Final

UCR Residential Soil Study Field Sampling and Data Summary Report

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CH2MHILL®

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Acronyms and Abbreviations

µm	micrometers
ALS	ALS Group USA, Corp.
bgs	below ground surface
CCB	continuing calibration blank
CCT	Confederated Tribes of the Colville Reservation
COC	chain of custody
DU	Decision Unit
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
ESI	Environmental Standards, Inc.
FSP	Field Sampling Plan
FTL	field team lead
GPS	global positioning system
IC	incremental composite (sample)
IEUBK	Integrated Exposure Uptake Biokinetic
IVBA	in vitro bioaccessibility assay
LCL	lower control limit
MS/MSD	matrix spike/matrix spike duplicate
MIST	multi-Incremental Sampling Tool
oz	ounce
PARCC	precision, accuracy, representativeness, comparability, and completeness
PPE	personal protective equipment
ppm	parts per million
QAPP	quality assurance project plan
RBA	relative bioavailability
RI/FS	Remedial Investigation and Feasibility Study
RPD	relative percent difference
RQAM	Regional Quality Assurance Manager
SCS	Spokane Courier Service
SDG	sample delivery group
sq. ft.	square feet
TAI	Teck American, Incorporated
TAL	target analyte list
TCRA	time critical removal action
Teck	Teck Metals, Ltd.
UCR	Upper Columbia River
USCS	United Soil Classification System
µm	micrometers
U.S.	United States
USCS	United Soil Classification System
VSP	Visual sampling plan (software supported by EPA to determine the number of samples or increments)
WA	Washington

SECTION 1

Introduction

This report provides a summary of the field activities and results for the Residential Soil Study that was conducted in 2014 by the U.S. Environmental Protection Agency (EPA) in the northern portion of the Upper Columbia River (UCR) Site. Reconnaissance, sampling, and analyses were conducted under an EPA-approved quality assurance project plan (QAPP) for the study (SRC, 2014). The objective of the UCR Residential Soil Study is to collect data to support refinement of exposure estimates for residents in the northernmost reaches of the UCR Study Area to support the Human Health Risk Assessment. Specifically, surface soils were collected from rural residential properties in the Columbia River valley just north of the town of Northport, Washington (WA) and extending to the U.S.-Canada border. The owners of the sampled properties volunteered to participate after EPA notified landowners in the Residential Soil Study Area (Study Area) about the sampling program.

This Residential Soil Study represents one of the tasks that will be completed as part of the remedial investigation and feasibility study (RI/FS). The RI/FS is being conducted under a Settlement Agreement between Teck American, Incorporated (TAI) and EPA.

1.1 Background

The UCR Site consists of the areal extent of hazardous substances contamination within the United States in or adjacent to the Upper Columbia River, from the border between the United States and Canada downstream to the Grand Coulee Dam, including the Franklin D. Roosevelt Lake (Lake Roosevelt) and all suitable areas in proximity to such contamination necessary for implementation of the RI/FS. The RI/FS is currently underway to investigate the nature and extent of contamination that has resulted from historical and continuing discharges of hazardous substances in or adjacent to the Upper Columbia River, including, but not limited to, releases from smelting processes and facility operations by Teck Metals, Ltd. (Teck) at the Trail facility located in Trail, British Columbia. This report concerns residential soil sampling in a study area located along the Upper Columbia River between Northport, WA, and the U.S.-Canada border (Figure 1-1).

Historic emissions from the Trail smelting facility have included metal-enriched particulates and aerosols. These airborne contaminants were deposited at varying distances from the smelter and became incorporated into the soil horizon. Various studies and soil sampling activities conducted in the Columbia River valley corridor south of the U.S.-Canada border (Shannon & Wilson, Inc., 2011; Hart Crowser, 2013) have demonstrated the presence of elevated heavy metal concentrations in the upper horizons of minimally disturbed soils. These previous sampling activities were focused in an area of northeastern Washington where severe vegetation damage and impairment was documented in the 1920s and 1930s, and which was attributed to smelter sulfur dioxide emissions (Scheffer and Hedgcock, 1955). Elevated metal concentrations also have been mapped in surface soils collected by Canadian investigators between Trail and the U.S.-Canada border (Goodarzi et al., 2002; Goodarzi et al., 2006).

The objective of the Residential Soil Study was to generate analytical data from surface soil samples that will be used to refine metal-exposure estimates for residents in the northernmost reaches of the Columbia River valley. The data will be used to determine whether lead and arsenic concentrations (and other metals) in the fine-grained fraction (less than 150 micrometers [µm] for surface soils and less than 250 µm for beach sand) from sampled properties pose an unacceptable risk to human health, particularly for children who live in the study area. Therefore, sampling focused on locations where there is a high potential for exposure by residents, especially children.

Field activities were conducted from April 2014 through October 2014 and consisted of site reconnaissance (Phase 1) and sampling (Phase 2). The Phase 1 reconnaissance was performed in April and May 2014. Data from Phase 1 reconnaissance activities were reviewed and property-specific sampling designs were

developed. The sampling designs took into account current and future land use, physical boundaries of the property, and predicted depth of exposure to potentially contaminated soil in one or more sampling decision units (DUs) at the property. The sampling program incorporated both incremental composite (IC) and discrete soil samples, with IC samples being collected at every DU and discrete soil samples being generally obtained at one DU per property. Target analytes for the Residential Soil Study included target analyte list (TAL) metals[1] (except mercury). In vitro bioaccessibility assays (IVBA) for lead and arsenic were also performed on selected samples. Phase 2 soil sampling began in late August 2014 and was completed in early October 2014.

1.2 Document Organization

This report is organized into the following sections:

- **Section 1 – Introduction.** This section provides background information for the study and outlines the report organization.
- **Section 2 – Study Design.** This section describes the purpose and objectives of the study and provides an overview of the study design.
- **Section 3 – Field Activities.** This section identifies the methods used to collect the Residential Soil Study samples and discusses any changes or deviations from the QAPP and field sampling plan (FSP).
- **Section 4 – Laboratory Activities.** This section identifies the methods used to process and analyze the samples, as well as changes to the laboratory procedures identified in the QAPP.
- **Section 5 – Data Quality Assessment**. This section provides an assessment of data quality based on the validation of analytical data for the study.
- **Section 6 – Results.** This section presents a summary of the analytical data for the study.
- **Section 7 – Summary.** This section presents a summary of the results.
- **Section 8 – References.** This section presents bibliographic information for the documents cited within this report.
- Figures and data tables are provided following Section 8.

Field records and supporting information for the Residential Soil Study are provided in the following appendices, which are provided in electronic format (see enclosed DVD):

- **Appendix A** – Phase 1 Residential Reconnaissance Report
- **Appendix B** – Field Sampling Records and Photographs
- **Appendix C** – Laboratory Oversight Memo
- **Appendix D** - IVBA Decision Memo
- **Appendix E** – Data Validation Reports
- **Appendix F** - EPA Data Review Memos
- **Appendix G** – Sample Results Tables and Maps

1 TAL metals include aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium, and zinc.

SECTION 2

Study Design

2.1 Purpose of Study

The purpose of the Residential Soil Study was to collect data to support refinement of exposure estimates for residents of properties in the Study Area.

2.2 Study Design

The Residential Soil Study was designed to provide additional information to characterize potential risk and exposure associated with historical deposition of metals in soils in residential areas. The focus of this study was on residential properties located north of Northport and extending to the U.S.-Canada border, within the Columbia River valley. Landowners were contacted and provided access agreements to allow EPA to perform the sampling. The sampling was voluntary from the landowner.

In the spring of 2014, each residential property owner who returned a signed access agreement to EPA was visited, the property owner(s) interviewed, and exposure areas were defined and mapped. Residential parcels in this rural area are quite large (the mean parcel size sampled was 16 acres, and potential residential parcels in the study area ranged from 0.06 acres to approximately 158 acres). As such, portions of some large properties are not utilized regularly by the property owners (e.g., forested land). Given that the goal of the study is to sample soils in areas with high human exposure potential, this investigation placed emphasis on the utilized portions of each parcel (i.e., the areas around each house where residents are most likely to come into contact with surface soils). Children's play areas and gardens were targeted for soil sampling. Gardens were targeted because exposure may occur in these areas during digging in the surface soil for tilling and weeding, planting, and moving plants. Areas that are intermittently accessed were sampled on a case-by-case basis (e.g., areas where children ride dirt bikes). Animal pens or riding areas were also sampled because of potential for frequent human exposure to surface soils in these areas. Except for driplines from roofs, which were sampled separately, care was taken to locate increments away from influences of any other painted surfaces.

Residential soil samples were collected using an IC sampling design. IC sampling entails the collection of multiple individual volumes of soil (increments) from a target area (DU) that are composited and subsampled according to a detailed standard operating procedure prior to laboratory analysis (ITRC, 2012). Increments were located using systematic random sampling with a rectangular grid and random starting point. IC was selected as the sampling strategy because it provides a more cost-effective alternative to discrete sampling when the objective is to estimate the mean concentration for a DU (Hathaway et al., 2008). Composite sample data have lower variability than discrete sample data and a higher reproducibility (HDOH, 2009).

2.2.1 Number of DUs per Property

A DU is defined as the smallest area about which a risk-based decision will be made. For this project, the number and location of DUs on each of the residential properties was based on property size and the presence of features that may influence exposure. Most of the properties have one DU (House) that encompasses up to 1 acre immediately surrounding the residence. Distinct play areas, driplines, gardens, beaches, agricultural areas, and animal pens/riding areas were delineated as separate DUs. Properties that included other frequently used areas were delineated and assigned to the "Other Not Specified" DU category.

For example, a property that includes 5 acres of utilized land that includes a child's play area and a vegetable garden could have up to four DUs: one DU for up to 1 acre surrounding the residence (excluding gardens and play areas), one DU for the garden, one DU for the play area, and one DU for the remaining portion of

the property that is regularly used (Other Not Specified). The number of DUs per property ranged from 1 to 15, with the average being 3.

Areas near paved roadways and railways were avoided to prevent sampling soil that may be contaminated by non-air sources; a 50-foot buffer in both directions from the center line of these features was implemented. Buffers were not constructed for unpaved (e.g., dirt or gravel) roads, driveways, or parking areas. However, planned increments located in compacted gravel, other non-soil materials, or obstructions were moved as described in Section 3.2.3.5. Boundaries for each DU were delineated based on land use and geographic positioning system (GPS) data collected during the property visit. Property-specific maps were generated that outlined each DU.

2.2.2 IC Sample Quantity and Number of Increments per DU

IC sampling produces an estimate of the mean contaminant concentration in soil within a DU. If a DU were perfectly homogenous and contaminants were equally distributed throughout the surface soil, all sampling approaches would yield the same resulting contaminant concentration. However, the distribution of contaminants within soil is heterogeneous, introducing variability among the IC estimates.

The evaluations documenting the rationale for the quantity of IC samples per DU and number of increments per IC sample were detailed in Worksheet 17 of the QAPP (SRC, 2014). For DUs greater than 1,000 square feet (sq. ft.), three IC samples consisting of 30 increments were needed for each type of DU to enable an estimate of sampling variance and a 95 percent Upper Confidence Limit for the mean, which is used as the EPC for metals other than lead. Three samples will allow risk managers to compare the estimate of the mean DU contaminant concentration to applicable decision criteria while controlling the chance of decision errors (false negatives, false positives) at acceptable levels. It is critical that the same number of increments be collected for each IC sample within a DU. For duplicate types of DUs, only one triplicate IC sample was collected (e.g., if there were two or more DUs on one property described as garden, one had triplicate IC samples taken and the rest only had one IC sample collected). For DUs less than 1,000 sq. ft., only one IC sample was collected.

2.2.3 Location and Number of Discrete Samples

Discrete soil samples were typically collected at one DU per property to provide information on the vertical nature and extent of contamination at each property. In general, five discrete soil samples were collected in the DU closest to the house (where exposure is expected to be highest). The locations of the five samples were randomly selected.

2.2.4 Sample Depths

The exposure pathway of concern is incidental ingestion of surface soils resulting from contact with soil. The sampling depth is the soil depth interval that people are most likely to come into contact with and will vary by DU. As quoted in EPA's 2003 Superfund Lead-Contaminated Residential Sites Handbook, "With respect to risk assessment, the top inch of soil best represents current exposure to contaminants (EPA, 1989; EPA, 1996) and is the source of data used in the Integrated Exposure Uptake Biokinetic (IEUBK) model to represent exposure from soil."

Accordingly, the planned sample depth for most DU categories was 0 to 1 inch below ground surface (bgs), starting below the organic litter or sod (EPA, 2003). However, the expected exposure depth for certain DU categories is deeper to be consistent with the exposure scenarios, as follows:

- Gardens – tilled depth (typically 0 to 12 inches bgs)
- Disturbed areas (e.g., animal activity areas) – 0 to 3 inches bgs
- Beaches – 0 to 6 inches bgs

The discrete samples were obtained from an interval of 1 to 6 inches bgs.

2.2.5 Sample Locations within a DU

Increments for each IC sample were pre-located using a systematic grid based on a random starting location in Visual Sampling Plan (VSP, 2013). This sampling design resulted in approximately equally-spaced increments within the DU (i.e., uniform spatial distribution of increments). For example, a square-shaped DU may be divided into five rows with six increments collected from each row, using a systematic random design with an initial random starting point. For more rectangular-shaped DUs, fewer rows might be used, with more increments per row collected. Row lengths and increments per row were modified as needed to accommodate a variety of DU shapes, orientations, and obstructions encountered in the field.

Beach sample locations were delineated in the field based on water elevation at the time of sampling and interviews with property owners regarding use of the beach. Dripline sample locations were also delineated in the field based on field observations. Discrete sample locations were randomly located in designated DUs (typically the House DU) using VSP prior to field mobilization.

SECTION 3

Field Activities

The reconnaissance and sampling programs for the Residential Soil Study were outlined in the EPA-approved Residential Soil Study QAPP (SRC, 2014) and detailed in the Field Reconnaissance Plan (CH2M HILL, 2014a) and Phase 2 FSP (CH2M HILL, 2014b), which were included as appendices to the QAPP. Field reconnaissance was conducted by EPA, CH2M HILL (CH2M), and SRC. Sampling was conducted by EPA, CH2M, and archeologists from the Colville Confederated Tribes (CCT).

3.1 Phase 1 Reconnaissance

The residential soil reconnaissance effort was performed to delineate DU sampling locations and boundaries for the soil sampling event. Field reconnaissance activities were conducted in two non-contiguous weeks during the weeks of April 28 and May 12, 2014, and was performed in accordance with the EPA-approved Field Reconnaissance Plan (CH2M HILL, 2014a) and the draft QAPP (SRC, 2014).

Phase 1 reconnaissance consisted of visiting each property where sampling was planned to observe property features and to interview landowners or residents to determine the locations for soil sampling DUs. Understanding the primary use of the property and knowing the areas of high-use and expected future use of the property was essential to properly delineating the areas for the Phase 2 soil sampling.

Data collected from the reconnaissance effort were then used to finalize the field sampling plan for the Phase 2 soil sampling event. Field reconnaissance activities and results are summarized in Appendix A (Phase 1 Reconnaissance Report).

3.2 Phase 2 Sample Collection

This section discusses the soil sampling collection methods and procedures performed during the Phase 2 sampling event. Field sampling activities were conducted from August 18 to October 3, 2014. All field activities and sample collection methods were performed in accordance to the EPA-approved QAPP (SRC, 2014) and FSP (CH2M HILL, 2014b) unless otherwise noted in Section 3.2.11.

3.2.1 Sampling Overview

Soil sampling was conducted at 74 properties located in the study area (Figure 3-1). The locations, extent, and sampling depths for each DU for each property was determined based on property-specific information obtained during Phase 1 field reconnaissance.

Sampling was performed by two field teams consisting of CH2M, EPA, CCT, and contractor personnel for the duration of the sampling event. Each team generally consisted of one CH2M Field Team Lead (FTL), two CH2M sampling staff, one contractor sampling staff, one EPA representative, and one CCT archeologist. CH2M and contractor staff performed all duties and responsibilities for sample preparation, sample collection, and sample handling. EPA staff communicated with property owners, reviewed and approved sampling changes/deviations, and supported CH2M with sampling. CCT archeologists provided visual screening for cultural resources for all collected soil samples (described in further detail in Section 3.2.3.8).

A total of 235 DUs were sampled during the field effort, including 541 IC samples and 402 discrete samples. The chronology for sample collection activities is summarized in Table 3-1. Sample information is summarized in Tables 3-2 and 3-3, respectively. For privacy, property owner names and other identifying information are not displayed on the sample information tables.

3.2.2 Equipment

3.2.2.1 Global Positioning System

Due to the complexity, size, and large number of DUs identified for sampling, most of the IC and discrete sample locations were pre-determined using VSP software for IC sampling methodology prior to mobilizing for the field event. Finalized DU shapes and the pre-selected IC and discrete sampling locations were pre-selected by SRC and then uploaded prior to field mobilization onto handheld GPS units (Trimble XH) capable of meter accuracy. This allowed for the efficient placement of IC samples as field teams navigated to the sampling locations indicated on the GPS unit.

The CH2M field teams used the uploaded DU shape and sample locations on the GPS unit to identify the sample locations in the field. The field teams located each increment location within the DU using the handheld GPS unit in accordance to the FSP. Upon navigating to the selected sampling location with the handheld GPS unit, the field team marked the location with a pin flag. GPS reception quality was good for the majority of the DUs with accuracies observed at approximately 1 meter. The number of satellites overhead, topography, forest canopy, or other obstructions occasionally degraded GPS accuracy. Any errors, accuracy issues, or deviations relating to GPS use were noted on the field forms.

Boundaries and sample locations for some DUs (Driplines and Beaches) were not pre-determined due to interferences in GPS reception during the Phase 1 effort or uncertainty of DU shape due to river levels (Beach DUs). Additionally, DUs were added to the program after fieldwork had commenced due to property owner requests, updated property owner interviews, or new properties added to the sampling program. For those DUs where GPS coordinates were not available, or where GPS reception was poor, field staff manually flagged DU boundaries and sample locations in accordance with Standard Operating Procedure 5 in the FSP. This procedure entailed locating the corners of the DU using landmarks, measuring the dimensions of the DU, dividing the total DU area by 30 to determine the size of each sampling grid cell, identifying the most practical grid dimensions based on that size, then conceptually dividing the grids into quadrants and randomly selecting which quadrant of each cell to sample using the random number function in Excel.

3.2.2.2 Sampling Devices

Due to the multiple-depth intervals for sampling based on DU land use and sample type (IC or discrete), three types of soil sampling equipment were required to achieve the sampling depths and collect the required volumes for laboratory analysis.

CRREL Multi Increment Sampling Tool (MIST™)

The CRREL MIST sampler is an aluminum device with a 1.5-inch-inner-diameter shoe with a plunger. The shoe was made of stainless steel and is very similar to the shoe of a split-spoon sampler used for penetration sampling while drilling. The device has an approximately 48-inch-long aluminum rod with a T-hand at the top for pushing the sample shoe into the soil as well as foot pegs to add leverage. The design of the MIST limits deep penetration and can attain only a maximum 2.5-inch depth. The device is pushed by hand into the soil and pulled out once the desired depth is achieved. A plunger in the shoe is then pushed by hand to eject the sampled core into the sampling container. The MIST was ideal for the 0 to 1-inch sample depth and was effective at retrieving samples in a variety of media, except loose dry sand. MIST was used for approximately 75 percent of all the IC samples due to its speed, durability, and easy cleaning.

Oakfield Soil Core Sampler

The Oakfield stainless steel soil core sampler was a single-piece 40-inch-long hollow rod that contained an approximate 18-inch-long by ¾-inch-diameter core at the end. The sampler was pushed by hand or hammer using the T-handle and a foot peg for added leverage. Due to the sampler's small diameter, the Oakfield soil core sampler could be pushed to depths up to 18 inches bgs in a variety of media, but was most efficient in sands, and soft silts. Coarse material or very dense fine material proved difficult for the Oakfield sampler to achieve deeper sampling depths.

Trowels

Stainless steel hand trowels were used when the MIST or the Oakfield soil core samplers failed to collect an adequate sample. Typically, coarser material provided difficult sampling conditions for the samplers and required hand digging to the target depth using the hand trowel. Samples collected by trowel were carefully dug, measured, and then collected along the sides of the hole for the required depth interval; samples are noted in the field sampling forms.

3.2.2.3 Sample Containers

IC Samples

In coordination with the contracted laboratory (ALS Group USA, Corp. [ALS]), it was determined that plastic buckets with tamper-proof sealable lids would be the best sample container due to the volume of soil collected as part of the IC sampling protocol. The buckets were pre-cleaned by the lab, wrapped in shrink wrap, and shipped in cardboard boxes to CH2M field personnel.

Based on the sampling depth and estimated volume, buckets in 3 sizes (1 gallon, 2.5 gallon, and 5 gallon) were proved by ALS. The 1-gallon buckets were used primarily for the 1-inch bgs DU categories, 2.5-gallon buckets were used primarily for the 3-inch and 6-inch bgs DU categories, and the 5-gallon buckets were initially used for the deeper depth DU categories (gardens), but were later discarded in favor of the 2.5-gallon buckets because the larger volume capacity was not needed.

Discrete Samples

Discrete soil samples were placed in pre-cleaned 16 ounce (oz) glass jars, also provided by ALS.

3.2.3 Sample Collection Procedures

The following discusses the sampling procedures for IC and discrete sample collection.

3.2.3.1 Utility Locating Services

An assessment of underground utilities was performed for each property prior to any soil sampling. CH2M contacted the utility locating service (811) 6 business days prior to the sampling event. Due to the large number of properties scheduled for sampling and their remote locations, CH2M worked closely with the utility locator for the duration of the sampling event to ensure the safety of the property owners and sampling teams.

3.2.3.2 Coordination and Navigating

Communication and coordination with property owners was vital to ensure all locations were sampled and property was accessible. Property owners who had volunteered for the soil sampling were called by EPA 1 week prior to the start of soil sampling to schedule site access and inform the residents that sampling would be starting. EPA continued calling selected property owners over the first 2 weeks of the field sampling event to assist the field manager with scheduling property visits as work commenced. The CH2M field manager eventually took over the responsibilities of contacting property owners to schedule sampling as the pace of the sampling improved and due to familiarity of the property locations. Property owners were generally called 2 to 3 days prior to the sampling teams scheduled onsite arrival. If needed, messages were left to inform owners when sampling was scheduled to be performed. CH2M attempted a second call later in efforts to ensure thorough property owner communication.

CH2M rescheduled sampling when it was requested by the property owner. Many residents wished to be present during sampling to observe the work and ask questions. In many situations, permission was given to sample the property at ’the sampling team’s convenience. If contact was not possible, or if calls not returned from messages, CH2M proceeded with sampling those properties where written permission was obtained. In-person contact was attempted (knocking on the door) if a residence was evident when the sample teams arrived onsite.

Field maps were provided to field staff to assist with navigating to the rural residential properties. Due to the remote location and unimproved access roads for many properties, CH2M field teams referenced site maps, property maps, KMZ files, and used mobile and wireless devices to assist with locating properties.

3.2.3.3 Arrival at Property

Upon arrival to the property, the EPA representative and the CH2M FTL informed the property owner of the sequence of events regarding sampling and approximately how long the sampling effort would take. Any questions the property owner presented were addressed, if possible, by the EPA representative. The CH2M FTL also informed the property owner of the general sampling process, and the areas of the property that were going to be sampled. Property owners were consulted onsite regarding any underground utilities, or other site conditions or activities that may impact sampling at the site.

3.2.3.4 Property Utility Screening

Prior to sampling, CH2M performed a screen of underground utilities at the site. The CH2M FTL discussed the presence and location of underground utilities with the property owner or occupant, when available, and observed any markings applied by the utility locator. CH2M field staff marked confirmed utilities with pin flags where identified by utility markings and based on property owner information and direction. The utility locating service only marks underground utilities from the public right-of-way to the service box on private property. Any electrical or water services installed by the property owner to outbuildings or other structures was generally not marked by the public utility locating service.

CH2M field staff then performed a visual assessment of every sampling area for each property to identify the presence of underground utilities. The assessment consisted of walking the area and inspecting for utility-related item such as sheds or shops with power running to them, partially day-lighted lines, manholes, previous linear cuts, patchwork in pavement, pad-mounted transformers, utility poles with risers, storm sewer drains, utility vaults, fire hydrants/spigots, and other evidence that may indicate subsurface utilities. Any area of suspected underground utilities was marked with pin flags.

Upon the completion of the visual assessment, CH2M performed a utility screen using a PipeHorn® 800 Series underground pipe and cable locator. The PipeHorn® emits a high-frequency signal that can detect buried utilities. The utility screen was performed along the perimeter of the sampling area to identify any subsurface utilities that may be encountered when entering the DU, and then for any identified or suspected utilities within the DU.

All identified and unconfirmed (but suspected) subsurface utilities were marked with pin flags and were not sampled within 5 feet on either side. Samples that were located within the corridor of underground utilities were moved immediately adjacent to the 5-foot buffer of the marked or suspected utility location, where possible.

3.2.3.5 Flagging Sample Locations

Pin flags were used to mark the DU boundaries as well as the location of the sample locations. Samples were located using a handheld GPS unit, or by laying out the sampling grid if GPS locations were unavailable. Thirty composite samples were collected for each IC sample. Flags were numbered in sets from 1 to 30 and each set was of a different color to distinguish between the primary, duplicate, and triplicate IC samples. Five discrete samples were collected from each property. Accordingly, the discrete sample pin flags were a different color than the IC sample flags and were numbered 1 to 5.

Surface obstructions (including compacted gravel, exposed rock, trees, structures, or thick brush) and, potential cross-contamination sources such as treated lumber, oil drums, or fuel storage tanks were avoided and the sample location was flagged within a 2-foot radius of the designated sample location. If the flag was moved beyond the 2-foot radius from the designated location, then the location number, distance moved, and justification were recorded on the field form.

As each sample location was sampled, the pin flag was removed to indicate the sample had been collected. At the end of sample collection, the field team verified completeness by visually confirming all flags had been removed. The removed pin flags were then sorted and counted to verify that all sample locations were collected.

3.2.3.6 Incremental Composite Samples

Collection and processing of IC samples was conducted in accordance with the incremental sampling guidance (ITRC, 2012) and the FSP. Each IC sample consisted of 30 increments or subsamples located within the boundaries of each DU. For most DUs, the increment locations were pre-selected using VSP software based on the results of field reconnaissance conducted in April and May 2014 and uploaded to the GPS units used by the field teams. The handheld GPS unit was used to locate the primary increment locations, when possible. As described in Section 3.2.3.5, some increment locations had to be determined in the field using the procedures described in the FSP. The sampling depth for each DU was pre-determined prior to the sampling event based on the DU category and the results of field reconnaissance conducted in April and May 2014.

After the depths were confirmed and all 30 IC sample locations for the DU were flagged, sampling commenced using the appropriate sampling equipment for the sample depth and site conditions. Sampling was generally performed using the MIST tool for shallow (0 to 1 inch bgs) sample increments and the Oakfield soil corer sampler for deeper interval sample increments. Hand trowels were used when use of the MIST or Oakfield equipment was not practical or overly difficult, usually due to the presence of coarse material or very loose sand.

Large surface debris was cleared away by hand at each increment location. Surface debris included twigs, intact leaves, pine needles, woody debris, duff, vegetation (including grass and grass roots), and rocks. The ground surface for each increment was observed by cultural resources staff prior to disturbance from sampling. Cultural resource screening procedures are described in Section 3.2.3.8. Incremental soil samples were then collected from the designated depth for each DU as indicated in Table 2 of the FSP (CH2M HILL, 2014b). For samples collected in yards or in areas with thick vegetation, the sample depth was measured from below the thatch or root zone. The sample was retrieved from the sampler and the root 'plug' was removed from the top of the sample leaving the soil for collection. The sample was then measured for thickness and any excess material was removed from the bottom of the core to ensure the proper depth interval was collected so as not to bias the composite sample. Any excess material was placed back in the ground at the sample location.

The increment sample was then placed in a resealable plastic bag for cultural resources screening, and then in the approved sample container (pre-cleaned plastic bucket). Each bucket was labeled in accordance with labeling requirements described in FSP prior to sampling the DU, with the primary, duplicate, and triplicate IC samples being placed in separate buckets with its own unique sample ID and time. In addition, sample containers for Beach DUs were marked to indicate that the sample should be sieved to 250 µm. Each bucket with lid was weighed prior to use and again after all 30 increments of the sample were collected to get the net mass of the soil collected in the DU. The net soil mass (in grams) was written on the bucket as well as the field form. After the soil was classified using United Soil Classification System (USCS) nomenclature, the lid was secured on the bucket using a rubber mallet and placed in the field vehicle for temporary storage.

At DUs in yards and other maintained or manicured areas, the sample increment hole was backfilled with potting soil and the vegetation plug was placed back into the ground to conceal the sample location. Otherwise, the sample increment holes were allowed to collapse naturally.

3.2.3.7 Discrete Samples

In addition to the IC samples, four to six (five samples were typically collected) discrete samples were obtained at random locations (as determined by VSP) within a selected DU for each property. Generally, only one set of discrete samples was collected per property. Discrete samples were collected from 1 to

6 inches bgs within the designated DU and were collected from separate locations from the IC increments within the DU. Based on yard conditions, or at the property owner's request, discrete samples were moved to a different DU if it was determined the disturbance of the discrete samples would impact the yard. The discrete samples were always collected from one DU. As with IC samples, discrete sample locations were moved to avoid site obstructions, compacted gravel driveways or parking areas, surface staining (petroleum or other), or due to health and safety concerns (within heavy brush). Changes in the location of the discrete samples were documented on field forms.

Discrete samples were collected using hand trowels due to the depth (1 to 6 inches bgs) and volume required (16 oz). The top 1-inch of the soil and vegetative matt/grass was carefully removed in yard DUs or other maintained DUs to limit disturbance and impact to maintained or manicured portions of the property.

After the top vegetative layer was carefully removed and set aside, the sample location was observed by cultural monitors and excavated with a hand trowel to 6 inches bgs. After the depth was verified, soil was sampled by carefully using the hand trowel and clean nitrile gloves to scrape the sides of the excavation from 1 to 6 inches bgs and temporarily placed in a resealable plastic bag. The process was repeated until it was estimated that enough sample had been collected. After cultural resources review, the soil was then homogenized in the plastic bag and the soil was classified using the USCS method.

The sample was then placed in a pre-cleaned 16-oz glass jar and labeled accordingly with the sample ID, date and time collected, and DU in the field. GPS coordinates for each discrete sample were recorded and a photo was taken showing the sample location in relation to site features. The hole was then backfilled with garden soil, packed, and the top vegetative layer was replaced over the backfill.

3.2.3.8 Cultural Resource Field Screening

EPA has responsibilities under the National Historic Preservation Act to consider how its undertakings would affect historic properties. As such, archeological representatives from the Confederated Tribes of the Colville Reservation (CCT) were present for all sampling field activities.

One tribal archaeologist accompanied each field team at all times to observe the work and perform visual screening for cultural artifacts. After sample locations were flagged, the tribal representatives observed the ground surface in the general area to determine if any artifacts were present. Upon receiving approval to proceed from the tribal archaeologist, the sample was collected and then placed in a clear plastic bag and given to the archaeologist for visual screening for artifacts. After confirming no artifacts were present, the sample was then poured into the sample container.

If artifacts or likely archaeological deposits were observed, the archaeologist recorded the location of the materials and photographed the materials in place in such a manner to provide information on origin and then re-deposited them in their original location.

3.2.4 Sample Numbering

Each IC and discrete sample was assigned a unique field sample identification number that included the study name, medium, sample location (i.e., DU number), sample type, and sample type number. The unique sample number was entered in the field notebook, field forms, chain-of-custody forms, and other records documenting sampling activities.

The following sample numbering convention was used for IC samples:

Study Prefix – Medium – Location – Sample Type - Sample Number

Explanation:

Study Prefix:	2014R = 2014 Residential Soil Study
Medium:	SS = Surface Soil
Location:	DU number (unique numbers assigned to individual properties)

Sample Type:	IC = incremental composite
IC Sample Type Number:	01 = primary sample
	02 = duplicate sample
	03 = triplicate sample

The following sample numbering convention was used for discrete samples:

Study Prefix – Medium – Location – Sample Type - Sample Location – Sample Number

Explanation:

Study Prefix:	2014R = 2014 Residential Soil Study
Medium:	SS = Surface Soil
Location:	DU number (unique numbers assigned to individual properties)
Sample Type:	D = discrete
Sample Location:	01 through 06
Sample Number	01 = primary sample
	02 = duplicate sample

All samples were initially labeled in the field at the time of collection with temporary labels that included the DU, field sample ID, and date and time collected. The sample manager then entered the information into the Scribe sample management program and assigned a unique Scribe Sample ID to each sample.

3.2.5 Equipment Decontamination Procedures

To reduce the potential for cross contamination, all field sampling equipment was thoroughly decontaminated prior to first use and subsequently between each IC sample and discrete sample, between each DU, or any time the equipment may have been exposed to contaminated media. Sampling equipment requiring decontamination consisted of the MIST® sampler, tube sampler, trowels, and other hand tools (shovels) that were used to collect samples.

Temporary decontamination stations were established near the work area and immediately adjacent to the DU, where possible. Decontamination procedures consisted of initially brushing the equipment to remove residual soil and debris and then vigorously washing down the equipment with a solution of distilled potable water and Alconox® solution applied by hand sprayers. Upon inspecting the equipment to ensure no soil or debris remained, the equipment was then thoroughly rinsed using distilled water applied by a hand sprayer and allowed to air-dry, or wiped with clean disposable paper towels. All media and decontamination fluids produced during the decontamination process were discharged directly to the ground, away from any sampling locations. Estimated volume of decontamination fluids discharged was less than 0.25 gallons per DU. After decontamination, equipment was placed in a clean plastic baggie and labeled “deconned” and returned to the vehicle.

Decontamination of personal protective equipment (PPE) consisted of donning new nitrile gloves between each IC sample and each discrete sample location. New Tyvek® aprons were donned between each DU to reduce the potential of cross contamination and reduce the potential exposure to contaminants.

3.2.6 Field Quality Assurance and Quality Control

3.2.6.1 IC Replicates

Replicate (duplicate and triplicate) IC samples were collected at each property to measure sampling errors and estimate confidence limits within the DU. Generally, replicate samples were collected for at least one DU for each specified land use category on a property. For example, if multiple DUs on a property were designated as “Garden”, only one garden DU was designated for replicate sampling for the property. DUs

designated for replicate sampling were determined prior to the fieldwork and were indicated in Table 2 of the FSP. If a DU was designated for replicate sampling, both a duplicate and triplicate sample were collected.

The locations for the replicate IC subsample increments (duplicate, and triplicate) within a DU were determined using a systematic approach based on the spacing between primary subsample increments as described in the FSP. Pin flags were used to mark all sampling locations and were of different colors to designate the primary, duplicate, and triplicate IC increment locations. Replicate samples consisted of 30 increments, were sampled to the same depth, and were analyzed for the same constituents as the primary sample (TAL metals). Cultural review of sample locations and collected IC samples followed the same procedures as the primary samples as described in Section 3.2.3.6

Replicate samples were collected as separate samples with a unique sample identification suffix added to the sample ID to indicate the sample as a duplicate (-02) or triplicate (-03), as described in the FSP. Sampling equipment was decontaminated between the primary IC and the replicate samples for each DU to prevent cross contamination. Each IC sample container was labeled in accordance with the requirements described in FSP. The primary, duplicate, and triplicate IC samples were each placed in separate dedicated containers.

As shown in Table 3-2, replicate samples were collected at 153 DUs.

