pg/L	21.5
16605-91-7	PCB-5	U	21.5	21.5	pg/L	21.5
25569-80-6	PCB-6	U	21.5	21.5	pg/L	21.5
33284-50-3	PCB-7	U	21.5	21.5	pg/L	21.5
34883-43-7	PCB-8	U	21.5	21.5	pg/L	21.5
34883-39-1	PCB-9	U	21.5	21.5	pg/L	21.5
33146-45-1	PCB-10	U	21.5	21.5	pg/L	21.5
2050-67-1	PCB-11	U	108	108	pg/L	108
PCB-12/13	PCB-13/12	CU	43.1	43.1	pg/L	43.1
34883-41-5	PCB-14	U	21.5	21.5	pg/L	21.5
2050-68-2	PCB-15	U	21.5	21.5	pg/L	21.5
38444-78-9	PCB-16	U	21.5	21.5	pg/L	21.5
37680-66-3	PCB-17	U	21.5	21.5	pg/L	21.5
PCB-18/30	PCB-18/30	CU	43.1	43.1	pg/L	43.1
38444-73-4	PCB-19	U	21.5	21.5	pg/L	21.5
PCB-20/28	PCB-20/28	C	51.6	45.8	pg/L	43.1
PCB-21/33	PCB-21/33	CU	43.1	43.1	pg/L	43.1
38444-85-8	PCB-22	U	21.5	21.5	pg/L	21.5
55720-44-0	PCB-23	U	21.5	21.5	pg/L	21.5
55702-45-9	PCB-24	U	21.5	21.5	pg/L	21.5
55712-37-3	PCB-25	U	21.5	21.5	pg/L	21.5
PCB-26/29	PCB-26/29	CU	43.1	43.1	pg/L	43.1
38444-76-7	PCB-27	U	21.5	21.5	pg/L	21.5
16606-02-3	PCB-31	U	23.0	21.5	pg/L	21.5
38444-77-8	PCB-32	U	21.5	21.5	pg/L	21.5
37680-68-5	PCB-34	U	21.5	21.5	pg/L	21.5
37680-69-6	PCB-35	U	21.5	21.5	pg/L	21.5
38444-87-0	PCB-36	U	21.5	21.5	pg/L	21.5
38444-90-5	PCB-37		40.3	36.8	pg/L	21.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32203  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 06:33  
**Data File:** c09oct13d\_8-7  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:37  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	21.5	21.5	pg/L	21.5
38444-88-1	PCB-39	U	21.5	21.5	pg/L	21.5
PCB-40/71	PCB-40/71	C	47.0	43.3	pg/L	43.1
52663-59-9	PCB-41	U	21.5	21.5	pg/L	21.5
36559-22-5	PCB-42		28.6	24.7	pg/L	21.5
70362-46-8	PCB-43	U	21.5	21.5	pg/L	21.5
PCB-44/47/65	PCB-44/65/47	C	184	180	pg/L	64.6
PCB-45/51	PCB-45/51	CU	43.1	43.1	pg/L	43.1
41464-47-5	PCB-46	U	21.5	21.5	pg/L	21.5
70362-47-9	PCB-48	U	21.5	21.5	pg/L	21.5
PCB-49/69	PCB-69/49	C	105	102	pg/L	43.1
PCB-50/53	PCB-50/53	CU	43.1	43.1	pg/L	43.1
35693-99-3	PCB-52		339	336	pg/L	21.5
15968-05-5	PCB-54	U	21.5	21.5	pg/L	21.5
74338-24-2	PCB-55	U	21.5	21.5	pg/L	21.5
41464-43-1	PCB-56		74.9	72.5	pg/L	21.5
70424-67-8	PCB-57	U	21.5	21.5	pg/L	21.5
41464-49-7	PCB-58	U	21.5	21.5	pg/L	21.5
PCB-59/62/75	PCB-59/62/75	CU	64.6	64.6	pg/L	64.6
33025-41-1	PCB-60		41.9	38.4	pg/L	21.5
PCB-61-76	PCB-61/76/70/74	C	557	555	pg/L	86.2
74472-34-7	PCB-63	U	21.5	21.5	pg/L	21.5
52663-58-8	PCB-64		70.7	68	pg/L	21.5
32598-10-0	PCB-66		171	166	pg/L	21.5
73575-53-8	PCB-67	U	21.5	21.5	pg/L	21.5
73575-52-7	PCB-68	U	21.5	21.5	pg/L	21.5
41464-42-0	PCB-72	U	21.5	21.5	pg/L	21.5
74338-23-1	PCB-73	U	21.5	21.5	pg/L	21.5
32598-13-3	PCB-77	U	21.5	21.5	pg/L	21.5
70362-49-1	PCB-78	U	21.5	21.5	pg/L	21.5
41464-48-6	PCB-79	U	21.5	21.5	pg/L	21.5
33284-52-5	PCB-80	U	21.5	21.5	pg/L	21.5

**Comments:**

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**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-2136  
Lab Sample ID: 5383003  
Client Sample: 1668A Water  
Client ID: WT\_IPC-13-32203  
Batch ID: 24585  
Run Date: 10/13/2013 06:33  
Data File: c09oct13d\_8-7  
Prep Batch: 24583  
Prep Date: 09-OCT-13

Client: LANL001  
Date Collected: 09/13/2013 07:37  
Date Received: 09/26/2013 09:30  
  
Method: EPA Method 1668A  
Analyst: MJC  
  
Prep Method: SW846 3520C  
Aliquot: 928.5 mL

Project: LANL00112  
Matrix: WATER  
  
Prep Basis: As Received  
  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	21.5	21.5	pg/L	21.5
52663-62-4	PCB-82		117	112	pg/L	21.5
60145-20-2	PCB-83		59.3	54.4	pg/L	21.5
52663-60-2	PCB-84		302	297	pg/L	21.5
PCB-85-117	PCB-117/116/85	C	298	294	pg/L	64.6
PCB-86-125	PCB-86/87/97/109/119/125	C	951	948	pg/L	129
PCB-88/91	PCB-88/91	CU	43.1	43.1	pg/L	43.1
73575-57-2	PCB-89	U	21.5	21.5	pg/L	21.5
PCB-90-113	PCB-113/90/101	C	1730	1730	pg/L	64.6
52663-61-3	PCB-92		232	228	pg/L	21.5
PCB-93/100	PCB-93/100	CU	43.1	43.1	pg/L	43.1
73575-55-0	PCB-94	U	21.5	21.5	pg/L	21.5
38379-99-6	PCB-95		1250	1250	pg/L	21.5
73575-54-9	PCB-96	U	21.5	21.5	pg/L	21.5
PCB-98/102	PCB-102/98	CU	43.1	43.1	pg/L	43.1
38380-01-7	PCB-99		705	699	pg/L	21.5
60145-21-3	PCB-103	U	21.5	21.5	pg/L	21.5
56558-16-8	PCB-104	U	21.5	21.5	pg/L	21.5
32598-14-4	PCB-105		579	574	pg/L	21.5
70424-69-0	PCB-106	U	21.5	21.5	pg/L	21.5
70424-68-9	PCB-107		109	105	pg/L	21.5
PCB-108/124	PCB-108/124	C	70.3	65.7	pg/L	43.1
PCB-110/115	PCB-110/115	C	2480	2470	pg/L	43.1
39635-32-0	PCB-111	U	21.5	21.5	pg/L	21.5
74472-36-9	PCB-112	U	21.5	21.5	pg/L	21.5
74472-37-0	PCB-114	U	24.3	21.5	pg/L	21.5
31508-00-6	PCB-118		1380	1380	pg/L	21.5
68194-12-7	PCB-120	U	21.5	21.5	pg/L	21.5
56558-18-0	PCB-121	U	21.5	21.5	pg/L	21.5
76842-07-4	PCB-122	U	21.5	21.5	pg/L	21.5
65510-44-3	PCB-123	U	25.1	21.5	pg/L	21.5
57465-28-8	PCB-126	U	21.5	21.5	pg/L	21.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32203  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 06:33  
**Data File:** c09oct13d\_8-7  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:37  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	21.5	21.5	pg/L	21.5
PCB-128/166	PCB-128/166	C	595	591	pg/L	43.1
PCB-129-163	PCB-138/163/129	C	5890	5890	pg/L	64.6
52663-66-8	PCB-130		220	216	pg/L	21.5
61798-70-7	PCB-131		44.0	39.9	pg/L	21.5
38380-05-1	PCB-132		1880	1870	pg/L	21.5
35694-04-3	PCB-133		54.3	50.8	pg/L	21.5
52704-70-8	PCB-134		166	162	pg/L	21.5
PCB-135/151	PCB-151/135	C	1720	1720	pg/L	43.1
38411-22-2	PCB-136		466	464	pg/L	21.5
35694-06-5	PCB-137		145	140	pg/L	21.5
PCB-139/140	PCB-139/140	CU	46.4	43.1	pg/L	43.1
52712-04-6	PCB-141		1150	1150	pg/L	21.5
41411-61-4	PCB-142	U	21.5	21.5	pg/L	21.5
68194-15-0	PCB-143	U	21.5	21.5	pg/L	21.5
68194-14-9	PCB-144		205	203	pg/L	21.5
74472-40-5	PCB-145	U	21.5	21.5	pg/L	21.5
51908-16-8	PCB-146		707	704	pg/L	21.5
PCB-147/149	PCB-147/149	C	4870	4860	pg/L	43.1
74472-41-6	PCB-148	U	21.5	21.5	pg/L	21.5
68194-08-1	PCB-150	U	21.5	21.5	pg/L	21.5
68194-09-2	PCB-152	U	21.5	21.5	pg/L	21.5
PCB-153/168	PCB-153/168	C	4620	4620	pg/L	43.1
60145-22-4	PCB-154	U	21.5	21.5	pg/L	21.5
33979-03-2	PCB-155	U	21.5	21.5	pg/L	21.5
PCB-156/157	PCB-156/157	C	450	447	pg/L	43.1
74472-42-7	PCB-158		584	582	pg/L	21.5
39635-35-3	PCB-159	U	21.5	21.5	pg/L	21.5
41411-62-5	PCB-160	U	21.5	21.5	pg/L	21.5
74472-43-8	PCB-161	U	21.5	21.5	pg/L	21.5
39635-34-2	PCB-162	U	21.5	21.5	pg/L	21.5
74472-45-0	PCB-164		481	479	pg/L	21.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32203  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 06:33  
**Data File:** c09oct13d\_8-7  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:37  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	21.5	21.5	pg/L	21.5
52663-72-6	PCB-167		188	185	pg/L	21.5
32774-16-6	PCB-169	U	21.5	21.5	pg/L	21.5
35065-30-6	PCB-170		2010	2000	pg/L	21.5
PCB-171/173	PCB-173/171	C	621	618	pg/L	43.1
52663-74-8	PCB-172		317	315	pg/L	21.5
38411-25-5	PCB-174		2300	2300	pg/L	21.5
40186-70-7	PCB-175		74.7	72	pg/L	21.5
52663-65-7	PCB-176		191	189	pg/L	21.5
52663-70-4	PCB-177		1100	1100	pg/L	21.5
52663-67-9	PCB-178		333	330	pg/L	21.5
52663-64-6	PCB-179		621	619	pg/L	21.5
PCB-180/193	PCB-193/180	C	5400	5400	pg/L	43.1
74472-47-2	PCB-181	U	21.5	21.5	pg/L	21.5
60145-23-5	PCB-182	U	21.5	21.5	pg/L	21.5
PCB-183/185	PCB-183/185	C	1450	1440	pg/L	43.1
74472-48-3	PCB-184	U	21.5	21.5	pg/L	21.5
74472-49-4	PCB-186	U	21.5	21.5	pg/L	21.5
52663-68-0	PCB-187		2830	2830	pg/L	21.5
74487-85-7	PCB-188	U	21.5	21.5	pg/L	21.5
39635-31-9	PCB-189		74.5	71.6	pg/L	21.5
41411-64-7	PCB-190		412	410	pg/L	21.5
74472-50-7	PCB-191		76.3	74.2	pg/L	21.5
74472-51-8	PCB-192	U	21.5	21.5	pg/L	21.5
35694-08-7	PCB-194		944	942	pg/L	21.5
52663-78-2	PCB-195		360	357	pg/L	21.5
42740-50-1	PCB-196		450	448	pg/L	21.5
PCB-197/200	PCB-197/200	C	146	144	pg/L	43.1
PCB-198/199	PCB-198/199	C	1240	1240	pg/L	43.1
40186-71-8	PCB-201		101	98.6	pg/L	21.5
2136-99-4	PCB-202		228	226	pg/L	21.5
52663-76-0	PCB-203		933	930	pg/L	21.5

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383003  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32203  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 06:33  
**Data File:** c09oct13d\_8-7  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:37  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 928.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	21.5	21.5	pg/L	21.5
74472-53-0	PCB-205		44.8	42.4	pg/L	21.5
40186-72-9	PCB-206		715	711	pg/L	21.5
52663-79-3	PCB-207		59.1	56.4	pg/L	21.5
52663-77-1	PCB-208		195	192	pg/L	21.5
2051-24-3	PCB-209		394	390	pg/L	21.5
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs		115	82.6	pg/L	
26914-33-0	Total Tetra PCBs		1620	1590	pg/L	
25429-29-2	Total Penta PCBs		10300	10200	pg/L	
26601-64-9	Total Hexa PCBs		24500	24400	pg/L	
28655-71-2	Total Hepta PCBs		17800	17800	pg/L	
55722-26-4	Total Octa PCBs		4450	4420	pg/L	
53742-07-7	Total Nona PCBs		969	960	pg/L	
DECACB(Tot)	Total Deca PCB		394	390	pg/L	
1336-36-3	Total PCB Congeners		60100	59800	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		980	2150	pg/L	45.5	(15%-150%)
13C-3-MoCB		1040	2150	pg/L	48.1	(15%-150%)
13C-4-DiCB		1100	2150	pg/L	51.2	(25%-150%)
13C-15-DiCB		1270	2150	pg/L	59.1	(25%-150%)
13C-19-TrCB		1180	2150	pg/L	54.6	(25%-150%)
13C-37-TrCB		1390	2150	pg/L	64.6	(25%-150%)
13C-54-TeCB		840	2150	pg/L	39.0	(25%-150%)
13C-77-TeCB		1740	2150	pg/L	80.6	(25%-150%)
13C-81-TeCB		1770	2150	pg/L	82.3	(25%-150%)
13C-104-PeCB		1170	2150	pg/L	54.1	(25%-150%)
13C-105-PeCB		1350	2150	pg/L	62.8	(25%-150%)
13C-114-PeCB		1320	2150	pg/L	61.4	(25%-150%)
13C-118-PeCB		1370	2150	pg/L	63.7	(25%-150%)
13C-123-PeCB		1450	2150	pg/L	67.4	(25%-150%)
13C-126-PeCB		1480	2150	pg/L	68.7	(25%-150%)
13C-155-HxCB		1300	2150	pg/L	60.5	(25%-150%)
13C-156-HxCB	C	2550	4310	pg/L	59.1	(25%-150%)
13C-167-HxCB		1250	2150	pg/L	57.9	(25%-150%)
13C-169-HxCB		1490	2150	pg/L	69.0	(25%-150%)
13C-188-HpCB		1260	2150	pg/L	58.4	(25%-150%)
13C-189-HpCB		1170	2150	pg/L	54.2	(25%-150%)
13C-202-OcCB		1520	2150	pg/L	70.5	(25%-150%)
13C-205-OcCB		1890	2150	pg/L	87.9	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-2136	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5383003	<b>Date Collected:</b> 09/13/2013 07:37	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/26/2013 09:30	
<b>Client ID:</b> WT_IPC-13-32203		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24585	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/13/2013 06:33	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c09oct13d_8-7		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24583	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 09-OCT-13	<b>Aliquot:</b> 928.5 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2090	2150	pg/L	97.2      (25%-150%)
13C-208-NoCB			2020	2150	pg/L	93.8      (25%-150%)
13C-209-DeCB			2010	2150	pg/L	93.4      (25%-150%)
13C-28-TrCB			1380	2150	pg/L	64.1      (30%-135%)
13C-111-PeCB			1810	2150	pg/L	84.1      (30%-135%)
13C-178-HpCB			1610	2150	pg/L	74.8      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