3.2.6.2 Field Duplicates

Field duplicate samples were collected to assess the homogeneity of discrete samples collected in the field and the precision of the sampling process. Field duplicate samples were prepared by collecting two aliquots of sample from the sampling equipment and submitting them for sieving and analysis as separate samples (aliquots of soil were homogenized prior to splitting into separate samples). Field duplicates were collected from at least 15 percent of the discrete sampling locations at a property, with a minimum of one field duplicate sample per property where discrete samples were collected. The duplicate samples were submitted to the laboratory blind and analyzed for TAL metals.

Field duplicate samples were labeled with the suffix -02 for discrete samples and were recorded on field forms for record keeping.

As shown in Table 3-3, a total of 52 field duplicate samples were collected, representing 15 percent of the 350 discrete soil sample locations.

3.2.6.3 Matrix Spike/Matrix Spike Duplicates

Analyses of matrix spike/matrix spike duplicate (MS/MSD) samples was performed in the laboratory to assess the accuracy of the analyses. These analyses were performed according to the laboratory protocols and occurred at a frequency of once every 20 samples using the extra volumes of sample matrices obtained after laboratory processing. No additional sample volume was collected by the field team as the volume of the field-collected samples already accounted for potential MS/MSD analysis. The lab performed MS/MSD analysis on 5 percent of the submitted IC and discrete samples.

3.2.6.4 Equipment Rinsate Blanks

Equipment rinsate blanks are used to evaluate sampling device cleanliness and potential carryover of target contaminants from equipment contribution. Equipment rinsate blanks were collected from decontaminated sample collection equipment from each field team at the end of each field day. The equipment rinsate samples consisted of ASTM Type II water (provided by ALS) poured over and through the sampling equipment and collected in a nitric acid preserved 250 milliliter sample container and were analyzed for total TAL metals (except mercury).

A total of 72 equipment rinsate blank samples were collected and submitted for laboratory analysis for the duration of the fieldwork.

3.2.6.5 Property Owner Requested Split Samples

Two property owners requested split samples at selected DUs for their property for submittal to a different laboratory of their choice for analysis. Arrangements were made prior to sampling the properties to schedule sampling so the property owner would be available for receipt of the split samples. Split samples for property owners were collected following the same procedures as all other IC and discrete samples, including cultural resources visual screening.

IC split samples were collected immediately adjacent to the primary sample and placed in the pre-labeled container for the property owner after the cultural resources visual screen. No replicate samples were collected for IC split samples. Discrete sample splits were performed by collecting double volume from the designated location, homogenizing the soil in the plastic bag, and then dividing the soil between the CH2M sample and the property owner split sample. CH2M provided the sample ID to the property owner and the time the sample was collected.

3.2.7 Sample Handling and Custody

The following section describes the handling, storage, and shipment procedures for samples collected for the soil sampling event. All samples remained in the custody of CH2M or the courier at all times until delivery to the analytical laboratory. Custody procedures for the sampling event were in accordance with the FSP.

3.2.7.1 Sample Storage

All samples were temporarily stored in the field vehicles immediately after collection until transferred to the field manager at the end of the day. Samples were secured in the field vehicles and placed in dedicated areas within the vehicle to inhibit the potential for cross contamination during storage and transport.

Soil samples were temporarily stored in a rented storage unit in Colville, WA. The storage facility was secured with an automatic security gate and the storage unit was locked with a robust combination lock. Samples were placed and organized in the storage facility by sample date until shipment to the laboratory.

Soil samples did not require refrigeration because mercury was not analyzed as part of the TAL metals suite. Collected equipment rinsate samples were stored in the storage unit in plastic coolers with ice required for the aqueous samples. The field team checked the rinsate samples daily and replaced the block ice and drained melted water from the cooler as needed.

3.2.7.2 Scribe and Sample Labeling

A list of the samples collected by both field teams was provided to the sample manager on a sample tracking sheet at the end of each field day with date and time for creation of the permanent Scribe-generated labels. The sample information was entered into the Scribe software, and the Scribe-generated labels were produced and sent to the field manager to affix to the sample containers. Each Scribe label was checked against the list of sample IDs provided on the sample tracking sheet, and again against the temporary label on the sample container to ensure each container was properly label. Clear plastic tape was placed over each Scribe label to protect the label from damage.

3.2.7.3 Sample Preparation

All samples were packaged and labeled for shipment in compliance with the QAPP. After samples were labeled, they were held in the storage unit until shipment. IC and discrete sample containers were stacked in groups based on sample date. Discrete sample jars were placed 12 at a time in cushioned cardboard boxes and then placed in coolers to protect them from damage.

Aqueous equipment blank sample containers were placed in individual resealable plastic bags. The cooler was lined with a large plastic garbage bag and the equipment blank samples were placed in an upright position inside and packed with ice and bubble wrap. The plastic bag lining was tied and the cooler was secured with strapping tape.

The chain-of-custody (COC) forms were placed in a resealable plastic bag and placed in a manila envelope to accompany the samples during shipment.

3.2.7.4 Courier Service

Due to the large number and mass of samples, Spokane Courier Service (SCS) of Spokane was hired to transport the samples directly to the ALS analytical laboratory located in Kelso, Washington. SCS picked up the samples from the storage unit in Colville, Washington in the mornings for same-day delivery to Kelso, Washington. Four courier trips were used to ship samples to the lab during the sampling event.

The field manager assisted the courier driver with loading and securing the sample containers in the van for transport. After the allotted samples were placed in the vehicle, sample custody was transferred to the driver after signing each page of the COC for the samples. Samples were in the custody of SCS until they were hand-delivered to ALS. For two of the shipments, SCS picked the samples up in Colville in the evening and stored the vehicle at the SCS facility overnight to allow for earlier departure the following morning, thus ensuring samples arrived to the laboratory during business hours. CH2M discussed proper security, storage of the vehicle, and handling with SCS for the time period and confirmed the vehicle was locked and then parked in a secured, locked, indoor facility at SCS until the driver returned in the early hours the following day to drive the samples to ALS.

Samples were delivered to ALS and custody was transferred from the courier driver to the lab after the signing of all COCs. The Region X Regional Sample Control Coordinator was contacted for each shipment and provided the necessary information and details as described in the QAPP.

3.2.8 Field Documentation

All sampling and associated activities field activities were documented on activity-specific field forms, field logbooks, and digital photographs. Electronic copies of the field records for each property are provided in Appendix B.

3.2.8.1 Field Logbook

Daily field activities were documented through journal entries in a bound field logbook by each field team and the field manager for the duration of the residential sampling effort. The field logbooks contain all pertinent information about staff present, site arrival and departure times, health and safety pre-task meetings, sampling activities, site conditions, field methods, site sketches, general observations, and other pertinent technical information. The field logbooks are part of the permanent project record and have been scanned and saved in the project folders. Field book entries followed general accepted professional standards and procedures described in the FSP.

3.2.8.2 Digital Photographs

Digital photographs were shot during sampling activities to document sampling procedures, site locations and conditions, and other pertinent activities. Photographs were shot of each DU along with photographs of sampling locations. A dry-erase white boards bearing the property name, DU, date and time, and sample Identification (where applicable) was held in the photograph for reference. The photo number and description of the photograph (including direction) were entered sequentially into the dedicated Photo Log field form for each property.

3.2.8.3 Dedicated Field Forms

All sampling and associated activities were documented on activity-specific field forms. The field forms contained information and data specific to each DU and residential property. Due to the large quantity of DUs and properties specific field forms were created to contain specific data and information. Completed field forms are provided in Appendix B, and a brief description of each form is provided below.

- **Incremental Composite Sample Form:** Field team members, DU, property ID, start and end times, weather, IC sample ID, sample time, interval sampled, total mass collected, sample soil descriptions, and minor deviations to individual composite sub-samples.

- **Discrete Sample Form:** Field team members, DU, property ID, weather, IC sample ID, sample time, interval sampled, sample soil descriptions, GPS coordinates, and related comments or deviations.
- **Field Photo Log:** Provided photograph number and brief description of scene for each property for each field team.
- **Field Change Request Form**: Form required when a change or alteration was needed to the planned sampling protocol or location, such as altering shape of a DU due to obstructions, adding a new DU based on site conditions or additional information, removing a DU, and other significant field decisions. The form required the signature of the onsite EPA representative for approval. Additional details and examples are provided in Section 3.2.11.
- **Notice of Site Visit and Sample Collection Form and Sample Receipt Form:** These two forms were provided to the property owners after completion of sampling to provide them confirmation that sampling occurred at their property. These forms contained dates and times that the sample team was present on the property, sample IDs of all samples collected, sampling intervals, general comments, and provided EPA contact information for further communication or information.

3.2.9 Waste Disposal

Limited waste was produced during the residential soil sampling effort. During sampling, any excess soil or vegetation not retained from the collected sample was returned immediately to the hole and then backfilled, if necessary, with additional potting soil. Used PPE (nitrile gloves and Tyvek® aprons), as well as general waste, were stored in heavy-duty trash bags and disposed of in an offsite licensed waste facility (i.e., active Municipal Solid Waste Landfill operated under Chapter 173-351 of the Washington Administrative Code) by Stevens County.

3.2.10 Field Sampling Modifications and QAPP/FSP Deviations

Modifications and deviations to sampling procedures, sample or increment locations, or DU shape occurred during the field event due to unforeseen site conditions, or through client or property owner requests. It was anticipated that some changes would be required in the field so a protocol was established to address and approve significant changes to the sampling effort.

The Phase 1 Reconnaissance provided vital information from property owners and site observations to delineate DU locations and determine current and potential land use activities. But in some cases, interviews with property owners were not possible during the Phase 1 reconnaissance so field teams used professional judgment at the time to designate land use and approximate DU locations and dimensions. During the Phase 2 soil sampling event, additional discussions with the property owners occurred and in some cases provided further clarity on land use. Sometimes this resulted in the changing of a previously designated DU location and resulted in either not sampling it, or moving it to a location that best represented the potential exposure. In some instances, a new DU was created based on land owner input or from information that wasn't provided during the Phase 1 event.

Table 2 of the FSP provided the information for discrete and IC sample locations, depths, ID, and QA/QC samples. When changes were made that impacted whether a sample was collected, if a new sample location was added, or if the size or shape of a previously delineated DU was significantly altered, then the EPA representative discussed and approved the changes by signing the Field Change Request Form (change form). All changes and deviations from the approved sampling procedures as described in the FSP and QAPP were recorded on the dedicated field forms and in the field logbook. Examples of such changes include the following:

- **Adjusting the location of an increment or discrete sample location to avoid obstructions that were not indicated on field maps.** Such obstructions included compacted gravel driveways and parking areas, surface rock, thick brush or trees, structures, or debris within the DU. 'Only minor changes (less than 6 feet) in the position of an increment or discrete sample location were typically required and did not

significantly impact or alter the DU shape. Signed change forms were only completed if the adjustments altered the DU shape or extent.

- **Modification of sampling depth based on current observations or additional information from land owner.** In some situations, the DU category was changed based on further site observations or additional information provided by the property owner. If a DU category was changed such that the increment sampling depth was altered, the change was described on a change form that was approved by the EPA representative.
- **Adjustment of the shape of the DU based on site conditions or property boundaries.** In a few situations, the DU boundaries indicated on the GPS unit did not align with property boundaries or field maps. In those situations, the field team adjusted the DU boundaries to encompass the intended sampling area on the property and recorded the coordinates of the offset DU boundaries. Generally, a change form was not used when the DU was moved due to GPS error or offset as long as the overall DU shape or extent was not modified.
- **Not sampling due to health and safety considerations (aggressive wildlife).** One property was not sampled so as to avoid bears. The property owner had indicated that he feeds the bears and that they congregate on or nearby his property at all times. CH2M health and safety managers cancelled sampling at this location to avoid bears.
- **Adjustments to locations or extent of DUs based on property owner requests.** Some DUs were moved per property owner request based on their knowledge of how the property is used. A change form was filled out and approved by the EPA representative whenever a DU location was moved.
- **Not sampling due to property owner considerations.** Three property owners who had initially provided EPA with signed access agreements revoked them when contacted by EPA or FTL to schedule sampling. The properties rescinding the access agreements were documented in field notes and were not sampled.
- **Modifications to planned replicate locations.** DUs designated for replicate sampling were randomly selected prior to the sampling event. In some cases where site conditions made collecting replicates difficult, the replicate samples were moved to a different DU. This was done only if a property contained two or more DUs of the same land use type with only one DU designated for replicate sampling. A change form was filled out and approved by the EPA representative whenever a replicate DU location was changed.

Table 3-4 provides a listing of all EPA-approved sampling deviations for the Phase 2 sampling event.

SECTION 4

Laboratory Activities

This section describes the sample preparation and analyses performed by ALS Environmental in Kelso, WA.

4.1 Sample Receipt and Storage

The field samples, including IC and discrete soil samples and equipment blanks, were shipped to ALS by courier. Upon receipt at ALS, the samples were checked-in and any discrepancies with the COC were identified and communicated to the sample manager. In accordance with the QAPP (SRC, 2014), the soil samples were stored at room temperature.

4.2 Sample Processing

The IC and discrete soil samples were air dried, homogenized, and sieved into the appropriate fraction (less than 150 µm for soil, less than 250 µm for beach sand) for subsampling (IC samples only), digestion, and analysis. Laboratory duplicate samples were prepared by ALS after homogenization and sieving. These samples were assigned their own sample IDs. A total of 32 IC and 22 discrete laboratory duplicate samples were prepared and analyzed by ALS. In addition, splits of 75 IC and 49 discrete soil samples were prepared and provided to EPA for separate analysis.[2]

EPA personnel visited ALS on October 16, 2014 to observe soil processing methods employed by the lab and to independently verify that the QAPP and standard operating procedures for the study were being followed and to ensure the creation of representative soil fractions for the analysis of metals. In general, the lab was found to have well-documented procedures and there were no concerns about the quality of the work being performed. A copy of the laboratory oversight memo is included as Appendix C of this report.

4.3 Analyses

All soil samples were analyzed for total solids and TAL metals (except mercury). Soil samples for metals analyses were prepared with acid digestion following EPA methods 3050B. Samples were analyzed for metals according to EPA Methods 6010C and 6020A (see Table 4-1).

The 72 equipment blank samples from the field, as well as 52 sieve blank samples prepared following use and decontamination of the sieves used for sieving soil samples, were also analyzed for TAL metals (except mercury).

IVBA testing was also conducted on a subset of IC samples in accordance with the QAPP (SRC, 2014). Samples for IVBA testing were prepared according to EPA 9200.2-86 and analyzed for lead and arsenic according to EPA 6010B.

A two-step process was used to select IC samples for IVBA analysis (see IVBA Decision Memorandum in Appendix D):

1. DUs with a maximum lead concentration ≥ 100 parts per million (ppm) or a maximum arsenic concentration ≥ 20 ppm were eligible for IVBA analysis. If more than one DU of the same type (e.g., garden) on a given property were considered potentially eligible, then the DU with the maximum lead concentration was selected as the eligible DU. There were 114 DUs considered eligible by Step 1.
2. One IC sample was selected for IVBA analysis from each of the 114 eligible DUs. For DUs with more than one IC sample, the soil sample was randomly selected from the IC samples collected from the DU; this produced a total of 114 IC samples for IVBA.

[2] A technical memorandum presenting the split data and comparing it to the ALS-generated results will be issued separate from this report.

In addition to the IC samples selected by the process described above, all IC samples with relative percent differences (RPDs) for lead or arsenic concentration greater than 30 percent were selected for IVBA. This added eight IC samples (from 4 DUs) to the 114 selected above, for a total of 122 IC samples from a total of 114 DUs. The RPD criterion did not add any additional DUs to the eligible DU list that was produced by Step 1 of the process.

4.4 Laboratory Deviations

Laboratory methods included one deviation related to procedures specified in the QAPP (SRC, 2014), which stated that all beach sand samples would be sieved to 250 µm. During the course of sample selection for IVBA analysis, ALS notified EPA that two IC samples from Beach DUs had not been marked as beach samples on the COC and thus had been treated as soil and sieved to 150 µm. The affected samples (Scribe IDs 14346155 and 14346159 [ALS IDs K1409762-007 and K1409762-011]) were collected early in the sampling program and while the sample container lids were marked with the beach designation, the COC did not reflect that information.

No laboratory method deviations were noted in the data validation reports (Appendix E).

SECTION 5

Data Quality Assessment

This section summarizes the results of the QA/QC activities prescribed in the QAPP (SRC, 2014) and provides a data usability assessment. The QAPP identifies the method-specific QC requirements for each analytical parameter and matrix and defines a plan to test that the correct sampling, analytical, and data reduction procedures are followed. This section is intended as a general data quality assessment designed to summarize data issues.

5.1 Validation of Analytical Data

A total of 891 soil samples and 52 soil field duplicates (FD), 72 equipment blanks (EB), and 52 sieve blanks (SB) were analyzed by ALS, located in Kelso, WA. The laboratory divided the samples into 60 sample delivery groups (SDGs). Samples were collected and shipped by courier to the laboratory for analysis. Samples were analyzed for the following analyte/method:

- Metals by Method E6010/E6020
- Percent Solids by Method E160.3

IVBA testing was also conducted on 122 IC samples in accordance with the QAPP (SRC, 2014). The IVBA samples were divided into 8 SDGs. Samples for IVBA testing were prepared according to EPA 9200.2-86 and analyzed for lead and arsenic according to EPA 6010B.

Validation of total metals and IVBA data generated by ALS was performed by Environmental Standards, Inc. (ESI) of Valley Forge, Pennsylvania in accordance with the QAPP (SRC, 2014). Each SDG was validated by ESI chemists for data quality. The validation reports are included in Appendix E. The data validation reports were based on the review of all Stage 2B laboratory deliverables (QC summaries only) with a small number of Stage 4 packages.

CH2M validated the EB, SB, FD (discrete samples), and field replicate (IC samples) data.

These data validation reviews were conducted according to the analytical methods and QC specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State (SRC, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-ROS-005)

Data flags were assigned according to the QC acceptance limits defined in the QAPP. The data validation flags for each SDG are summarized in each data validation report. The validation flag applied to each result, the reason, and the validation stage are described in Table 5-1.

The validation flags are those listed and defined as below:

J = Analyte was detected; the quantitation was estimated because of discrepancies in meeting certain analyte-specific QC criteria.

UJ = Analyte was not detected; however, the quantitation was estimated because of discrepancies in meeting certain analyte-specific QC criteria.

R = Data were rejected because of deficiencies in meeting QC criteria.

U = Analyte was analyzed for but not detected, or was qualified as not detected because of blank contamination.

EPA conducted quality assurance reviews of the data validation reports for metals and IVBA analysis and prepared memos releasing the data for evaluation. Copies of the EPA memos are provided in Appendix F.

5.2 Validation Findings

The overall summaries of the data validation findings are summarized in the following method sections.

5.2.1 Data Flagging Summary

The frequency of field and laboratory QC samples and the associated control criteria are specified in the QAPP. These control criteria were used to evaluate the laboratory data. In the following method-specific discussions, only the criteria exceedances that impact data qualification are discussed. Any laboratory flags that were applied to the data that were not consistent with the data flags listed in the QAPP were marked as invalid and replaced with the appropriate data flag (e.g., “J”, “U”, or “UJ”). A summary of the qualifiers assigned to the metals data is provided in Table 5-1. The number of flagged data is compared to the total number of results to give a percentage of flagged data for each QC criterion (see Section 5.3).

5.2.1.1 Method E6010 (Metals)

Blanks

Negative bias was observed in the continuing calibration blank (CCB). Two associated sodium results were “J” flagged. Sodium was detected in CCBs associated with four detected results. These detected results were flagged “U” at the reported concentration. The affected samples are listed in Table 5-2.

SBs were collected for each fraction and SDG. Although low-level detects were present in the SBs, the concentrations were very low and had no impact on any of the reported sample results.

EBs were collected on a daily basis and were evaluated against the associated samples collected the same day. Although low-level detects were present in the EBs, concentrations were very low and had no impact on any of the reported sample results.

Interference Check Standard

Sodium was detected greater than the detection limit along with high levels of the interferent iron in the interference check standard solution A (ICSA). Of the sodium results, 102 were “J” flagged for possible interference. The affected samples are listed in Table 5-2.

Magnesium was recovered less than the lower control limit (LCL) for magnesium. Of the detected results, 39 were “J” flagged. The affected samples are listed in Table 5-2.

Potassium was detected greater than the detection limit along with high levels of the interferent calcium in the ICSA. Of the potassium results, 17 “J” flagged for possible interference. The affected samples are listed in Table 5-2.

Matrix

Serial dilutions exceeded criteria for 20 magnesium and 20 sodium soil sample results and were “J” flagged. The affected samples are listed in Table 5-2.

Field Duplicate

Field duplicate evaluation criteria was exceeded for three results (Table 5-3). The associated detected concentrations were flagged “J.”

Laboratory Control Sample

Aluminum was recovered less than the LCL in laboratory control samples. Results associated with this exceedance have been “J” flagged. The affected samples are listed in Table 5-2.

5.2.1.2 Method E6020 (Metals)

Blanks

SBs were collected for each fraction and SDG. Although low-level detects were present in the SBs, the concentrations were very low and had no impact on any of the reported sample results.

EBs were collected on a daily basis and were evaluated against the associated samples collected that same day. Although low-level detects were present in the EBs, the concentrations were very low and had no impact on any of the reported sample results.

Matrix

Of the results, 975 exceeded MS or MS RPD criteria. Nine hundred and three antimony, 20 selenium, six barium, and six cadmium detected sample results were "J" flagged. The affected samples are listed in Table 5-2.

The laboratory duplicated RPD criterion was exceeded for 46 detected silver results. These results were flagged "J". The affected samples are listed in Table 5-2.

Serial dilutions exceeded criteria for 321 beryllium and 20 antimony soil sample results and were "J" flagged. The affected samples are listed in Table 5-2.

Field Duplicate

Field duplicate evaluation criteria was exceeded for 12 results. The affected samples are listed in Table 5-3. The associated detected concentrations were flagged "J".

Laboratory Control Sample

Antimony was recovered less than the LCL in a laboratory control sample. Results associated with this exceedance have been "J" flagged. The affected samples are listed in Table 5-2.

5.3 Overall Assessment

Data quality objectives have been prescribed in the QAPP in terms of precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters. The following is a description of the assessment for each parameter.

Precision measurement data include FR data expressed as RSD and FD data expressed as RPD. The FR evaluations are summarized in Table 5-3 and 5-4. The FR RSD criteria exceedances for arsenic and lead were 1.3 percent and 2 percent, respectively. The FD RPD exceedances affected 1.3 percent of the data.

Accuracy measurement data include laboratory control sample and matrix spike recovery data. Accuracy recovery exceedances affected less than 5 percent of the data.

Representativeness is a measure of how closely the measured results reflect the actual concentration or distribution of the chemical compounds in the sampled media. Representativeness is assessed in both qualitative and quantitative terms. Previous sections in this report discuss the qualitative aspects of representativeness in terms of design of the field sampling plan, sampling techniques, sample handling protocols, and associated documentation. Quantitative measures of representativeness include field blank measurements and laboratory blank measurements to identify if contamination was introduced through field or laboratory operations. Field duplicate and replicate measurements are used to establish variability. Detections in laboratory blanks, SBs, and EBs affected less than 0.03 percent of the data. Variability between native and field duplicate measurements is small, with less than 2 percent of the data exceeding QAPP criteria.

Comparability expresses the confidence with which one data set can be compared to another. Comparability of data has been established through use of following**:**

- Standard analytical methods and QC procedures established in the project QAPP
- Consistent reporting units for a specified procedure
- Method detection limits for all analytical parameters that were established in accordance with 40 CFR Part 136, Appendix B, before the start of the analyses to meet the project requirements

All comparability factors have been met for this set of data.

Completeness in this report is assessed as a measure of the amount of valid data obtained from the analytical measurements. Field activity completeness is assessed within the context of the overall sampling design. Data completeness is 100 percent.

SECTION 6

Results

This section summarizes the overall and property-specific results of the Residential Soil Study.

6.1 Field and Analytical Data Management

Field reconnaissance and sampling activities were documented in field notebooks and forms, Scribe management files, and GPS files. Deviations from the FSP were noted in the field and detailed in field change forms. All documents were scanned and converted to electronic files (Adobe Acrobat PDFs). Sample location coordinates and GPS files containing DU boundary information were converted to geographic information system shapefiles, which were used to update the spatial database for the overall UCR project. Copies of the field forms, photographs, and field change forms are provided in Appendix B. Figure 3-1 shows the locations and boundaries of the sampled DUs. Property-specific maps included in Appendix G show the individual DU boundaries and discrete sample locations. Table 6-1 provides a cross reference for property numbers, parcel numbers, and DUs.

Laboratory data were stored at the analytical laboratory and uploaded to the project database managed by TAI and validated by ESI. Preliminary metals data were released to EPA for selection of IVBA samples in December 2014. The validated metals data and validated IVBA data were released to EPA in January and February 2015. Following EPA review of the data and validation reports, the data sets were combined into a project database, which integrated sample collection information, analytical data, calculated values for analytes based on RPDs for replicate samples from the same DU, and adjusted values for lead and arsenic based on relative bioavailability (RBA) determined from IVBA analysis (lead) and the default value for arsenic. More information about these calculated and adjusted values is provided in Section 6.2.

6.2 IVBA Adjusted Arsenic and Lead Results

As indicated in Section 4.3, a total of 122 IC samples from a total of 114 DUs were selected for IVBA analysis. The samples came from all DU categories except Dripline DUs. The IVBA results were divided into two groups for evaluation purposes based on the grain-size fraction that was analyzed. Beach samples (sieved to 250 µm) and non-Beach samples (sieved to 150 µm) comprised the two groups. The mean IVBA values for arsenic and lead in the non-Beach DUs were 32 and 77 percent, respectively, and the mean IVBA values for arsenic and lead in the Beach DUs were 35 and 68 percent, respectively. The summary statistics for each group are presented in Table 6-2.

The approach for evaluating the analytical data and IVBA results for the Residential Soil Study are related to the principal study question detailed in the QAPP (SRC, 2014):

- Do lead and arsenic concentrations (and possibly other TAL metals) in the fine-grained fraction of soils from rural residential parcels located within the initial sampling area boundary pose an unacceptable risk to human health, particularly to children who live within the UCR Study Area?

Because the principal study question focuses on human exposure to metals in soil, the methods used to aggregate and evaluate analytical data from the study concentrated on potential exposure to metals, particularly bioavailable lead and arsenic, on a DU- and property-specific basis.

A total of 541 IC and 402 discrete field samples (counts include replicates and field duplicates) were collected from 235 residential DUs. In addition, the laboratory prepared 32 IC and 22 discrete laboratory duplicates. In order to evaluate potential exposure at a DU, all field and laboratory duplicates were averaged with respective field samples prior to calculating DU-specific average concentrations of arsenic and lead.

While IVBA analysis for arsenic was conducted as part of this study, the arsenic IVBA procedure has not been validated as of this date. Consequently, the arsenic data were adjusted using the default value of 60 selected percent (EPA, 2012).

The lead IVBA data were used to adjust soil lead concentration data for IC samples on a DU-specific basis when possible:

- DUs selected for IVBA analysis: The IVBA result for the DU was used to adjust the soil lead data for that DU (Equations 1, 3). The average of three IVBA results was used for the four DUs that had all three IC samples selected for IVBA analysis.
- DUs not selected for IVBA analysis: The lead concentrations for Beach DUs were adjusted using the average of the IVBA results for Beaches. The lead concentrations for non-Beach DUs (DUs labeled as House, Play Area, Garden, Agricultural, Animal Activity, or Other Not Specified) were adjusted using the average of the IVBA results for non-Beach DUs.
- Dripline DUs: IVBA for the House DU associated with the Dripline DU was used if the House DU was selected for IVBA; if the House DU was not selected for IVBA analysis, the average IVBA for non-Beach DUs at the property was used to adjust the soil lead concentration.

In accordance with EPA (2007), RBA for lead was calculated using the following equation:

$$RBA_{PbS} = 100 \times (0.878 \times (IVBA_{PbS}/100) - 0.028) \quad \text{Equation 1}$$

Where:

RBA_{PbS} = Estimated relative bioavailability of lead in soil

$IVBA_{PbS}$ = Measured or average beach/non-Beach DU IVBA for lead in soil

RBA-adjusted lead and -arsenic concentrations (e.g., for mapping) were calculated using the following equations (EPA, 2007):

$$Pb_{Adj} = PbS \times (RBA_{Pb}/100) \times (0.5/0.3) \quad \text{Equation 2}$$

$$As_{Adj} = 0.6 \times As \quad \text{Equation 3}$$

Where:

Pb_{Adj} = Estimated RBA-adjusted soil-lead concentration (ppm)

RBA_{PbS} = Estimated relative bioavailability of lead in soil (%)

PbS = Measured soil-lead concentration (ppm)

As_{Adj} = Relative bioavailability-adjusted soil-arsenic concentration (ppm)

0.6 = default RBA for arsenic (EPA, 2012)

As = Measured soil-arsenic concentration (ppm)

The default RBA for arsenic was used to adjust the measured arsenic concentrations in the discrete soil samples. The site-wide average RBA for Beach or non-Beach samples (depending on the DU category where the discrete samples were collected) was used to adjust the measured lead concentrations in the discrete soil samples.

6.3 Metals Results

This section summarizes the overall results of the Residential Soil Study. The metals data were primarily evaluated by DU category and sample type to provide general information about the distribution of metals in the different DU categories associated with residential land use in the study area. Sample counts for each DU category, including primary, replicate and field duplicate samples, are summarized in Table 6-3.

Total metals results for the study are summarized by DU category in Tables 6-4 through 6-11, with each table summarizing results for one DU category. The results for all available field samples (including replicates and field duplicates) are summarized in these tables. Adjusted averaged lead and arsenic results for each DU category are provided in Table 6-12 through 6-19, which list DU-specific values. The combined results for all DU categories are summarized in Table 6-20 and 6-21. These summary statistics tables list the number of samples by sample type (IC or discrete), number of detects, ranges of detected concentrations, ranges of reporting limits for nondetect results, screening levels (referred to as project action limits in the Phase 2 QAPP), and number of detected results with screening level exceedances on an analyte-by-analyte basis. Highlighting indicates analytes where one or more sample result exceeds a screening level. The screening levels presented on the tables are for comparison purposes only. Exceedance of a screening level does not imply unacceptable risk.

6.3.1 House Decision Units

A total of 184 IC samples were collected at House DUs. The sample depth interval for House samples was 0 to 1 inch bgs.

The total metals results for the IC samples are summarized in the upper portion of Table 6-4. The adjusted arsenic and lead results for the IC samples are summarized in Table 6-12. All 22 metals except sodium were detected in each of the samples. As shown by the highlighted rows in Table 6-4, concentrations of total arsenic, total lead, manganese, and thallium exceeded their respective screening levels in one or more samples from the group. Adjusted arsenic was detected above its screening level of 20 milligrams per kilogram (mg/kg) in 19 percent of the House DUs (Table 6-12. The highest concentrations of adjusted arsenic were in samples collected from DU 196 (61.8 mg/kg) and DU 1021 (59 mg/kg). Adjusted lead exceedances occurred in 23 percent of the House DUs. The highest concentrations of adjusted lead were in samples collected from DU 196 (1,936 mg/kg) and DU 49 (1,628 mg/kg). The manganese and thallium exceedances occurred in samples that also had concentrations of adjusted arsenic and/or adjusted lead above screening levels.

A total of 328 discrete samples were collected at House DUs. The samples were obtained from 1 to 6 inches bgs. The results for the discrete samples are summarized in the lower portion of Table 6-4. The adjusted arsenic and lead results for the discrete samples are summarized in Table 6-12.

All 22 metals were detected in each of the samples (there were no nondetect results). As shown by the highlighted rows in Table 6-4, concentrations of antimony, total arsenic, cobalt, total lead, manganese, and thallium exceeded their respective screening levels in one or more samples from the group. Adjusted arsenic was detected above its screening level in 11 percent of the House samples. The samples with the highest concentrations of adjusted arsenic (75 and 98.4 mg/kg) were collected from DU 49. Adjusted lead exceedances over the screening level occurred in 12 percent of the House samples. The sample with the highest concentration of adjusted lead (2,502 mg/kg) was also collected from DU 49. The antimony, cobalt, manganese, and thallium exceedances occurred in a few House samples that also had concentrations of adjusted arsenic and/or adjusted lead above screening levels. The highest concentrations of antimony, cobalt, manganese, and thallium occurred in discrete samples collected from DU 49.

6.3.2 Dripline Decision Units

A total of 34 IC samples were collected from Dripline DUs at residential properties. The sample depth interval for Dripline samples was 0 to 1 inch bgs. No discrete core samples were collected at the Dripline DUs.

The total metals results for the IC samples are summarized in Table 6-5. The adjusted arsenic and lead results for the IC samples are summarized in Table 6-13. All 22 metals were detected in each of the samples. Concentrations of total arsenic and total lead exceeded their respective screening levels in one or more samples from the group, as did adjusted lead. Adjusted lead exceedances occurred in 4 Dripline DUs (DU 35DL, 109DL, 112DL, and 319DL). The highest concentration (908 mg/kg) was from DU 35 DL.

6.3.3 Garden Decision Units

A total of 84 IC samples were collected at Garden DUs. The sample depth intervals for Garden DU samples varied according to the tilled depth of the garden. In most cases, the depth was 0 to12 inches bgs, but intervals of 0 to 1 and 0 to 18 inches bgs were also sampled.

The total metals results for the IC samples are summarized in the upper portion of Table 6-6. The adjusted arsenic and lead results for the IC samples are summarized in Table 6-14. All 22 metals were detected in each of the samples. Concentrations of total arsenic and total lead exceeded their respective screening levels in one or more samples from the group. Adjusted arsenic and adjusted lead were detected above their screening levels in one Garden DU (DU 201G).

A total of 17 discrete samples were collected at Garden DUs. The samples were obtained from 1 to 6 inches bgs. The total metals results for the discrete samples are summarized in the lower portion of Table 6-6. The adjusted arsenic and lead results for the discrete samples are summarized in Table 6-14. All 22 metals were detected in each of the samples (there were no nondetect results). Concentrations of total arsenic and total lead exceeded their respective screening levels in one or more samples from the group, as did adjusted arsenic and adjusted lead. Adjusted arsenic and adjusted lead were detected above their screening levels in three of the discrete samples collected at DU 201G.

6.3.4 Beach Decision Units

Forty-five IC samples were collected at Beach DUs. The sample depth intervals for Beach DU samples were typically 0 to 6 inches bgs, but the potential presence of cultural artifacts restricted sample depths to 0 to 1 inch bgs at several beaches. Beach DU samples were sieved to 250 µm (with the exception of the two samples listed in Section 4.4).

The total metals results for the IC samples are summarized in the upper portion of Table 6-7. The adjusted arsenic and adjusted lead results for the IC samples are summarized in Table 6-15. All 22 metals were detected in each of the samples (there were no nondetect results). As shown by the highlighted rows in Table 6-7, concentrations of antimony and total arsenic exceeded their respective screening levels in one or more samples from the group. Concentrations of adjusted arsenic and adjusted lead did not exceed their screening levels. The antimony exceedances occurred in a single DU (DU 97) that also had concentrations of total arsenic above the screening level.

Six discrete samples (five primary and one FD) were collected at one Beach DU. The samples were obtained from 1 to 6 inches bgs. The results for the discrete samples are summarized in the lower portion of Table 6-7. The adjusted arsenic and lead results for the discrete samples are summarized in Table 6-15. All 22 metals were detected in each of the samples (there were no nondetect results), but there were no exceedances of screening levels.

6.3.5 Play Area Decision Units

Nineteen IC samples were collected at Play Area DUs. The sample depth interval for Play Area DU samples was 0 to 1 inch bgs.