Page 1 of 7

**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383004  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32208  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 07:37  
**Data File:** c09oct13d\_8-8  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 909.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	22	22	pg/L	22.0
2051-61-8	PCB-2	U	22	22	pg/L	22.0
2051-62-9	PCB-3	U	22	22	pg/L	22.0
13029-08-8	PCB-4	U	22	22	pg/L	22.0
16605-91-7	PCB-5	U	22	22	pg/L	22.0
25569-80-6	PCB-6	U	22	22	pg/L	22.0
33284-50-3	PCB-7	U	22	22	pg/L	22.0
34883-43-7	PCB-8	U	22	22	pg/L	22.0
34883-39-1	PCB-9	U	22	22	pg/L	22.0
33146-45-1	PCB-10	U	22	22	pg/L	22.0
2050-67-1	PCB-11	U	110	110	pg/L	110
PCB-12/13	PCB-13/12	CU	44	44	pg/L	44.0
34883-41-5	PCB-14	U	22	22	pg/L	22.0
2050-68-2	PCB-15	U	22	22	pg/L	22.0
38444-78-9	PCB-16	U	22	22	pg/L	22.0
37680-66-3	PCB-17	U	22	22	pg/L	22.0
PCB-18/30	PCB-18/30	CU	44	44	pg/L	44.0
38444-73-4	PCB-19	U	22	22	pg/L	22.0
PCB-20/28	PCB-20/28	CU	44	44	pg/L	44.0
PCB-21/33	PCB-21/33	CU	44	44	pg/L	44.0
38444-85-8	PCB-22	U	22	22	pg/L	22.0
55720-44-0	PCB-23	U	22	22	pg/L	22.0
55702-45-9	PCB-24	U	22	22	pg/L	22.0
55712-37-3	PCB-25	U	22	22	pg/L	22.0
PCB-26/29	PCB-26/29	CU	44	44	pg/L	44.0
38444-76-7	PCB-27	U	22	22	pg/L	22.0
16606-02-3	PCB-31	U	22	22	pg/L	22.0
38444-77-8	PCB-32	U	22	22	pg/L	22.0
37680-68-5	PCB-34	U	22	22	pg/L	22.0
37680-69-6	PCB-35	U	22	22	pg/L	22.0
38444-87-0	PCB-36	U	22	22	pg/L	22.0
38444-90-5	PCB-37	U	22	22	pg/L	22.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383004  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32208  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 07:37  
**Data File:** c09oct13d\_8-8  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 909.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	22	22	pg/L	22.0
38444-88-1	PCB-39	U	22	22	pg/L	22.0
PCB-40/71	PCB-40/71	CU	44	44	pg/L	44.0
52663-59-9	PCB-41	U	22	22	pg/L	22.0
36559-22-5	PCB-42	U	22	22	pg/L	22.0
70362-46-8	PCB-43	U	22	22	pg/L	22.0
PCB-44/47/65	PCB-44/65/47	CU	66	66	pg/L	66.0
PCB-45/51	PCB-45/51	CU	44	44	pg/L	44.0
41464-47-5	PCB-46	U	22	22	pg/L	22.0
70362-47-9	PCB-48	U	22	22	pg/L	22.0
PCB-49/69	PCB-69/49	C	96.9	94	pg/L	44.0
PCB-50/53	PCB-50/53	CU	44	44	pg/L	44.0
35693-99-3	PCB-52		201	198	pg/L	22.0
15968-05-5	PCB-54	U	22	22	pg/L	22.0
74338-24-2	PCB-55	U	22	22	pg/L	22.0
41464-43-1	PCB-56		37.8	35.3	pg/L	22.0
70424-67-8	PCB-57	U	22	22	pg/L	22.0
41464-49-7	PCB-58	U	22	22	pg/L	22.0
PCB-59/62/75	PCB-59/62/75	CU	66	66	pg/L	66.0
33025-41-1	PCB-60	U	22	22	pg/L	22.0
PCB-61-76	PCB-61/76/70/74	C	595	593	pg/L	88.0
74472-34-7	PCB-63	U	22	22	pg/L	22.0
52663-58-8	PCB-64		74.2	71.4	pg/L	22.0
32598-10-0	PCB-66		154	148	pg/L	22.0
73575-53-8	PCB-67	U	22	22	pg/L	22.0
73575-52-7	PCB-68	U	22	22	pg/L	22.0
41464-42-0	PCB-72	U	22	22	pg/L	22.0
74338-23-1	PCB-73	U	22	22	pg/L	22.0
32598-13-3	PCB-77		34.1	31.7	pg/L	22.0
70362-49-1	PCB-78	U	22	22	pg/L	22.0
41464-48-6	PCB-79	U	22	22	pg/L	22.0
33284-52-5	PCB-80	U	22	22	pg/L	22.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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SDG Number: 2013-2136  
Lab Sample ID: 5383004  
Client Sample: 1668A Water  
Client ID: WT\_IPC-13-32208  
Batch ID: 24585  
Run Date: 10/13/2013 07:37  
Data File: c09oct13d\_8-8  
Prep Batch: 24583  
Prep Date: 09-OCT-13

Client: LANL001  
Date Collected: 09/13/2013 07:01  
Date Received: 09/26/2013 09:30  
Method: EPA Method 1668A  
Analyst: MJC  
Prep Method: SW846 3520C  
Aliquot: 909.5 mL

Project: LANL00112  
Matrix: WATER  
Prep Basis: As Received  
Instrument: HRP791  
Dilution: 1  
Prep SOP Ref: CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	22	22	pg/L	22.0
52663-62-4	PCB-82		34.9	30.1	pg/L	22.0
60145-20-2	PCB-83	U	22.8	22	pg/L	22.0
52663-60-2	PCB-84		27.2	22.1	pg/L	22.0
PCB-85-117	PCB-117/116/85	C	246	242	pg/L	66.0
PCB-86-125	PCB-86/87/97/109/119/125	C	560	556	pg/L	132
PCB-88/91	PCB-88/91	CU	44	44	pg/L	44.0
73575-57-2	PCB-89	U	22	22	pg/L	22.0
PCB-90-113	PCB-113/90/101	C	1060	1050	pg/L	66.0
52663-61-3	PCB-92		108	104	pg/L	22.0
PCB-93/100	PCB-93/100	CU	44	44	pg/L	44.0
73575-55-0	PCB-94	U	22	22	pg/L	22.0
38379-99-6	PCB-95		142	138	pg/L	22.0
73575-54-9	PCB-96	U	22	22	pg/L	22.0
PCB-98/102	PCB-102/98	CU	44	44	pg/L	44.0
38380-01-7	PCB-99		680	674	pg/L	22.0
60145-21-3	PCB-103	U	22	22	pg/L	22.0
56558-16-8	PCB-104	U	22	22	pg/L	22.0
32598-14-4	PCB-105		246	241	pg/L	22.0
70424-69-0	PCB-106	U	22	22	pg/L	22.0
70424-68-9	PCB-107		77.4	73.4	pg/L	22.0
PCB-108/124	PCB-108/124	CU	44	44	pg/L	44.0
PCB-110/115	PCB-110/115	C	1300	1290	pg/L	44.0
39635-32-0	PCB-111	U	22	22	pg/L	22.0
74472-36-9	PCB-112	U	22	22	pg/L	22.0
74472-37-0	PCB-114	U	22	22	pg/L	22.0
31508-00-6	PCB-118		778	773	pg/L	22.0
68194-12-7	PCB-120	U	22	22	pg/L	22.0
56558-18-0	PCB-121	U	22	22	pg/L	22.0
76842-07-4	PCB-122	U	22	22	pg/L	22.0
65510-44-3	PCB-123	U	22	22	pg/L	22.0
57465-28-8	PCB-126	U	22	22	pg/L	22.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383004  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32208  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 07:37  
**Data File:** c09oct13d\_8-8  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 909.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127	U	22	22	pg/L	22.0
PCB-128/166	PCB-128/166	C	117	114	pg/L	44.0
PCB-129-163	PCB-138/163/129	C	659	656	pg/L	66.0
52663-66-8	PCB-130		31.5	27.8	pg/L	22.0
61798-70-7	PCB-131	U	22	22	pg/L	22.0
38380-05-1	PCB-132		128	123	pg/L	22.0
35694-04-3	PCB-133	U	22	22	pg/L	22.0
52704-70-8	PCB-134		27.6	23.2	pg/L	22.0
PCB-135/151	PCB-151/135	C	94.4	91.3	pg/L	44.0
38411-22-2	PCB-136	U	22	22	pg/L	22.0
35694-06-5	PCB-137	U	22	22	pg/L	22.0
PCB-139/140	PCB-139/140	CU	44	44	pg/L	44.0
52712-04-6	PCB-141		56.9	53.5	pg/L	22.0
41411-61-4	PCB-142	U	22	22	pg/L	22.0
68194-15-0	PCB-143	U	22	22	pg/L	22.0
68194-14-9	PCB-144	U	22	22	pg/L	22.0
74472-40-5	PCB-145	U	22	22	pg/L	22.0
51908-16-8	PCB-146		88.9	85.6	pg/L	22.0
PCB-147/149	PCB-147/149	C	424	420	pg/L	44.0
74472-41-6	PCB-148	U	22	22	pg/L	22.0
68194-08-1	PCB-150	U	22	22	pg/L	22.0
68194-09-2	PCB-152	U	22	22	pg/L	22.0
PCB-153/168	PCB-153/168	C	443	440	pg/L	44.0
60145-22-4	PCB-154	U	22	22	pg/L	22.0
33979-03-2	PCB-155	U	22	22	pg/L	22.0
PCB-156/157	PCB-156/157	CU	44	44	pg/L	44.0
74472-42-7	PCB-158		104	102	pg/L	22.0
39635-35-3	PCB-159	U	22	22	pg/L	22.0
41411-62-5	PCB-160	U	22	22	pg/L	22.0
74472-43-8	PCB-161	U	22	22	pg/L	22.0
39635-34-2	PCB-162	U	22	22	pg/L	22.0
74472-45-0	PCB-164		40.7	38.1	pg/L	22.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383004  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32208  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 07:37  
**Data File:** c09oct13d\_8-8  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 909.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	22	22	pg/L	22.0
52663-72-6	PCB-167	U	22	22	pg/L	22.0
32774-16-6	PCB-169	U	22	22	pg/L	22.0
35065-30-6	PCB-170		26.7	23.9	pg/L	22.0
PCB-171/173	PCB-173/171	CU	44	44	pg/L	44.0
52663-74-8	PCB-172	U	22	22	pg/L	22.0
38411-25-5	PCB-174		35.4	32.6	pg/L	22.0
40186-70-7	PCB-175	U	22	22	pg/L	22.0
52663-65-7	PCB-176	U	22	22	pg/L	22.0
52663-70-4	PCB-177	U	22	22	pg/L	22.0
52663-67-9	PCB-178	U	22	22	pg/L	22.0
52663-64-6	PCB-179	U	22	22	pg/L	22.0
PCB-180/193	PCB-193/180	C	62.8	57.9	pg/L	44.0
74472-47-2	PCB-181	U	22	22	pg/L	22.0
60145-23-5	PCB-182	U	22	22	pg/L	22.0
PCB-183/185	PCB-183/185	CU	44	44	pg/L	44.0
74472-48-3	PCB-184	U	22	22	pg/L	22.0
74472-49-4	PCB-186	U	22	22	pg/L	22.0
52663-68-0	PCB-187		64.1	60.5	pg/L	22.0
74487-85-7	PCB-188	U	22	22	pg/L	22.0
39635-31-9	PCB-189	U	22	22	pg/L	22.0
41411-64-7	PCB-190	U	22	22	pg/L	22.0
74472-50-7	PCB-191	U	22	22	pg/L	22.0
74472-51-8	PCB-192	U	22	22	pg/L	22.0
35694-08-7	PCB-194	U	22	22	pg/L	22.0
52663-78-2	PCB-195	U	22	22	pg/L	22.0
42740-50-1	PCB-196	U	22	22	pg/L	22.0
PCB-197/200	PCB-197/200	CU	44	44	pg/L	44.0
PCB-198/199	PCB-198/199	CU	44	44	pg/L	44.0
40186-71-8	PCB-201	U	22	22	pg/L	22.0
2136-99-4	PCB-202	U	22	22	pg/L	22.0
52663-76-0	PCB-203	U	22	22	pg/L	22.0

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for, but not detected above the specified detection limit.



**PCB Congeners  
Certificate of Analysis  
Sample Summary**

**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383004  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32208  
**Batch ID:** 24585  
**Run Date:** 10/13/2013 07:37  
**Data File:** c09oct13d\_8-8  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 07:01  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 909.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 1  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	22	22	pg/L	22.0
74472-53-0	PCB-205	U	22	22	pg/L	22.0
40186-72-9	PCB-206	U	22	22	pg/L	22.0
52663-79-3	PCB-207	U	22	22	pg/L	22.0
52663-77-1	PCB-208	U	22	22	pg/L	22.0
2051-24-3	PCB-209	U	22	22	pg/L	22.0
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs	U	0	0	pg/L	
25323-68-6	Total Tri PCBs	U	0	0	pg/L	
26914-33-0	Total Tetra PCBs		1190	1170	pg/L	
25429-29-2	Total Penta PCBs		5280	5200	pg/L	
26601-64-9	Total Hexa PCBs		2220	2170	pg/L	
28655-71-2	Total Hepta PCBs		189	175	pg/L	
55722-26-4	Total Octa PCBs	U	0	0	pg/L	
53742-07-7	Total Nona PCBs	U	0	0	pg/L	
DECACB(Tot)	Total Deca PCB	U	0	0	pg/L	
1336-36-3	Total PCB Congeners		8880	8720	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1150	2200	pg/L	52.3	(15%-150%)
13C-3-MoCB		1220	2200	pg/L	55.3	(15%-150%)
13C-4-DiCB		1300	2200	pg/L	58.9	(25%-150%)
13C-15-DiCB		1420	2200	pg/L	64.6	(25%-150%)
13C-19-TrCB		1420	2200	pg/L	64.4	(25%-150%)
13C-37-TrCB		1400	2200	pg/L	63.6	(25%-150%)
13C-54-TeCB		928	2200	pg/L	42.2	(25%-150%)
13C-77-TeCB		1740	2200	pg/L	79.1	(25%-150%)
13C-81-TeCB		1880	2200	pg/L	85.7	(25%-150%)
13C-104-PeCB		1270	2200	pg/L	57.9	(25%-150%)
13C-105-PeCB		1370	2200	pg/L	62.3	(25%-150%)
13C-114-PeCB		1310	2200	pg/L	59.8	(25%-150%)
13C-118-PeCB		1410	2200	pg/L	63.9	(25%-150%)
13C-123-PeCB		1460	2200	pg/L	66.3	(25%-150%)
13C-126-PeCB		1480	2200	pg/L	67.1	(25%-150%)
13C-155-HxCB		1490	2200	pg/L	67.5	(25%-150%)
13C-156-HxCB	C	2650	4400	pg/L	60.2	(25%-150%)
13C-167-HxCB		1300	2200	pg/L	59.1	(25%-150%)
13C-169-HxCB		1550	2200	pg/L	70.3	(25%-150%)
13C-188-HpCB		1380	2200	pg/L	62.7	(25%-150%)
13C-189-HpCB		1220	2200	pg/L	55.4	(25%-150%)
13C-202-OcCB		1640	2200	pg/L	74.5	(25%-150%)
13C-205-OcCB		2030	2200	pg/L	92.3	(25%-150%)

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-2136	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5383004	<b>Date Collected:</b> 09/13/2013 07:01	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/26/2013 09:30	
<b>Client ID:</b> WT_IPC-13-32208		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24585	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/13/2013 07:37	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c09oct13d_8-8		<b>Dilution:</b> 1
<b>Prep Batch:</b> 24583	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 09-OCT-13	<b>Aliquot:</b> 909.5 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2270	2200	pg/L	103      (25%-150%)
13C-208-NoCB			2200	2200	pg/L	100      (25%-150%)
13C-209-DeCB			2210	2200	pg/L	100      (25%-150%)
13C-28-TrCB			997	2200	pg/L	45.4      (30%-135%)
13C-111-PeCB			1210	2200	pg/L	54.8      (30%-135%)
13C-178-HpCB			1120	2200	pg/L	51.0      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383005  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32192  
**Batch ID:** 24585  
**Run Date:** 10/19/2013 07:03  
**Data File:** c18oct13a\_2-4  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:56  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 926.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 20  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
2051-60-7	PCB-1	U	432	432	pg/L	432
2051-61-8	PCB-2	U	432	432	pg/L	432
2051-62-9	PCB-3	U	432	432	pg/L	432
13029-08-8	PCB-4	U	432	432	pg/L	432
16605-91-7	PCB-5	U	432	432	pg/L	432
25569-80-6	PCB-6	U	432	432	pg/L	432
33284-50-3	PCB-7	U	432	432	pg/L	432
34883-43-7	PCB-8	U	432	432	pg/L	432
34883-39-1	PCB-9	U	432	432	pg/L	432
33146-45-1	PCB-10	U	432	432	pg/L	432
2050-67-1	PCB-11	U	2160	2160	pg/L	2160
PCB-12/13	PCB-13/12	CU	863	863	pg/L	863
34883-41-5	PCB-14	U	432	432	pg/L	432
2050-68-2	PCB-15		505	493	pg/L	432
38444-78-9	PCB-16	U	432	432	pg/L	432
37680-66-3	PCB-17		646	643	pg/L	432
PCB-18/30	PCB-18/30	C	1830	1830	pg/L	863
38444-73-4	PCB-19	U	432	432	pg/L	432
PCB-20/28	PCB-20/28	C	2420	2410	pg/L	863
PCB-21/33	PCB-21/33	CU	863	863	pg/L	863
38444-85-8	PCB-22		480	477	pg/L	432
55720-44-0	PCB-23	U	432	432	pg/L	432
55702-45-9	PCB-24	U	432	432	pg/L	432
55712-37-3	PCB-25	U	432	432	pg/L	432
PCB-26/29	PCB-26/29	CU	863	863	pg/L	863
38444-76-7	PCB-27	U	432	432	pg/L	432
16606-02-3	PCB-31		2700	2690	pg/L	432
38444-77-8	PCB-32		539	537	pg/L	432
37680-68-5	PCB-34	U	432	432	pg/L	432
37680-69-6	PCB-35	U	432	432	pg/L	432
38444-87-0	PCB-36	U	432	432	pg/L	432
38444-90-5	PCB-37		2560	2560	pg/L	432