The total metals results for the IC samples are summarized in the upper portion of Table 6-8. The adjusted arsenic and adjusted lead results for the IC samples are summarized in Table 6-16. All 22 metals, except sodium, were detected in each of the samples. Concentrations of total arsenic, total lead, and thallium exceeded their respective screening levels in one or more samples from the group. Adjusted arsenic and adjusted lead were detected above their screening levels in three DUs (DUs 7, 317M, and 35PA). The thallium exceedances occurred in samples from DUs 7 and 35PA.

Sixteen discrete samples were collected at Play Area DUs. The samples were obtained from 1 to 6 inches bgs. The total metals results for the discrete samples are summarized in the lower portion of Table 6-8. The adjusted arsenic and adjusted lead results for the discrete samples are summarized in Table 6-16. All 22 metals were detected in each of the samples. Concentrations of total arsenic and total lead exceeded

their respective screening levels in one or more samples from the group, as did adjusted arsenic and adjusted lead. Adjusted arsenic and adjusted lead were detected above their screening levels in one discrete sample collected at DU 7.

6.3.6 Other Not Specified Decision Units

A total of 130 IC samples were collected at DUs with land uses designated as "Other Not Specified". The typical sample depth interval for these samples was 0 to 1 inch bgs, but 0 to 3 inch bgs intervals were also sampled.

The total metals results for the IC samples are summarized in the upper portion of Table 6-9. The adjusted arsenic and adjusted lead results for the IC samples are summarized in Table 6-17. With the exception of sodium, all 22 metals were detected in each of the samples. Concentrations of total arsenic, total lead, and thallium exceeded their respective screening levels in one or more samples from the group. Concentrations of adjusted arsenic were detected above the screening level in 12 percent of the DUs. Adjusted lead exceedances occurred in 25 percent of the DUs. The highest concentration of adjusted arsenic (48 mg/kg) was detected at DU 401. The highest concentration of adjusted lead was also detected at DU 401. The single thallium exceedance shown in Table 6-9 was also from DU 401.

Thirty-five discrete samples were collected at Other Not Specified DUs. The samples were obtained from 1 to 6 inches bgs. The results for the discrete samples are summarized in the lower portion of Table 6-9. The adjusted arsenic and adjusted lead results for the discrete samples are summarized in Table 6-17. All 22 metals were detected in each of the samples (there were no nondetect results). Concentrations of total arsenic and total lead exceeded their respective screening levels in one or more samples from the group. Concentrations of adjusted arsenic and adjusted lead were also detected above the screening levels in three DUs (adjusted arsenic in DUs 258 and 420; adjusted lead in DUs 420 and 430).

6.3.7 Agricultural Decision Units

A total of 42 IC samples were collected at DUs with land uses designated as "Agricultural". The sample depth interval for these samples was 0 to 1 inch bgs. No discrete core samples were collected at the Agricultural DUs.

The total metals results for the IC samples are summarized in Table 6-10. The adjusted arsenic and adjusted lead results for the IC samples are summarized in Table 6-18. All 22 metals were detected in each of the samples (there were no nondetect results). Concentrations of total arsenic and total lead exceeded their respective screening levels in one or more samples from the group. Concentrations of adjusted arsenic did not exceed the screening level. The concentration of adjusted lead in one DU (DU 39) exceeded its screening level.

6.3.8 Animal Activity Area Decision Units

Three IC samples were collected at one DU where land use was designated as "Animal Activity Area" (DU 208AA). The sample depth interval for these samples was 0 to 3 inches bgs. No discrete core samples were collected at the Animal Activity Area DU.

The total metals results for the IC samples are summarized in Table 6-11. The adjusted arsenic and adjusted lead results for the IC samples are summarized in Table 6-19. All 22 metals were detected in each of the samples (there were no nondetect results) and all concentrations were below their respective screening levels. Similarly, the adjusted arsenic and adjusted lead concentrations were below their screening levels.

6.4 Decision Unit Category Comparisons

This section compares the distribution of metals in IC soil samples by DU category as illustrated by the box and whisker plots on Figures 6-1 through 6-22. The box and whisker plots show the distribution of the analytical results by quartile group excluding outliers. The outliers are results that are greater than 1.5 times the inter quartile range added to the 75 percentile and subtracted from the 25 percentile (EPA, 2013). The

box plots for arsenic and lead use the RBA-adjusted averaged values for these metals. The data for each DU category are compared to each other and to the screening levels identified in the QAPP, which are based on human health criteria. The screening levels presented on the plots are for comparison purposes only. Exceedance of a screening level does not imply unacceptable risk. Figures 6-23 through 6-27 illustrate the spatial distributions of antimony, adjusted arsenic, adjusted lead, manganese, and thallium concentrations for IC samples by DU relative to project screening levels, and, in the cases of adjusted arsenic and adjusted lead, also to other potentially applicable human health benchmarks (see Section 6.5, below). The following provides a summary of the comparisons among DU categories by analyte:

- Aluminum - The highest median concentration of aluminum occurred in the Garden DUs (Figure 6-1). However, the maximum concentration, including outliers, occurred in an Other Not Specified DU. The lowest concentrations were reported in the Beach category. All detected concentrations of aluminum were below the screening level of 77,400 mg/kg.
- Antimony - The highest median concentration of antimony occurred in the Beach DUs (Figure 6-2). The highest concentrations of antimony, including outliers, were also reported for the Beach category. The three samples (primary and two replicates) with concentrations above the screening level were collected from DU 97 (Figure 6-23).
- Adjusted Arsenic - The highest median concentration of adjusted arsenic occurred in the Other Not Specified DUs (Figure 6-3). However, the highest concentrations, including outliers, occurred in the House DUs, with multiple DUs having concentrations above the screening level of 20 mg/kg. The box plot for the Play Area category is somewhat distorted by the limited number of DU samples (seven) and three results exceeding the screening level. The spatial distribution of the adjusted arsenic exceedances is shown in Figure 6-24.
- Barium - The highest median concentration of barium occurred in the Beach DUs (Figure 6-4). The maximum concentrations, including outliers, were reported in the Other Not Specified DUs, but elevated levels also occurred in the House DUs. The lowest median concentration of barium was in the Play Area DUs. All detected concentrations of barium were below the screening level of 15,300 mg/kg.
- Beryllium - The highest median concentration of beryllium was reported in the Play Area DUs (Figure 6-5). However, the maximum concentration, including outliers, was identified in the Other Not Specified category DUs. The lowest median concentration of beryllium was in the Beach category DUs. All detected concentrations of beryllium were below the screening level of 156 mg/kg.
- Cadmium - The highest median concentration of cadmium was reported in the Other Not Specified DUs (Figure 6-6). However, the maximum concentration, including outliers, was identified in the House DUs. The lowest median concentration of cadmium was in the Beach DUs. All detected concentrations of cadmium were below the screening level of 70 mg/kg.
- Calcium - The highest median concentration of calcium was reported in the Beach DUs (Figure 6-7). The maximum concentration, including outliers, was also reported in the Beach DUs. The lowest median concentration of calcium was in the Animal Activity Area DUs. There is no screening level for calcium because it is considered an essential nutrient.
- Chromium - The highest median concentration of chromium was reported in the Dripline DUs (Figure 6-8). The maximum concentration, including outliers, was reported in the Other Not Specified DUs. The lowest median concentration of chromium was in the Beach DUs. All detected concentrations of chromium were below the screening level of 117,000 mg/kg.
- Cobalt - The highest median concentration of cobalt was reported in the Garden DUs (Figure 6-9). The maximum concentration, including outliers, was reported in the Other Not Specified DUs. The lowest median concentration of cobalt was in the Beach DUs. All concentrations in the IC samples were below the screening level of 23 mg/kg.

- Copper - The highest median concentration of copper was reported in the Beach DUs (Figure 6-10). The maximum concentration, including outliers, was also reported in the Beach DUs. The lowest median concentration of copper was in the Animal Activity Area DUs. All detected concentrations of copper were below the screening level of 3,130 mg/kg.
- Iron - The highest median concentration of iron was reported in the Beach DUs (Figure 6-11). The maximum concentration, including outliers, was also reported in the Beach DUs. The lowest median concentration of iron was in the Animal Activity Area DUs. All detected concentrations of iron were below the screening level of 54,800 mg/kg.
- Adjusted Lead - The highest median concentration of adjusted lead was reported in the House DUs (Figure 6-12). The maximum concentration, including outliers, was reported in the House DUs. The lowest median concentration of adjusted lead was in the Agriculture DUs. The spatial distribution of the adjusted lead exceedances is shown in Figure 6-25.
- Magnesium - The highest median concentration of magnesium was reported in the Beach DUs (Figure 6-13). The maximum concentration, including outliers, was reported in the Other Not Specified DUs. The lowest median concentration of magnesium was in the Animal Activity Area DUs. There is no screening level for magnesium because it is considered an essential nutrient.
- Manganese - The highest median concentration of manganese was reported in the Other Not Specified DUs (Figure 6-14). The maximum concentration, including outliers, was reported in the House DUs. One House DU result exceeded the screening level of 1,830 mg/kg (Figure 6-26). The lowest median concentration of manganese was in the Beach DUs.
- Nickel - The highest median concentration of nickel was reported in the Garden DUs (Figure 6-15). The maximum concentration, including outliers, was reported in the House DUs. The lowest median concentration of nickel was in the Beach DUs. All detected concentrations of nickel were below the screening level of 1,550 mg/kg.
- Potassium - The highest median concentration of potassium was reported in the Animal Activity Area DUs (Figure 6-16). The maximum concentration, including outliers, was reported in the Other Not Specified DUs. The lowest median concentration of potassium was in the Beach DUs. There is no screening level for potassium because it is considered an essential nutrient.
- Selenium - The highest median concentration of selenium was reported in the Garden DUs (Figure 6-17). The maximum concentration, including outliers, was also reported in the Garden DUs. The lowest median concentration of selenium was in the Animal Activity Area DUs. All detected concentrations of selenium were below the screening level of 391 mg/kg.
- Silver - The highest median concentration of silver was reported in the Beach DUs (Figure 6-18). The maximum concentration, including outliers, was also reported in the Beach DUs. The lowest median concentration of silver was in the Animal Activity Area DUs. All detected concentrations of silver were below the screening level of 391 mg/kg.
- Sodium - The highest median concentration of sodium was reported in the Garden DUs (Figure 6-19). The maximum concentration, including outliers, was also reported in the Garden DUs. The lowest median concentration of sodium was in the Animal Activity Area DUs. There is no screening level for sodium because it is considered an essential nutrient.
- Thallium - The highest median concentration of thallium was reported in the Other Not Specified DUs (Figure 6-20). However, the maximum concentration, including outliers, was reported in the House DUs, with multiple exceedances of the 0.78 mg/kg screening level. The lowest median concentration of thallium was in the Garden DUs. The spatial distribution of the thallium exceedances is shown in Figure 6-27.

- Vanadium - The highest median concentration of vanadium was reported in the Other Not Specified DUs (Figure 6-21). The maximum concentration, including outliers, was also reported in the Other Not Specified DUs. The lowest median concentration of vanadium was in the Animal Activity DUs. All detected concentrations of vanadium were below the screening level of 394 mg/kg.
- Zinc - The highest median concentration of zinc was reported in the Beach DUs (Figure 6-22). The maximum concentration, including outliers, was also reported in the Beach DUs. The lowest median concentration of zinc was in the Agriculture DUs. All detected concentrations of zinc were below the screening level of 23,500 mg/kg.

6.5 Decision Unit Specific Evaluations

A total of 235 DUs were sampled at 74 properties during the Residential Soil Study. The EPA national screening level for lead is 400 mg/kg. The State of Washington has a lower cleanup level for unrestricted land use of 250 mg/kg. The State of Washington cleanup level for arsenic is 20 mg/kg. EPA considers results below these levels to be safe for everyone living on a property, including children and pregnant women. Results above a screening level are not necessarily cause for concern. For results above these levels, EPA evaluates the land use, exposure concerns, and other site-specific factors to determine what actions to take.

EPA set action levels of 700 mg/kg lead and 90 mg/kg arsenic in IC samples for the 2014 Residential Soil Study. Soil in DUs with concentrations near or above these levels were removed with owner consent during a time-critical removal action (TCRA) in 2015. The overall distributions of adjusted arsenic and lead results in IC samples relative to the EPA action levels and other human health benchmarks are shown in Figures 6-24 and 6-25, and summarized below:

Arsenic:

- Concentrations at or below 20 mg/kg - 212 DUs
- Concentrations greater than 20 and less than 90 mg/kg - 23 DUs (highest concentration found in IC samples was 62 mg/kg)
- Concentrations at or above 90 mg/kg - 0 DUs[3]

Lead:

- Concentrations at or below 250 mg/kg - 159 DUs
- Concentrations greater than 250 and less than 400 mg/kg - 37 DUs
- Concentrations at or above 400 and less than 700- mg/kg - 21 DUs
- Concentrations at or above 700 mg/kg – 18 DUs (highest concentration found in IC samples was 1,936 mg/kg)

The DUs with adjusted lead concentrations at or above the 700 mg/kg TCRA action level were located on 10 privately-owned properties and three tribal allotments. Four additional privately-owned properties with adjusted lead concentrations close to the 700 mg/kg action level were also identified for cleanup during TCRA planning. Lead-contaminated soil at 13 of the 14 privately-owned properties[4] was cleaned up to

[3] This category does not appear on Figure 6-24 because none of the DU results exceeded the 90 mg/kg benchmark.

[4] One private property owner declined to participate in the TCRA. The tribal allotments were not addressed during the 2014 TCRA.

below 250 mg/kg during the 2015 TCRA. None of the sampled properties had arsenic results in IC samples above the action level of 90 mg/kg[5]. The cleanup work was performed by TAI under EPA oversight.

The validated and adjusted data for each DU are listed by property and sample ID in Appendix G of this report[6]. Maps showing the adjusted arsenic and lead results for samples at each DU are also included in the appendix. These maps include recommendations to mitigate potential exposure to elevated concentrations of lead or arsenic in a DU and were prepared in support of the results notification letters sent by EPA to each property owner. A brochure detailing the Soil Safety Guidelines was included in the notification letter.

[5] One discrete sample had a concentration of adjusted arsenic above 90 mg/kg (98 mg/kg at DU 49). The IC sample from this DU had an adjusted lead concentration of 1,628 mg/kg, which is above the TCRA action level. Consequently, the localized area of arsenic contaminated soil was removed as part of the overall removal of lead-contaminated soil at the DU.

[6] For privacy reasons, property owner names and contact information have been redacted from the tables and maps in the appendix.

SECTION 7

Summary

The purpose of the Residential Soil Study was to collect data to support refinement of exposure estimates for residents of properties in the Study Area.

The Residential Soil Study was designed to provide additional information to characterize potential risk and exposure associated with historical deposition of metals in soils in residential areas. The initial focus of this study was on residential properties located north of Northport and extending to the U.S.-Canada border, within the Columbia River valley. Landowners were contacted and provided access agreements to allow EPA to perform the sampling. The sampling was voluntary from the landowner. In the spring of 2014, each residential property owner who returned a signed access agreement to EPA was visited, the property owner(s) interviewed in person or by phone, and exposure areas were defined and mapped.

Given that the goal of the study was to sample soils in areas with high human exposure potential, the investigation focused on the areas around each house where residents are most likely to come into contact with surface soils. Children's play areas and gardens were targeted for soil sampling. Gardens were targeted because exposure may occur in these areas during digging in the surface soil for tilling and weeding, planting, and moving plants. Areas that were intermittently accessed were sampled on a case-by-case basis. Animal pens or riding areas were also sampled because of potential for frequent human exposure to surface soils in these areas. Except for driplines from roofs, which were sampled separately, care was taken to locate increments outside the dripline of the residence, and away from influences of any other potentially contaminated surfaces.

Residential soil samples were collected using an IC sampling design. IC sampling entails the collection of multiple increments of soil from a DU that are composited and subsampled according to a detailed standard operating procedure prior to laboratory analysis (ITRC, 2012). Increments were located using systematic random sampling with a rectangular grid and random starting point. The number of DUs per property was determined following a visit to each property for which an access agreement has been received by EPA in early 2014. Property-specific maps were generated that include DUs for areas near the homes that were most frequently utilized: children's play areas (e.g., sandbox, swing set), gardens, and animal pens/riding areas. Boundaries for each DU were delineated based on land use and GPS data collected during the property visit.

Discrete soil samples were also collected from 1 to 6 inches bgs at selected DUs to provide information on the vertical nature and extent of contamination at each property. The majority of the discrete samples were randomly located in the DU closest to the house (where exposure is expected to be highest) and where IC samples depths were 0 to 1 inch bgs. There were exceptions at 13 DUs where property owner preferences necessitated moving the discrete samples to a different DU on the property.

The sample depth for most DU categories was the entire 0 to 1 inch bgs interval below organic litter or sod because this is the interval that people are most likely to come into contact with(EPA, 1989; EPA, 1996) and is the sampling depth recommended for use with the IEUBK model to represent exposure from soil (EPA, 2003). However, deeper exposures are anticipated for certain exposure scenarios so the sample depth for each increment was expanded at the following DU categories:

- Gardens – tilled depth (typically 0 to 12 inches bgs)
- Disturbed areas (e.g., animal activity areas) – 0 to 3 inches bgs
- Beaches – 0 to 6 inches bgs (0 to 1 inch if there were cultural resource concerns)

The discrete samples were obtained from an interval of 1 to 6 inches bgs.

A total of 541 IC samples and 402 discrete field samples were collected from 235 residential DUs at 74 properties. Daily equipment blanks were collected by each field team (total of 72 equipment blanks). Sampling activities were conducted by CH2M and EPA; cultural resource monitoring was conducted by the CCT.

The samples were processed and analyzed by ALS located in Kelso, Washington. The IC and discrete soil samples were air dried, homogenized, and sieved into the appropriate fraction (less than 150 µm for soil, less than 250 µm for beach sand)[7] for subsampling (IC samples only), digestion, and analysis. Laboratory duplicate samples were prepared by ALS after homogenization and sieving. These samples were assigned their own sample IDs. A total of 32 IC and 22 discrete laboratory duplicate samples were prepared and analyzed by ALS. In addition, splits of 75 IC and 49 discrete soil samples were prepared and provided to EPA for separate analysis

All soil samples were analyzed for total solids and TAL metals (except mercury). Soil samples for metals analyses were prepared with acid digestion following EPA methods 3050B. Samples were analyzed for metals according to EPA Methods 6010C and 6020A. The 72 equipment blank samples from the field, as well as 52 sieve blank samples prepared following use and decontamination of the sieves used for sieving soil samples, were also analyzed for TAL metals (except mercury). IVBA testing was also conducted on a subset of 122 IC samples from a total of 114 DUs. Samples for IVBA testing were prepared according to EPA 9200.2-86 and analyzed for lead and arsenic according to EPA 6010B.

Quality assurance and validation of total metals and IVBA data generated by ALS was performed by ESI in accordance with the QAPP (SRC, 2014). Each SDG was validated by ESI chemists for data quality and qualifiers were assigned to the metals data as appropriate. No data were flagged as rejected. EPA personnel conducted quality assurance reviews of the data validation reports for metals and IVBA analysis and prepared memos releasing the data for evaluation. EPA reviewed the data and validation reports prior to releasing the validated data for evaluation. CH2M personnel conducted evaluations of EB, SB, FD, and FR results. The data were found to meet QAPP requirements in terms of PARCC parameters and data completeness is 100 percent.

A total of 122 IC samples from a total of 114 DUs were selected for IVBA analysis for arsenic and lead. The samples came from all DU categories except Dripline DUs. The IVBA results were divided into two groups for evaluation purposes based on the grain-size fraction that was analyzed. Beach samples (sieved to 250 µm) and non-Beach samples (sieved to 150 µm) comprise the two groups. The mean IVBA values for arsenic and lead in the non-Beach DUs were 32 and 77 percent, respectively, and the mean IVBA values for arsenic and lead in the Beach DUs were 35 and 68 percent, respectively.

Lead and arsenic concentrations were RBA-adjusted to evaluate potential residential exposure in each DU. While IVBA analysis for arsenic was conducted as part of this study, the arsenic IVBA procedure has not been validated as of this date. Consequently, the arsenic data for IC and discrete samples were adjusted using the default value of 60 percent (EPA, 2012). The lead results for IC samples were adjusted as follows:

- DUs selected for IVBA analysis: The IVBA result for the DU was used to adjust the soil lead data for that DU.
- DUs not selected for IVBA analysis: The lead concentrations for Beach DUs were adjusted using the average of the IVBA results for Beaches. The lead concentrations for non-Beach DUs (DUs labeled as House, Play Area, Garden, Agricultural, Animal Activity, or Other Not Specified) were adjusted using the average of the IVBA results for non-Beach DUs.

[7] Two beach samples were mistakenly sieved to 150 µm (see Section 4.4).

- Dripline DUs: IVBA for the House DU associated with the Dripline DU was used if the House DU was selected for IVBA; if the House DU was not selected for IVBA analysis, the average IVBA for non-Beach DUs at the property was used to adjust the soil lead concentration.

The site-wide average RBA for Beach or non-Beach samples (depending on the DU category where the samples were collected) was used to adjust the measured lead concentrations in the discrete soil samples.

The results of the Residential Soil Study were compared to screening levels to provide general information about the distribution of metals in the different DU categories associated with residential land use in the study area. Concentrations of RBA-adjusted arsenic and lead in IC and discrete soil samples exceeded their respective screening levels in all DU categories except Beaches and Animal Activity DUs. A few other metals (antimony, cobalt [discrete samples only], manganese, and thallium) were detected above their respective screening levels in several DU categories, but these exceedances typically occurred in samples from DUs with concentrations of adjusted arsenic and/or adjusted lead in excess of screening levels.

EPA set action levels of 700 mg/kg lead and 90 mg/kg arsenic in IC samples for the 2014 Residential Soil Study. Soil in DUs with concentrations near or above these levels were removed with owners consent during the 2015 TCRA. The overall distributions of adjusted arsenic and lead results in IC samples relative to the EPA action levels and other human health benchmarks are summarized below:

Arsenic:

- Concentrations at or below 20 mg/kg - 212 DUs
- Concentrations greater than 20 and less than 90 mg/kg - 23 DUs (highest concentration found in IC samples was 62 mg/kg)
- Concentrations at or above 90 mg/kg - 0 DUs

Lead:

- Concentrations at or below 250 mg/kg - 159 DUs
- Concentrations greater than 250 and less than 400 mg/kg - 37 DUs
- Concentrations at or above 400 and less than 700- mg/kg - 21 DUs
- Concentrations at or above 700 mg/kg – 18 DUs (highest concentration found in IC samples was 1,936 mg/kg)

The DUs with adjusted lead concentrations at or above the 700 mg/kg TCRA action level were located on 10 privately-owned properties and three tribal allotments. Four additional privately-owned properties with adjusted lead concentrations close to the 700 mg/kg action level were also identified for cleanup during TCRA planning. Lead-contaminated soil at 13 of the 14 privately-owned properties was cleaned up to below 250 mg/kg during the 2015 TCRA. None of the sampled properties had arsenic results in IC samples above the action level of 90 mg/kg. The cleanup work was performed by TAI under EPA oversight.

SECTION 8

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Tables

TABLE 3-1

Residential Soil Study Sample Collection Chronology

UCR Residential Soil Study Field Sampling and Data Summary Report

Date	Number of Incremental Composite Samples	Number of Discrete Samples	Number of Equipment Blanks	Decision Units
8/18/2014	5	5	1	14 15 15DL
8/19/2014	8	0	2	16 17 280DL 280yard
8/20/2014	9	6	2	13 192 40 40DL 9
8/21/2014	12	6	2	1060 151DL 186 192 192DL 280 320new
8/22/2014	11	18	2	151 152 185 185DL 186 186DL
8/23/2014	6	5	2	185G 317 317M 319
8/25/2014	12	6	3	318 319 319DL 85 85DL 86 87
8/26/2014	13	12	1	253 254DL 288 319M 87 94M
8/27/2014	13	0	2	226A 226DL 251B 288G1 288G2 289G3 291
8/28/2014	14	18	2	116DL 116M 226 226C 289G3 999DL2 999M1 999M2
8/29/2014	17	6	2	116M 284DL 284M 315 999DL1 999G1 999M3
9/3/2014	12	10	2	284M 285M 287 303 316 59
9/4/2014	16	12	2	206 306 55 59 59A 59DL
9/6/2014	17	5	2	208 208BM 208DL 209A 229 55DL 56 58
9/8/2014	15	5	2	123 135 208AA 208BM 208G 230G
9/9/2014	14	11	2	110 110DL 110G 111 112 112DL 112G 208BM 213
9/10/2014	14	18	2	112 113low 113up 259 403 410 412 420
9/11/2014	12	11	2	258 411 413 421 430 431
9/12/2014	16	5	2	249 250 431 432 440 441 442 49
9/13/2014	13	17	2	203 204 216 250 255
9/15/2014	19	12	2	115SP 197 201 201DL 201G 21 21G 7
9/16/2014	16	18	2	1020 1021 109 109DL 193 193DL 201G 202
9/17/2014	19	24	2	1020 194 195 196 35 35DL 800B 801
9/18/2014	19	6	2	1030 170 224 35PA 39 401 402
9/19/2014	18	6	2	1015 1017 1018 42 42DL 44 46 47
9/20/2014	17	24	2	121 121DL 122 62 62DL2 62G 82
9/22/2014	13	5	1	25 25DL 27 28 29 30 31
9/23/2014	18	11	2	160 163 163G 164 324 325 326 327
9/24/2014	20	17	2	154 154DL 167 174M 175 238G 238M 246
9/25/2014	19	23	2	146 146G 147 176G 176M 177 18 18DL 20 61
9/26/2014	20	22	2	168 169 18 33 345 346 60 75

TABLE 3-1

Residential Soil Study Sample Collection Chronology

UCR Residential Soil Study Field Sampling and Data Summary Report

Date	Number of Incremental Composite Samples	Number of Discrete Samples	Number of Equipment Blanks	Decision Units
9/27/2014	17	6	2	106 107 108 168DL 169A 172U 347
9/29/2014	16	19	2	173 187DL 218 22 66 67
9/30/2014	15	11	2	1035 1036 1037 189 3004
10/1/2014	14	11	2	231 231DL 231Lower 3000 3001 3003
10/2/2014	19	5	2	1005 1006 1007 1008 1009DL 1010 1011 72 72M
10/3/2014	13	6	2	1000 1001 70 71 72U
Total	**541**	**402**	**72**	

TABLE 3-2

Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-1000-IC-01	1000-IC	Beach	14397007	IC	0	6	in	48.969609	-117.651919	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-1000-IC-02	1000-IC	Beach	14397008	IC	0	6	in	48.969609	-117.651919	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-1000-IC-03	1000-IC	Beach	14397009	IC	0	6	in	48.969609	-117.651919	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-1001-IC-01	1001-IC	Other Not Specified	14397010	IC	0	1	in	48.968628	-117.652458	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-1001-IC-02	1001-IC	Other Not Specified	14397011	IC	0	1	in	48.968628	-117.652458	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-1001-IC-03	1001-IC	Other Not Specified	14397012	IC	0	1	in	48.968628	-117.652458	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-1005-IC-01	1005-IC	Garden	14396977	IC	0	12	in	48.95382	-117.668446	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1006-IC-01	1006-IC	House	14396968	IC	0	1	in	48.953874	-117.66902	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1006-IC-02	1006-IC	House	14396969	IC	0	1	in	48.953874	-117.66902	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1006-IC-03	1006-IC	House	14396970	IC	0	1	in	48.953874	-117.66902	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1007-IC-01	1007-IC	Garden	14396982	IC	0	12	in	48.95364	-117.669146	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1007-IC-02	1007-IC	Garden	14396983	IC	0	12	in	48.95364	-117.669146	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1007-IC-03	1007-IC	Garden	14396984	IC	0	12	in	48.95364	-117.669146	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1008-IC-01	1008-IC	Agriculture	14396971	IC	0	1	in	48.95349	-117.669724	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1009DL-IC-01	1009DL-IC	Dripline	14396973	IC	0	1	in	48.953772	-117.669009	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1010-IC-01	1010-IC	Agriculture	14396972	IC	0	1	in	48.953774	-117.667557	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1011-IC-01	1011-IC	Agriculture	14396979	IC	0	1	in	48.954579	-117.668938	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1011-IC-02	1011-IC	Agriculture	14396980	IC	0	1	in	48.954579	-117.668938	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1011-IC-03	1011-IC	Agriculture	14396981	IC	0	1	in	48.954579	-117.668938	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-1015-IC-01	1015-IC	Garden	14376614	IC	0	12	in	48.98909	-117.665126	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-1017-IC-01	1017-IC	Garden	14376608	IC	0	1	in	48.988727	-117.665163	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-1017-IC-02	1017-IC	Garden	14376609	IC	0	1	in	48.988727	-117.665163	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-1017-IC-03	1017-IC	Garden	14376610	IC	0	1	in	48.988727	-117.665163	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-1018-IC-01	1018-IC	Garden	14376611	IC	0	12	in	48.988826	-117.665158	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-1018-IC-02	1018-IC	Garden	14376612	IC	0	12	in	48.988826	-117.665158	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-1018-IC-03	1018-IC	Garden	14376613	IC	0	12	in	48.988826	-117.665158	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-1020-IC-01	1020-IC	Garden	14376510	IC	0	18	in	48.97835	-117.644946	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-1020-IC-02	1020-IC	Garden	14376556	IC	0	18	in	48.97835	-117.644946	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-1020-IC-03	1020-IC	Garden	14376557	IC	0	18	in	48.97835	-117.644946	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-1021-IC-01	1021-IC	House	14376497	IC	0	1	in	48.9777	-117.64573	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-1021-IC-02	1021-IC	House	14376498	IC	0	1	in	48.9777	-117.64573	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-1021-IC-03	1021-IC	House	14376499	IC	0	1	in	48.9777	-117.64573	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-1030-IC-01	1030-IC	Other Not Specified	14376581	IC	0	1	in	48.974657	-117.667255	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-1030-IC-02	1030-IC	Other Not Specified	14376582	IC	0	1	in	48.974657	-117.667255	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-1030-IC-03	1030-IC	Other Not Specified	14376583	IC	0	1	in	48.974657	-117.667255	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-1035-IC-01	1035-IC	Garden	14396913	IC	0	12	in	48.990728	-117.618132	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-1035-IC-02	1035-IC	Garden	14396914	IC	0	12	in	48.990728	-117.618132	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-1035-IC-03	1035-IC	Garden	14396915	IC	0	12	in	48.990728	-117.618132	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-1036-IC-01	1036-IC	Play Area	14396916	IC	0	1	in	48.990756	-117.618379	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-1036-IC-02	1036-IC	Play Area	14396917	IC	0	1	in	48.990756	-117.618379	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-1036-IC-03	1036-IC	Play Area	14396918	IC	0	1	in	48.990756	-117.618379	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-1037-IC-01	1037-IC	Garden	14396937	IC	0	12	in	48.991278	-117.618298	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-1037-IC-02	1037-IC	Garden	14396938	IC	0	12	in	48.991278	-117.618298	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-1037-IC-03	1037-IC	Garden	14396939	IC	0	12	in	48.991278	-117.618298	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-1060-IC-01	1060-IC	House	14336045	IC	0	1	in	48.941559	-117.781572	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-106-IC-01	106-IC	House	14386863	IC	0	1	in	48.948952	-117.702114	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-106-IC-02	106-IC	House	14386864	IC	0	1	in	48.948952	-117.702114	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-106-IC-03	106-IC	House	14386865	IC	0	1	in	48.948952	-117.702114	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-107-IC-01	107-IC	Garden	14386866	IC	0	12	in	48.948953	-117.702134	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-108-IC-01	108-IC	Garden	14386854	IC	0	12	in	48.948788	-117.703013	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-108-IC-02	108-IC	Garden	14386855	IC	0	12	in	48.948788	-117.703013	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-108-IC-03	108-IC	Garden	14386856	IC	0	12	in	48.948788	-117.703013	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-109DL-IC-01	109DL-IC	Dripline	14376531	IC	0	1	in	48.979244	-117.664978	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-109-IC-01	109-IC	House	14376522	IC	0	1	in	48.979277	-117.665073	NAD083	Soil	9/16/2014	9/23/2014

TABLE 3-2

Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-109-IC-02	109-IC	House	14376523	IC	0	1	in	48.979277	-117.665073	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-109-IC-03	109-IC	House	14376524	IC	0	1	in	48.979277	-117.665073	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-110DL-IC-01	110DL-IC	Dripline	14366333	IC	0	1	in	48.953335	-117.794142	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-110G-IC-01	110G-IC	Garden	14366334	IC	0	12	in	48.953554	-117.794105	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-110-IC-01	110-IC	House	14366324	IC	0	1	in	48.953494	-117.794276	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-110-IC-02	110-IC	House	14366325	IC	0	1	in	48.953494	-117.794276	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-110-IC-03	110-IC	House	14366326	IC	0	1	in	48.953494	-117.794276	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-111-IC-01	111-IC	Other Not Specified	14366335	IC	0	1	in	48.952804	-117.793919	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-111-IC-02	111-IC	Other Not Specified	14366336	IC	0	1	in	48.952804	-117.793919	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-111-IC-03	111-IC	Other Not Specified	14366337	IC	0	1	in	48.952804	-117.793919	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-112DL-IC-01	112DL-IC	Dripline	14366348	IC	0	1	in	48.931687	-117.768572	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-112G-IC-01	112G-IC	Garden	14366340	IC	0	12	in	49.014268	-117.770841	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-112G-IC-02	112G-IC	Garden	14366341	IC	0	12	in	49.014268	-117.770841	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-112G-IC-03	112G-IC	Garden	14366342	IC	0	12	in	49.014268	-117.770841	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-112-IC-01	112-IC	House	14366378	IC	0	1	in	48.931874	-117.77115	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-112-IC-02	112-IC	House	14366379	IC	0	1	in	48.931874	-117.77115	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-112-IC-03	112-IC	House	14366380	IC	0	1	in	48.931874	-117.77115	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-113low-IC-01	113low-IC	Other Not Specified	14366382	IC	0	1	in	48.931992	-117.771931	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-113up-IC-01	113up-IC	Other Not Specified	14366375	IC	0	1	in	48.931264	-117.770857	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-113up-IC-02	113up-IC	Other Not Specified	14366376	IC	0	1	in	48.931264	-117.770857	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-113up-IC-03	113up-IC	Other Not Specified	14366377	IC	0	1	in	48.931264	-117.770857	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-115SP-IC-01	115SP-IC	Other Not Specified	14376476	IC	0	1	in	48.972786	-117.65392	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-116DL-IC-01	116DL-IC	Dripline	14346194	IC	0	1	in	48.939933	-117.753547	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-116M-IC-01	116M-IC	House	14346196	IC	0	1	in	48.939814	-117.753527	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-116M-IC-02	116M-IC	House	14346197	IC	0	1	in	48.939814	-117.753527	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-116M-IC-03	116M-IC	House	14346198	IC	0	1	in	48.939814	-117.753527	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-121DL-IC-01	121DL-IC	Dripline	14376646	IC	0	1	in	48.988885	-117.813808	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-121-IC-01	121-IC	House	14376647	IC	0	1	in	48.975156	-117.814142	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-121-IC-02	121-IC	House	14376648	IC	0	1	in	48.975156	-117.814142	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-121-IC-03	121-IC	House	14376649	IC	0	1	in	48.975156	-117.814142	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-122-IC-01	122-IC	Other Not Specified	14376657	IC	0	1	in	48.973226	-117.809887	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-122-IC-02	122-IC	Other Not Specified	14376658	IC	0	1	in	48.973226	-117.809887	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-122-IC-03	122-IC	Other Not Specified	14376659	IC	0	1	in	48.973226	-117.809887	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-123-IC-01	123-IC	House	14366315	IC	0	1	in	48.953357	-117.706987	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-123-IC-02	123-IC	House	14366316	IC	0	1	in	48.953357	-117.706987	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-123-IC-03	123-IC	House	14366317	IC	0	1	in	48.953357	-117.706987	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-135-IC-01	135-IC	Other Not Specified	14366312	IC	0	1	in	48.953356	-117.700325	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-135-IC-02	135-IC	Other Not Specified	14366313	IC	0	1	in	48.953356	-117.700325	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-135-IC-03	135-IC	Other Not Specified	14366314	IC	0	1	in	48.953356	-117.700325	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-13-IC-01	13-IC	Other Not Specified	14336035	IC	0	1	in	48.972038	-117.734943	NAD083	Soil	8/20/2014	8/28/2014
2014R-SS-146G-IC-01	146G-IC	Garden	14386794	IC	0	1	in	48.914658	-117.758383	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-146-IC-01	146-IC	House	14386785	IC	0	1	in	48.915029	-117.758302	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-146-IC-02	146-IC	House	14386786	IC	0	1	in	48.915029	-117.758302	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-146-IC-03	146-IC	House	14386787	IC	0	1	in	48.915029	-117.758302	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-147-IC-01	147-IC	Garden	14386795	IC	0	12	in	48.915424	-117.760345	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-147-IC-02	147-IC	Garden	14386796	IC	0	12	in	48.915424	-117.760345	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-147-IC-03	147-IC	Garden	14386797	IC	0	12	in	48.915424	-117.760345	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-14-IC-01	14-IC	Garden	14336000	IC	0	12	in	48.967847	-117.733845	NAD083	Soil	8/18/2014	8/28/2014
2014R-SS-151DL-IC-01	151DL-IC	Dripline	14336056	IC	0	1	in	48.938943	-117.780466	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-151-IC-01	151-IC	House	14336064	IC	0	1	in	48.93867	-117.780289	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-151-IC-02	151-IC	House	14336065	IC	0	1	in	48.93867	-117.780289	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-151-IC-03	151-IC	House	14336066	IC	0	1	in	48.93867	-117.780289	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-152-IC-01	152-IC	Other Not Specified	14336067	IC	0	1	in	48.939535	-117.780597	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-152-IC-02	152-IC	Other Not Specified	14336068	IC	0	1	in	48.939535	-117.780597	NAD083	Soil	8/22/2014	8/28/2014