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**E** Organics--Concentration of the target analyte exceeds the instrument calibration range  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383005  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32192  
**Batch ID:** 24585  
**Run Date:** 10/19/2013 07:03  
**Data File:** c18oct13a\_2-4  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:56  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 926.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 20  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
53555-66-1	PCB-38	U	432	432	pg/L	432
38444-88-1	PCB-39	U	432	432	pg/L	432
PCB-40/71	PCB-40/71	C	37700	37700	pg/L	863
52663-59-9	PCB-41		1130	1130	pg/L	432
36559-22-5	PCB-42		17700	17700	pg/L	432
70362-46-8	PCB-43		2360	2360	pg/L	432
PCB-44/47/65	PCB-44/65/47	C	285000	285000	pg/L	1300
PCB-45/51	PCB-45/51	C	3660	3660	pg/L	863
41464-47-5	PCB-46		1350	1350	pg/L	432
70362-47-9	PCB-48		6650	6650	pg/L	432
PCB-49/69	PCB-69/49	C	137000	137000	pg/L	863
PCB-50/53	PCB-50/53	C	10700	10700	pg/L	863
35693-99-3	PCB-52		673000	673000	pg/L	432
15968-05-5	PCB-54	U	432	432	pg/L	432
74338-24-2	PCB-55	U	432	432	pg/L	432
41464-43-1	PCB-56		50600	50600	pg/L	432
70424-67-8	PCB-57	U	432	432	pg/L	432
41464-49-7	PCB-58	U	432	432	pg/L	432
PCB-59/62/75	PCB-59/62/75	C	1790	1790	pg/L	1300
33025-41-1	PCB-60		7130	7120	pg/L	432
PCB-61-76	PCB-61/76/70/74	C	652000	652000	pg/L	1730
74472-34-7	PCB-63		1330	1330	pg/L	432
52663-58-8	PCB-64		77600	77600	pg/L	432
32598-10-0	PCB-66		135000	135000	pg/L	432
73575-53-8	PCB-67		1390	1380	pg/L	432
73575-52-7	PCB-68	U	432	432	pg/L	432
41464-42-0	PCB-72	U	432	432	pg/L	432
74338-23-1	PCB-73		2040	2030	pg/L	432
32598-13-3	PCB-77		19600	19600	pg/L	432
70362-49-1	PCB-78	U	432	432	pg/L	432
41464-48-6	PCB-79		9380	9370	pg/L	432
33284-52-5	PCB-80	U	432	432	pg/L	432

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**E** Organics--Concentration of the target analyte exceeds the instrument calibration range  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383005  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32192  
**Batch ID:** 24585  
**Run Date:** 10/19/2013 07:03  
**Data File:** c18oct13a\_2-4  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:56  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 926.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 20  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
70362-50-4	PCB-81	U	432	432	pg/L	432
52663-62-4	PCB-82		177000	177000	pg/L	432
60145-20-2	PCB-83		75600	75600	pg/L	432
52663-60-2	PCB-84		451000	451000	pg/L	432
PCB-85-117	PCB-117/116/85	C	299000	299000	pg/L	1300
PCB-86-125	PCB-86/87/97/109/119/125	C	1280000	1280000	pg/L	2590
PCB-88/91	PCB-88/91	C	187000	187000	pg/L	863
73575-57-2	PCB-89		7450	7450	pg/L	432
PCB-90-113	PCB-113/90/101	C	1750000	1750000	pg/L	1300
52663-61-3	PCB-92		247000	247000	pg/L	432
PCB-93/100	PCB-93/100	C	2610	2600	pg/L	863
73575-55-0	PCB-94		4570	4560	pg/L	432
38379-99-6	PCB-95	E	1080000	1080000	pg/L	432
73575-54-9	PCB-96		3850	3840	pg/L	432
PCB-98/102	PCB-102/98	C	28000	28000	pg/L	863
38380-01-7	PCB-99		794000	794000	pg/L	432
60145-21-3	PCB-103		3950	3940	pg/L	432
56558-16-8	PCB-104	U	432	432	pg/L	432
32598-14-4	PCB-105		547000	547000	pg/L	432
70424-69-0	PCB-106	U	432	432	pg/L	432
70424-68-9	PCB-107		106000	106000	pg/L	432
PCB-108/124	PCB-108/124	C	69400	69400	pg/L	863
PCB-110/115	PCB-110/115	CE	2290000	2290000	pg/L	863
39635-32-0	PCB-111	U	432	432	pg/L	432
74472-36-9	PCB-112	U	432	432	pg/L	432
74472-37-0	PCB-114		13600	13600	pg/L	432
31508-00-6	PCB-118	E	1370000	1370000	pg/L	432
68194-12-7	PCB-120		637	634	pg/L	432
56558-18-0	PCB-121	U	432	432	pg/L	432
76842-07-4	PCB-122		14200	14200	pg/L	432
65510-44-3	PCB-123		21100	21100	pg/L	432
57465-28-8	PCB-126		3830	3830	pg/L	432

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**E** Organics--Concentration of the target analyte exceeds the instrument calibration range  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383005  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32192  
**Batch ID:** 24585  
**Run Date:** 10/19/2013 07:03  
**Data File:** c18oct13a\_2-4  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:56  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 926.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 20  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
39635-33-1	PCB-127		2390	2380	pg/L	432
PCB-128/166	PCB-128/166	C	338000	338000	pg/L	863
PCB-129-163	PCB-138/163/129	C	1880000	1880000	pg/L	1300
52663-66-8	PCB-130		102000	102000	pg/L	432
61798-70-7	PCB-131		29400	29400	pg/L	432
38380-05-1	PCB-132		749000	749000	pg/L	432
35694-04-3	PCB-133		14700	14700	pg/L	432
52704-70-8	PCB-134		102000	102000	pg/L	432
PCB-135/151	PCB-151/135	C	343000	343000	pg/L	863
38411-22-2	PCB-136		137000	137000	pg/L	432
35694-06-5	PCB-137		128000	128000	pg/L	432
PCB-139/140	PCB-139/140	C	36700	36700	pg/L	863
52712-04-6	PCB-141		287000	287000	pg/L	432
41411-61-4	PCB-142	U	432	432	pg/L	432
68194-15-0	PCB-143	U	432	432	pg/L	432
68194-14-9	PCB-144		50300	50300	pg/L	432
74472-40-5	PCB-145		562	559	pg/L	432
51908-16-8	PCB-146		185000	185000	pg/L	432
PCB-147/149	PCB-147/149	C	1100000	1100000	pg/L	863
74472-41-6	PCB-148		613	610	pg/L	432
68194-08-1	PCB-150		1310	1300	pg/L	432
68194-09-2	PCB-152		1110	1110	pg/L	432
PCB-153/168	PCB-153/168	C	1090000	1090000	pg/L	863
60145-22-4	PCB-154		9630	9630	pg/L	432
33979-03-2	PCB-155	U	432	432	pg/L	432
PCB-156/157	PCB-156/157	C	245000	245000	pg/L	863
74472-42-7	PCB-158		211000	211000	pg/L	432
39635-35-3	PCB-159	U	432	432	pg/L	432
41411-62-5	PCB-160	U	432	432	pg/L	432
74472-43-8	PCB-161	U	432	432	pg/L	432
39635-34-2	PCB-162		9500	9500	pg/L	432
74472-45-0	PCB-164		126000	126000	pg/L	432

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**E** Organics--Concentration of the target analyte exceeds the instrument calibration range  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383005  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32192  
**Batch ID:** 24585  
**Run Date:** 10/19/2013 07:03  
**Data File:** c18oct13a\_2-4  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:56  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 926.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 20  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-46-1	PCB-165	U	432	432	pg/L	432
52663-72-6	PCB-167		74100	74100	pg/L	432
32774-16-6	PCB-169	U	432	432	pg/L	432
35065-30-6	PCB-170		149000	149000	pg/L	432
PCB-171/173	PCB-173/171	C	48600	48600	pg/L	863
52663-74-8	PCB-172		19900	19900	pg/L	432
38411-25-5	PCB-174		133000	133000	pg/L	432
40186-70-7	PCB-175		4430	4430	pg/L	432
52663-65-7	PCB-176		12800	12800	pg/L	432
52663-70-4	PCB-177		64200	64200	pg/L	432
52663-67-9	PCB-178		16100	16000	pg/L	432
52663-64-6	PCB-179		34100	34100	pg/L	432
PCB-180/193	PCB-193/180	CU	863	863	pg/L	863
74472-47-2	PCB-181		3950	3950	pg/L	432
60145-23-5	PCB-182		838	835	pg/L	432
PCB-183/185	PCB-183/185	C	78200	78200	pg/L	863
74472-48-3	PCB-184	U	432	432	pg/L	432
74472-49-4	PCB-186	U	432	432	pg/L	432
52663-68-0	PCB-187		125000	125000	pg/L	432
74487-85-7	PCB-188	U	432	432	pg/L	432
39635-31-9	PCB-189		6610	6600	pg/L	432
41411-64-7	PCB-190		25800	25800	pg/L	432
74472-50-7	PCB-191		4850	4840	pg/L	432
74472-51-8	PCB-192	U	432	432	pg/L	432
35694-08-7	PCB-194		21700	21700	pg/L	432
52663-78-2	PCB-195		9370	9370	pg/L	432
42740-50-1	PCB-196		12100	12100	pg/L	432
PCB-197/200	PCB-197/200	C	4340	4340	pg/L	863
PCB-198/199	PCB-198/199	C	28900	28900	pg/L	863
40186-71-8	PCB-201		2810	2810	pg/L	432
2136-99-4	PCB-202		5070	5070	pg/L	432
52663-76-0	PCB-203		21300	21300	pg/L	432

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**E** Organics--Concentration of the target analyte exceeds the instrument calibration range  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

**PCB Congeners**  
**Certificate of Analysis**  
**Sample Summary**

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**SDG Number:** 2013-2136  
**Lab Sample ID:** 5383005  
**Client Sample:** 1668A Water  
**Client ID:** WT\_IPC-13-32192  
**Batch ID:** 24585  
**Run Date:** 10/19/2013 07:03  
**Data File:** c18oct13a\_2-4  
**Prep Batch:** 24583  
**Prep Date:** 09-OCT-13

**Client:** LANL001  
**Date Collected:** 09/13/2013 06:56  
**Date Received:** 09/26/2013 09:30  
  
**Method:** EPA Method 1668A  
**Analyst:** MJC  
  
**Prep Method:** SW846 3520C  
**Aliquot:** 926.5 mL

**Project:** LANL00112  
**Matrix:** WATER  
  
**Prep Basis:** As Received  
  
**Instrument:** HRP791  
**Dilution:** 20  
**Prep SOP Ref:** CF-OA-E-001

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
74472-52-9	PCB-204	U	432	432	pg/L	432
74472-53-0	PCB-205		1130	1120	pg/L	432
40186-72-9	PCB-206		7840	7830	pg/L	432
52663-79-3	PCB-207		949	947	pg/L	432
52663-77-1	PCB-208		2490	2490	pg/L	432
2051-24-3	PCB-209		761	757	pg/L	432
27323-18-8	Total Mono PCBs	U	0	0	pg/L	
25512-42-9	Total Di PCBs		505	493	pg/L	
25323-68-6	Total Tri PCBs		11200	11100	pg/L	
26914-33-0	Total Tetra PCBs		2140000	2140000	pg/L	
25429-29-2	Total Penta PCBs		10800000	10800000	pg/L	
26601-64-9	Total Hexa PCBs		7250000	7250000	pg/L	
28655-71-2	Total Hepta PCBs		727000	727000	pg/L	
55722-26-4	Total Octa PCBs		107000	107000	pg/L	
53742-07-7	Total Nona PCBs		11300	11300	pg/L	
DECACB(Tot)	Total Deca PCB		761	757	pg/L	
1336-36-3	Total PCB Congeners		21100000	21100000	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		918	2160	pg/L	42.5	(15%-150%)
13C-3-MoCB		1140	2160	pg/L	52.9	(15%-150%)
13C-4-DiCB		1310	2160	pg/L	60.8	(25%-150%)
13C-15-DiCB		1430	2160	pg/L	66.3	(25%-150%)
13C-19-TrCB		1840	2160	pg/L	85.4	(25%-150%)
13C-37-TrCB		1510	2160	pg/L	69.7	(25%-150%)
13C-54-TeCB		1530	2160	pg/L	70.9	(25%-150%)
13C-77-TeCB		1810	2160	pg/L	83.6	(25%-150%)
13C-81-TeCB		1900	2160	pg/L	88.0	(25%-150%)
13C-104-PeCB		1390	2160	pg/L	64.4	(25%-150%)
13C-105-PeCB		1500	2160	pg/L	69.5	(25%-150%)
13C-114-PeCB		1350	2160	pg/L	62.6	(25%-150%)
13C-118-PeCB		1560	2160	pg/L	72.4	(25%-150%)
13C-123-PeCB		1480	2160	pg/L	68.6	(25%-150%)
13C-126-PeCB		1490	2160	pg/L	68.9	(25%-150%)
13C-155-HxCB		1380	2160	pg/L	63.8	(25%-150%)
13C-156-HxCB	C	2520	4320	pg/L	58.5	(25%-150%)
13C-167-HxCB		1240	2160	pg/L	57.3	(25%-150%)
13C-169-HxCB		1440	2160	pg/L	66.7	(25%-150%)
13C-188-HpCB		1420	2160	pg/L	65.7	(25%-150%)
13C-189-HpCB		1350	2160	pg/L	62.5	(25%-150%)
13C-202-OcCB		1580	2160	pg/L	73.4	(25%-150%)
13C-205-OcCB		1840	2160	pg/L	85.1	(25%-150%)



**PCB Congeners  
Certificate of Analysis  
Sample Summary**

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<b>SDG Number:</b> 2013-2136	<b>Client:</b> LANL001	<b>Project:</b> LANL00112
<b>Lab Sample ID:</b> 5383005	<b>Date Collected:</b> 09/13/2013 06:56	<b>Matrix:</b> WATER
<b>Client Sample:</b> 1668A Water	<b>Date Received:</b> 09/26/2013 09:30	
<b>Client ID:</b> WT_IPC-13-32192		<b>Prep Basis:</b> As Received
<b>Batch ID:</b> 24585	<b>Method:</b> EPA Method 1668A	
<b>Run Date:</b> 10/19/2013 07:03	<b>Analyst:</b> MJC	<b>Instrument:</b> HRP791
<b>Data File:</b> c18oct13a_2-4		<b>Dilution:</b> 20
<b>Prep Batch:</b> 24583	<b>Prep Method:</b> SW846 3520C	<b>Prep SOP Ref:</b> CF-OA-E-001
<b>Prep Date:</b> 09-OCT-13	<b>Aliquot:</b> 926.5 mL	

CAS No.	Parmname	Qual	Result	MBCR	Units	PQL
<b>Surrogate/Tracer recovery</b>						
		<b>Qual</b>	<b>Result</b>	<b>Nominal</b>	<b>Units</b>	<b>Recovery%      Acceptable Limits</b>
13C-206-NoCB			2070	2160	pg/L	95.9      (25%-150%)
13C-208-NoCB			1920	2160	pg/L	88.9      (25%-150%)
13C-209-DeCB			2270	2160	pg/L	105      (25%-150%)
13C-28-TrCB			1730	2160	pg/L	80.3      (30%-135%)
13C-111-PeCB			1720	2160	pg/L	79.7      (30%-135%)
13C-178-HpCB			1670	2160	pg/L	77.6      (30%-135%)

**Comments:**

- C** Congener has coeluters. When Cxxx, refer to congener number xxx for data  
**E** Organics--Concentration of the target analyte exceeds the instrument calibration range  
**U** Analyte was analyzed for , but not detected above the specified detection limit.