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Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-152-IC-03	152-IC	Other Not Specified	14336069	IC	0	1	in	48.939535	-117.780597	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-154DL-IC-01	154DL-IC	Dripline	14386749	IC	0	1	in	48.94564	-117.710156	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-154-IC-01	154-IC	House	14386756	IC	0	1	in	48.944224	-117.709792	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-154-IC-02	154-IC	House	14386757	IC	0	1	in	48.944224	-117.709792	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-154-IC-03	154-IC	House	14386758	IC	0	1	in	48.944224	-117.709792	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-15DL-IC-01	15DL-IC	Dripline	14336004	IC	0	1	in	48.967674	-117.73421	NAD083	Soil	8/18/2014	8/28/2014
2014R-SS-15-IC-01	15-IC	House	14336001	IC	0	1	in	48.967605	-117.734158	NAD083	Soil	8/18/2014	8/28/2014
2014R-SS-15-IC-02	15-IC	House	14336002	IC	0	1	in	48.967605	-117.734158	NAD083	Soil	8/18/2014	8/28/2014
2014R-SS-15-IC-03	15-IC	House	14336003	IC	0	1	in	48.967605	-117.734158	NAD083	Soil	8/18/2014	8/28/2014
2014R-SS-160-IC-01	160-IC	House	14386709	IC	0	1	in	48.914694	-117.757342	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-160-IC-02	160-IC	House	14386710	IC	0	1	in	48.914694	-117.757342	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-160-IC-03	160-IC	House	14386711	IC	0	1	in	48.914694	-117.757342	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-163G-IC-01	163G-IC	Garden	14386702	IC	0	12	in	48.917532	-117.758391	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-163-IC-01	163-IC	House	14386693	IC	0	1	in	48.91703	-117.758121	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-163-IC-02	163-IC	House	14386694	IC	0	1	in	48.91703	-117.758121	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-163-IC-03	163-IC	House	14386695	IC	0	1	in	48.91703	-117.758121	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-164-IC-01	164-IC	Agriculture	14386696	IC	0	1	in	48.91677	-117.759132	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-167-IC-01	167-IC	Agriculture	14386759	IC	0	1	in	48.917509	-117.760344	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-167-IC-02	167-IC	Agriculture	14386760	IC	0	1	in	48.917509	-117.760344	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-167-IC-03	167-IC	Agriculture	14386761	IC	0	1	in	48.917509	-117.760344	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-168DL-IC-01	168DL-IC	Dripline	14386868	IC	0	1	in	48.976049	-117.637107	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-168-IC-01	168-IC	House	14386840	IC	0	1	in	48.975959	-117.637207	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-168-IC-02	168-IC	House	14386841	IC	0	1	in	48.975959	-117.637207	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-168-IC-03	168-IC	House	14386842	IC	0	1	in	48.975959	-117.637207	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-169A-IC-01	169A-IC	Other Not Specified	14386869	IC	0	1	in	48.975129	-117.640271	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-169A-IC-02	169A-IC	Other Not Specified	14386870	IC	0	1	in	48.975129	-117.640271	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-169A-IC-03	169A-IC	Other Not Specified	14386871	IC	0	1	in	48.975129	-117.640271	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-169-IC-01	169-IC	Other Not Specified	14386849	IC	0	1	in	48.976692	-117.637727	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-16-IC-01	16-IC	Other Not Specified	14336010	IC	0	1	in	48.968202	-117.734117	NAD083	Soil	8/19/2014	8/28/2014
2014R-SS-170-IC-01	170-IC	House	14376584	IC	0	1	in	48.973405	-117.66717	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-170-IC-02	170-IC	House	14376585	IC	0	1	in	48.973405	-117.66717	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-170-IC-03	170-IC	House	14376586	IC	0	1	in	48.973405	-117.66717	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-172U-IC-01	172U-IC	Other Not Specified	14386872	IC	0	1	in	48.969948	-117.649023	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-172U-IC-02	172U-IC	Other Not Specified	14386873	IC	0	1	in	48.969948	-117.649023	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-172U-IC-03	172U-IC	Other Not Specified	14386874	IC	0	1	in	48.969948	-117.649023	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-173-IC-01	173-IC	Beach	14396876	IC	0	6	in	48.970452	-117.649431	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-173-IC-02	173-IC	Beach	14396877	IC	0	6	in	48.970452	-117.649431	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-173-IC-03	173-IC	Beach	14396878	IC	0	6	in	48.970452	-117.649431	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-174M-IC-01	174M-IC	House	14386730	IC	0	1	in	48.913823	-117.761271	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-174M-IC-02	174M-IC	House	14386731	IC	0	1	in	48.913823	-117.761271	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-174M-IC-03	174M-IC	House	14386732	IC	0	1	in	48.913823	-117.761271	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-175-IC-01	175-IC	Other Not Specified	14386734	IC	0	1	in	48.913102	-117.76091	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-175-IC-02	175-IC	Other Not Specified	14386735	IC	0	1	in	48.913102	-117.76091	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-175-IC-03	175-IC	Other Not Specified	14386736	IC	0	1	in	48.913102	-117.76091	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-176G-IC-01	176G-IC	Garden	14386769	IC	0	1	in	48.931266	-117.751725	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-176M-IC-01	176M-IC	House	14386766	IC	0	1	in	48.931092	-117.751525	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-176M-IC-02	176M-IC	House	14386767	IC	0	1	in	48.931092	-117.751525	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-176M-IC-03	176M-IC	House	14386768	IC	0	1	in	48.931092	-117.751525	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-177-IC-01	177-IC	Agriculture	14386763	IC	0	1	in	48.930154	-117.756542	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-177-IC-02	177-IC	Agriculture	14386764	IC	0	1	in	48.930154	-117.756542	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-177-IC-03	177-IC	Agriculture	14386765	IC	0	1	in	48.930154	-117.756542	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-17-IC-01	17-IC	Other Not Specified	14336011	IC	0	1	in	48.965847	-117.734612	NAD083	Soil	8/19/2014	8/28/2014
2014R-SS-17-IC-02	17-IC	Other Not Specified	14336012	IC	0	1	in	48.965847	-117.734612	NAD083	Soil	8/19/2014	8/28/2014
2014R-SS-17-IC-03	17-IC	Other Not Specified	14336013	IC	0	1	in	48.965847	-117.734612	NAD083	Soil	8/19/2014	8/28/2014

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Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-185DL-IC-01	185DL-IC	Dripline	14336084	IC	0	1	in	48.940601	-117.780389	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-185G-IC-01	185G-IC	Garden	14336098	IC	0	12	in	48.940575	-117.780011	NAD083	Soil	8/23/2014	8/28/2014
2014R-SS-185-IC-01	185-IC	House	14336085	IC	0	1	in	48.940219	-117.780796	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-185-IC-02	185-IC	House	14336086	IC	0	1	in	48.940219	-117.780796	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-185-IC-03	185-IC	House	14336087	IC	0	1	in	48.940219	-117.780796	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-186DL-IC-01	186DL-IC	Dripline	14336077	IC	0	1	in	48.940953	-117.779338	NAD083	Soil	8/22/2014	8/28/2014
2014R-SS-186-IC-01	186-IC	House	14336041	IC	0	1	in	48.940916	-117.779114	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-186-IC-02	186-IC	House	14336042	IC	0	1	in	48.940916	-117.779114	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-186-IC-03	186-IC	House	14336043	IC	0	1	in	48.940916	-117.779114	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-187DL-IC-01	187DL-IC	Dripline	14396888	IC	0	1	in	48.990665	-117.617557	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-189-IC-01	189-IC	House	14396928	IC	0	1	in	48.99169	-117.617882	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-189-IC-02	189-IC	House	14396929	IC	0	1	in	48.99169	-117.617882	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-189-IC-03	189-IC	House	14396930	IC	0	1	in	48.99169	-117.617882	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-18DL-IC-01	18DL-IC	Dripline	14386804	IC	0	1	in	48.979997	-117.637948	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-18-IC-01	18-IC	House	14386807	IC	0	1	in	48.980831	-117.637751	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-18-IC-02	18-IC	House	14386808	IC	0	1	in	48.980831	-117.637751	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-18-IC-03	18-IC	House	14386809	IC	0	1	in	48.980831	-117.637751	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-192DL-IC-01	192DL-IC	Dripline	14336052	IC	0	1	in	48.938943	-117.780466	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-192-IC-01	192-IC	House	14336036	IC	0	1	in	48.941669	-117.781565	NAD083	Soil	8/20/2014	8/28/2014
2014R-SS-193DL-IC-01	193DL-IC	Dripline	14376500	IC	0	1	in	48.978546	-117.64483	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-193-IC-01	193-IC	House	14376501	IC	0	1	in	48.903256	-115.567533	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-193-IC-02	193-IC	House	14376502	IC	0	1	in	48.903256	-115.567533	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-193-IC-03	193-IC	House	14376503	IC	0	1	in	48.903256	-115.567533	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-194-IC-01	194-IC	House	14376558	IC	0	1	in	48.977838	-117.644834	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-194-IC-02	194-IC	House	14376559	IC	0	1	in	48.977838	-117.644834	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-194-IC-03	194-IC	House	14376560	IC	0	1	in	48.977838	-117.644834	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-195-IC-01	195-IC	Beach	14376567	IC	0	6	in	48.977313	-117.643909	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-195-IC-02	195-IC	Beach	14376568	IC	0	6	in	48.977313	-117.643909	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-195-IC-03	195-IC	Beach	14376569	IC	0	6	in	48.977313	-117.643909	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-196-IC-01	196-IC	House	14376570	IC	0	1	in	48.974436	-117.647436	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-197-IC-01	197-IC	Beach	14376477	IC	0	6	in	48.973493	-117.647588	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-197-IC-02	197-IC	Beach	14376478	IC	0	6	in	48.973493	-117.647588	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-197-IC-03	197-IC	Beach	14376479	IC	0	6	in	48.973493	-117.647588	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-201DL-IC-01	201DL-IC	Dripline	14376493	IC	0	1	in	48.968162	-117.664819	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-201G-IC-01	201G-IC	Garden	14376494	IC	0	12	in	48.968368	-117.664356	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-201G-IC-02	201G-IC	Garden	14376495	IC	0	12	in	48.968368	-117.664356	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-201G-IC-03	201G-IC	Garden	14376518	IC	0	12	in	48.968368	-117.664356	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-201-IC-01	201-IC	House	14376490	IC	0	1	in	48.968176	-117.665003	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-201-IC-02	201-IC	House	14376491	IC	0	1	in	48.968176	-117.665003	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-201-IC-03	201-IC	House	14376492	IC	0	1	in	48.968176	-117.665003	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-202-IC-01	202-IC	Beach	14376519	IC	0	6	in	48.967864	-117.66423	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-202-IC-02	202-IC	Beach	14376520	IC	0	6	in	48.967864	-117.66423	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-202-IC-03	202-IC	Beach	14376521	IC	0	6	in	48.967864	-117.66423	NAD083	Soil	9/16/2014	9/23/2014
2014R-SS-203-IC-01	203-IC	House	14366451	IC	0	1	in	48.970441	-117.658687	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-203-IC-02	203-IC	House	14366452	IC	0	1	in	48.970441	-117.658687	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-203-IC-03	203-IC	House	14366453	IC	0	1	in	48.970441	-117.658687	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-204-IC-01	204-IC	Beach	14366460	IC	0	6	in	48.970405	-117.658653	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-204-IC-02	204-IC	Beach	14366461	IC	0	6	in	48.970405	-117.658653	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-204-IC-03	204-IC	Beach	14366462	IC	0	6	in	48.970405	-117.658653	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-206-IC-01	206-IC	House	14356248	IC	0	1	in	48.95288	-117.743831	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-206-IC-02	206-IC	House	14356249	IC	0	1	in	48.95288	-117.743831	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-206-IC-03	206-IC	House	14356250	IC	0	1	in	48.95288	-117.743831	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-208AA-IC-01	208AA-IC	Animal Activity Area	14366305	IC	0	3	in	48.952179	-117.74562	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-208AA-IC-02	208AA-IC	Animal Activity Area	14366306	IC	0	3	in	48.952179	-117.74562	NAD083	Soil	9/8/2014	9/11/2014

TABLE 3-2

Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-208AA-IC-03	208AA-IC	Animal Activity Area	14366307	IC	0	3	in	48.952179	-117.74562	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-208BM-IC-01	208BM-IC	House	14366308	IC	0	1	in	48.952859	-117.74394	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-208BM-IC-02	208BM-IC	House	14366309	IC	0	1	in	48.952859	-117.74394	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-208BM-IC-03	208BM-IC	House	14366339	IC	0	1	in	48.952859	-117.74394	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-208DL-IC-01	208DL-IC	Dripline	14356288	IC	0	1	in	48.951376	-117.744647	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-208G-IC-01	208G-IC	Garden	14366301	IC	0	12	in	48.951435	-117.744274	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-208G-IC-02	208G-IC	Garden	14366302	IC	0	12	in	48.951435	-117.744274	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-208G-IC-03	208G-IC	Garden	14366303	IC	0	12	in	48.951435	-117.744274	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-208-IC-01	208-IC	Other Not Specified	14356294	IC	0	1	in	48.951717	-117.743329	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-208-IC-02	208-IC	Other Not Specified	14356295	IC	0	1	in	48.951717	-117.743329	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-208-IC-03	208-IC	Other Not Specified	14356296	IC	0	1	in	48.951717	-117.743329	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-209A-IC-01	209A-IC	Agriculture	14356297	IC	0	1	in	48.952323	-117.740769	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-209A-IC-02	209A-IC	Agriculture	14356298	IC	0	1	in	48.952323	-117.740769	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-209A-IC-03	209A-IC	Agriculture	14356299	IC	0	1	in	48.952323	-117.740769	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-20-IC-01	20-IC	Garden	14386805	IC	0	12	in	48.980177	-117.637886	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-213-IC-01	213-IC	Other Not Specified	14366304	IC	0	1	in	48.954666	-117.743517	NAD083	Soil	9/9/2014	9/11/2014
2014R-SS-216-IC-01	216-IC	House	14366432	IC	0	1	in	48.997028	-117.663434	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-216-IC-02	216-IC	House	14366433	IC	0	1	in	48.997028	-117.663434	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-216-IC-03	216-IC	House	14366434	IC	0	1	in	48.997028	-117.663434	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-218-IC-01	218-IC	House	14396879	IC	0	1	in	48.998314	-117.62547	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-218-IC-02	218-IC	House	14396880	IC	0	1	in	48.998314	-117.62547	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-218-IC-03	218-IC	House	14396881	IC	0	1	in	48.998314	-117.62547	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-21G-IC-01	21G-IC	Garden	14376464	IC	0	12	in	48.973154	-117.65333	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-21G-IC-02	21G-IC	Garden	14376465	IC	0	12	in	48.973154	-117.65333	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-21G-IC-03	21G-IC	Garden	14376466	IC	0	12	in	48.973154	-117.65333	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-21-IC-01	21-IC	House	14376467	IC	0	1	in	48.972766	-117.653336	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-21-IC-02	21-IC	House	14376468	IC	0	1	in	48.972766	-117.653336	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-21-IC-03	21-IC	House	14376469	IC	0	1	in	48.972766	-117.653336	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-224-IC-01	224-IC	Beach	14376578	IC	0	6	in	48.963564	-117.676471	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-224-IC-02	224-IC	Beach	14376579	IC	0	6	in	48.963564	-117.676471	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-224-IC-03	224-IC	Beach	14376580	IC	0	6	in	48.963564	-117.676471	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-226A-IC-01	226A-IC	Beach	14346158	IC	0	1	in	48.937652	-117.755235	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-226A-IC-02	226A-IC	Beach	14346159	IC	0	1	in	48.937652	-117.755235	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-226A-IC-03	226A-IC	Beach	14346160	IC	0	1	in	48.937652	-117.755235	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-226C-IC-01	226C-IC	House	14346177	IC	0	1	in	48.940685	-117.754584	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-226C-IC-02	226C-IC	House	14346178	IC	0	1	in	48.940685	-117.754584	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-226C-IC-03	226C-IC	House	14346179	IC	0	1	in	48.940685	-117.754584	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-226DL-IC-01	226DL-IC	Dripline	14346161	IC	0	1	in	48.940507	-117.754727	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-226-IC-01	226-IC	Beach	14346276	IC	0	1	in	48.939993	-117.755278	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-226-IC-02	226-IC	Beach	14346186	IC	0	1	in	48.939993	-117.755278	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-226-IC-03	226-IC	Beach	14346187	IC	0	1	in	48.939993	-117.755278	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-229-IC-01	229-IC	Play Area	14356284	IC	0	1	in	48.94873	-117.758014	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-229-IC-02	229-IC	Play Area	14356285	IC	0	1	in	48.94873	-117.758014	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-229-IC-03	229-IC	Play Area	14356286	IC	0	1	in	48.94873	-117.758014	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-22-IC-01	22-IC	House	14396890	IC	0	1	in	48.990978	-117.621166	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-22-IC-02	22-IC	House	14396891	IC	0	1	in	48.990978	-117.621166	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-22-IC-03	22-IC	House	14396892	IC	0	1	in	48.990978	-117.621166	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-230G-IC-01	230G-IC	Garden	14366311	IC	0	12	in	48.948802	-117.757528	NAD083	Soil	9/8/2014	9/11/2014
2014R-SS-231DL-IC-01	231DL-IC	Dripline	14396963	IC	0	1	in	48.92466	-117.747706	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-231-IC-01	231-IC	House	14396954	IC	0	1	in	48.924728	-117.747839	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-231-IC-02	231-IC	House	14396955	IC	0	1	in	48.924728	-117.747839	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-231-IC-03	231-IC	House	14396956	IC	0	1	in	48.924728	-117.747839	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-231Lower-IC-01	231Lower-IC	Other Not Specified	14396964	IC	0	1	in	48.924397	-117.747664	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-231Lower-IC-02	231Lower-IC	Other Not Specified	14396965	IC	0	1	in	48.924397	-117.747664	NAD083	Soil	10/1/2014	10/6/2014

TABLE 3-2

Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-231Lower-IC-03	231Lower-IC	Other Not Specified	14396966	IC	0	1	in	48.924397	-117.747664	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-238G-IC-01	238G-IC	Garden	14386737	IC	0	12	in	48.80881	-126.658831	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-238G-IC-02	238G-IC	Garden	14386738	IC	0	12	in	48.80881	-126.658831	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-238G-IC-03	238G-IC	Garden	14386739	IC	0	12	in	48.80881	-126.658831	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-238M-IC-01	238M-IC	Other Not Specified	14386733	IC	0	1	in	48.913952	-117.761246	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-246-IC-01	246-IC	Play Area	14386741	IC	0	1	in	48.946345	-117.677083	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-246-IC-02	246-IC	Play Area	14386742	IC	0	1	in	48.946345	-117.677083	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-246-IC-03	246-IC	Play Area	14386743	IC	0	1	in	48.946345	-117.677083	NAD083	Soil	9/24/2014	10/6/2014
2014R-SS-249-IC-01	249-IC	Other Not Specified	14366412	IC	0	1	in	48.976626	-117.667405	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-249-IC-02	249-IC	Other Not Specified	14366413	IC	0	1	in	48.976626	-117.667405	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-249-IC-03	249-IC	Other Not Specified	14366414	IC	0	1	in	48.976626	-117.667405	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-250-IC-01	250-IC	House	14366415	IC	0	1	in	48.999629	-117.664741	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-250-IC-02	250-IC	House	14366416	IC	0	1	in	48.999629	-117.664741	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-250-IC-03	250-IC	House	14366445	IC	0	1	in	48.999629	-117.664741	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-251B-IC-01	251B-IC	Beach	14346155	IC	0	1	in	48.937062	-117.757312	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-251B-IC-02	251B-IC	Beach	14346156	IC	0	1	in	48.937062	-117.757312	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-251B-IC-03	251B-IC	Beach	14346157	IC	0	1	in	48.937062	-117.757312	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-253-IC-01	253-IC	House	14346144	IC	0	1	in	48.940018	-117.760859	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-253-IC-02	253-IC	House	14346145	IC	0	1	in	48.940018	-117.760859	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-253-IC-03	253-IC	House	14346146	IC	0	1	in	48.940018	-117.760859	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-254DL-IC-01	254DL-IC	Dripline	14346147	IC	0	1	in	48.940369	-117.758165	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-255-IC-01	255-IC	Beach	14366441	IC	0	6	in	48.989344	-117.642127	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-255-IC-02	255-IC	Beach	14366442	IC	0	6	in	48.989344	-117.642127	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-255-IC-03	255-IC	Beach	14366443	IC	0	6	in	48.989344	-117.642127	NAD083	Soil	9/13/2014	9/23/2014
2014R-SS-258-IC-01	258-IC	Other Not Specified	14366389	IC	0	3	in	48.954634	-117.718879	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-258-IC-02	258-IC	Other Not Specified	14366390	IC	0	3	in	48.954634	-117.718879	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-258-IC-03	258-IC	Other Not Specified	14366391	IC	0	3	in	48.954634	-117.718879	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-259-IC-01	259-IC	Other Not Specified	14366381	IC	0	3	in	48.954353	-117.72766	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-25DL-IC-01	25DL-IC	Dripline	14386679	IC	0	1	in	48.964222	-117.801025	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-25-IC-01	25-IC	House	14386680	IC	0	1	in	48.964062	-117.80128	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-25-IC-02	25-IC	House	14386681	IC	0	1	in	48.964062	-117.80128	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-25-IC-03	25-IC	House	14386682	IC	0	1	in	48.964062	-117.80128	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-27-IC-01	27-IC	Other Not Specified	14386686	IC	0	1	in	48.963954	-117.800985	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-280DL-IC-01	280DL-IC	Dripline	14336016	IC	0	1	in	48.941341	-117.782504	NAD083	Soil	8/19/2014	8/28/2014
2014R-SS-280-IC-01	280-IC	Other Not Specified	14336038	IC	0	1	in	48.941119	-117.782217	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-280-IC-02	280-IC	Other Not Specified	14336039	IC	0	1	in	48.941119	-117.782217	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-280-IC-03	280-IC	Other Not Specified	14336040	IC	0	1	in	48.941119	-117.782217	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-280yard-IC-01	280yard-IC	House	14336017	IC	0	1	in	48.941122	-117.782548	NAD083	Soil	8/19/2014	8/28/2014
2014R-SS-280yard-IC-02	280yard-IC	House	14336018	IC	0	1	in	48.941122	-117.782548	NAD083	Soil	8/19/2014	8/28/2014
2014R-SS-280yard-IC-03	280yard-IC	House	14336019	IC	0	1	in	48.941122	-117.782548	NAD083	Soil	8/19/2014	8/28/2014
2014R-SS-284DL-IC-01	284DL-IC	Dripline	14346219	IC	0	1	in	48.958	-117.735837	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-284M-IC-01	284M-IC	House	14346216	IC	0	1	in	48.958132	-117.735908	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-284M-IC-02	284M-IC	House	14346217	IC	0	1	in	48.958132	-117.735908	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-284M-IC-03	284M-IC	House	14346218	IC	0	1	in	48.958132	-117.735908	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-285M-IC-01	285M-IC	Other Not Specified	14356226	IC	0	1	in	48.958075	-117.735229	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-285M-IC-02	285M-IC	Other Not Specified	14356227	IC	0	1	in	48.958075	-117.735229	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-285M-IC-03	285M-IC	Other Not Specified	14356228	IC	0	1	in	48.958075	-117.735229	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-287-IC-01	287-IC	Agriculture	14356229	IC	0	1	in	48.956572	-117.735889	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-287-IC-02	287-IC	Agriculture	14356230	IC	0	1	in	48.956572	-117.735889	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-287-IC-03	287-IC	Agriculture	14356231	IC	0	1	in	48.956572	-117.735889	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-288G1-IC-01	288G1-IC	Garden	14346148	IC	0	12	in	48.945196	-117.751421	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-288G2-IC-01	288G2-IC	Garden	14346149	IC	0	12	in	48.94522	-117.75172	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-288-IC-01	288-IC	House	14346125	IC	0	1	in	48.944828	-117.750976	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-288-IC-02	288-IC	House	14346126	IC	0	1	in	48.944828	-117.750976	NAD083	Soil	8/26/2014	8/28/2014

TABLE 3-2

Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-288-IC-03	288-IC	House	14346127	IC	0	1	in	48.944828	-117.750976	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-289G3-IC-01	289G3-IC	Garden	14346153	IC	0	12	in	48.944748	-117.750736	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-289G3-IC-02	289G3-IC	Garden	14346163	IC	0	12	in	48.944748	-117.750736	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-289G3-IC-03	289G3-IC	Garden	14346164	IC	0	12	in	48.944748	-117.750736	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-28-IC-01	28-IC	Garden	14386683	IC	0	12	in	48.964717	-117.801129	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-28-IC-02	28-IC	Garden	14386684	IC	0	12	in	48.964717	-117.801129	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-28-IC-03	28-IC	Garden	14386685	IC	0	12	in	48.964717	-117.801129	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-291-IC-01	291-IC	Agriculture	14346150	IC	0	1	in	48.945251	-117.755376	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-291-IC-02	291-IC	Agriculture	14346151	IC	0	1	in	48.945251	-117.755376	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-291-IC-03	291-IC	Agriculture	14346152	IC	0	1	in	48.945251	-117.755376	NAD083	Soil	8/27/2014	9/11/2014
2014R-SS-29-IC-01	29-IC	Other Not Specified	14386687	IC	0	1	in	48.965363	-117.802474	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-3000-IC-01	3000-IC	House	14396941	IC	0	1	in	48.940964	-117.774349	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-3000-IC-02	3000-IC	House	14396942	IC	0	1	in	48.940964	-117.774349	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-3000-IC-03	3000-IC	House	14396943	IC	0	1	in	48.940964	-117.774349	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-3001-IC-01	3001-IC	Garden	14396949	IC	0	1	in	48.940194	-117.773418	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-3003-IC-01	3003-IC	Other Not Specified	14396950	IC	0	1	in	48.939749	-117.774395	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-3003-IC-02	3003-IC	Other Not Specified	14396951	IC	0	1	in	48.939749	-117.774395	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-3003-IC-03	3003-IC	Other Not Specified	14396952	IC	0	1	in	48.939749	-117.774395	NAD083	Soil	10/1/2014	10/6/2014
2014R-SS-3004-IC-01	3004-IC	House	14396920	IC	0	1	in	48.998987	-117.5967	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-3004-IC-02	3004-IC	House	14396921	IC	0	1	in	48.998987	-117.5967	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-3004-IC-03	3004-IC	House	14396922	IC	0	1	in	48.998987	-117.5967	NAD083	Soil	9/30/2014	10/6/2014
2014R-SS-303-IC-01	303-IC	Beach	14356241	IC	0	6	in	48.939265	-117.748787	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-303-IC-02	303-IC	Beach	14356242	IC	0	6	in	48.939265	-117.748787	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-303-IC-03	303-IC	Beach	14356243	IC	0	6	in	48.939265	-117.748787	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-306-IC-01	306-IC	Other Not Specified	14356245	IC	0	1	in	48.942873	-117.750478	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-306-IC-02	306-IC	Other Not Specified	14356246	IC	0	1	in	48.942873	-117.750478	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-306-IC-03	306-IC	Other Not Specified	14356247	IC	0	1	in	48.942873	-117.750478	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-30-IC-01	30-IC	Other Not Specified	14386688	IC	0	1	in	48.965818	-117.804814	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-30-IC-02	30-IC	Other Not Specified	14386689	IC	0	1	in	48.965818	-117.804814	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-30-IC-03	30-IC	Other Not Specified	14386690	IC	0	1	in	48.965818	-117.804814	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-315-IC-01	315-IC	House	14346205	IC	0	1	in	48.947152	-117.777972	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-315-IC-02	315-IC	House	14346206	IC	0	1	in	48.947152	-117.777972	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-315-IC-03	315-IC	House	14346207	IC	0	1	in	48.947152	-117.777972	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-316-IC-01	316-IC	Other Not Specified	14356238	IC	0	1	in	48.946859	-117.77993	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-316-IC-02	316-IC	Other Not Specified	14356239	IC	0	1	in	48.946859	-117.77993	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-316-IC-03	316-IC	Other Not Specified	14356240	IC	0	1	in	48.946859	-117.77993	NAD083	Soil	9/3/2014	9/11/2014
2014R-SS-317-IC-01	317-IC	House	14336099	IC	0	1	in	48.938232	-117.777298	NAD083	Soil	8/23/2014	8/28/2014
2014R-SS-317M-IC-01	317M-IC	Play Area	14336089	IC	0	1	in	48.938512	-117.776112	NAD083	Soil	8/23/2014	8/28/2014
2014R-SS-317M-IC-02	317M-IC	Play Area	14336090	IC	0	1	in	48.938512	-117.776112	NAD083	Soil	8/23/2014	8/28/2014
2014R-SS-317M-IC-03	317M-IC	Play Area	14336091	IC	0	1	in	48.938512	-117.776112	NAD083	Soil	8/23/2014	8/28/2014
2014R-SS-318-IC-01	318-IC	Other Not Specified	14346117	IC	0	1	in	48.938262	-117.775906	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-318-IC-02	318-IC	Other Not Specified	14346118	IC	0	1	in	48.938262	-117.775906	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-318-IC-03	318-IC	Other Not Specified	14346119	IC	0	1	in	48.938262	-117.775906	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-319DL-IC-01	319DL-IC	Dripline	14346120	IC	0	1	in	48.939405	-117.775737	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-319-IC-01	319-IC	Other Not Specified	14336100	IC	0	1	in	48.936858	-117.777735	NAD083	Soil	8/23/2014	8/28/2014
2014R-SS-319-IC-02	319-IC	Other Not Specified	14346115	IC	0	1	in	48.936858	-117.777735	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-319-IC-03	319-IC	Other Not Specified	14346116	IC	0	1	in	48.936858	-117.777735	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-319M-IC-01	319M-IC	House	14346135	IC	0	1	in	48.93948	-117.775709	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-319M-IC-02	319M-IC	House	14346136	IC	0	1	in	48.93948	-117.775709	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-319M-IC-03	319M-IC	House	14346137	IC	0	1	in	48.93948	-117.775709	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-31-IC-01	31-IC	Other Not Specified	14386691	IC	0	1	in	48.968002	-117.800896	NAD083	Soil	9/22/2014	10/6/2014
2014R-SS-320new-IC-01	320new-IC	Other Not Specified	14336053	IC	0	1	in	48.941104	-117.783386	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-320new-IC-02	320new-IC	Other Not Specified	14336054	IC	0	1	in	48.941104	-117.783386	NAD083	Soil	8/21/2014	8/28/2014
2014R-SS-320new-IC-03	320new-IC	Other Not Specified	14336055	IC	0	1	in	48.941104	-117.783386	NAD083	Soil	8/21/2014	8/28/2014