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13

Analyte	Units	Average	Stdev	MBCV	*
2-Chlorobiphenyl (1)	pg/L	1.11	0.599	2.31	
3-Chlorobiphenyl (2)	pg/L	1.01	0.498	2.01	
4-Chlorobiphenyl (3)	pg/L	1.03	0.516	2.06	
2,2'-Dichlorobiphenyl (4)	pg/L	5.7	4.03	13.8	
2,3-Dichlorobiphenyl (5)	pg/L	6.26	5.08	16.4	
2,3'-Dichlorobiphenyl (6)	pg/L	4.03	3.34	10.7	
2,4-Dichlorobiphenyl (7)	pg/L	5.67	4.66	15	
2,4'-Dichlorobiphenyl (8)	pg/L	3.86	3.18	10.2	
2,5-Dichlorobiphenyl (9)	pg/L	3.98	3.35	10.7	
2,6-Dichlorobiphenyl (10)	pg/L	3.65	2.66	8.98	
3,3'-Dichlorobiphenyl (11)	pg/L	4.75	3.07	10.9	
3,4-Dichlorobiphenyl (12)	pg/L	5.62	3.73	13.1	
3,5-Dichlorobiphenyl (14)	pg/L	4.14	3.24	10.6	
4,4'-Dichlorobiphenyl (15)	pg/L	4.83	3.86	12.5	
2,2',3-Trichlorobiphenyl (16)	pg/L	1.76	0.818	3.4	
2,2',4-Trichlorobiphenyl (17)	pg/L	1.31	0.586	2.48	
2,2',5-Trichlorobiphenyl (18)	pg/L	1.23	0.485	2.2	
2,2',6-Trichlorobiphenyl (19)	pg/L	1.24	0.55	2.34	
2,3,3'-Trichlorobiphenyl (20)	pg/L	1.74	2.04	5.83	
2,3,4-Trichlorobiphenyl (21)	pg/L	1.09	0.312	1.72	
2,3,4'-Trichlorobiphenyl (22)	pg/L	1.36	0.511	2.38	
2,3,5-Trichlorobiphenyl (23)	pg/L	1.35	0.548	2.44	
2,3,6-Trichlorobiphenyl (24)	pg/L	1.32	0.575	2.47	
2,3',4-Trichlorobiphenyl (25)	pg/L	0.94	0.367	1.67	
2,3',5-Trichlorobiphenyl (26)	pg/L	1.01	0.327	1.66	
2,3',6-Trichlorobiphenyl (27)	pg/L	0.896	0.405	1.71	
2,4',5-Trichlorobiphenyl (31)	pg/L	0.871	0.345	1.56	
2,4',6-Trichlorobiphenyl (32)	pg/L	0.848	0.372	1.59	
2',3,5-Trichlorobiphenyl (34)	pg/L	0.915	0.377	1.67	
3,3',4-Trichlorobiphenyl (35)	pg/L	0.966	0.303	1.57	
3,3',5-Trichlorobiphenyl (36)	pg/L	0.889	0.291	1.47	
3,4,4'-Trichlorobiphenyl (37)	pg/L	1.41	1.06	3.53	
3,4,5-Trichlorobiphenyl (38)	pg/L	0.956	0.306	1.57	
3,4',5-Trichlorobiphenyl (39)	pg/L	1.25	0.414	2.08	
2,2',3,3'-Tetrachlorobiphenyl (40)	pg/L	1.82	0.959	3.74	
2,2',3,4-Tetrachlorobiphenyl (41)	pg/L	1.87	1.09	4.06	
2,2',3,4'-Tetrachlorobiphenyl (42)	pg/L	1.88	1.04	3.95	
2,2',3,5-Tetrachlorobiphenyl (43)	pg/L	2.17	1.27	4.71	
2,2',3,5'-Tetrachlorobiphenyl (44)	pg/L	1.64	0.819	3.28	
2,2',3,6-Tetrachlorobiphenyl (45)	pg/L	1.68	0.474	2.63	
2,2',3,6'-Tetrachlorobiphenyl (46)	pg/L	1.28	0.616	2.52	
2,2',4,5-Tetrachlorobiphenyl (48)	pg/L	2.23	1.24	4.71	
2,2',4,5'-Tetrachlorobiphenyl (49)	pg/L	1.56	0.709	2.98	
2,2',4,6-Tetrachlorobiphenyl (50)	pg/L	1.28	0.508	2.29	
2,2',5,5'-Tetrachlorobiphenyl (52)	pg/L	1.6	0.866	3.33	
2,2',6,6'-Tetrachlorobiphenyl (54)	pg/L	0.664	0.275	1.21	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13*

Analyte	Units	Average	Stdev	MBCV	*
2,3,3',4-Tetrachlorobiphenyl (55)	pg/L	1.57	0.686	2.94	
2,3,3',4'-Tetrachlorobiphenyl (56)	pg/L	1.36	0.54	2.44	
2,3,3',5-Tetrachlorobiphenyl (57)	pg/L	1.06	0.493	2.04	
2,3,3',5'-Tetrachlorobiphenyl (58)	pg/L	1.54	0.713	2.96	
2,3,3',6-Tetrachlorobiphenyl (59)	pg/L	1.44	0.664	2.77	
2,3,4,4'-Tetrachlorobiphenyl (60)	pg/L	1.67	0.914	3.49	
2,3,4,5-Tetrachlorobiphenyl (61)	pg/L	1.41	0.431	2.28	
2,3,4',5-Tetrachlorobiphenyl (63)	pg/L	1.03	0.472	1.98	
2,3,4',6-Tetrachlorobiphenyl (64)	pg/L	1.34	0.695	2.73	
2,3',4,4'-Tetrachlorobiphenyl (66)	pg/L	2.07	1.63	5.34	
2,3',4,5-Tetrachlorobiphenyl (67)	pg/L	1.03	0.468	1.97	
2,3',4,5'-Tetrachlorobiphenyl (68)	pg/L	1.41	0.621	2.65	
2,3',5,5'-Tetrachlorobiphenyl (72)	pg/L	1.01	0.481	1.97	
2,3',5',6-Tetrachlorobiphenyl (73)	pg/L	1.69	0.978	3.64	
3,3',4,4'-Tetrachlorobiphenyl (77)	pg/L	1.32	0.58	2.48	
3,3',4,5-Tetrachlorobiphenyl (78)	pg/L	1.15	0.465	2.08	
3,3',4,5'-Tetrachlorobiphenyl (79)	pg/L	1	0.407	1.82	
3,3',5,5'-Tetrachlorobiphenyl (80)	pg/L	1.04	0.458	1.96	
3,4,4',5-Tetrachlorobiphenyl (81)	pg/L	1.27	0.563	2.4	
2,2',3,3',4-Pentachlorobiphenyl (82)	pg/L	2.3	1.23	4.77	
2,2',3,3',5-Pentachlorobiphenyl (83)	pg/L	2.36	1.32	4.99	
2,2',3,3',6-Pentachlorobiphenyl (84)	pg/L	2.37	1.35	5.07	
2,2',3,4,4'-Pentachlorobiphenyl (85)	pg/L	2.01	0.954	3.92	
2,2',3,4,5-Pentachlorobiphenyl (86)	pg/L	2.19	0.87	3.93	
2,2',3,4,6-Pentachlorobiphenyl (88)	pg/L	2.56	1.17	4.89	
2,2',3,4,6'-Pentachlorobiphenyl (89)	pg/L	2.14	1.22	4.59	
2,2',3,4',5-Pentachlorobiphenyl (90)	pg/L	2.12	0.951	4.03	
2,2',3,5,5'-Pentachlorobiphenyl (92)	pg/L	2.05	1.16	4.37	
2,2',3,5,6-Pentachlorobiphenyl (93)	pg/L	2.39	1.37	5.14	
2,2',3,5,6'-Pentachlorobiphenyl (94)	pg/L	3.06	1.79	6.64	
2,2',3,5',6-Pentachlorobiphenyl (95)	pg/L	2.02	1.05	4.12	
2,2',3,6,6'-Pentachlorobiphenyl (96)	pg/L	1.12	0.603	2.32	
2,2',3',4,6-Pentachlorobiphenyl (98)	pg/L	2.45	1.15	4.74	
2,2',4,4',5-Pentachlorobiphenyl (99)	pg/L	2.79	1.63	6.06	
2,2',4,5',6-Pentachlorobiphenyl (103)	pg/L	1.83	1.07	3.97	
2,2',4,6,6'-Pentachlorobiphenyl (104)	pg/L	1.03	0.486	2	
2,3,3',4,4'-Pentachlorobiphenyl (105)	pg/L	2.17	1.36	4.89	
2,3,3',4,5-Pentachlorobiphenyl (106)	pg/L	1.79	1.1	4	
2,3,3',4',5-Pentachlorobiphenyl (107)	pg/L	1.8	1.1	4.01	
2,3,3',4,5'-Pentachlorobiphenyl (108)	pg/L	2.09	1.25	4.58	
2,3,3',4',6-Pentachlorobiphenyl (110)	pg/L	2.4	1.06	4.52	
2,3,3',5,5'-Pentachlorobiphenyl (111)	pg/L	2.14	1.16	4.47	
2,3,3',5,6-Pentachlorobiphenyl (112)	pg/L	1.54	0.833	3.21	
2,3,4,4',5-Pentachlorobiphenyl (114)	pg/L	2.21	1.35	4.91	
2,3',4,4',5-Pentachlorobiphenyl (118)	pg/L	2.1	1.17	4.43	
2,3',4,5,5'-Pentachlorobiphenyl (120)	pg/L	1.46	0.784	3.02	

# Blank Population Summary

Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13

Analyte	Units	Average	Stdev	MBCV	*
2,3',4,5',6-Pentachlorobiphenyl (121)	pg/L	2.15	1.24	4.63	
2',3,3',4,5-Pentachlorobiphenyl (122)	pg/L	1.96	1.19	4.34	
2',3,4,4',5-Pentachlorobiphenyl (123)	pg/L	1.98	1.21	4.4	
3,3',4,4',5-Pentachlorobiphenyl (126)	pg/L	2.45	1.52	5.49	
3,3',4,5,5'-Pentachlorobiphenyl (127)	pg/L	1.88	1.1	4.08	
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	pg/L	1.64	0.771	3.18	
2,2',3,3',4,5-Hexachlorobiphenyl (129)	pg/L	1.68	0.76	3.2	
2,2',3,3',4,5'-Hexachlorobiphenyl (130)	pg/L	1.84	0.903	3.64	
2,2',3,3',4,6-Hexachlorobiphenyl (131)	pg/L	2.02	1.05	4.13	
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	pg/L	2.51	1.29	5.09	
2,2',3,3',5,5'-Hexachlorobiphenyl (133)	pg/L	1.71	0.868	3.45	
2,2',3,3',5,6-Hexachlorobiphenyl (134)	pg/L	2.13	1.17	4.48	
2,2',3,3',5,6'-Hexachlorobiphenyl (135)	pg/L	1.64	0.719	3.08	
2,2',3,3',6,6'-Hexachlorobiphenyl (136)	pg/L	1	0.56	2.13	
2,2',3,4,4',5-Hexachlorobiphenyl (137)	pg/L	2.5	1.28	5.07	
2,2',3,4,4',6-Hexachlorobiphenyl (139)	pg/L	1.87	0.953	3.78	
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	pg/L	1.69	0.826	3.35	
2,2',3,4,5,6-Hexachlorobiphenyl (142)	pg/L	1.78	0.9	3.58	
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	pg/L	1.6	0.799	3.2	
2,2',3,4,5',6-Hexachlorobiphenyl (144)	pg/L	1.31	0.681	2.67	
2,2',3,4,6,6'-Hexachlorobiphenyl (145)	pg/L	1.46	0.807	3.08	
2,2',3,4',5,5'-Hexachlorobiphenyl (146)	pg/L	1.61	0.84	3.29	
2,2',3,4',5,6-Hexachlorobiphenyl (147)	pg/L	1.9	0.947	3.8	
2,2',3,4',5,6'-Hexachlorobiphenyl (148)	pg/L	1.28	0.653	2.59	
2,2',3,4',6,6'-Hexachlorobiphenyl (150)	pg/L	1.41	0.784	2.98	
2,2',3,5,6,6'-Hexachlorobiphenyl (152)	pg/L	0.987	0.559	2.1	
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	pg/L	1.68	0.688	3.06	
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	pg/L	1.2	0.621	2.44	
2,2',4,4',6,6'-Hexachlorobiphenyl (155)	pg/L	0.887	0.409	1.71	
2,3,3',4,4',5-Hexachlorobiphenyl (156)	pg/L	1.77	0.803	3.38	
2,3,3',4,4',6-Hexachlorobiphenyl (158)	pg/L	1.25	0.605	2.45	
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	pg/L	1.24	0.589	2.42	
2,3,3',4,5,6-Hexachlorobiphenyl (160)	pg/L	1.93	0.958	3.85	
2,3,3',4,5',6-Hexachlorobiphenyl (161)	pg/L	1.27	0.64	2.55	
2,3,3',4',5,5'-Hexachlorobiphenyl (162)	pg/L	1.71	0.811	3.33	
2,3,3',4',5',6-Hexachlorobiphenyl (164)	pg/L	1.31	0.632	2.57	
2,3,3',5,5',6-Hexachlorobiphenyl (165)	pg/L	1.96	0.998	3.95	
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	pg/L	1.41	0.672	2.75	
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	pg/L	1.53	0.674	2.88	
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	pg/L	1.53	0.631	2.8	
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	pg/L	1.66	0.591	2.85	
2,2',3,3',4,5,5'-Heptachlorobiphenyl (172)	pg/L	1.54	0.654	2.85	
2,2',3,3',4,5,6'-Heptachlorobiphenyl (174)	pg/L	1.5	0.66	2.82	
2,2',3,3',4,5',6-Heptachlorobiphenyl (175)	pg/L	1.39	0.664	2.71	
2,2',3,3',4,6,6'-Heptachlorobiphenyl (176)	pg/L	1.07	0.536	2.14	
2,2',3,3',4',5,6-Heptachlorobiphenyl (177)	pg/L	1.55	0.673	2.9	

# Blank Population Summary

*Method 1668 HRMS Aqueous Analysis for 01-OCT-13 to 31-OCT-13*

Analyte	Units	Average	Stdev	MBCV	*
2,2',3,3',5,5',6-Heptachlorobiphenyl (178)	pg/L	1.45	0.702	2.86	
2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)	pg/L	1.05	0.535	2.12	
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	pg/L	1.89	1.55	5	
2,2',3,4,4',5,6-Heptachlorobiphenyl (181)	pg/L	2.04	0.898	3.84	
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	pg/L	1.45	0.683	2.81	
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	pg/L	1.75	0.648	3.04	
2,2',3,4,4',6,6'-Heptachlorobiphenyl (184)	pg/L	1.42	0.719	2.86	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (186)	pg/L	1.55	0.771	3.09	
2,2',3,4,5,5',6-Heptachlorobiphenyl (187)	pg/L	1.85	0.868	3.58	
2,2',3,4,5,6,6'-Heptachlorobiphenyl (188)	pg/L	1.13	0.541	2.21	
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	pg/L	1.53	0.668	2.86	
2,3,3',4,4',5,6-Heptachlorobiphenyl (190)	pg/L	1.19	0.489	2.16	
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	pg/L	1.15	0.491	2.13	
2,3,3',4,5,5',6-Heptachlorobiphenyl (192)	pg/L	1.73	0.736	3.2	
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	pg/L	1.43	0.615	2.66	
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	pg/L	1.5	0.667	2.83	
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	pg/L	1.37	0.666	2.7	
2,2',3,3',4,4',6,6'-Octachlorobiphenyl (197)	pg/L	1.3	0.538	2.38	
2,2',3,3',4,5,5',6-Octachlorobiphenyl (198)	pg/L	1.73	0.697	3.13	
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (201)	pg/L	1.05	0.529	2.1	
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	pg/L	1.19	0.567	2.32	
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	pg/L	1.81	0.876	3.56	
2,2',3,4,4',5,6,6'-Octachlorobiphenyl (204)	pg/L	1.06	0.534	2.13	
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	pg/L	1.25	0.564	2.37	
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	pg/L	1.92	0.787	3.49	
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	pg/L	1.45	0.6	2.64	
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (208)	pg/L	1.63	0.653	2.93	
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (209)	pg/L	1.51	0.831	3.17	

\* = PQL adjusted to the MBCV.