TABLE 3-2

Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-324-IC-01	324-IC	Beach	14386712	IC	0	6	in	48.917887	-117.79593	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-324-IC-02	324-IC	Beach	14386713	IC	0	6	in	48.917887	-117.79593	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-324-IC-03	324-IC	Beach	14386714	IC	0	6	in	48.917887	-117.79593	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-325-IC-01	325-IC	Garden	14386715	IC	0	12	in	48.918832	-117.795946	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-325-IC-02	325-IC	Garden	14386716	IC	0	12	in	48.918832	-117.795946	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-325-IC-03	325-IC	Garden	14386717	IC	0	12	in	48.918832	-117.795946	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-326-IC-01	326-IC	Other Not Specified	14386718	IC	0	1	in	48.918435	-117.796035	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-327-IC-01	327-IC	Other Not Specified	14386719	IC	0	1	in	48.918208	-117.795887	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-327-IC-02	327-IC	Other Not Specified	14386720	IC	0	1	in	48.918208	-117.795887	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-327-IC-03	327-IC	Other Not Specified	14386721	IC	0	1	in	48.918208	-117.795887	NAD083	Soil	9/23/2014	10/6/2014
2014R-SS-33-IC-01	33-IC	House	14386831	IC	0	1	in	66.7489	-115.846204	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-33-IC-02	33-IC	House	14386832	IC	0	1	in	66.7489	-115.846204	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-33-IC-03	33-IC	House	14386833	IC	0	1	in	66.7489	-115.846204	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-345-IC-01	345-IC	Play Area	14386826	IC	0	1	in	48.982052	-117.631126	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-346-IC-01	346-IC	Garden	14386818	IC	0	12	in	48.981545	-117.631633	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-346-IC-02	346-IC	Garden	14386819	IC	0	12	in	48.981545	-117.631633	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-346-IC-03	346-IC	Garden	14386820	IC	0	12	in	48.981545	-117.631633	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-347-IC-01	347-IC	Other Not Specified	14386851	IC	0	1	in	48.982652	-117.631056	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-347-IC-02	347-IC	Other Not Specified	14386852	IC	0	1	in	48.982652	-117.631056	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-347-IC-03	347-IC	Other Not Specified	14386853	IC	0	1	in	48.982652	-117.631056	NAD083	Soil	9/27/2014	10/6/2014
2014R-SS-35DL-IC-01	35DL-IC	Dripline	14376554	IC	0	1	in	48.970259	-117.666198	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-35-IC-01	35-IC	House	14376545	IC	0	1	in	48.970124	-117.665955	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-35-IC-02	35-IC	House	14376546	IC	0	1	in	48.970124	-117.665955	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-35-IC-03	35-IC	House	14376547	IC	0	1	in	48.970124	-117.665955	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-35PA-IC-01	35PA-IC	Play Area	14376601	IC	0	1	in	48.969932	-117.666264	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-35PA-IC-02	35PA-IC	Play Area	14376602	IC	0	1	in	48.969932	-117.666264	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-35PA-IC-03	35PA-IC	Play Area	14376603	IC	0	1	in	48.969932	-117.666264	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-39-IC-01	39-IC	Agriculture	14376598	IC	0	1	in	48.970665	-117.665524	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-39-IC-02	39-IC	Agriculture	14376599	IC	0	1	in	48.970665	-117.665524	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-39-IC-03	39-IC	Agriculture	14376600	IC	0	1	in	48.970665	-117.665524	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-401-IC-01	401-IC	Other Not Specified	14376594	IC	0	3	in	48.971985	-117.673553	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-402-IC-01	402-IC	Other Not Specified	14376595	IC	0	3	in	48.97276	-117.675945	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-402-IC-02	402-IC	Other Not Specified	14376596	IC	0	3	in	48.97276	-117.675945	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-402-IC-03	402-IC	Other Not Specified	14376597	IC	0	3	in	48.97276	-117.675945	NAD083	Soil	9/18/2014	9/23/2014
2014R-SS-403-IC-01	403-IC	Other Not Specified	14366350	IC	0	3	in	48.97665	-117.67488	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-40DL-IC-01	40DL-IC	Dripline	14336027	IC	0	1	in	48.92571	-117.773641	NAD083	Soil	8/20/2014	8/28/2014
2014R-SS-40-IC-01	40-IC	House	14336028	IC	0	1	in	48.925739	-117.773982	NAD083	Soil	8/20/2014	8/28/2014
2014R-SS-40-IC-02	40-IC	House	14336029	IC	0	1	in	48.925739	-117.773982	NAD083	Soil	8/20/2014	8/28/2014
2014R-SS-40-IC-03	40-IC	House	14336030	IC	0	1	in	48.925739	-117.773982	NAD083	Soil	8/20/2014	8/28/2014
2014R-SS-410-IC-01	410-IC	Other Not Specified	14366364	IC	0	3	in	48.95139	-117.721216	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-411-IC-01	411-IC	Beach	14366401	IC	0	6	in	48.948699	-117.71518	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-411-IC-02	411-IC	Beach	14366402	IC	0	6	in	48.948699	-117.71518	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-411-IC-03	411-IC	Beach	14366403	IC	0	6	in	48.948699	-117.71518	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-412-IC-01	412-IC	Other Not Specified	14366371	IC	0	3	in	48.950168	-117.713588	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-412-IC-02	412-IC	Other Not Specified	14366372	IC	0	3	in	48.950168	-117.713588	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-412-IC-03	412-IC	Other Not Specified	14366373	IC	0	3	in	48.950168	-117.713588	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-413-IC-01	413-IC	Other Not Specified	14366404	IC	0	3	in	48.948963	-117.721461	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-420-IC-01	420-IC	Other Not Specified	14366357	IC	0	3	in	48.951229	-117.723966	NAD083	Soil	9/10/2014	9/23/2014
2014R-SS-421-IC-01	421-IC	Other Not Specified	14366405	IC	0	3	in	48.949343	-117.729179	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-421-IC-02	421-IC	Other Not Specified	14366406	IC	0	3	in	48.949343	-117.729179	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-421-IC-03	421-IC	Other Not Specified	14366407	IC	0	3	in	48.949343	-117.729179	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-42DL-IC-01	42DL-IC	Dripline	14376616	IC	0	1	in	48.989154	-117.665133	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-42-IC-01	42-IC	House	14376617	IC	0	1	in	48.988929	-117.665165	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-42-IC-02	42-IC	House	14376618	IC	0	1	in	48.988929	-117.665165	NAD083	Soil	9/19/2014	10/6/2014

TABLE 3-2

Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-42-IC-03	42-IC	House	14376619	IC	0	1	in	48.988929	-117.665165	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-430-IC-01	430-IC	Other Not Specified	14366398	IC	0	3	in	48.947707	-117.729082	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-431-IC-01	431-IC	Other Not Specified	14366399	IC	0	3	in	48.943368	-117.738745	NAD083	Soil	9/11/2014	9/23/2014
2014R-SS-431-IC-02	431-IC	Other Not Specified	14366409	IC	0	3	in	48.943368	-117.738745	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-431-IC-03	431-IC	Other Not Specified	14366410	IC	0	3	in	48.943368	-117.738745	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-432-IC-01	432-IC	Other Not Specified	14366411	IC	0	3	in	48.947158	-117.729279	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-440-IC-01	440-IC	Other Not Specified	14366418	IC	0	3	in	48.9298	-117.789454	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-440-IC-02	440-IC	Other Not Specified	14366419	IC	0	3	in	48.9298	-117.789454	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-440-IC-03	440-IC	Other Not Specified	14366420	IC	0	3	in	48.9298	-117.789454	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-441-IC-01	441-IC	Other Not Specified	14366421	IC	0	3	in	48.922743	-117.789716	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-442-IC-01	442-IC	Other Not Specified	14366422	IC	0	3	in	48.92602	-117.789567	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-44-IC-01	44-IC	Agriculture	14376626	IC	0	1	in	48.988028	-117.663543	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-44-IC-02	44-IC	Agriculture	14376627	IC	0	1	in	48.988028	-117.663543	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-44-IC-03	44-IC	Agriculture	14376628	IC	0	1	in	48.988028	-117.663543	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-46-IC-01	46-IC	Other Not Specified	14376605	IC	0	1	in	48.988904	-117.666247	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-46-IC-02	46-IC	Other Not Specified	14376606	IC	0	1	in	48.988904	-117.666247	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-46-IC-03	46-IC	Other Not Specified	14376607	IC	0	1	in	48.988904	-117.666247	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-47-IC-01	47-IC	Agriculture	14376629	IC	0	1	in	66.835768	-115.875142	NAD083	Soil	9/19/2014	10/6/2014
2014R-SS-49-IC-01	49-IC	House	14366428	IC	0	1	in	48.988894	-117.643508	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-49-IC-02	49-IC	House	14366429	IC	0	1	in	48.988894	-117.643508	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-49-IC-03	49-IC	House	14366430	IC	0	1	in	48.988894	-117.643508	NAD083	Soil	9/12/2014	9/23/2014
2014R-SS-55DL-IC-01	55DL-IC	Dripline	14356283	IC	0	1	in	48.952069	-117.759783	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-55-IC-01	55-IC	House	14356265	IC	0	1	in	48.952156	-117.759806	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-55-IC-02	55-IC	House	14356266	IC	0	1	in	48.952156	-117.759806	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-55-IC-03	55-IC	House	14356267	IC	0	1	in	48.952156	-117.759806	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-56-IC-01	56-IC	Other Not Specified	14356280	IC	0	1	in	48.952042	-117.760745	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-56-IC-02	56-IC	Other Not Specified	14356281	IC	0	1	in	48.952042	-117.760745	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-56-IC-03	56-IC	Other Not Specified	14356282	IC	0	1	in	48.952042	-117.760745	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-58-IC-01	58-IC	Agriculture	14356277	IC	0	1	in	48.952571	-117.760186	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-58-IC-02	58-IC	Agriculture	14356278	IC	0	1	in	48.952571	-117.760186	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-58-IC-03	58-IC	Agriculture	14356279	IC	0	1	in	48.952571	-117.760186	NAD083	Soil	9/6/2014	9/11/2014
2014R-SS-59A-IC-01	59A-IC	House	14356261	IC	0	1	in	67.906813	-117.740335	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-59A-IC-02	59A-IC	House	14356262	IC	0	1	in	67.906813	-117.740335	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-59A-IC-03	59A-IC	House	14356263	IC	0	1	in	67.906813	-117.740335	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-59DL-IC-01	59DL-IC	Dripline	14356264	IC	0	1	in	48.955571	-117.740602	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-59-IC-01	59-IC	House	14356258	IC	0	1	in	48.955322	-117.740233	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-59-IC-02	59-IC	House	14356259	IC	0	1	in	48.955322	-117.740233	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-59-IC-03	59-IC	House	14356260	IC	0	1	in	48.955322	-117.740233	NAD083	Soil	9/4/2014	9/11/2014
2014R-SS-60-IC-01	60-IC	Garden	14386828	IC	0	12	in	48.920882	-117.743933	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-60-IC-02	60-IC	Garden	14386829	IC	0	12	in	48.920882	-117.743933	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-60-IC-03	60-IC	Garden	14386830	IC	0	12	in	48.920882	-117.743933	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-61-IC-01	61-IC	House	14386776	IC	0	1	in	48.920784	-117.744721	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-61-IC-02	61-IC	House	14386777	IC	0	1	in	48.920784	-117.744721	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-61-IC-03	61-IC	House	14386778	IC	0	1	in	48.920784	-117.744721	NAD083	Soil	9/25/2014	10/6/2014
2014R-SS-62DL2-IC-01	62DL2-IC	Dripline	14376660	IC	0	1	in	48.970468	-117.798511	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-62G-IC-01	62G-IC	Garden	14376661	IC	0	12	in	48.9704	-117.798138	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-62G-IC-02	62G-IC	Garden	14376662	IC	0	12	in	48.9704	-117.798138	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-62G-IC-03	62G-IC	Garden	14376663	IC	0	12	in	48.9704	-117.798138	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-62-IC-01	62-IC	House	14376664	IC	0	1	in	48.970155	-117.798527	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-62-IC-02	62-IC	House	14376665	IC	0	1	in	48.970155	-117.798527	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-62-IC-03	62-IC	House	14376666	IC	0	1	in	48.970155	-117.798527	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-66-IC-01	66-IC	Other Not Specified	14396900	IC	0	1	in	48.988813	-117.61994	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-66-IC-02	66-IC	Other Not Specified	14396901	IC	0	1	in	48.988813	-117.61994	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-66-IC-03	66-IC	Other Not Specified	14396902	IC	0	1	in	48.988813	-117.61994	NAD083	Soil	9/29/2014	10/6/2014

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Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-67-IC-01	67-IC	Garden	14396903	IC	0	12	in	48.986374	-117.62188	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-67-IC-02	67-IC	Garden	14396904	IC	0	12	in	48.986374	-117.62188	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-67-IC-03	67-IC	Garden	14396905	IC	0	12	in	48.986374	-117.62188	NAD083	Soil	9/29/2014	10/6/2014
2014R-SS-70-IC-01	70-IC	House	14396994	IC	0	1	in	48.965623	-117.652917	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-70-IC-02	70-IC	House	14396995	IC	0	1	in	48.965623	-117.652917	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-70-IC-03	70-IC	House	14396996	IC	0	1	in	48.965623	-117.652917	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-71-IC-01	71-IC	Garden	14397003	IC	0	12	in	48.965856	-117.653159	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-71-IC-02	71-IC	Garden	14397004	IC	0	12	in	48.965856	-117.653159	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-71-IC-03	71-IC	Garden	14397005	IC	0	12	in	48.965856	-117.653159	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-72-IC-01	72-IC	Garden	14396974	IC	0	12	in	48.966702	-117.65589	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-72-IC-02	72-IC	Garden	14396975	IC	0	12	in	48.966702	-117.65589	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-72-IC-03	72-IC	Garden	14396976	IC	0	12	in	48.966702	-117.65589	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-72M-IC-01	72M-IC	Agriculture	14396985	IC	0	1	in	48.965622	-117.653425	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-72M-IC-02	72M-IC	Agriculture	14396986	IC	0	1	in	48.965622	-117.653425	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-72M-IC-03	72M-IC	Agriculture	14396987	IC	0	1	in	48.965622	-117.653425	NAD083	Soil	10/2/2014	10/6/2014
2014R-SS-72U-IC-01	72U-IC	Other Not Specified	14397013	IC	0	1	in	48.963286	-117.652932	NAD083	Soil	10/3/2014	10/6/2014
2014R-SS-75-IC-01	75-IC	House	14386810	IC	0	1	in	48.988118	-117.635965	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-75-IC-02	75-IC	House	14386811	IC	0	1	in	48.988118	-117.635965	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-75-IC-03	75-IC	House	14386812	IC	0	1	in	48.988118	-117.635965	NAD083	Soil	9/26/2014	10/6/2014
2014R-SS-7-IC-01	7-IC	Play Area	14376481	IC	0	1	in	48.969126	-117.663209	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-7-IC-02	7-IC	Play Area	14376482	IC	0	1	in	48.969126	-117.663209	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-7-IC-03	7-IC	Play Area	14376483	IC	0	1	in	48.969126	-117.663209	NAD083	Soil	9/15/2014	9/23/2014
2014R-SS-800B-IC-01	800B-IC	Beach	14376533	IC	0	6	in	48.996637	-117.640222	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-800B-IC-02	800B-IC	Beach	14376534	IC	0	6	in	48.996637	-117.640222	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-800B-IC-03	800B-IC	Beach	14376535	IC	0	6	in	48.996637	-117.640222	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-801-IC-01	801-IC	Other Not Specified	14376542	IC	0	1	in	48.996786	-117.640643	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-801-IC-02	801-IC	Other Not Specified	14376543	IC	0	1	in	48.996786	-117.640643	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-801-IC-03	801-IC	Other Not Specified	14376544	IC	0	1	in	48.996786	-117.640643	NAD083	Soil	9/17/2014	9/23/2014
2014R-SS-82-IC-01	82-IC	House	14376631	IC	0	1	in	48.974105	-117.794962	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-82-IC-02	82-IC	House	14376632	IC	0	1	in	48.974105	-117.794962	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-82-IC-03	82-IC	House	14376633	IC	0	1	in	48.974105	-117.794962	NAD083	Soil	9/20/2014	10/6/2014
2014R-SS-85DL-IC-01	85DL-IC	Dripline	14346108	IC	0	1	in	48.95137	-117.753411	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-85-IC-01	85-IC	House	14346109	IC	0	1	in	48.951094	-117.753428	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-85-IC-02	85-IC	House	14346110	IC	0	1	in	48.951094	-117.753428	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-85-IC-03	85-IC	House	14346111	IC	0	1	in	48.951094	-117.753428	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-86-IC-01	86-IC	Agriculture	14346112	IC	0	1	in	48.950571	-117.753124	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-87-IC-01	87-IC	Agriculture	14346113	IC	0	1	in	48.950655	-117.7528	NAD083	Soil	8/25/2014	8/28/2014
2014R-SS-87-IC-02	87-IC	Agriculture	14346122	IC	0	1	in	48.950655	-117.7528	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-87-IC-03	87-IC	Agriculture	14346123	IC	0	1	in	48.950655	-117.7528	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-94M-IC-01	94M-IC	Agriculture	14346124	IC	0	1	in	48.94948	-117.748124	NAD083	Soil	8/26/2014	8/28/2014
2014R-SS-999DL1-IC-01	999DL1-IC-01	Dripline	14346215	IC	0	1	in	48.947516	-117.774985	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-999DL2-IC-01	999DL2-IC	Dripline	14346175	IC	0	1	in	48.948565	-117.775205	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-999G1-IC-01	999G1-IC	Garden	14346209	IC	0	12	in	48.947913	-117.775042	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-999G1-IC-02	999G1-IC	Garden	14346210	IC	0	12	in	48.947913	-117.775042	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-999G1-IC-03	999G1-IC	Garden	14346211	IC	0	12	in	48.947913	-117.775042	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-999M1-IC-01	999M1-IC	House	14346171	IC	0	1	in	48.947434	-117.775159	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-999M1-IC-02	999M1-IC	House	14346172	IC	0	1	in	48.947434	-117.775159	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-999M1-IC-03	999M1-IC	House	14346173	IC	0	1	in	48.947434	-117.775159	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-999M2-IC-01	999M2-IC	Garden	14346174	IC	0	12	in	48.947558	-117.775311	NAD083	Soil	8/28/2014	9/11/2014
2014R-SS-999M3-IC-01	999M3-IC	Other Not Specified	14346212	IC	0	1	in	48.947623	-117.774755	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-999M3-IC-02	999M3-IC	Other Not Specified	14346213	IC	0	1	in	48.947623	-117.774755	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-999M3-IC-03	999M3-IC	Other Not Specified	14346214	IC	0	1	in	48.947623	-117.774755	NAD083	Soil	8/29/2014	9/11/2014
2014R-SS-9-IC-01	9-IC	Agriculture	14336032	IC	0	1	in	48.966535	-117.738524	NAD083	Soil	8/20/2014	8/28/2014
2014R-SS-9-IC-02	9-IC	Agriculture	14336033	IC	0	1	in	48.966535	-117.738524	NAD083	Soil	8/20/2014	8/28/2014

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Incremental Composite Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Date Shipped
2014R-SS-9-IC-03	9-IC	Agriculture	14336034	IC	0	1	in	48.966535	-117.738524	NAD083	Soil	8/20/2014	8/28/2014

TABLE 3-3

Discrete Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Sample Time	QA/QC Type	Preservative	Analysis	COC Number	Lab	Airbill	Date Shipped
2014R-SS-1005-D-01-01	1005-D-01	Garden	14396988	Discrete	1	6	in	48.95382	-117.66845	NAD083	Soil	10/2/2014	13:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-1005-D-02-01	1005-D-02	Garden	14396989	Discrete	1	6	in	48.953859	-117.66827	NAD083	Soil	10/2/2014	13:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-1005-D-03-01	1005-D-03	Garden	14396990	Discrete	1	6	in	48.953774	-117.66823	NAD083	Soil	10/2/2014	13:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-1005-D-04-01	1005-D-04	Garden	14396991	Discrete	1	6	in	48.95373	-117.66838	NAD083	Soil	10/2/2014	13:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-1005-D-05-01	1005-D-05	Garden	14396992	Discrete	1	6	in	48.9537	-117.6685	NAD083	Soil	10/2/2014	13:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-106-D-01-01	106-D-01	House	14386857	Discrete	1	6	in	48.948924	-117.70192	NAD083	Soil	9/27/2014	13:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-106-D-01-02	106-D-01	House	14386858	Discrete	1	6	in	48.948924	-117.70192	NAD083	Soil	9/27/2014	14:00	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-106-D-02-01	106-D-02	House	14386859	Discrete	1	6	in	48.948942	-117.70234	NAD083	Soil	9/27/2014	13:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-106-D-03-01	106-D-03	House	14386860	Discrete	1	6	in	48.948794	-117.70236	NAD083	Soil	9/27/2014	13:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-106-D-04-01	106-D-04	House	14386861	Discrete	1	6	in	48.948823	-117.70279	NAD083	Soil	9/27/2014	13:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-106-D-05-01	106-D-05	House	14386862	Discrete	1	6	in	48.948811	-117.70279	NAD083	Soil	9/27/2014	13:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-109-D-01-01	109-D-01	House	14376525	Discrete	1	6	in	48.979281	-117.66517	NAD083	Soil	9/16/2014	14:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-109-D-02-01	109-D-02	House	14376526	Discrete	1	6	in	48.979314	-117.66504	NAD083	Soil	9/16/2014	14:27	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-109-D-03-01	109-D-03	House	14376527	Discrete	1	6	in	48.979195	-117.66504	NAD083	Soil	9/16/2014	14:29	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-109-D-03-02	109-D-03	House	14376528	Discrete	1	6	in	48.979195	-117.66504	NAD083	Soil	9/16/2014	14:32	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-109-D-04-01	109-D-04	House	14376529	Discrete	1	6	in	48.979146	-117.66505	NAD083	Soil	9/16/2014	14:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-109-D-05-01	109-D-05	House	14376530	Discrete	1	6	in	48.979063	-117.66508	NAD083	Soil	9/16/2014	14:37	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-110-D-01-01	110-D-01	House	14366327	Discrete	1	6	in	48.953507	-117.79412	NAD083	Soil	9/9/2014	9:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-110-D-02-01	110-D-02	House	14366328	Discrete	1	6	in	48.953544	-117.79431	NAD083	Soil	9/9/2014	10:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-110-D-03-01	110-D-03	House	14366329	Discrete	1	6	in	48.953688	-117.79467	NAD083	Soil	9/9/2014	11:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-110-D-03-02	110-D-03	House	14366330	Discrete	1	6	in	48.953688	-117.79467	NAD083	Soil	9/9/2014	11:20	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-110-D-04-01	110-D-04	House	14366331	Discrete	1	6	in	48.953687	-117.79458	NAD083	Soil	9/9/2014	11:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-110-D-05-01	110-D-05	House	14366332	Discrete	1	6	in	48.95365	-117.79439	NAD083	Soil	9/9/2014	11:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-112-D-01-01	112-D-01	House	14366343	Discrete	1	6	in	48.931602	-117.77117	NAD083	Soil	9/9/2014	14:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-112-D-02-01	112-D-02	House	14366344	Discrete	1	6	in	48.931779	-117.77152	NAD083	Soil	9/9/2014	14:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-112-D-03-01	112-D-03	House	14366345	Discrete	1	6	in	48.931848	-117.77103	NAD083	Soil	9/9/2014	14:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-112-D-04-01	112-D-04	House	14366346	Discrete	1	6	in	48.931825	-117.77111	NAD083	Soil	9/9/2014	15:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-112-D-05-01	112-D-05	House	14366347	Discrete	1	6	in	48.932023	-117.76855	NAD083	Soil	9/9/2014	15:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-116M-D-01-01	116M-D-01	House	14346188	Discrete	1	6	in	48.940104	-117.75362	NAD083	Soil	8/28/2014	16:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-116M-D-02-01	116M-D-02	House	14346189	Discrete	1	6	in	48.939825	-117.75308	NAD083	Soil	8/28/2014	16:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-116M-D-03-01	116M-D-03	House	14346190	Discrete	1	6	in	48.939927	-117.75362	NAD083	Soil	8/28/2014	16:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-116M-D-03-02	116M-D-03	House	14346191	Discrete	1	6	in	48.939927	-117.75362	NAD083	Soil	8/28/2014	16:35	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-116M-D-04-01	116M-D-04	House	14346192	Discrete	1	6	in	48.939612	-117.75362	NAD083	Soil	8/28/2014	16:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-116M-D-05-01	116M-D-05	House	14346193	Discrete	1	6	in	48.939648	-117.75322	NAD083	Soil	8/28/2014	16:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-121-D-01-01	121-D-01	House	14376640	Discrete	1	6	in	48.975142	-117.81377	NAD083	Soil	9/20/2014	14:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-121-D-02-01	121-D-02	House	14376641	Discrete	1	6	in	48.975136	-117.81393	NAD083	Soil	9/20/2014	14:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-121-D-03-01	121-D-03	House	14376642	Discrete	1	6	in	48.975143	-117.81411	NAD083	Soil	9/20/2014	15:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-121-D-03-02	121-D-03	House	14376643	Discrete	1	6	in	48.975143	-117.81411	NAD083	Soil	9/20/2014	15:20	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-121-D-04-01	121-D-04	House	14376644	Discrete	1	6	in	48.973778	-117.81438	NAD083	Soil	9/20/2014	15:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-121-D-05-01	121-D-05	House	14376645	Discrete	1	6	in	48.97513	-117.81446	NAD083	Soil	9/20/2014	15:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-122-D-01-01	122-D-01	Other Not Specified	14376651	Discrete	1	6	in	48.973244	-117.80987	NAD083	Soil	9/20/2014	9:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-122-D-02-01	122-D-02	Other Not Specified	14376652	Discrete	1	6	in	48.973218	-117.80976	NAD083	Soil	9/20/2014	10:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-122-D-03-01	122-D-03	Other Not Specified	14376653	Discrete	1	6	in	48.973308	-117.80978	NAD083	Soil	9/20/2014	10:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-122-D-04-01	122-D-04	Other Not Specified	14376654	Discrete	1	6	in	48.973377	-117.80981	NAD083	Soil	9/20/2014	10:57	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-122-D-05-01	122-D-05	Other Not Specified	14376655	Discrete	1	6	in	48.973439	-117.80976	NAD083	Soil	9/20/2014	10:59	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-122-D-05-02	122-D-05	Other Not Specified	14376656	Discrete	1	6	in	48.973439	-117.80976	NAD083	Soil	9/20/2014	11:02	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-123-D-01-01	123-D-01	House	14366318	Discrete	1	6	in	48.953332	-117.70657	NAD083	Soil	9/8/2014	16:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-123-D-02-01	123-D-02	House	14366319	Discrete	1	6	in	48.953314	-117.70685	NAD083	Soil	9/8/2014	16:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-123-D-03-01	123-D-03	House	14366320	Discrete	1	6	in	48.95331	-117.70717	NAD083	Soil	9/8/2014	16:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-123-D-04-01	123-D-04	House	14366321	Discrete	1	6	in	48.953118	-117.70715	NAD083	Soil	9/8/2014	16:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-123-D-05-01	123-D-05	House	14366322	Discrete	1	6	in	48.953139	-117.7075	NAD083	Soil	9/8/2014	17:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-146-D-01-01	146-D-01	House	14386788	Discrete	1	6	in	48.914953	-117.75817	NAD083	Soil	9/25/2014	9:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-146-D-02-01	146-D-02	House	14386789	Discrete	1	6	in	48.914948	-117.75827	NAD083	Soil	9/25/2014	9:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-146-D-02-02	146-D-02	House	14386790	Discrete	1	6	in	48.914948	-117.75827	NAD083	Soil	9/25/2014	10:35	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-146-D-03-01	146-D-03	House	14386791	Discrete	1	6	in	48.915038	-117.75827	NAD083	Soil	9/25/2014	10:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-146-D-04-01	146-D-04	House	14386792	Discrete	1	6	in	48.915038	-117.75838	NAD083	Soil	9/25/2014	10:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-146-D-05-01	146-D-05	House	14386793	Discrete	1	6	in	48.915095	-117.75838	NAD083	Soil	9/25/2014	10:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-151-D-01-01	151-D-01	House	14336058	Discrete	1	6	in	48.939296	-117.78008	NAD083	Soil	8/22/2014	11:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-151-D-01-02	151-D-01	House	14336063	Discrete	1	6	in	48.939296	-117.78008	NAD083	Soil	8/22/2014	11:45	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-151-D-02-01	151-D-02	House	14336059	Discrete	1	6	in	48.939176	-117.78076	NAD083	Soil	8/22/2014	11:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-151-D-03-01	151-D-03	House	14336060	Discrete	1	6	in	48.938969	-117.78091	NAD083	Soil	8/22/2014	11:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-151-D-04-01	151-D-04	House	14336061	Discrete	1	6	in	48.938682	-117.78	NAD083	Soil	8/22/2014	12:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-151-D-05-01	151-D-05	House	14336062	Discrete	1	6	in	48.938921	-117.78008	NAD083	Soil	8/22/2014	11:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-154-D-01-01	154-D-01	House	14386750	Discrete	1	6	in	48.944296	-117.70982	NAD083	Soil	9/24/2014	13:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-154-D-02-01	154-D-02	House	14386751	Discrete	1	6	in	48.943626	-117.68479	NAD083	Soil	9/24/2014	13:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-154-D-02-02	154-D-02	House	14386752	Discrete	1	6	in	48.943626	-117.68479	NAD083	Soil	9/24/2014	14:30	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-154-D-03-01	154-D-03	House	14386753	Discrete	1	6	in	48.944228	-117.70975	NAD083	Soil	9/24/2014	14:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-154-D-04-01	154-D-04	House	14386754	Discrete	1	6	in	48.944174	-117.70977	NAD083	Soil	9/24/2014	14:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-154-D-05-01	154-D-05	House	14386755	Discrete	1	6	in	48.943457	-117.68523	NAD083	Soil	9/24/2014	14:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-15-D-01-01	15-D-01	House	14336005	Discrete	1	6	in	48.968122	-117.73443	NAD083	Soil	8/18/2014	16:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-15-D-02-01	15-D-02	House	14336006	Discrete	1	6	in	48.968083	-117.73428	NAD083	Soil	8/18/2014	16:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-15-D-03-01	15-D-03	House	14336007	Discrete	1	6	in	48.967995	-117.73466	NAD083	Soil	8/18/2014	16:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-15-D-03-02	15-D-03	House	14336009	Discrete	1	6	in	48.967995	-117.73466	NAD083	Soil	8/18/2014	16:35	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-15-D-04-01	15-D-04	House	14336008	Discrete	1	6	in	48.967789	-117.73442	NAD083	Soil	8/18/2014	16:16	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-160-D-01-01	160-D-01	House	14386703	Discrete	1	6	in	48.914634	-117.75786	NAD083	Soil	9/23/2014	15:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-160-D-01-02	160-D-01	House	14386704	Discrete	1	6	in	48.914634	-117.75786	NAD083	Soil	9/23/2014	16:00	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-160-D-02-01	160-D-02	House	14386705	Discrete	1	6	in	48.914842	-117.75785	NAD083	Soil	9/23/2014	15:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-160-D-03-01	160-D-03	House	14386706	Discrete	1	6	in	48.914849	-117.75753	NAD083	Soil	9/23/2014	15:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-160-D-04-01	160-D-04	House	14386707	Discrete	1	6	in	48.914828	-117.75718	NAD083	Soil	9/23/2014	15:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-160-D-05-01	160-D-05	House	14386708	Discrete	1	6	in	48.914594	-117.75735	NAD083	Soil	9/23/2014	15:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-163-D-01-01	163-D-01	House	14386697	Discrete	1	6	in	48.917573	-117.75841	NAD083	Soil	9/23/2014	12:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-163-D-02-01	163-D-02	House	14386698	Discrete	1	6	in	48.917597	-117.75883	NAD083	Soil	9/23/2014	12:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014

TABLE 3-3

Discrete Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Sample Time	QA/QC Type	Preservative	Analysis	COC Number	Lab	Airbill	Date Shipped
2014R-SS-163-D-03-01	163-D-03	House	14386699	Discrete	1	6	in	48.917037	-117.75843	NAD083	Soil	9/23/2014	12:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-163-D-04-01	163-D-04	House	14386700	Discrete	1	6	in	48.917052	-117.75802	NAD083	Soil	9/23/2014	13:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-163-D-05-01	163-D-05	House	14386701	Discrete	1	6	in	48.916752	-117.75804	NAD083	Soil	9/23/2014	13:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-168-D-01-01	168-D-01	House	14386843	Discrete	1	6	in	48.975971	-117.63725	NAD083	Soil	9/26/2014	15:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-168-D-02-01	168-D-02	House	14386844	Discrete	1	6	in	48.975976	-117.63716	NAD083	Soil	9/26/2014	15:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-168-D-03-01	168-D-03	House	14386845	Discrete	1	6	in	48.975967	-117.63708	NAD083	Soil	9/26/2014	15:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-168-D-03-02	168-D-03	House	14386846	Discrete	1	6	in	48.975967	-117.63708	NAD083	Soil	9/26/2014	15:40	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-168-D-04-01	168-D-04	House	14386847	Discrete	1	6	in	48.975908	-117.63717	NAD083	Soil	9/26/2014	15:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-168-D-05-01	168-D-05	House	14386848	Discrete	1	6	in	48.975899	-117.63726	NAD083	Soil	9/26/2014	15:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-170-D-01-01	170-D-01	House	14376587	Discrete	1	6	in	48.973637	-117.66713	NAD083	Soil	9/18/2014	14:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091914-134613-0009	ALS Environmental	Courier Service	9/23/2014
2014R-SS-170-D-02-01	170-D-02	House	14376588	Discrete	1	6	in	48.973516	-117.66736	NAD083	Soil	9/18/2014	14:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091914-134613-0009	ALS Environmental	Courier Service	9/23/2014
2014R-SS-170-D-03-01	170-D-03	House	14376589	Discrete	1	6	in	48.973356	-117.66717	NAD083	Soil	9/18/2014	14:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091914-134613-0009	ALS Environmental	Courier Service	9/23/2014
2014R-SS-170-D-03-02	170-D-03	House	14376590	Discrete	1	6	in	48.973356	-117.66717	NAD083	Soil	9/18/2014	14:50	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091914-134613-0009	ALS Environmental	Courier Service	9/23/2014
2014R-SS-170-D-04-01	170-D-04	House	14376591	Discrete	1	6	in	48.973274	-117.66691	NAD083	Soil	9/18/2014	15:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091914-134613-0009	ALS Environmental	Courier Service	9/23/2014
2014R-SS-170-D-05-01	170-D-05	House	14376592	Discrete	1	6	in	48.973166	-117.66731	NAD083	Soil	9/18/2014	14:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091914-134613-0009	ALS Environmental	Courier Service	9/23/2014
2014R-SS-174M-D-01-01	174M-D-01	House	14386724	Discrete	1	6	in	48.913694	-117.76123	NAD083	Soil	9/24/2014	9:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-174M-D-02-01	174M-D-02	House	14386725	Discrete	1	6	in	48.913694	-117.76133	NAD083	Soil	9/24/2014	9:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-174M-D-02-02	174M-D-02	House	14386726	Discrete	1	6	in	48.913694	-117.76133	NAD083	Soil	9/24/2014	9:30	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-174M-D-03-01	174M-D-03	House	14386727	Discrete	1	6	in	48.913817	-117.76153	NAD083	Soil	9/24/2014	9:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-174M-D-04-01	174M-D-04	House	14386728	Discrete	1	6	in	48.913793	-117.76136	NAD083	Soil	9/24/2014	9:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-174M-D-05-01	174M-D-05	House	14386729	Discrete	1	6	in	48.913811	-117.76114	NAD083	Soil	9/24/2014	9:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-176M-D-01-01	176M-D-01	House	14386770	Discrete	1	6	in	48.931297	-117.75163	NAD083	Soil	9/25/2014	14:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-176M-D-02-01	176M-D-02	House	14386771	Discrete	1	6	in	48.931142	-117.75152	NAD083	Soil	9/25/2014	14:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-176M-D-02-02	176M-D-02	House	14386772	Discrete	1	6	in	48.931142	-117.75152	NAD083	Soil	9/25/2014	14:15	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-176M-D-03-01	176M-D-03	House	14386773	Discrete	1	6	in	48.930906	-117.75146	NAD083	Soil	9/25/2014	14:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-176M-D-04-01	176M-D-04	House	14386774	Discrete	1	6	in	48.930797	-117.75138	NAD083	Soil	9/25/2014	14:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-176M-D-05-01	176M-D-05	House	14386775	Discrete	1	6	in	48.930699	-117.75138	NAD083	Soil	9/25/2014	14:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-185-D-01-01	185-D-01	House	14336078	Discrete	1	6	in	48.940609	-117.77987	NAD083	Soil	8/22/2014	16:32	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-185-D-02-01	185-D-02	House	14336079	Discrete	1	6	in	48.940549	-117.78011	NAD083	Soil	8/22/2014	16:34	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-185-D-03-01	185-D-03	House	14336080	Discrete	1	6	in	48.940348	-117.78044	NAD083	Soil	8/22/2014	16:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-185-D-04-01	185-D-04	House	14336081	Discrete	1	6	in	48.940645	-117.78081	NAD083	Soil	8/22/2014	16:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-185-D-05-01	185-D-05	House	14336082	Discrete	1	6	in	48.940287	-117.78093	NAD083	Soil	8/22/2014	16:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-185-D-05-02	185-D-05	House	14336083	Discrete	1	6	in	48.940287	-117.78093	NAD083	Soil	8/22/2014	16:50	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-186-D-01-01	186-D-01	House	14336071	Discrete	1	6	in	48.940901	-117.77911	NAD083	Soil	8/22/2014	10:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-186-D-01-02	186-D-01	House	14336072	Discrete	1	6	in	48.940901	-117.77911	NAD083	Soil	8/22/2014	10:10	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-186-D-02-01	186-D-02	House	14336073	Discrete	1	6	in	48.941055	-117.77917	NAD083	Soil	8/22/2014	9:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-186-D-03-01	186-D-03	House	14336074	Discrete	1	6	in	48.941145	-117.77933	NAD083	Soil	8/22/2014	10:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-186-D-04-01	186-D-04	House	14336075	Discrete	1	6	in	48.94129	-117.77951	NAD083	Soil	8/22/2014	10:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-186-D-05-01	186-D-05	House	14336076	Discrete	1	6	in	48.941186	-117.77952	NAD083	Soil	8/22/2014	10:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-189-D-01-01	189-D-01	House	14396931	Discrete	1	6	in	48.991571	-117.61782	NAD083	Soil	9/30/2014	12:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-189-D-02-01	189-D-02	House	14396932	Discrete	1	6	in	48.991625	-117.61785	NAD083	Soil	9/30/2014	12:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-189-D-03-01	189-D-03	House	14396933	Discrete	1	6	in	48.991723	-117.61784	NAD083	Soil	9/30/2014	12:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-189-D-03-02	189-D-03	House	14396934	Discrete	1	6	in	48.991723	-117.61784	NAD083	Soil	9/30/2014	12:55	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-189-D-04-01	189-D-04	House	14396935	Discrete	1	6	in	48.991726	-117.61802	NAD083	Soil	9/30/2014	13:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-189-D-05-01	189-D-05	House	14396936	Discrete	1	6	in	48.99162	-117.61794	NAD083	Soil	9/30/2014	13:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-18-D-01-01	18-D-01	House	14386798	Discrete	1	6	in	48.979959	-117.6377	NAD083	Soil	9/25/2014	14:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-18-D-02-01	18-D-02	House	14386799	Discrete	1	6	in	48.980108	-117.6377	NAD083	Soil	9/25/2014	15:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-18-D-03-01	18-D-03	House	14386800	Discrete	1	6	in	48.980112	-117.63795	NAD083	Soil	9/25/2014	15:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-18-D-04-01	18-D-04	House	14386801	Discrete	1	6	in	48.980293	-117.63794	NAD083	Soil	9/25/2014	15:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-18-D-05-01	18-D-05	House	14386802	Discrete	1	6	in	48.980281	-117.63767	NAD083	Soil	9/25/2014	15:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-18-D-05-02	18-D-05	House	14386803	Discrete	1	6	in	48.980281	-117.63767	NAD083	Soil	9/25/2014	15:40	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-192-D-01-01	192-D-01	House	14336046	Discrete	1	6	in	48.941712	-117.78141	NAD083	Soil	8/21/2014	9:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-192-D-02-01	192-D-02	House	14336047	Discrete	1	6	in	48.941716	-117.78149	NAD083	Soil	8/21/2014	9:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-192-D-02-02	192-D-02	House	14336049	Discrete	1	6	in	48.941716	-117.78149	NAD083	Soil	8/21/2014	9:30	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-192-D-03-01	192-D-03	House	14336048	Discrete	1	6	in	48.94169	-117.78144	NAD083	Soil	8/21/2014	9:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-192-D-04-01	192-D-04	House	14336050	Discrete	1	6	in	48.941704	-117.78152	NAD083	Soil	8/21/2014	9:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-192-D-05-01	192-D-05	House	14336051	Discrete	1	6	in	48.94167	-117.78141	NAD083	Soil	8/21/2014	9:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-193-D-01-01	193-D-01	House	14376504	Discrete	1	6	in	48.978428	-117.64463	NAD083	Soil	9/16/2014	13:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-193-D-02-01	193-D-02	House	14376505	Discrete	1	6	in	48.978499	-117.64462	NAD083	Soil	9/16/2014	13:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-193-D-03-01	193-D-03	House	14376506	Discrete	1	6	in	48.978511	-117.64468	NAD083	Soil	9/16/2014	13:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-193-D-03-02	193-D-03	House	14376507	Discrete	1	6	in	48.978511	-117.64468	NAD083	Soil	9/16/2014	13:55	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-193-D-04-01	193-D-04	House	14376508	Discrete	1	6	in	48.97854	-117.64472	NAD083	Soil	9/16/2014	13:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-193-D-05-01	193-D-05	House	14376509	Discrete	1	6	in	48.97848	-117.64477	NAD083	Soil	9/16/2014	14:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-194-D-01-01	194-D-01	House	14376561	Discrete	1	6	in	48.977861	-117.64471	NAD083	Soil	9/17/2014	11:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-194-D-02-01	194-D-02	House	14376562	Discrete	1	6	in	48.977884	-117.6449	NAD083	Soil	9/17/2014	11:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-194-D-03-01	194-D-03	House	14376563	Discrete	1	6	in	48.97781	-117.64483	NAD083	Soil	9/17/2014	11:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-194-D-03-02	194-D-03	House	14376564	Discrete	1	6	in	48.97781	-117.64483	NAD083	Soil	9/17/2014	11:35	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-194-D-04-01	194-D-04	House	14376565	Discrete	1	6	in	48.97777	-117.64477	NAD083	Soil	9/17/2014	11:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-194-D-05-01	194-D-05	House	14376566	Discrete	1	6	in	48.977789	-117.64491	NAD083	Soil	9/17/2014	11:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-196-D-01-01	196-D-01	House	14376571	Discrete	1	6	in	48.974453	-117.6474	NAD083	Soil	9/17/2014	16:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-196-D-02-01	196-D-02	House	14376572	Discrete	1	6	in	48.974457	-117.64745	NAD083	Soil	9/17/2014	16:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-196-D-03-01	196-D-03	House	14376573	Discrete	1	6	in	48.974437	-117.64748	NAD083	Soil	9/17/2014	16:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-196-D-04-01	196-D-04	House	14376574	Discrete	1	6	in	48.974405	-117.64746	NAD083	Soil	9/17/2014	16:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-196-D-05-01	196-D-05	House	14376575	Discrete	1	6	in	48.974405	-117.64741	NAD083	Soil	9/17/2014	16:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-196-D-05-02	196-D-05	House	14376576	Discrete	1	6	in	48.974405	-117.64741	NAD083	Soil	9/17/2014	17:00	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-201G-D-01-01	201G-D-01	Garden	14376512	Discrete	1	6	in	48.968301	-117.66438	NAD083	Soil	9/16/2014	8:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-201G-D-02-01	201G-D-02	Garden	14376513	Discrete	1	6	in	48.968359	-117.6642	NAD083	Soil	9/16/2014	8:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-201G-D-03-01	201G-D-03	Garden	14376514	Discrete	1	6	in	48.968573	-117.66405	NAD083	Soil	9/16/2014	8:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-201G-D-03-02	201G-D-03	Garden	14376515	Discrete	1	6	in	48.968573	-117.66405	NAD083	Soil	9/16/2014	8:55	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-201G-D-04-01	201G-D-04	Garden	14376516	Discrete	1	6	in	48.968447	-117.66424	NAD083	Soil	9/16/2014	9:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-201G-D-05-01	201G-D-05	Garden	14376517	Discrete	1	6	in	48.968465	-117.66442	NAD083	Soil	9/16/2014	9:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-203-D-01-01	203-D-01	House	14366454	Discrete	1	6	in	48.895813	-115.58222	NAD083	Soil	9/13/2014	13:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014

TABLE 3-3

Discrete Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Sample Time	QA/QC Type	Preservative	Analysis	COC Number	Lab	Airbill	Date Shipped
2014R-SS-203-D-02-01	203-D-02	House	14366455	Discrete	1	6	in	48.970728	-117.6588	NAD083	Soil	9/13/2014	13:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-203-D-02-02	203-D-02	House	14366456	Discrete	1	6	in	48.970728	-117.6588	NAD083	Soil	9/13/2014	13:40	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-203-D-03-01	203-D-03	House	14366457	Discrete	1	6	in	48.970859	-117.65869	NAD083	Soil	9/13/2014	13:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-203-D-04-01	203-D-04	House	14366458	Discrete	1	6	in	48.970868	-117.65858	NAD083	Soil	9/13/2014	14:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-203-D-05-01	203-D-05	House	14366459	Discrete	1	6	in	48.970943	-117.65869	NAD083	Soil	9/13/2014	14:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-206-D-01-01	206-D-01	House	14356251	Discrete	1	6	in	48.952364	-117.74413	NAD083	Soil	9/4/2014	14:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-206-D-02-01	206-D-02	House	14356252	Discrete	1	6	in	48.952651	-117.74367	NAD083	Soil	9/4/2014	14:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-206-D-03-01	206-D-03	House	14356253	Discrete	1	6	in	48.952864	-117.74407	NAD083	Soil	9/4/2014	15:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-206-D-04-01	206-D-04	House	14356254	Discrete	1	6	in	48.952907	-117.7437	NAD083	Soil	9/4/2014	15:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-206-D-04-02	206-D-04	House	14356255	Discrete	1	6	in	48.952907	-117.7437	NAD083	Soil	9/4/2014	16:00	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-206-D-05-01	206-D-05	House	14356256	Discrete	1	6	in	48.95316	-117.74411	NAD083	Soil	9/4/2014	15:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-208BM-D-01-01	208BM-D-01	House	14356289	Discrete	1	6	in	48.951253	-117.7447	NAD083	Soil	9/6/2014	12:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-208BM-D-02-01	208BM-D-02	House	14356290	Discrete	1	6	in	48.951403	-117.74482	NAD083	Soil	9/6/2014	13:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-208BM-D-03-01	208BM-D-03	House	14356291	Discrete	1	6	in	48.95143	-117.74452	NAD083	Soil	9/6/2014	13:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-208BM-D-04-01	208BM-D-04	House	14356292	Discrete	1	6	in	48.951643	-117.7447	NAD083	Soil	9/6/2014	13:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-208BM-D-05-01	208BM-D-05	House	14356293	Discrete	1	6	in	48.951655	-117.74448	NAD083	Soil	9/6/2014	14:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090914-171443-0005	ALS Environmental	Courier Service	9/11/2014
2014R-SS-216-D-01-01	216-D-01	House	14366435	Discrete	1	6	in	48.996799	-117.66362	NAD083	Soil	9/13/2014	10:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-216-D-02-01	216-D-02	House	14366436	Discrete	1	6	in	48.996958	-117.66362	NAD083	Soil	9/13/2014	10:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-216-D-03-01	216-D-03	House	14366437	Discrete	1	6	in	48.996794	-117.66335	NAD083	Soil	9/13/2014	11:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-216-D-04-01	216-D-04	House	14366438	Discrete	1	6	in	48.996963	-117.6633	NAD083	Soil	9/13/2014	11:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-216-D-05-01	216-D-05	House	14366439	Discrete	1	6	in	48.996947	-117.66308	NAD083	Soil	9/13/2014	11:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-216-D-05-02	216-D-05	House	14366440	Discrete	1	6	in	48.996947	-117.66308	NAD083	Soil	9/13/2014	11:40	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-218-D-01-01	218-D-01	House	14396882	Discrete	1	6	in	48.998365	-117.62547	NAD083	Soil	9/29/2014	13:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-218-D-02-01	218-D-02	House	14396883	Discrete	1	6	in	48.998363	-117.62556	NAD083	Soil	9/29/2014	13:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-218-D-03-01	218-D-03	House	14396884	Discrete	1	6	in	48.998294	-117.6254	NAD083	Soil	9/29/2014	13:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-218-D-04-01	218-D-04	House	14396885	Discrete	1	6	in	48.998292	-117.62548	NAD083	Soil	9/29/2014	13:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-218-D-05-01	218-D-05	House	14396886	Discrete	1	6	in	48.998247	-117.62547	NAD083	Soil	9/29/2014	14:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-218-D-05-02	218-D-05	House	14396887	Discrete	1	6	in	48.998247	-117.62547	NAD083	Soil	9/29/2014	14:05	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-21-D-01-01	21-D-01	House	14376470	Discrete	1	6	in	48.97264	-117.6536	NAD083	Soil	9/15/2014	13:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-21-D-01-02	21-D-01	House	14376471	Discrete	1	6	in	48.97264	-117.6536	NAD083	Soil	9/15/2014	13:20	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-21-D-02-01	21-D-02	House	14376472	Discrete	1	6	in	48.972717	-117.6536	NAD083	Soil	9/15/2014	13:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-21-D-03-01	21-D-03	House	14376473	Discrete	1	6	in	48.972769	-117.65347	NAD083	Soil	9/15/2014	13:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-21-D-04-01	21-D-04	House	14376474	Discrete	1	6	in	48.972799	-117.65347	NAD083	Soil	9/15/2014	13:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-21-D-05-01	21-D-05	House	14376475	Discrete	1	6	in	48.972819	-117.65336	NAD083	Soil	9/15/2014	14:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-226C-D-01-01	226C-D-01	House	14346180	Discrete	1	6	in	48.940733	-117.75493	NAD083	Soil	8/28/2014	12:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-226C-D-02-01	226C-D-02	House	14346181	Discrete	1	6	in	48.940732	-117.75442	NAD083	Soil	8/28/2014	13:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-226C-D-03-01	226C-D-03	House	14346182	Discrete	1	6	in	48.940612	-117.75385	NAD083	Soil	8/28/2014	13:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-226C-D-04-01	226C-D-04	House	14346183	Discrete	1	6	in	48.940381	-117.7544	NAD083	Soil	8/28/2014	13:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-226C-D-05-01	226C-D-05	House	14346184	Discrete	1	6	in	48.940394	-117.75507	NAD083	Soil	8/28/2014	13:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-226C-D-05-02	226C-D-05	House	14346185	Discrete	1	6	in	48.940394	-117.75507	NAD083	Soil	8/28/2014	13:40	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-22-D-01-01	22-D-01	House	14396893	Discrete	1	6	in	48.990996	-117.62108	NAD083	Soil	9/29/2014	11:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-22-D-01-02	22-D-02	House	14396894	Discrete	1	6	in	48.990933	-117.6212	NAD083	Soil	9/29/2014	11:35	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-22-D-02-01	22-D-02	House	14396895	Discrete	1	6	in	48.990933	-117.6212	NAD083	Soil	9/29/2014	11:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-22-D-03-01	22-D-03	House	14396896	Discrete	1	6	in	48.990865	-117.62119	NAD083	Soil	9/29/2014	11:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-22-D-04-01	22-D-04	House	14396897	Discrete	1	6	in	48.990805	-117.6212	NAD083	Soil	9/29/2014	12:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-22-D-05-01	22-D-05	House	14396898	Discrete	1	6	in	48.990741	-117.62121	NAD083	Soil	9/29/2014	12:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-22-D-06-01	22-D-06	House	14396899	Discrete	1	6	in	48.991321	-117.62117	NAD083	Soil	9/29/2014	12:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-231-D-01-01	231-D-01	House	14396957	Discrete	1	6	in	48.92469	-117.74773	NAD083	Soil	10/1/2014	9:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-231-D-01-02	231-D-01	House	14396958	Discrete	1	6	in	48.92469	-117.74773	NAD083	Soil	10/1/2014	9:17	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-231-D-02-01	231-D-02	House	14396959	Discrete	1	6	in	48.92468	-117.74789	NAD083	Soil	10/1/2014	9:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-231-D-03-01	231-D-03	House	14396960	Discrete	1	6	in	48.924743	-117.74787	NAD083	Soil	10/1/2014	9:22	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-231-D-04-01	231-D-04	House	14396961	Discrete	1	6	in	48.924743	-117.74787	NAD083	Soil	10/1/2014	9:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-231-D-05-01	231-D-05	House	14396962	Discrete	1	6	in	48.924727	-117.74777	NAD083	Soil	10/1/2014	9:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-246-D-01-01	246-D-01	Play Area	14386744	Discrete	1	6	in	48.947122	-117.71037	NAD083	Soil	9/24/2014	9:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-246-D-02-01	246-D-02	Play Area	14386745	Discrete	1	6	in	48.947146	-117.71037	NAD083	Soil	9/24/2014	10:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-246-D-03-01	246-D-03	Play Area	14386746	Discrete	1	6	in	48.947214	-117.71037	NAD083	Soil	9/24/2014	10:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-246-D-04-01	246-D-04	Play Area	14386747	Discrete	1	6	in	48.947265	-117.71036	NAD083	Soil	9/24/2014	10:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-246-D-05-01	246-D-05	Play Area	14386748	Discrete	1	6	in	48.947261	-117.71025	NAD083	Soil	9/24/2014	10:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-250-D-01-01	250-D-01	House	14366446	Discrete	1	6	in	48.987433	-117.66518	NAD083	Soil	9/13/2014	9:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-250-D-02-01	250-D-02	House	14366447	Discrete	1	6	in	48.987416	-117.66456	NAD083	Soil	9/13/2014	9:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-250-D-03-01	250-D-03	House	14366448	Discrete	1	6	in	48.9874	-117.66392	NAD083	Soil	9/13/2014	9:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-250-D-04-01	250-D-04	House	14366449	Discrete	1	6	in	48.987015	-117.66522	NAD083	Soil	9/13/2014	9:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-250-D-05-01	250-D-05	House	14366450	Discrete	1	6	in	48.986997	-117.66456	NAD083	Soil	9/13/2014	9:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-253-D-01-01	253-D-01	House	14346138	Discrete	1	6	in	48.940346	-117.76073	NAD083	Soil	8/26/2014	15:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-253-D-01-02	253-D-01	House	14346139	Discrete	1	6	in	48.940346	-117.76073	NAD083	Soil	8/26/2014	15:20	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-253-D-02-01	253-D-02	House	14346140	Discrete	1	6	in	48.940332	-117.75977	NAD083	Soil	8/26/2014	15:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-253-D-03-01	253-D-03	House	14346141	Discrete	1	6	in	48.940307	-117.75895	NAD083	Soil	8/26/2014	15:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-253-D-04-01	253-D-04	House	14346142	Discrete	1	6	in	48.940272	-117.75811	NAD083	Soil	8/26/2014	15:51	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-253-D-05-01	253-D-05	House	14346143	Discrete	1	6	in	48.940304	-117.75722	NAD083	Soil	8/26/2014	16:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-258-D-01-01	258-D-01	Other Not Specified	14366384	Discrete	1	6	in	48.850153	-126.65967	NAD083	Soil	9/11/2014	9:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-258-D-02-01	258-D-02	Other Not Specified	14366385	Discrete	1	6	in	48.955875	-117.71852	NAD083	Soil	9/11/2014	9:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-258-D-03-01	258-D-03	Other Not Specified	14366386	Discrete	1	6	in	48.955874	-117.71936	NAD083	Soil	9/11/2014	10:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-258-D-04-01	258-D-04	Other Not Specified	14366387	Discrete	1	6	in	48.954832	-117.71968	NAD083	Soil	9/11/2014	10:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-258-D-05-01	258-D-05	Other Not Specified	14366388	Discrete	1	6	in	48.954624	-117.71851	NAD083	Soil	9/11/2014	11:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-25-D-01-01	25-D-01	House	14386674	Discrete	1	6	in	48.964253	-117.80089	NAD083	Soil	9/22/2014	10:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-25-D-02-01	25-D-02	House	14386675	Discrete	1	6	in	48.964483	-117.80109	NAD083	Soil	9/22/2014	11:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-25-D-03-01	25-D-03	House	14386676	Discrete	1	6	in	48.964139	-117.80127	NAD083	Soil	9/22/2014	11:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-25-D-04-01	25-D-04	House	14386677	Discrete	1	6	in	48.964002	-117.80133	NAD083	Soil	9/22/2014	11:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-25-D-05-01	25-D-05	House	14386678	Discrete	1	6	in	48.964145	-117.8011	NAD083	Soil	9/22/2014	10:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092314-144920-0011	ALS Environmental	Courier Service	10/6/2014
2014R-SS-284M-D-01-01	284M-D-01	House	14356221	Discrete	1	6	in	48.958036	-117.7361	NAD083	Soil	9/3/2014	9:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-284M-D-02-01	284M-D-02	House	14356222	Discrete	1	6	in	48.958012	-117.73582	NAD083	Soil	9/3/2014	9:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-284M-D-03-01	284M-D-03	House	14356223	Discrete	1	6	in	48.95781	-117.73586	NAD083	Soil	9/3/2014	9:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014

TABLE 3-3

Discrete Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Sample Time	QA/QC Type	Preservative	Analysis	COC Number	Lab	Airbill	Date Shipped
2014R-SS-284M-D-04-01	284M-D-04	House	14356224	Discrete	1	6	in	48.957642	-117.73585	NAD083	Soil	9/3/2014	9:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-284M-D-05-01	284M-D-05	House	14356225	Discrete	1	6	in	48.957854	-117.73612	NAD083	Soil	9/3/2014	9:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-288-D-01-01	288-D-01	House	14346128	Discrete	1	6	in	48.945104	-117.75144	NAD083	Soil	8/26/2014	16:18	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-288-D-02-01	288-D-02	House	14346129	Discrete	1	6	in	48.94509	-117.7514	NAD083	Soil	8/26/2014	16:22	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-288-D-03-01	288-D-03	House	14346130	Discrete	1	6	in	48.945063	-117.75105	NAD083	Soil	8/26/2014	16:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-288-D-04-01	288-D-04	House	14346131	Discrete	1	6	in	48.945057	-117.75073	NAD083	Soil	8/26/2014	16:33	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-288-D-04-02	288-D-04	House	14346132	Discrete	1	6	in	48.945057	-117.75073	NAD083	Soil	8/26/2014	16:35	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-288-D-05-01	288-D-05	House	14346133	Discrete	1	6	in	48.944904	-117.75077	NAD083	Soil	8/26/2014	16:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082714-105256-0003	ALS Environmental	Courier Service	8/28/2014
2014R-SS-3000-D-01-01	3000-D-01	House	14396944	Discrete	1	6	in	48.940723	-117.77434	NAD083	Soil	10/1/2014	10:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-3000-D-02-01	3000-D-02	House	14396945	Discrete	1	6	in	48.940716	-117.77414	NAD083	Soil	10/1/2014	10:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-3000-D-03-01	3000-D-03	House	14396946	Discrete	1	6	in	48.940847	-117.77401	NAD083	Soil	10/1/2014	10:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-3000-D-04-01	3000-D-04	House	14396947	Discrete	1	6	in	48.940828	-117.77423	NAD083	Soil	10/1/2014	10:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-3000-D-05-01	3000-D-05	House	14396948	Discrete	1	6	in	48.940851	-117.77444	NAD083	Soil	10/1/2014	10:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100214-150539-0016	ALS Environmental	Courier Service	10/6/2014
2014R-SS-3004-D-01-01	3004-D-01	House	14396923	Discrete	1	6	in	49.004312	-117.59639	NAD083	Soil	9/30/2014	9:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-3004-D-02-01	3004-D-02	House	14396924	Discrete	1	6	in	48.99881	-117.59673	NAD083	Soil	9/30/2014	9:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-3004-D-03-01	3004-D-03	House	14396925	Discrete	1	6	in	48.999041	-117.59724	NAD083	Soil	9/30/2014	9:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-3004-D-04-01	3004-D-04	House	14396926	Discrete	1	6	in	48.999036	-117.59689	NAD083	Soil	9/30/2014	9:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-3004-D-05-01	3004-D-05	House	14396927	Discrete	1	6	in	48.999033	-117.59656	NAD083	Soil	9/30/2014	9:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-315-D-01-01	315-D-01	House	14346199	Discrete	1	6	in	48.947209	-117.77775	NAD083	Soil	8/29/2014	12:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-315-D-02-01	315-D-02	House	14346200	Discrete	1	6	in	48.947147	-117.77795	NAD083	Soil	8/29/2014	12:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-315-D-03-01	315-D-03	House	14346201	Discrete	1	6	in	48.947155	-117.77813	NAD083	Soil	8/29/2014	12:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-315-D-03-02	315-D-03	House	14346202	Discrete	1	6	in	48.947155	-117.77813	NAD083	Soil	8/29/2014	12:45	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-315-D-04-01	315-D-04	House	14346203	Discrete	1	6	in	48.946983	-117.7784	NAD083	Soil	8/29/2014	13:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-315-D-05-01	315-D-05	House	14346204	Discrete	1	6	in	48.947019	-117.77793	NAD083	Soil	8/29/2014	13:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-317-D-01-01	317-D-01	House	14336092	Discrete	1	6	in	48.938396	-117.77607	NAD083	Soil	8/23/2014	11:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-317-D-02-01	317-D-02	House	14336093	Discrete	1	6	in	48.938389	-117.77653	NAD083	Soil	8/23/2014	11:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-317-D-03-01	317-D-03	House	14336094	Discrete	1	6	in	48.938601	-117.77725	NAD083	Soil	8/23/2014	10:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-317-D-04-01	317-D-04	House	14336095	Discrete	1	6	in	48.938736	-117.7768	NAD083	Soil	8/23/2014	10:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-317-D-05-01	317-D-05	House	14336096	Discrete	1	6	in	48.938646	-117.77644	NAD083	Soil	8/23/2014	10:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-33-D-01-01	33-D-01	House	14386834	Discrete	1	6	in	48.978656	-117.63678	NAD083	Soil	9/26/2014	10:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-33-D-02-01	33-D-02	House	14386835	Discrete	1	6	in	48.978492	-117.63681	NAD083	Soil	9/26/2014	11:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-33-D-03-01	33-D-03	House	14386836	Discrete	1	6	in	48.978345	-117.63683	NAD083	Soil	9/26/2014	11:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-33-D-04-01	33-D-04	House	14386837	Discrete	1	6	in	48.978166	-117.63678	NAD083	Soil	9/26/2014	11:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-33-D-05-01	33-D-05	House	14386838	Discrete	1	6	in	48.978351	-117.63702	NAD083	Soil	9/26/2014	11:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-33-D-05-02	33-D-05	House	14386839	Discrete	1	6	in	48.978351	-117.63702	NAD083	Soil	9/26/2014	11:25	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-345-D-01-01	345-D-01	Play Area	14386821	Discrete	1	6	in	48.982083	-117.63109	NAD083	Soil	9/26/2014	14:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-345-D-02-01	345-D-02	Play Area	14386822	Discrete	1	6	in	48.982099	-117.63115	NAD083	Soil	9/26/2014	14:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-345-D-03-01	345-D-03	Play Area	14386823	Discrete	1	6	in	48.982048	-117.63117	NAD083	Soil	9/26/2014	14:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-345-D-04-01	345-D-04	Play Area	14386824	Discrete	1	6	in	48.982009	-117.63115	NAD083	Soil	9/26/2014	14:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-345-D-05-01	345-D-05	Play Area	14386825	Discrete	1	6	in	48.983633	-117.63107	NAD083	Soil	9/26/2014	14:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-35-D-01-01	35-D-01	House	14376548	Discrete	1	6	in	48.970183	-117.66578	NAD083	Soil	9/17/2014	14:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-35-D-02-01	35-D-02	House	14376549	Discrete	1	6	in	48.97009	-117.66595	NAD083	Soil	9/17/2014	14:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-35-D-02-02	35-D-02	House	14376550	Discrete	1	6	in	48.97009	-117.66595	NAD083	Soil	9/17/2014	14:15	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-35-D-03-01	35-D-03	House	14376551	Discrete	1	6	in	48.970111	-117.6661	NAD083	Soil	9/17/2014	14:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-35-D-04-01	35-D-04	House	14376552	Discrete	1	6	in	48.970009	-117.6661	NAD083	Soil	9/17/2014	14:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-35-D-05-01	35-D-05	House	14376553	Discrete	1	6	in	48.970099	-117.66623	NAD083	Soil	9/17/2014	14:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-403-D-01-01	403-D-01	Other Not Specified	14366351	Discrete	1	6	in	48.975935	-117.67467	NAD083	Soil	9/10/2014	9:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-403-D-02-01	403-D-02	Other Not Specified	14366352	Discrete	1	6	in	48.97602	-117.67472	NAD083	Soil	9/10/2014	9:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-403-D-03-01	403-D-03	Other Not Specified	14366353	Discrete	1	6	in	48.976272	-117.67469	NAD083	Soil	9/10/2014	10:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-403-D-04-01	403-D-04	Other Not Specified	14366354	Discrete	1	6	in	48.976402	-117.67473	NAD083	Soil	9/10/2014	10:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-403-D-04-02	403-D-04	Other Not Specified	14366355	Discrete	1	6	in	48.976402	-117.67473	NAD083	Soil	9/10/2014	10:20	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-403-D-05-01	403-D-05	Other Not Specified	14366356	Discrete	1	6	in	48.976687	-117.67474	NAD083	Soil	9/10/2014	10:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-40-D-01-01	40-D-01	House	14336021	Discrete	1	6	in	48.925895	-117.77412	NAD083	Soil	8/20/2014	15:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-40-D-02-01	40-D-02	House	14336022	Discrete	1	6	in	48.925895	-117.77412	NAD083	Soil	8/20/2014	14:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-40-D-02-02	40-D-02	House	14336025	Discrete	1	6	in	48.925895	-117.77412	NAD083	Soil	8/20/2014	14:30	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-40-D-03-01	40-D-03	House	14336023	Discrete	1	6	in	48.92585	-117.77388	NAD083	Soil	8/20/2014	15:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-40-D-04-01	40-D-04	House	14336024	Discrete	1	6	in	48.925818	-117.774	NAD083	Soil	8/20/2014	15:11	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-40-D-05-01	40-D-05	House	14336026	Discrete	1	6	in	48.925708	-117.77388	NAD083	Soil	8/20/2014	15:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-410-D-01-01	410-D-01	Other Not Specified	14366365	Discrete	1	6	in	48.951322	-117.72148	NAD083	Soil	9/10/2014	14:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-410-D-02-01	410-D-02	Other Not Specified	14366366	Discrete	1	6	in	48.951339	-117.72206	NAD083	Soil	9/10/2014	14:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-410-D-03-01	410-D-03	Other Not Specified	14366367	Discrete	1	6	in	48.95135	-117.72274	NAD083	Soil	9/10/2014	14:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-410-D-03-02	410-D-03	Other Not Specified	14366368	Discrete	1	6	in	48.95135	-117.72274	NAD083	Soil	9/10/2014	14:40	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-410-D-04-01	410-D-04	Other Not Specified	14366369	Discrete	1	6	in	48.95092	-117.72281	NAD083	Soil	9/10/2014	14:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-410-D-05-01	410-D-05	Other Not Specified	14366370	Discrete	1	6	in	48.95091	-117.72214	NAD083	Soil	9/10/2014	14:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-420-D-01-01	420-D-01	Other Not Specified	14366358	Discrete	1	6	in	48.951384	-117.72362	NAD083	Soil	9/10/2014	13:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-420-D-02-01	420-D-02	Other Not Specified	14366359	Discrete	1	6	in	48.951395	-117.7241	NAD083	Soil	9/10/2014	13:02	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-420-D-03-01	420-D-03	Other Not Specified	14366360	Discrete	1	6	in	48.951362	-117.72456	NAD083	Soil	9/10/2014	13:03	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-420-D-04-01	420-D-04	Other Not Specified	14366361	Discrete	1	6	in	48.951102	-117.72414	NAD083	Soil	9/10/2014	13:08	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-420-D-04-02	420-D-04	Other Not Specified	14366362	Discrete	1	6	in	48.951102	-117.72414	NAD083	Soil	9/10/2014	13:10	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-420-D-05-01	420-D-05	Other Not Specified	14366363	Discrete	1	6	in	48.951061	-117.72357	NAD083	Soil	9/10/2014	13:11	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-42-D-01-01	42-D-01	House	14376620	Discrete	1	6	in	48.988865	-117.66533	NAD083	Soil	9/19/2014	11:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-42-D-02-01	42-D-02	House	14376621	Discrete	1	6	in	48.988865	-117.6655	NAD083	Soil	9/19/2014	12:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-42-D-03-01	42-D-03	House	14376622	Discrete	1	6	in	48.988982	-117.66532	NAD083	Soil	9/19/2014	12:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-42-D-04-01	42-D-04	House	14376623	Discrete	1	6	in	48.98903	-117.66723	NAD083	Soil	9/19/2014	13:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-42-D-04-02	42-D-04	House	14376624	Discrete	1	6	in	48.98903	-117.66723	NAD083	Soil	9/19/2014	13:30	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-42-D-05-01	42-D-05	House	14376625	Discrete	1	6	in	48.988957	-117.66501	NAD083	Soil	9/19/2014	13:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-430-D-01-01	430-D-01	Other Not Specified	14366392	Discrete	1	6	in	48.948838	-117.72846	NAD083	Soil	9/11/2014	13:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-430-D-02-01	430-D-02	Other Not Specified	14366393	Discrete	1	6	in	48.947494	-117.72928	NAD083	Soil	9/11/2014	13:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-430-D-03-01	430-D-03	Other Not Specified	14366394	Discrete	1	6	in	48.947862	-117.72976	NAD083	Soil	9/11/2014	13:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-430-D-04-01	430-D-04	Other Not Specified	14366395	Discrete	1	6	in	48.947823	-117.72926	NAD083	Soil	9/11/2014	13:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-430-D-05-01	430-D-05	Other Not Specified	14366396	Discrete	1	6	in	48.947814	-117.72876	NAD083	Soil	9/11/2014	14:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014
2014R-SS-430-D-05-02	430-D-05	Other Not Specified	14366397	Discrete	1	6	in	48.947814	-117.72876	NAD083	Soil	9/11/2014	14:15	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-135600-0006	ALS Environmental	Courier Service	9/23/2014

TABLE 3-3

Discrete Soil Sample Information

UCR Residential Soil Study Field Sampling and Data Summary Report

Field Sample ID	Station	DU Category	Scribe Sample ID	Sample Type	Top Depth	Bottom Depth	Units	Latitude	Longitude	DATUM	Matrix	Sample Date	Sample Time	QA/QC Type	Preservative	Analysis	COC Number	Lab	Airbill	Date Shipped
2014R-SS-49-D-01-01	49-D-01	House	14366423	Discrete	1	6	in	48.9887	-117.64364	NAD083	Soil	9/12/2014	15:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-49-D-02-01	49-D-02	House	14366424	Discrete	1	6	in	48.988723	-117.64362	NAD083	Soil	9/12/2014	16:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-49-D-03-01	49-D-03	House	14366425	Discrete	1	6	in	48.988806	-117.64359	NAD083	Soil	9/12/2014	16:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-49-D-04-01	49-D-04	House	14366426	Discrete	1	6	in	48.988878	-117.64359	NAD083	Soil	9/12/2014	16:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-49-D-05-01	49-D-05	House	14366427	Discrete	1	6	in	48.988826	-117.64354	NAD083	Soil	9/12/2014	16:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091514-192634-0007	ALS Environmental	Courier Service	9/23/2014
2014R-SS-55-D-01-01	55-D-01	House	14356268	Discrete	1	6	in	48.95201	-117.75984	NAD083	Soil	9/4/2014	15:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-55-D-02-01	55-D-02	House	14356269	Discrete	1	6	in	48.952141	-117.75984	NAD083	Soil	9/4/2014	15:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-55-D-03-01	55-D-03	House	14356270	Discrete	1	6	in	48.952271	-117.75982	NAD083	Soil	9/4/2014	16:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-55-D-04-01	55-D-04	House	14356271	Discrete	1	6	in	48.957434	-117.76004	NAD083	Soil	9/4/2014	16:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-55-D-05-01	55-D-05	House	14356272	Discrete	1	6	in	48.951883	-117.75986	NAD083	Soil	9/4/2014	16:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-55-D-05-02	55-D-05	House	14356273	Discrete	1	6	in	48.951883	-117.75986	NAD083	Soil	9/4/2014	16:27	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-59-D-01-01	59-D-01	House	14356232	Discrete	1	6	in	48.955581	-117.74023	NAD083	Soil	9/3/2014	16:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-59-D-02-01	59-D-02	House	14356233	Discrete	1	6	in	48.955402	-117.74022	NAD083	Soil	9/3/2014	16:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-59-D-03-01	59-D-03	House	14356234	Discrete	1	6	in	48.955411	-117.7404	NAD083	Soil	9/3/2014	16:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-59-D-04-01	59-D-04	House	14356235	Discrete	1	6	in	48.850748	-126.66175	NAD083	Soil	9/3/2014	16:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-59-D-05-01	59-D-05	House	14356236	Discrete	1	6	in	48.958808	-117.74065	NAD083	Soil	9/3/2014	16:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-61-D-01-01	61-D-01	House	14386779	Discrete	1	6	in	48.920943	-117.74476	NAD083	Soil	9/25/2014	16:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-61-D-02-01	61-D-02	House	14386780	Discrete	1	6	in	48.920833	-117.74483	NAD083	Soil	9/25/2014	16:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-61-D-03-01	61-D-03	House	14386781	Discrete	1	6	in	48.920705	-117.74482	NAD083	Soil	9/25/2014	16:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-61-D-04-01	61-D-04	House	14386782	Discrete	1	6	in	48.920551	-117.74481	NAD083	Soil	9/25/2014	16:23	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-61-D-05-01	61-D-05	House	14386783	Discrete	1	6	in	48.920596	-117.74458	NAD083	Soil	9/25/2014	16:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142744-0013	ALS Environmental	Courier Service	10/6/2014
2014R-SS-62-D-01-01	62-D-01	House	14376667	Discrete	1	6	in	48.970613	-117.79824	NAD083	Soil	9/20/2014	15:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-62-D-02-01	62-D-02	House	14376668	Discrete	1	6	in	48.970634	-117.79858	NAD083	Soil	9/20/2014	15:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-62-D-02-02	62-D-02	House	14376669	Discrete	1	6	in	48.970634	-117.79858	NAD083	Soil	9/20/2014	15:35	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-62-D-03-01	62-D-03	House	14376670	Discrete	1	6	in	48.970387	-117.79871	NAD083	Soil	9/20/2014	15:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-62-D-04-01	62-D-04	House	14376671	Discrete	1	6	in	48.970157	-117.7987	NAD083	Soil	9/20/2014	15:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-62-D-05-01	62-D-05	House	14376672	Discrete	1	6	in	48.970098	-117.79839	NAD083	Soil	9/20/2014	15:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-67-D-01-01	67-D-01	Garden	14396906	Discrete	1	6	in	48.986167	-117.62174	NAD083	Soil	9/29/2014	16:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-67-D-02-01	67-D-02	Garden	14396907	Discrete	1	6	in	48.986336	-117.62174	NAD083	Soil	9/29/2014	16:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-67-D-03-01	67-D-03	Garden	14396908	Discrete	1	6	in	48.986509	-117.62175	NAD083	Soil	9/29/2014	16:05	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-67-D-04-01	67-D-04	Garden	14396909	Discrete	1	6	in	48.986325	-117.62201	NAD083	Soil	9/29/2014	16:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-67-D-05-01	67-D-05	Garden	14396910	Discrete	1	6	in	48.986673	-117.62175	NAD083	Soil	9/29/2014	15:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-67-D-05-02	67-D-05	Garden	14396911	Discrete	1	6	in	48.986673	-117.62175	NAD083	Soil	9/29/2014	15:55	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-100114-141736-0015	ALS Environmental	Courier Service	10/6/2014
2014R-SS-70-D-01-01	70-D-01	House	14396997	Discrete	1	6	in	48.965802	-117.65336	NAD083	Soil	10/3/2014	9:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100314-144335-0017	ALS Environmental	Courier Service	10/6/2014
2014R-SS-70-D-02-01	70-D-02	House	14396998	Discrete	1	6	in	48.96578	-117.653	NAD083	Soil	10/3/2014	9:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100314-144335-0017	ALS Environmental	Courier Service	10/6/2014
2014R-SS-70-D-03-01	70-D-03	House	14396999	Discrete	1	6	in	48.965742	-117.65267	NAD083	Soil	10/3/2014	10:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100314-144335-0017	ALS Environmental	Courier Service	10/6/2014
2014R-SS-70-D-04-01	70-D-04	House	14397000	Discrete	1	6	in	48.96601	-117.65371	NAD083	Soil	10/3/2014	9:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100314-144335-0017	ALS Environmental	Courier Service	10/6/2014
2014R-SS-70-D-04-02	70-D-04	House	14397001	Discrete	1	6	in	48.96601	-117.65371	NAD083	Soil	10/3/2014	9:25	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-100314-144335-0017	ALS Environmental	Courier Service	10/6/2014
2014R-SS-70-D-05-01	70-D-05	House	14397002	Discrete	1	6	in	48.965752	-117.65404	NAD083	Soil	10/3/2014	9:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-100314-144335-0017	ALS Environmental	Courier Service	10/6/2014
2014R-SS-75-D-01-01	75-D-01	House	14386813	Discrete	1	6	in	48.988237	-117.63605	NAD083	Soil	9/26/2014	11:00	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-75-D-02-01	75-D-02	House	14386814	Discrete	1	6	in	48.98823	-117.63586	NAD083	Soil	9/26/2014	11:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-75-D-03-01	75-D-03	House	14386815	Discrete	1	6	in	48.987984	-117.63255	NAD083	Soil	9/26/2014	11:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-75-D-04-01	75-D-04	House	14386816	Discrete	1	6	in	48.988106	-117.63607	NAD083	Soil	9/26/2014	11:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-75-D-05-01	75-D-05	House	14386817	Discrete	1	6	in	48.987971	-117.63607	NAD083	Soil	9/26/2014	11:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092914-142826-0014	ALS Environmental	Courier Service	10/6/2014
2014R-SS-7-D-01-01	7-D-01	Play Area	14376484	Discrete	1	6	in	48.96897	-117.66319	NAD083	Soil	9/15/2014	10:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-7-D-02-01	7-D-02	Play Area	14376485	Discrete	1	6	in	48.96915	-117.66329	NAD083	Soil	9/15/2014	11:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-7-D-02-02	7-D-02	Play Area	14376486	Discrete	1	6	in	48.96915	-117.66329	NAD083	Soil	9/15/2014	11:10	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-7-D-03-01	7-D-03	Play Area	14376487	Discrete	1	6	in	48.969093	-117.6632	NAD083	Soil	9/15/2014	11:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-7-D-04-01	7-D-04	Play Area	14376488	Discrete	1	6	in	48.969155	-117.66311	NAD083	Soil	9/15/2014	11:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-7-D-05-01	7-D-05	Play Area	14376489	Discrete	1	6	in	48.969196	-117.66327	NAD083	Soil	9/15/2014	11:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-800B-D-01-01	800B-D-01	Beach	14376536	Discrete	1	6	in	48.996766	-117.64012	NAD083	Soil	9/17/2014	10:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-800B-D-02-01	800B-D-02	Beach	14376537	Discrete	1	6	in	48.996678	-117.64012	NAD083	Soil	9/17/2014	10:20	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-800B-D-03-01	800B-D-03	Beach	14376538	Discrete	1	6	in	48.9966	-117.64028	NAD083	Soil	9/17/2014	10:23	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-800B-D-04-01	800B-D-04	Beach	14376539	Discrete	1	6	in	48.996492	-117.64043	NAD083	Soil	9/17/2014	10:19	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-800B-D-05-01	800B-D-05	Beach	14376540	Discrete	1	6	in	48.99642	-117.64042	NAD083	Soil	9/17/2014	10:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-800B-D-05-02	800B-D-05	Beach	14376541	Discrete	1	6	in	48.99642	-117.64042	NAD083	Soil	9/17/2014	10:25	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-091614-143747-0008	ALS Environmental	Courier Service	9/23/2014
2014R-SS-82-D-01-01	82-D-01	House	14376634	Discrete	1	6	in	48.974198	-117.79452	NAD083	Soil	9/20/2014	10:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-82-D-02-01	82-D-02	House	14376635	Discrete	1	6	in	48.974213	-117.79495	NAD083	Soil	9/20/2014	10:40	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-82-D-03-01	82-D-03	House	14376636	Discrete	1	6	in	48.973899	-117.79374	NAD083	Soil	9/20/2014	11:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-82-D-03-02	82-D-03	House	14376637	Discrete	1	6	in	48.973899	-117.79374	NAD083	Soil	9/20/2014	11:40	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-82-D-04-01	82-D-04	House	14376638	Discrete	1	6	in	48.973952	-117.79539	NAD083	Soil	9/20/2014	11:45	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-82-D-05-01	82-D-05	House	14376639	Discrete	1	6	in	48.973664	-117.79498	NAD083	Soil	9/20/2014	11:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-092214-161955-0010	ALS Environmental	Courier Service	10/6/2014
2014R-SS-85-D-01-01	85-D-01	House	14346102	Discrete	1	6	in	48.951299	-117.75402	NAD083	Soil	8/25/2014	14:07	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-85-D-02-01	85-D-02	House	14346103	Discrete	1	6	in	48.951312	-117.75358	NAD083	Soil	8/25/2014	14:15	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-85-D-03-01	85-D-03	House	14346104	Discrete	1	6	in	48.951305	-117.75319	NAD083	Soil	8/25/2014	14:25	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-85-D-04-01	85-D-04	House	14346105	Discrete	1	6	in	48.951573	-117.75397	NAD083	Soil	8/25/2014	14:50	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-85-D-05-01	85-D-05	House	14346106	Discrete	1	6	in	48.951539	-117.75318	NAD083	Soil	8/25/2014	14:35	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-85-D-05-02	85-D-05	House	14346107	Discrete	1	6	in	48.951539	-117.75318	NAD083	Soil	8/25/2014	14:30	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-082214-133440-0001	ALS Environmental	Courier Service	8/28/2014
2014R-SS-999M1-D-01-01	999M1-D-01	House	14346165	Discrete	1	6	in	48.947607	-117.77505	NAD083	Soil	8/28/2014	14:30	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-999M1-D-02-01	999M1-D-02	House	14346166	Discrete	1	6	in	48.947454	-117.77496	NAD083	Soil	8/28/2014	14:43	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-999M1-D-03-01	999M1-D-03	House	14346167	Discrete	1	6	in	48.947448	-117.77506	NAD083	Soil	8/28/2014	14:48	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-999M1-D-04-01	999M1-D-04	House	14346168	Discrete	1	6	in	48.947473	-117.7754	NAD083	Soil	8/28/2014	14:55	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-999M1-D-04-02	999M1-D-04	House	14346169	Discrete	1	6	in	48.947473	-117.7754	NAD083	Soil	8/28/2014	15:00	Field duplicate	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014
2014R-SS-999M1-D-05-01	999M1-D-05	House	14346170	Discrete	1	6	in	48.947528	-117.77541	NAD083	Soil	8/28/2014	15:10	Field sample	None	TAL Metals (no Hg) (TAT 21 Days)	10-090514-084802-0004	ALS Environmental	Courier Service	9/11/2014

TABLE 3-4

Field Sampling Modifications and Deviations

UCR Residential Soil Study Field Sampling and Data Summary Report

Location	Property Number	Decision Unit	Deviation	Field Sample ID Affected	Comment
5687700	NA	214	Permission to sample revoked by property owner		Property owner indicated they were no longer interested in sampling during phone conversation on 9-27. No samples collected.
5693400	8	22	Additional discrete sample collected	2014R-SS-22-D-06-01	Property owner requested a grab sample in an area to the north of DU 22 in an unmaintained area of his property. Sample was collected as a 6th discrete sample.
5087000	104	201G	Planned sample depth not achieved	2014R-SS-201G-IC-01 2014R-SS-201G-IC-02 2014R-SS-201G-IC-03	Not all increments achieved 12-inch depth due to dense and rocky soil underlying variable till depth within the garden area.
5088000	67	14	Replicate samples not collected	2014R-SS-14-IC-02 2014R-SS-14-IC-03	Property owner requested not collecting replicate samples so as to not disturb his garden area further. No samples collected.
5088000	1	15	Discrete sample not collected	2014R-SS-15-D-01-01	Did not collect 2014R-SS-15-D-05-01 due to gravel below topsoil and homeowner not wanting more invasive tools used that would impact his lawn. No sample collected.
5088000	1	15	DU location/shape altered	2014R-SS-9-IC-01 2014R-SS-9-IC-02 2014R-SS-9-IC-03	Several IC increments were located on the west side of a fence/property line in a wooded area. A total of 13 IC locations were moved to the east side of property, shifting the DU to encompass more of the field that was to be sampled.
5078100	78	216DL	Removed DU	2014R-SS-216DL-IC-01	Dripline DU removed due to age of house (approximately 4 years old). Too new to see effects from air emissions. No sample collected.
5085300	85	170	DU location/shape altered	2014R-SS-170-IC-01 2014R-SS-170-IC-02 2014R-SS-170-IC-03	DU 170 was moved to large field area to the southeast of the house, just south of the driveway. Landowner indicated that area as heavily used by children for playing and riding ATVs.
5085300	85	1031	Removed DU	2014R-SS-1031-IC-01	Homeowner imported clean fill and manure for garden soil. No sample collected.
5704000	73	169A	DU location/shape altered, DU land use changed	2014R-SS-169A-IC-01 2014R-SS-169A-IC-02 2014R-SS-169A-IC-03	Changed DU type to Beach, altered shape, and moved to closer to river beach area as to better reflect potential land use based on rugged site conditions of original DU location.
5689900	5	49	DU location/shape altered	2014R-SS-49-IC-01 2014R-SS-49-IC-02 2014R-SS-49-IC-03	Location of IC samples were not indicated properly on GPS and fell outside of the yard area in heavy brush. Marked DU and all IC samples manually in open area of property.
615200	95	185	Planned sample depth not achieved	2014R-SS-185G-IC-01	Changed sample depth to 8 inches to match total disturbed depth in raised garden.
5086800	105	204	DU location/shape altered	2014R-SS-204-IC-01 2014R-SS-204-IC-02 2014R-SS-204-IC-03	Expanded DU boundary to account for lower river level that exposed more beach.
5095700	128	251B	DU location/shape altered	2014R-SS-251B-IC-01 2014R-SS-251B-IC-02 2014R-SS-251B-IC-03	DU boundaries changed to include more exposed beach due to lower water levels.
5084902	NA	1050 1051	Permission to sample revoked by property owner		Property owner indicated they were no longer interested in sampling during phone conversation on 8-13. No samples collected.

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Field Sampling Modifications and Deviations

UCR Residential Soil Study Field Sampling and Data Summary Report

Location	Property Number	Decision Unit	Deviation	Field Sample ID Affected	Comment
50989601	89	176M	DU location/shape altered	2014R-SS-176M-IC-01 2014R-SS-176M-IC-02 2014R-SS-176M-IC-03	Property not reconned during Phase 1. DU was created manually after property owner communication during sampling. Collected discrete samples from DU 176M.
50989601	89	176G	New DU added	2014R-SS-176G-IC-01	Property not reconned during Phase 1. Small garden observed during sampling and DU was manually created in the field.
5704500	99	194	DU location/shaped altered	2014R-SS-194-IC-01 2014R-SS-194-IC-02 2014R-SS-194-IC-03	Shifted DU and slightly reduced area to cover area of activity. Original DU shape included steep bank to the east. Expanded DU to the west to incorporate high activity area that included fire pit and seating.
5704500	99	195	DU location/shaped altered	2014R-SS-195-IC-01 2014R-SS-195-IC-02 2014R-SS-195-IC-03	Split DU into two areas to better account for usage of beach areas.
5704600	99	1020	Planned sample depth not achieved		Unable to achieve 18-inch sample depth for garden for most sample locations. Maximum penetration for most locations was 16 inches and required additional hand tools to collect sample.
2393280	35	62DL1	Removed DU	2014R-SS-62DL1-IC-01	Dripline 62DL1 was eliminated due to it being on the gabled side of roof. Dripline samples are not collected from gabled sides of roof. No sample collected.
2393280	35	62G	Changed sample depth	2014R-SS-62G-IC-01 2014R-SS-62G-IC-02 2014R-SS-62G-IC-03	Changed sample depth to 0 to 1 inches, because this is a proposed future garden.
5706200	51	1009DL	DU location/shape altered	2014R-SS-1009DL-IC-01	Move from SE area of home to E and W sides of garage due to utilities in and near the dripline. The garage was older than the house and had a distinct dripline.
5706200	145	1005	Changed sample depth	2014R-SS-1005-IC-01 2014R-SS-1005-IC-02 2014R-SS-1005-IC-03	Changed sample depth to 0 to 1 inches, because this is a proposed future garden.
5706200	145	1005 1006 1007 1009DL 1005	Split samples collected	2014R-SS-1005-IC-01 2014R-SS-1006-IC-01 2014R-SS-1007-IC-01 2014R-SS-1009DL-IC-01 Discrete composite	One split sample collected for each DU as requested by property owner. Owner requested a composite split sample from equal soil amounts from each of the 5 discrete samples collected for DU 1005.
5090320	106	230G	DU location/shape altered, Changed sample depth	2014R-SS-230G-IC-01 2014R-SS-230G-IC-02 2014R-SS-230G-IC-03	Moved location of DU 230G based on updated landowner information. Location is for future garden, so sample depth changed from 0 to 12 inches to 0 to 1 inch as the soil hasn't been tilled.
5085825	113	197	DU location/shape altered	2014R-SS-197-IC-01 2014R-SS-197-IC-02 2014R-SS-197-IC-03	DU boundaries changed to include more exposed beach due to lower water levels.

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Field Sampling Modifications and Deviations

UCR Residential Soil Study Field Sampling and Data Summary Report

Location	Property Number	Decision Unit	Deviation	Field Sample ID Affected	Comment
615900	302	280yard	Discrete samples not collected	2014R-SS-280yard-D-01-01, 2014R-SS-280yard-D-02-01, 2014R-SS-280yard-D-03-01, 2014R-SS-280yard-D-04-01, 2014R-SS-280yard-D-05-01, 2014R-SS-280yard-D-05-02 (FD)	Could not achieve total depth for discrete samples with sampling tool. Decided against using trowels in yard due to disturbance to lawn. No discrete samples collected.
2402360	139	325	Planned sample depth not achieved, DU location/shape altered	2014R-SS-325-IC-01 2014R-SS-325-IC-02 2014R-SS-325-IC-03	Changed garden sample depth to 0 to 6 inches, as opposed to 0 to 12 inches, to match maximum till depth as indicated by landowner. Sampling performed in active and tilled garden areas located in troughs, boxes, and tilled rows within the DU as opposed to the entire fenced area where that was indicated by DU boundary from the Phase 1 recon.
5091300	47	94M	Replicate samples removed	2014R-SS-94M-IC-02 2014R-SS-94M-IC-03	Moved duplicate and triplicate samples to DU 87 due to access restriction.
5091300	47	87	Replicate samples added	2014R-SS-87-IC-02 2014R-SS-87-IC-03	Duplicate and triplicate samples moved here from DU 94M due to access restriction.
5693100	97	1035	Planned sample depth not achieved	2014R-SS-1035-IC-01 2014R-SS-1035-IC-02 2014R-SS-1035-IC-03	Could not achieve total depth of 12 inches at all locations for garden DU. Noted which locations did not reach total depth on field forms.
2392940	45	82DL1	Removed DU	2014R-SS-82DL1-IC-01	Home was built in 2008-2009. Too new to see effects from air emissions. No sample collected.
2392940	45	82DL2	Removed DU	2014R-SS-82DL2-IC-01	Home was built in 2008-2009. Too new to see effects from air emissions. No sample collected.
5096217	136	317	Replicate samples removed	2014R-SS-317-IC-01	Moved duplicate and triplicate from 317 to 318 in consideration of property owner's upcoming wedding.
5096217	136	318	Replicate samples added	2014R-SS-318-IC-01 2014R-SS-318-IC-02 2014R-SS-318-IC-03	Moved duplicate and triplicate to 318 from 317 in consideration of property owner's upcoming wedding.
5096217	136	319DL	DU location/shape altered	2014R-SS-319DL-IC-01	Changed orientation of DU and distribution of increments to match house orientation.
5045800	88	238M	Land use changed, Replicate samples removed	2014R-SS-238M-IC-02 2014R-SS-238M-IC-03	Changed land use type to Other Not Specified due to observed conditions and at recommendations of EPA representative on site. Did not collect duplicate and triplicate samples due to another Other Not Specified DU with duplicate and triplicate at the property.
5095105	NA	48	Permission to sample revoked by property owner		Property owner indicated they were no longer interested in sampling during phone conversation on 8-14. No samples collected.
5091700	92	206	DU Location/shape altered	2014R-SS-206-IC-01 2014R-SS-206-IC-02 2014R-SS-206-IC-03	Expanded DU boundary to include high-use yard area to the west and southwest of home that was not included in the original DU shape.
5091100	92	206DL	Removed DU	2014R-SS-206DL-IC-01	Home built in late 1990s. Too new to see effects from air emissions. In addition, home has full gutters. No sample collected.

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Field Sampling Modifications and Deviations

UCR Residential Soil Study Field Sampling and Data Summary Report

Location	Property Number	Decision Unit	Deviation	Field Sample ID Affected	Comment
5091700	92	206G	Removed DU	2014R-SS-206G-IC-01	Weed barrier over whole landscape/garden DU area with irrigation lines running throughout. Additionally, homeowner indicated that the area was not tilled, and that only areas where shrubs were planted were excavated during planting, but then backfilled with garden soil. No samples collected.
5091100	92	207G	Removed DU	2014R-SS-207G-IC-01	Garden located in raised garden box. Owner brought in clean fill for construction of garden. No sample collected.
5087301	58	115SP	Replicate samples removed	2014R-SS-115SP-IC-02 2014R-SS-115SP-IC-03	Replicates samples not collected (duplicate and triplicate) due to small size of stockpile.
5045600	72	160	DU location/shape altered	2014R-SS-160-IC-01 2014R-SS-160-IC-02 2014R-SS-160-IC-03	Several IC samples were moved as they were located in driveway and behind outbuilding. IC locations moved to higher-use area of the yard.
2398875	135	315DL	Removed DU	2014R-SS-315DL-IC-01	Home built in 2010. Too new to see effects from air emissions. In addition, home has full gutters. No sample collected.
5045675	67	140G	Planned sample depth not achieved	2014R-SS-140G-IC-01	Could not achieve total depth of 12 inches at all locations for garden DU. Refusal encountered at 9 locations at 4 to 6 inches.
5693200	72	160	DU location/shape altered	2014R-SS-160-IC-01 2014R-SS-160-IC-02 2014R-SS-160-IC-03 2014R-SS-160-D-05-01 2014R-SS-160-D-05-02	DU shape was changed based on conversation with property owner. Property owner indicated area to south of house as location for future garden. No previous tilling/gardening in area. Property owner also requested to extend DU to west of new house due to future fire pit/high use. Changed sample depth from 0 to 12 inches to 0 to 1 inch. One discrete sample (and FD) were also moved to expanded area of DU.
5089440	32	55	DU location/shape altered	2014R-SS-55-IC-01 2014R-SS-55-IC-02 2014R-SS-55-IC-03	Moved six increment locations to more suitable sampling locations within the DU as they were located within gravel driveway and in area where a new garage had been recently built.
5044000	7	60DL	Removed DU	2014R-SS-60DL-IC-01	Home built in 1980s. Too new to see effects from air emissions and lead-based paint. No sample collected.
5083200	NA	181 181DL 183A 184G	Removed DU		Property not sampled due to the continual presence of several bears on site. Property owner consistently feeds bears, creating a safety risk for field team. No samples collected for this property.
2398900	52	110	DU location/shape altered	2014R-SS-110-IC-01 2014R-SS-110-IC-02 2014R-SS-110-IC-03	Moved four IC locations from densely vegetated/forested area to open area of yard where activity was more likely. Adjusted IC samples were moved to northern area of property, extending the north portion of the DU.
2398900	52	110G	DU location/shape altered	2014R-SS-110G-IC-01	Moved IC sample locations into actual garden area and planter boxes.
151-H-189	151	432	DU location/shape altered	2014R-SS-432-IC-01	Moved some IC locations due to steep ravine to the south side of the DU.
151-H-196	143	402	Replicate samples added	2014R-SS-402-IC-02 2014R-SS-402-IC-03	Duplicate and triplicate moved to DU 402 from DU 403. DU 403 contained heavy vegetation in 403. Both DU 402 and DU 403 had the same land use designation.

TABLE 3-4

Field Sampling Modifications and Deviations

UCR Residential Soil Study Field Sampling and Data Summary Report

Location	Property Number	Decision Unit	Deviation	Field Sample ID Affected	Comment
151-H-196	143	403	Replicate samples removed	2014R-SS-403-IC-02 2014R-SS-403-IC-03	Duplicate and triplicate moved from DU 403 to DU 402. DU 403 contained heavy vegetation in 403. Both DU 402 and DU 403 had the same land use designation.
5092600	48	106DL	Removed DU	2014R-SS-106DL-IC-01	Home built in 1980. Too new to see effects from air emissions and lead-based paint. No sample collected.
5078600	3	42 42DL 44 1018	Split samples collected	2014R-SS-42-IC-01 2014R-SS-42DL-IC-01 2014R-SS-44-IC-01 2014R-SS-1018-IC-01	One split sample collected for each DU as requested by property owner.
5078600	3	1015	DU location/shape altered	2014R-SS-1015-IC-01	Moved IC sample locations to garden planter boxes within the DU boundary.
5705655	38	70DL	Removed DU	2014R-SS-70DL-IC-01	Home built in 1991. Too new to see effects from air emissions and lead-based paint. No sample collected.
5705655	38	71	Planned sample depth not achieved	2014R-SS-71-IC-01 2014R-SS-71-IC-02 2014R-SS-71-IC-03	Unable to achieve 12-inch depth for garden DU for several increments. Rocks and dense soil prevented sampler from advancing and were encountered from 3 to 9 inches for several increments.
5705655	38	72	Planned sample depth not achieved	2014R-SS-72-IC-01 2014R-SS-72-IC-02 2014R-SS-72-IC-03	Garden DU was actually an orchard with mature fruit trees. No evidence of previous tilling. Unable to advance sampler to depth. Collected samples from 0 to 1 inch based on site conditions.
5705655	38	72U	DU location/shape altered	2014R-SS-72U-IC-01	DU shape elongated to represent hiking trail to water source. Original DU shape included densely vegetated steep slopes to the east and west. Discussions with the property owner revealed only activity in the area is on the trail.

TABLE 4-1

Analytical Methods for Soil Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

Medium	Analytes	Sample Preparation		Quantitative Analysis	
		Protocol	**Procedure**	**Protocol**	**Procedure**
Soil	Percent moisture	NA	NA	EPA 160.3	Gravimetric
	Calcium, iron, magnesium, potassium, sodium	IC Sample Preparation and Subsampling, EPA 3050B	Acid digestion	EPA 6010C	ICP-AES
	Aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, vanadium, and zinc	IC Sample Preparation and Subsampling, EPA 3050B	Acid digestion	EPA 6020A	ICP-MS
	Lead and arsenic bioaccessibility	EPA 9200.2-86	Glycine extraction	EPA 6010B	ICP-AES

Notes:

AES = atomic emission spectrometry

ICP = inductively coupled plasma

MS - mass spectrometry

NA = not applicable

TABLE 5-1

Summary of Laboratory and Validation Qualifiers

UCR Residential Soil Study Field Sampling and Data Summary Report

Analyte	Number of Samples	Reject Results	Accepted Results	Count of Results with no Flags	Count of Accepted Results Laboratory Flags					Count of Accepted Results Validator Flags		Laboratory Flags, % of Accepted Results					Validator Flags, % of Accepted Results	
					*	J	J*	N	N*	J	U*	*	J	J*	N	N*	J	U*
Aluminum	943	0 (0%)	943 (100%)	903	0	0	0	0	0	40	0	0	0	0	0	0	4	0
Antimony	943	0 (0%)	943 (100%)	0	0	0	0	943	0	943	0	0	0	0	100	0	100	0
Arsenic	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium	943	0 (0%)	943 (100%)	937	0	0	0	6	0	6	0	0	0	0	1	0	1	0
Beryllium	943	0 (0%)	943 (100%)	639	0	0	0	0	0	304	0	0	0	0	0	0	32	0
Cadmium	943	0 (0%)	943 (100%)	937	0	0	0	0	6	6	0	0	0	0	0	1	1	0
Calcium	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cobalt	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron	943	0 (0%)	943 (100%)	923	0	0	0	0	0	20	0	0	0	0	0	0	2	0
Lead	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	943	0 (0%)	943 (100%)	904	0	0	0	0	0	39	0	0	0	0	0	0	4	0
Manganese	943	0 (0%)	943 (100%)	923	0	0	0	0	0	20	0	0	0	0	0	0	2	0
Nickel	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	943	0 (0%)	943 (100%)	926	0	0	0	0	0	17	0	0	0	0	0	0	2	0
Selenium	943	0 (0%)	943 (100%)	718	1	205	19	0	0	225	0	0.11	22	2	0	0	24	0
Silver	943	0 (0%)	943 (100%)	896	46	0	0	0	0	47	0	5	0	0	0	0	5	0
Sodium	943	0 (0%)	943 (100%)	835	0	0	0	0	0	104	4	0	0	0	0	0	11	0.4
Thallium	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc	943	0 (0%)	943 (100%)	943	0	0	0	0	0	0	0	0	0	0	0	0	0	0

J = Analyte was detected; the quantitation was estimated because of discrepancies in meeting certain analyte-specific QC criteria

UJ = Analyte was not detected; however, the quantitation was estimated because of discrepancies in meeting certain analyte-specific QC criteria

U = Analyte was analyzed for but not detected, or was qualified as not detected because of blank contamination.

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1411030-001	14396893	EPA6010	N	Soil	Aluminum	0.5	1.9	11,000	mg/kg	J	LCS<LCL	Stage 2B
K1411030-002	14396894	EPA6010	FD	Soil	Aluminum	0.5	1.9	11,300	mg/kg	J	LCS<LCL	Stage 2B
K1411030-003	14396895	EPA6010	N	Soil	Aluminum	0.5	1.9	10,400	mg/kg	J	LCS<LCL	Stage 2B
K1411030-004	14396896	EPA6010	N	Soil	Aluminum	0.5	1.9	11,700	mg/kg	J	LCS<LCL	Stage 2B
K1411030-005	14396897	EPA6010	N	Soil	Aluminum	0.5	1.9	11,700	mg/kg	J	LCS<LCL	Stage 2B
K1411030-006	14396898	EPA6010	N	Soil	Aluminum	0.5	1.9	13,200	mg/kg	J	LCS<LCL	Stage 2B
K1411030-007	14396899	EPA6010	N	Soil	Aluminum	0.5	1.9	17,400	mg/kg	J	LCS<LCL	Stage 2B
K1411030-008	14396906	EPA6010	N	Soil	Aluminum	0.5	1.9	17,100	mg/kg	J	LCS<LCL	Stage 2B
K1411030-009	14396907	EPA6010	N	Soil	Aluminum	0.5	1.9	14,000	mg/kg	J	LCS<LCL	Stage 2B
K1411030-010	14396908	EPA6010	N	Soil	Aluminum	0.5	1.9	18,900	mg/kg	J	LCS<LCL	Stage 2B
K1411030-011	14396909	EPA6010	N	Soil	Aluminum	0.5	1.9	14,700	mg/kg	J	LCS<LCL	Stage 2B
K1411030-012	14396910	EPA6010	N	Soil	Aluminum	0.5	1.9	16,500	mg/kg	J	LCS<LCL	Stage 2B
K1411030-013	14396911	EPA6010	FD	Soil	Aluminum	0.5	1.9	16,700	mg/kg	J	LCS<LCL	Stage 2B
K1411030-014	14396923	EPA6010	N	Soil	Aluminum	0.5	1.9	12,200	mg/kg	J	LCS<LCL	Stage 2B
K1411030-015	14396924	EPA6010	N	Soil	Aluminum	0.5	1.9	14,100	mg/kg	J	LCS<LCL	Stage 2B
K1411030-016	14396925	EPA6010	N	Soil	Aluminum	0.5	1.9	16,700	mg/kg	J	LCS<LCL	Stage 2B
K1411030-017	14396926	EPA6010	N	Soil	Aluminum	0.5	1.9	12,800	mg/kg	J	LCS<LCL	Stage 2B
K1411030-018	14396927	EPA6010	N	Soil	Aluminum	0.5	1.9	12,800	mg/kg	J	LCS<LCL	Stage 2B
K1411030-019	14396931	EPA6010	N	Soil	Aluminum	0.5	1.9	15,100	mg/kg	J	LCS<LCL	Stage 2B
K1411030-020	14396932	EPA6010	N	Soil	Aluminum	0.5	1.9	17,800	mg/kg	J	LCS<LCL	Stage 2B
K1411037-001	14376620	EPA6010	N	Soil	Aluminum	0.5	1.9	10,100	mg/kg	J	LCS<LCL	Stage 2B
K1411037-002	14376621	EPA6010	N	Soil	Aluminum	0.5	1.9	10,100	mg/kg	J	LCS<LCL	Stage 2B
K1411037-003	14376622	EPA6010	N	Soil	Aluminum	0.5	1.9	11,400	mg/kg	J	LCS<LCL	Stage 2B
K1411037-004	14376623	EPA6010	N	Soil	Aluminum	0.5	1.9	12,300	mg/kg	J	LCS<LCL	Stage 2B
K1411037-005	14376624	EPA6010	FD	Soil	Aluminum	0.5	1.9	11,800	mg/kg	J	LCS<LCL	Stage 2B
K1411037-006	14376625	EPA6010	N	Soil	Aluminum	0.5	1.9	12,700	mg/kg	J	LCS<LCL	Stage 2B
K1411037-007	14376634	EPA6010	N	Soil	Aluminum	0.5	1.9	17,300	mg/kg	J	LCS<LCL	Stage 2B
K1411037-008	14376635	EPA6010	N	Soil	Aluminum	0.5	1.9	15,800	mg/kg	J	LCS<LCL	Stage 2B
K1411037-009	14376636	EPA6010	N	Soil	Aluminum	0.5	1.9	14,500	mg/kg	J	LCS<LCL	Stage 2B
K1411037-010	14376637	EPA6010	FD	Soil	Aluminum	0.5	2.0	14,100	mg/kg	J	LCS<LCL	Stage 2B
K1411037-011	14376638	EPA6010	N	Soil	Aluminum	0.5	1.9	16,000	mg/kg	J	LCS<LCL	Stage 2B
K1411037-012	14376639	EPA6010	N	Soil	Aluminum	0.5	1.9	15,900	mg/kg	J	LCS<LCL	Stage 2B
K1411037-013	14376640	EPA6010	N	Soil	Aluminum	0.5	2.0	32,600	mg/kg	J	LCS<LCL	Stage 2B
K1411037-014	14376641	EPA6010	N	Soil	Aluminum	0.5	1.9	28,200	mg/kg	J	LCS<LCL	Stage 2B
K1411037-015	14376642	EPA6010	N	Soil	Aluminum	0.5	2.1	28,200	mg/kg	J	LCS<LCL	Stage 2B
K1411037-016	14376643	EPA6010	FD	Soil	Aluminum	0.5	2.0	27,100	mg/kg	J	LCS<LCL	Stage 2B
K1411037-017	14376644	EPA6010	N	Soil	Aluminum	0.5	2.0	23,000	mg/kg	J	LCS<LCL	Stage 2B
K1411037-018	14376645	EPA6010	N	Soil	Aluminum	0.5	2.0	28,900	mg/kg	J	LCS<LCL	Stage 2B
K1411037-019	14376651	EPA6010	N	Soil	Aluminum	0.5	2.0	31,700	mg/kg	J	LCS<LCL	Stage 2B
K1411037-020	14376652	EPA6010	N	Soil	Aluminum	0.5	2.0	30,500	mg/kg	J	LCS<LCL	Stage 2B
K1409213-001	14336000	EPA6020	N	Soil	Antimony	0.010	0.049	1.03	mg/kg	J	MS<LCL	Stage 4
K1409213-002	14336001	EPA6020	N	Soil	Antimony	0.010	0.051	1.36	mg/kg	J	MS<LCL	Stage 4
K1409213-003	14336002	EPA6020	N	Soil	Antimony	0.010	0.049	1.35	mg/kg	J	MS<LCL	Stage 4
K1409213-004	14336003	EPA6020	N	Soil	Antimony	0.010	0.051	1.27	mg/kg	J	MS<LCL	Stage 4
K1409213-005	14336004	EPA6020	N	Soil	Antimony	0.010	0.051	1.21	mg/kg	J	MS<LCL	Stage 4
K1409213-006	14336010	EPA6020	N	Soil	Antimony	0.009	0.045	3.36	mg/kg	J	MS<LCL	Stage 4
K1409213-007	14336011	EPA6020	N	Soil	Antimony	0.010	0.050	1.74	mg/kg	J	MS<LCL	Stage 4
K1409213-008	14336012	EPA6020	N	Soil	Antimony	0.008	0.042	1.9	mg/kg	J	MS<LCL	Stage 4
K1409213-009	14336013	EPA6020	N	Soil	Antimony	0.010	0.050	1.71	mg/kg	J	MS<LCL	Stage 4
K1409213-010	14336016	EPA6020	N	Soil	Antimony	0.010	0.049	2.92	mg/kg	J	MS<LCL	Stage 4
K1409213-011	14336017	EPA6020	N	Soil	Antimony	0.009	0.043	3.32	mg/kg	J	MS<LCL	Stage 4
K1409213-012	14336018	EPA6020	N	Soil	Antimony	0.009	0.043	3.12	mg/kg	J	MS<LCL	Stage 4
K1409213-013	14336019	EPA6020	N	Soil	Antimony	0.010	0.051	3.15	mg/kg	J	MS<LCL	Stage 4
K1409213-014	14336027	EPA6020	N	Soil	Antimony	0.010	0.052	2.35	mg/kg	J	MS<LCL	Stage 4
K1409213-015	14336028	EPA6020	N	Soil	Antimony	0.010	0.052	5.14	mg/kg	J	MS<LCL	Stage 4
K1409213-016	14336029	EPA6020	N	Soil	Antimony	0.010	0.052	5.57	mg/kg	J	MS<LCL	Stage 4
K1409213-017	14336030	EPA6020	N	Soil	Antimony	0.011	0.053	5.68	mg/kg	J	MS<LCL	Stage 4
K1409213-018	14336032	EPA6020	N	Soil	Antimony	0.010	0.050	1.68	mg/kg	J	MS<LCL	Stage 4
K1409213-019	14336033	EPA6020	N	Soil	Antimony	0.010	0.051	1.61	mg/kg	J	MS<LCL	Stage 4
K1409213-020	14336034	EPA6020	N	Soil	Antimony	0.010	0.051	1.53	mg/kg	J	MS<LCL	Stage 4
K1409214-001	14336035	EPA6020	N	Soil	Antimony	0.010	0.051	1.04	mg/kg	J	MS<LCL	Stage 4
K1409214-002	14336036	EPA6020	N	Soil	Antimony	0.010	0.051	1.87	mg/kg	J	MS<LCL	Stage 4
K1409214-003	14336038	EPA6020	N	Soil	Antimony	0.010	0.051	3.54	mg/kg	J	MS<LCL	Stage 4
K1409214-004	14336039	EPA6020	N	Soil	Antimony	0.010	0.051	2.77	mg/kg	J	MS<LCL	Stage 4
K1409214-005	14336040	EPA6020	N	Soil	Antimony	0.010	0.051	2.76	mg/kg	J	MS<LCL	Stage 4
K1409214-006	14336041	EPA6020	N	Soil	Antimony	0.010	0.050	2.03	mg/kg	J	MS<LCL	Stage 4
K1409214-007	14336042	EPA6020	N	Soil	Antimony	0.010	0.051	1.82	mg/kg	J	MS<LCL	Stage 4
K1409214-008	14336043	EPA6020	N	Soil	Antimony	0.010	0.051	1.91	mg/kg	J	MS<LCL	Stage 4
K1409214-009	14336045	EPA6020	N	Soil	Antimony	0.010	0.048	1.2	mg/kg	J	MS<LCL	Stage 4
K1409214-010	14336052	EPA6020	N	Soil	Antimony	0.010	0.048	1.32	mg/kg	J	MS<LCL	Stage 4
K1409214-011	14336053	EPA6020	N	Soil	Antimony	0.010	0.050	3.63	mg/kg	J	MS<LCL	Stage 4
K1409214-012	14336054	EPA6020	N	Soil	Antimony	0.010	0.050	4.53	mg/kg	J	MS<LCL	Stage 4
K1409214-013	14336055	EPA6020	N	Soil	Antimony	0.010	0.050	4.15	mg/kg	J	MS<LCL	Stage 4
K1409214-014	14336056	EPA6020	N	Soil	Antimony	0.010	0.051	1.54	mg/kg	J	MS<LCL	Stage 4
K1409214-015	14336064	EPA6020	N	Soil	Antimony	0.021	0.103	4.17	mg/kg	J	MS<LCL	Stage 4
K1409214-016	14336065	EPA6020	N	Soil	Antimony	0.010	0.052	5.46	mg/kg	J	MS<LCL	Stage 4
K1409214-017	14336066	EPA6020	N	Soil	Antimony	0.010	0.052	3.92	mg/kg	J	MS<LCL	Stage 4
K1409214-018	14336067	EPA6020	N	Soil	Antimony	0.010	0.050	1.51	mg/kg	J	MS<LCL	Stage 4
K1409214-019	14336068	EPA6020	N	Soil	Antimony	0.010	0.050	1.62	mg/kg	J	MS<LCL	Stage 4
K1409214-020	14336069	EPA6020	N	Soil	Antimony	0.010	0.048	1.69	mg/kg	J	MS<LCL	Stage 4
K1409217-001	14336077	EPA6020	N	Soil	Antimony	0.010	0.051	0.659	mg/kg	J	MS<LCL	Stage 2B
K1409217-002	14336084	EPA6020	N	Soil	Antimony	0.010	0.051	1.1	mg/kg	J	MS<LCL	Stage 2B
K1409217-003	14336085	EPA6020	N	Soil	Antimony	0.010	0.051	1.71	mg/kg	J	MS<LCL	Stage 2B
K1409217-004	14336086	EPA6020	N	Soil	Antimony	0.010	0.050	2.23	mg/kg	J	MS<LCL	Stage 2B
K1409217-005	14336087	EPA6020	N	Soil	Antimony	0.010	0.050	1.63	mg/kg	J	MS<LCL	Stage 2B
K1409217-006	14336089	EPA6020	N	Soil	Antimony	0.010	0.051	3.64	mg/kg	J	MS<LCL	Stage 2B
K1409217-007	14336090	EPA6020	N	Soil	Antimony	0.010	0.050	4.67	mg/kg	J	MS<LCL	Stage 2B
K1409217-008	14336091	EPA6020	N	Soil	Antimony	0.010	0.051	3.35	mg/kg	J	MS<LCL	Stage 2B
K1409217-009	14336098	EPA6020	N	Soil	Antimony	0.010	0.050	0.761	mg/kg	J	MS<LCL	Stage 2B
K1409217-010	14336099	EPA6020	N	Soil	Antimony	0.010	0.051	1.96	mg/kg	J	MS<LCL	Stage 2B
K1409217-011	14336100	EPA6020	N	Soil	Antimony	0.010	0.051	3.74	mg/kg	J	MS<LCL	Stage 2B
K1409217-012	14346108	EPA6020	N	Soil	Antimony	0.010	0.050	0.645	mg/kg	J	MS<LCL	Stage 2B
K1409217-013	14346109	EPA6020	N	Soil	Antimony	0.010	0.050	0.555	mg/kg	J	MS<LCL	Stage 2B
K1409217-014	14346110	EPA6020	N	Soil	Antimony	0.010	0.051	0.546	mg/kg	J	MS<LCL	Stage 2B
K1409217-015	14346111	EPA6020	N	Soil	Antimony	0.010	0.050	0.555	mg/kg	J	MS<LCL	Stage 2B
K1409217-016	14346112	EPA6020	N	Soil	Antimony	0.010	0.051	1.13	mg/kg	J	MS<LCL	Stage 2B
K1409217-017	14346113	EPA6020	N	Soil	Antimony	0.010	0.051	0.985	mg/kg	J	MS<LCL	Stage 2B
K1409217-018	14346115	EPA6020	N	Soil	Antimony	0.010	0.050	3.12	mg/kg	J	MS<LCL	Stage 2B
K1409217-019	14346116	EPA6020	N	Soil	Antimony	0.010	0.051	4.49	mg/kg	J	MS<LCL	Stage 2B
K1409217-020	14346117	EPA6020	N	Soil	Antimony	0.010	0.051	2.88	mg/kg	J	MS<LCL	Stage 2B
K1409220-001	14346118	EPA6020	N	Soil	Antimony	0.010	0.051	3.84	mg/kg	J	MS<LCL	Stage 2B
K1409220-002	14346119	EPA6020	N	Soil	Antimony	0.010	0.050	3.27	mg/kg	J	MS<LCL	Stage 2B
K1409220-003	14346120	EPA6020	N	Soil	Antimony	0.010	0.051	4.32	mg/kg	J	MS<LCL	Stage 2B
K1409220-004	14346122	EPA6020	N	Soil	Antimony	0.010	0.050	1.13	mg/kg	J	MS<LCL	Stage 2B
K1409220-005	14346123	EPA6020	N	Soil	Antimony	0.010	0.050	0.898	mg/kg	J	MS<LCL	Stage 2B
K1409220-006	14346124	EPA6020	N	Soil	Antimony	0.010	0.051	0.864	mg/kg	J	MS<LCL	Stage 2B
K1409220-007	14346125	EPA6020	N	Soil	Antimony	0.010	0.051	0.704	mg/kg	J	MS<LCL	Stage 2B
K1409220-008	14346126	EPA6020	N	Soil	Antimony	0.010	0.050	0.69	mg/kg	J	MS<LCL	Stage 2B
K1409220-009	14346127	EPA6020	N	Soil	Antimony	0.010	0.051	0.629	mg/kg	J	MS<LCL	Stage 2B
K1409220-010	14346135	EPA6020	N	Soil	Antimony	0.010	0.051	6.18	mg/kg	J	MS<LCL	Stage 2B
K1409220-011	14346136	EPA6020	N	Soil	Antimony	0.011	0.053	7	mg/kg	J	MS<LCL	Stage 2B
K1409220-012	14346137	EPA6020	N	Soil	Antimony	0.010	0.051	7.36	mg/kg	J	MS<LCL	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1409220-013	14346144	EPA6020	N	Soil	Antimony	0.010	0.050	1.02	mg/kg	J	MS<LCL	Stage 2B
K1409220-014	14346145	EPA6020	N	Soil	Antimony	0.010	0.050	0.881	mg/kg	J	MS<LCL	Stage 2B
K1409220-015	14346146	EPA6020	N	Soil	Antimony	0.010	0.050	0.976	mg/kg	J	MS<LCL	Stage 2B
K1409220-016	14346147	EPA6020	N	Soil	Antimony	0.010	0.050	1.56	mg/kg	J	MS<LCL	Stage 2B
K1409228-001	14336005	EPA6020	N	Soil	Antimony	0.009	0.047	0.96	mg/kg	J	MS<LCL	Stage 2B
K1409228-002	14336006	EPA6020	N	Soil	Antimony	0.010	0.048	0.533	mg/kg	J	MS<LCL	Stage 2B
K1409228-003	14336007	EPA6020	N	Soil	Antimony	0.010	0.051	2.83	mg/kg	J	MS<LCL	Stage 2B
K1409228-004	14336008	EPA6020	N	Soil	Antimony	0.008	0.042	1.14	mg/kg	J	MS<LCL	Stage 2B
K1409228-005	14336009	EPA6020	FD	Soil	Antimony	0.008	0.041	2.1	mg/kg	J	MS<LCL	Stage 2B
K1409228-006	14336021	EPA6020	N	Soil	Antimony	0.009	0.045	2.97	mg/kg	J	MS<LCL	Stage 2B
K1409228-007	14336022	EPA6020	N	Soil	Antimony	0.009	0.043	0.937	mg/kg	J	MS<LCL	Stage 2B
K1409228-008	14336023	EPA6020	N	Soil	Antimony	0.010	0.051	9.84	mg/kg	J	MS<LCL	Stage 2B
K1409228-009	14336024	EPA6020	N	Soil	Antimony	0.009	0.043	1.45	mg/kg	J	MS<LCL	Stage 2B
K1409228-010	14336025	EPA6020	FD	Soil	Antimony	0.009	0.045	1.05	mg/kg	J	MS<LCL	Stage 2B
K1409228-011	14336026	EPA6020	N	Soil	Antimony	0.010	0.050	3.67	mg/kg	J	MS<LCL	Stage 2B
K1409228-012	14336046	EPA6020	N	Soil	Antimony	0.009	0.047	4.8	mg/kg	J	MS<LCL	Stage 2B
K1409228-013	14336047	EPA6020	N	Soil	Antimony	0.008	0.040	0.392	mg/kg	J	MS<LCL	Stage 2B
K1409228-014	14336048	EPA6020	N	Soil	Antimony	0.010	0.049	4.8	mg/kg	J	MS<LCL	Stage 2B
K1409228-015	14336049	EPA6020	FD	Soil	Antimony	0.008	0.042	0.403	mg/kg	J	MS<LCL	Stage 2B
K1409228-016	14336050	EPA6020	N	Soil	Antimony	0.010	0.050	1.22	mg/kg	J	MS<LCL	Stage 2B
K1409228-017	14336051	EPA6020	N	Soil	Antimony	0.010	0.048	5.5	mg/kg	J	MS<LCL	Stage 2B
K1409228-018	14336058	EPA6020	N	Soil	Antimony	0.009	0.047	3.53	mg/kg	J	MS<LCL	Stage 2B
K1409228-019	14336059	EPA6020	N	Soil	Antimony	0.010	0.049	1.51	mg/kg	J	MS<LCL	Stage 2B
K1409228-020	14336060	EPA6020	N	Soil	Antimony	0.011	0.053	1.61	mg/kg	J	MS<LCL	Stage 2B
K1409229-001	14336061	EPA6020	N	Soil	Antimony	0.010	0.051	1.44	mg/kg	J	MS<LCL	Stage 2B
K1409229-002	14336062	EPA6020	N	Soil	Antimony	0.009	0.044	2.52	mg/kg	J	MS<LCL	Stage 2B
K1409229-003	14336063	EPA6020	FD	Soil	Antimony	0.009	0.044	3.14	mg/kg	J	MS<LCL	Stage 2B
K1409229-004	14336071	EPA6020	N	Soil	Antimony	0.009	0.044	1.12	mg/kg	J	MS<LCL	Stage 2B
K1409229-005	14336072	EPA6020	FD	Soil	Antimony	0.008	0.042	1.12	mg/kg	J	MS<LCL	Stage 2B
K1409229-006	14336073	EPA6020	N	Soil	Antimony	0.010	0.048	1.76	mg/kg	J	MS<LCL	Stage 2B
K1409229-007	14336074	EPA6020	N	Soil	Antimony	0.009	0.043	0.461	mg/kg	J	MS<LCL	Stage 2B
K1409229-008	14336075	EPA6020	N	Soil	Antimony	0.010	0.048	6.43	mg/kg	J	MS<LCL	Stage 2B
K1409229-009	14336076	EPA6020	N	Soil	Antimony	0.010	0.048	2.39	mg/kg	J	MS<LCL	Stage 2B
K1409229-010	14336078	EPA6020	N	Soil	Antimony	0.008	0.042	0.626	mg/kg	J	MS<LCL	Stage 2B
K1409229-011	14336079	EPA6020	N	Soil	Antimony	0.009	0.043	0.991	mg/kg	J	MS<LCL	Stage 2B
K1409229-012	14336080	EPA6020	N	Soil	Antimony	0.009	0.044	0.311	mg/kg	J	MS<LCL	Stage 2B
K1409229-013	14336081	EPA6020	N	Soil	Antimony	0.008	0.040	1.68	mg/kg	J	MS<LCL	Stage 2B
K1409229-014	14336082	EPA6020	N	Soil	Antimony	0.009	0.047	0.981	mg/kg	J	MS<LCL	Stage 2B
K1409229-015	14336083	EPA6020	FD	Soil	Antimony	0.008	0.042	1.29	mg/kg	J	MS<LCL	Stage 2B
K1409229-016	14336092	EPA6020	N	Soil	Antimony	0.010	0.048	1.12	mg/kg	J	MS<LCL	Stage 2B
K1409229-017	14336093	EPA6020	N	Soil	Antimony	0.008	0.041	0.883	mg/kg	J	MS<LCL	Stage 2B
K1409229-018	14336094	EPA6020	N	Soil	Antimony	0.010	0.049	1.28	mg/kg	J	MS<LCL	Stage 2B
K1409229-019	14336095	EPA6020	N	Soil	Antimony	0.010	0.049	2.92	mg/kg	J	MS<LCL	Stage 2B
K1409229-020	14336096	EPA6020	N	Soil	Antimony	0.009	0.043	0.401	mg/kg	J	MS<LCL	Stage 2B
K1409230-001	14346102	EPA6020	N	Soil	Antimony	0.009	0.045	0.606	mg/kg	J	MS<LCL	Stage 2B
K1409230-002	14346103	EPA6020	N	Soil	Antimony	0.009	0.046	0.797	mg/kg	J	MS<LCL	Stage 2B
K1409230-003	14346104	EPA6020	N	Soil	Antimony	0.008	0.041	0.139	mg/kg	J	MS<LCL	Stage 2B
K1409230-004	14346105	EPA6020	N	Soil	Antimony	0.009	0.045	0.858	mg/kg	J	MS<LCL	Stage 2B
K1409230-005	14346106	EPA6020	N	Soil	Antimony	0.009	0.047	1.78	mg/kg	J	MS<LCL	Stage 2B
K1409230-006	14346107	EPA6020	FD	Soil	Antimony	0.009	0.046	1.87	mg/kg	J	MS<LCL	Stage 2B
K1409230-007	14346128	EPA6020	N	Soil	Antimony	0.008	0.042	1.21	mg/kg	J	MS<LCL	Stage 2B
K1409230-008	14346129	EPA6020	N	Soil	Antimony	0.010	0.048	0.747	mg/kg	J	MS<LCL	Stage 2B
K1409230-009	14346130	EPA6020	N	Soil	Antimony	0.008	0.041	0.81	mg/kg	J	MS<LCL	Stage 2B
K1409230-010	14346131	EPA6020	N	Soil	Antimony	0.009	0.045	0.597	mg/kg	J	MS<LCL	Stage 2B
K1409230-011	14346132	EPA6020	FD	Soil	Antimony	0.009	0.043	0.633	mg/kg	J	MS<LCL	Stage 2B
K1409230-012	14346133	EPA6020	N	Soil	Antimony	0.009	0.045	0.837	mg/kg	J	MS<LCL	Stage 2B
K1409230-013	14346138	EPA6020	N	Soil	Antimony	0.009	0.046	1.46	mg/kg	J	MS<LCL	Stage 2B
K1409230-014	14346139	EPA6020	FD	Soil	Antimony	0.009	0.047	1.43	mg/kg	J	MS<LCL	Stage 2B
K1409230-015	14346140	EPA6020	N	Soil	Antimony	0.010	0.048	1.22	mg/kg	J	MS<LCL	Stage 2B
K1409230-016	14346141	EPA6020	N	Soil	Antimony	0.008	0.041	0.923	mg/kg	J	MS<LCL	Stage 2B
K1409230-017	14346142	EPA6020	N	Soil	Antimony	0.010	0.049	2.72	mg/kg	J	MS<LCL	Stage 2B
K1409230-018	14346143	EPA6020	N	Soil	Antimony	0.009	0.045	1.76	mg/kg	J	MS<LCL	Stage 2B
K1409762-001	14346148	EPA6020	N	Soil	Antimony	0.010	0.050	0.841	mg/kg	J	MS<LCL	Stage 2B
K1409762-002	14346149	EPA6020	N	Soil	Antimony	0.010	0.051	0.737	mg/kg	J	MS<LCL	Stage 2B
K1409762-003	14346150	EPA6020	N	Soil	Antimony	0.010	0.050	0.844	mg/kg	J	MS<LCL	Stage 2B
K1409762-004	14346151	EPA6020	N	Soil	Antimony	0.010	0.050	0.92	mg/kg	J	MS<LCL	Stage 2B
K1409762-005	14346152	EPA6020	N	Soil	Antimony	0.010	0.050	0.873	mg/kg	J	MS<LCL	Stage 2B
K1409762-006	14346153	EPA6020	N	Soil	Antimony	0.010	0.050	0.86	mg/kg	J	MS<LCL	Stage 2B
K1409762-007	14346155	EPA6020	N	Soil	Antimony	0.010	0.050	4.7	mg/kg	J	MS<LCL	Stage 2B
K1409762-008	14346156	EPA6020	N	Soil	Antimony	0.010	0.050	2.56	mg/kg	J	MS<LCL	Stage 2B
K1409762-009	14346157	EPA6020	N	Soil	Antimony	0.010	0.050	5.93	mg/kg	J	MS<LCL	Stage 2B
K1409762-010	14346158	EPA6020	N	Soil	Antimony	0.010	0.050	4.15	mg/kg	J	MS<LCL	Stage 2B
K1409762-011	14346159	EPA6020	N	Soil	Antimony	0.010	0.050	3.96	mg/kg	J	MS<LCL	Stage 2B
K1409762-012	14346160	EPA6020	N	Soil	Antimony	0.010	0.050	5.44	mg/kg	J	MS<LCL	Stage 2B
K1409762-013	14346161	EPA6020	N	Soil	Antimony	0.010	0.050	0.932	mg/kg	J	MS<LCL	Stage 2B
K1409762-014	14346163	EPA6020	N	Soil	Antimony	0.010	0.050	0.768	mg/kg	J	MS<LCL	Stage 2B
K1409762-015	14346164	EPA6020	N	Soil	Antimony	0.010	0.050	0.778	mg/kg	J	MS<LCL	Stage 2B
K1409762-016	14346171	EPA6020	N	Soil	Antimony	0.010	0.051	0.842	mg/kg	J	MS<LCL	Stage 2B
K1409762-017	14346172	EPA6020	N	Soil	Antimony	0.010	0.051	0.838	mg/kg	J	MS<LCL	Stage 2B
K1409762-018	14346173	EPA6020	N	Soil	Antimony	0.010	0.051	0.96	mg/kg	J	MS<LCL	Stage 2B
K1409762-019	14346174	EPA6020	N	Soil	Antimony	0.010	0.050	0.564	mg/kg	J	MS<LCL	Stage 2B
K1409762-020	14346175	EPA6020	N	Soil	Antimony	0.010	0.052	1.55	mg/kg	J	MS<LCL	Stage 2B
K1409764-001	14346177	EPA6020	N	Soil	Antimony	0.010	0.050	2.37	mg/kg	J	MS<LCL	Stage 2B
K1409764-002	14346178	EPA6020	N	Soil	Antimony	0.010	0.050	4.83	mg/kg	J	MS<LCL	Stage 2B
K1409764-003	14346179	EPA6020	N	Soil	Antimony	0.010	0.050	2.6	mg/kg	J	MS<LCL	Stage 2B
K1409764-004	14346194	EPA6020	N	Soil	Antimony	0.010	0.050	1.55	mg/kg	J	MS<LCL	Stage 2B
K1409764-005	14346196	EPA6020	N	Soil	Antimony	0.010	0.048	4.49	mg/kg	J	MS<LCL	Stage 2B
K1409764-006	14346197	EPA6020	N	Soil	Antimony	0.010	0.050	5.78	mg/kg	J	MS<LCL	Stage 2B
K1409764-007	14346198	EPA6020	N	Soil	Antimony	0.010	0.050	4.3	mg/kg	J	MS<LCL	Stage 2B
K1409764-008	14346205	EPA6020	N	Soil	Antimony	0.010	0.049	0.407	mg/kg	J	MS<LCL	Stage 2B
K1409764-009	14346206	EPA6020	N	Soil	Antimony	0.010	0.050	0.479	mg/kg	J	MS<LCL	Stage 2B
K1409764-010	14346207	EPA6020	N	Soil	Antimony	0.010	0.050	0.439	mg/kg	J	MS<LCL	Stage 2B
K1409764-011	14346209	EPA6020	N	Soil	Antimony	0.010	0.051	1.19	mg/kg	J	MS<LCL	Stage 2B
K1409764-012	14346210	EPA6020	N	Soil	Antimony	0.010	0.050	1.09	mg/kg	J	MS<LCL	Stage 2B
K1409764-013	14346211	EPA6020	N	Soil	Antimony	0.010	0.051	1.1	mg/kg	J	MS<LCL	Stage 2B
K1409764-014	14346212	EPA6020	N	Soil	Antimony	0.010	0.050	1.06	mg/kg	J	MS<LCL	Stage 2B
K1409764-015	14346213	EPA6020	N	Soil	Antimony	0.010	0.051	1.99	mg/kg	J	MS<LCL	Stage 2B
K1409764-016	14346214	EPA6020	N	Soil	Antimony	0.010	0.051	1.06	mg/kg	J	MS<LCL	Stage 2B
K1409764-017	14346215	EPA6020	N	Soil	Antimony	0.010	0.052	1.99	mg/kg	J	MS<LCL	Stage 2B
K1409764-018	14346216	EPA6020	N	Soil	Antimony	0.010	0.051	1.46	mg/kg	J	MS<LCL	Stage 2B
K1409764-019	14346217	EPA6020	N	Soil	Antimony	0.010	0.051	1.54	mg/kg	J	MS<LCL	Stage 2B
K1409764-020	14346218	EPA6020	N	Soil	Antimony	0.010	0.051	1.4	mg/kg	J	MS<LCL	Stage 2B
K1409765-001	14346219	EPA6020	N	Soil	Antimony	0.008	0.041	1.25	mg/kg	J	MS<LCL	Stage 2B
K1409765-002	14356226	EPA6020	N	Soil	Antimony	0.008	0.041	1.76	mg/kg	J	MS<LCL	Stage 2B
K1409765-003	14356227	EPA6020	N	Soil	Antimony	0.009	0.043	1.83	mg/kg	J	MS<LCL	Stage 2B
K1409765-004	14356228	EPA6020	N	Soil	Antimony	0.009	0.044	1.67	mg/kg	J	MS<LCL	Stage 2B
K1409765-005	14356229	EPA6020	N	Soil	Antimony	0.010	0.050	3.11	mg/kg	J	MS<LCL	Stage 2B
K1409765-006	14356230	EPA6020	N	Soil	Antimony	0.010	0.049	2.68	mg/kg	J	MS<LCL	Stage 2B
K1409765-007	14356231	EPA6020	N	Soil	Antimony	0.009	0.046	2.83	mg/kg	J	MS<LCL	Stage 2B
K1409765-008	14356238	EPA6020	N	Soil	Antimony	0.010	0.048	1.37	mg/kg	J	MS<LCL	Stage 2B
K1409765-009	14356239	EPA6020	N	Soil	Antimony	0.010	0.048	1.62	mg/kg	J	MS<LCL	Stage 2B
K1409765-010	14356240	EPA6020	N	Soil	Antimony	0.010	0.048	1.31	mg/kg	J	MS<LCL	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1409765-011	14356245	EPA6020	N	Soil	Antimony	0.010	0.048	0.887	mg/kg	J	MS<LCL	Stage 2B
K1409765-012	14356246	EPA6020	N	Soil	Antimony	0.009	0.047	0.916	mg/kg	J	MS<LCL	Stage 2B
K1409765-013	14356247	EPA6020	N	Soil	Antimony	0.009	0.047	0.864	mg/kg	J	MS<LCL	Stage 2B
K1409765-014	14356248	EPA6020	N	Soil	Antimony	0.010	0.048	1.57	mg/kg	J	MS<LCL	Stage 2B
K1409765-015	14356249	EPA6020	N	Soil	Antimony	0.010	0.048	1.78	mg/kg	J	MS<LCL	Stage 2B
K1409765-016	14356250	EPA6020	N	Soil	Antimony	0.010	0.048	1.75	mg/kg	J	MS<LCL	Stage 2B
K1409765-017	14356258	EPA6020	N	Soil	Antimony	0.010	0.048	2.5	mg/kg	J	MS<LCL	Stage 2B
K1409765-018	14356259	EPA6020	N	Soil	Antimony	0.010	0.048	2.59	mg/kg	J	MS<LCL	Stage 2B
K1409765-019	14356260	EPA6020	N	Soil	Antimony	0.010	0.048	3.25	mg/kg	J	MS<LCL	Stage 2B
K1409765-020	14356261	EPA6020	N	Soil	Antimony	0.010	0.049	4.15	mg/kg	J	MS<LCL	Stage 2B
K1409771-001	14356262	EPA6020	N	Soil	Antimony	0.009	0.043	4.23	mg/kg	J	MS<LCL	Stage 2B
K1409771-002	14356263	EPA6020	N	Soil	Antimony	0.009	0.045	3.31	mg/kg	J	MS<LCL	Stage 2B
K1409771-003	14356264	EPA6020	N	Soil	Antimony	0.010	0.048	2.12	mg/kg	J	MS<LCL	Stage 2B
K1409771-004	14356265	EPA6020	N	Soil	Antimony	0.009	0.044	0.782	mg/kg	J	MS<LCL	Stage 2B
K1409771-005	14356266	EPA6020	N	Soil	Antimony	0.009	0.043	0.727	mg/kg	J	MS<LCL	Stage 2B
K1409771-006	14356267	EPA6020	N	Soil	Antimony	0.009	0.047	0.684	mg/kg	J	MS<LCL	Stage 2B
K1409771-007	14356277	EPA6020	N	Soil	Antimony	0.009	0.044	1.06	mg/kg	J	MS<LCL	Stage 2B
K1409771-008	14356278	EPA6020	N	Soil	Antimony	0.010	0.048	0.971	mg/kg	J	MS<LCL	Stage 2B
K1409771-009	14356279	EPA6020	N	Soil	Antimony	0.008	0.042	1.02	mg/kg	J	MS<LCL	Stage 2B
K1409771-010	14356280	EPA6020	N	Soil	Antimony	0.008	0.041	1.97	mg/kg	J	MS<LCL	Stage 2B
K1409771-011	14356281	EPA6020	N	Soil	Antimony	0.009	0.043	1.59	mg/kg	J	MS<LCL	Stage 2B
K1409771-012	14356282	EPA6020	N	Soil	Antimony	0.008	0.041	1.56	mg/kg	J	MS<LCL	Stage 2B
K1409771-013	14356283	EPA6020	N	Soil	Antimony	0.008	0.041	0.763	mg/kg	J	MS<LCL	Stage 2B
K1409771-014	14356284	EPA6020	N	Soil	Antimony	0.008	0.041	0.468	mg/kg	J	MS<LCL	Stage 2B
K1409771-015	14356285	EPA6020	N	Soil	Antimony	0.009	0.043	0.539	mg/kg	J	MS<LCL	Stage 2B
K1409771-016	14356286	EPA6020	N	Soil	Antimony	0.009	0.044	0.465	mg/kg	J	MS<LCL	Stage 2B
K1409771-017	14356288	EPA6020	N	Soil	Antimony	0.008	0.042	1.23	mg/kg	J	MS<LCL	Stage 2B
K1409771-018	14356294	EPA6020	N	Soil	Antimony	0.009	0.043	1.5	mg/kg	J	MS<LCL	Stage 2B
K1409771-019	14356295	EPA6020	N	Soil	Antimony	0.009	0.045	1.7	mg/kg	J	MS<LCL	Stage 2B
K1409772-001	14356296	EPA6020	N	Soil	Antimony	0.009	0.043	4.57	mg/kg	J	MS<LCL	Stage 2B
K1409772-002	14356297	EPA6020	N	Soil	Antimony	0.008	0.041	1.3	mg/kg	J	MS<LCL	Stage 2B
K1409772-003	14356298	EPA6020	N	Soil	Antimony	0.009	0.044	1.4	mg/kg	J	MS<LCL	Stage 2B
K1409772-004	14356299	EPA6020	N	Soil	Antimony	0.009	0.044	1.61	mg/kg	J	MS<LCL	Stage 2B
K1409772-005	14366301	EPA6020	N	Soil	Antimony	0.009	0.045	1.23	mg/kg	J	MS<LCL	Stage 2B
K1409772-006	14366302	EPA6020	N	Soil	Antimony	0.009	0.046	1.2	mg/kg	J	MS<LCL	Stage 2B
K1409772-007	14366303	EPA6020	N	Soil	Antimony	0.009	0.043	1.13	mg/kg	J	MS<LCL	Stage 2B
K1409772-008	14366304	EPA6020	N	Soil	Antimony	0.009	0.044	4.04	mg/kg	J	MS<LCL	Stage 2B
K1409772-009	14366305	EPA6020	N	Soil	Antimony	0.008	0.041	1.96	mg/kg	J	MS<LCL	Stage 2B
K1409772-010	14366306	EPA6020	N	Soil	Antimony	0.009	0.043	2.03	mg/kg	J	MS<LCL	Stage 2B
K1409772-011	14366307	EPA6020	N	Soil	Antimony	0.009	0.044	1.98	mg/kg	J	MS<LCL	Stage 2B
K1409772-012	14366308	EPA6020	N	Soil	Antimony	0.009	0.044	1.17	mg/kg	J	MS<LCL	Stage 2B
K1409772-013	14366309	EPA6020	N	Soil	Antimony	0.009	0.045	1.18	mg/kg	J	MS<LCL	Stage 2B
K1409772-014	14366311	EPA6020	N	Soil	Antimony	0.008	0.041	0.869	mg/kg	J	MS<LCL	Stage 2B
K1409772-015	14366312	EPA6020	N	Soil	Antimony	0.009	0.044	1.18	mg/kg	J	MS<LCL	Stage 2B
K1409772-016	14366313	EPA6020	N	Soil	Antimony	0.009	0.043	1.14	mg/kg	J	MS<LCL	Stage 2B
K1409772-017	14366314	EPA6020	N	Soil	Antimony	0.008	0.042	1.28	mg/kg	J	MS<LCL	Stage 2B
K1409773-001	14346186	EPA6020	N	Soil	Antimony	0.009	0.043	8.28	mg/kg	J	MS<LCL	Stage 2B
K1409773-002	14346187	EPA6020	N	Soil	Antimony	0.009	0.043	5.41	mg/kg	J	MS<LCL	Stage 2B
K1409773-003	14356241	EPA6020	N	Soil	Antimony	0.009	0.044	6.12	mg/kg	J	MS<LCL	Stage 2B
K1409773-004	14356242	EPA6020	N	Soil	Antimony	0.008	0.042	2.3	mg/kg	J	MS<LCL	Stage 2B
K1409773-005	14356243	EPA6020	N	Soil	Antimony	0.008	0.042	2.11	mg/kg	J	MS<LCL	Stage 2B
K1409773-006	14346276	EPA6020	N	Soil	Antimony	0.009	0.043	2.1	mg/kg	J	MS<LCL	Stage 2B
K1409777-001	14366315	EPA6020	N	Soil	Antimony	0.010	0.049	4.08	mg/kg	J	MS<LCL	Stage 4
K1409777-002	14366316	EPA6020	N	Soil	Antimony	0.010	0.050	3.77	mg/kg	J	MS<LCL	Stage 4
K1409777-003	14366317	EPA6020	N	Soil	Antimony	0.010	0.050	3.92	mg/kg	J	MS<LCL	Stage 4
K1409777-004	14366324	EPA6020	N	Soil	Antimony	0.009	0.045	0.965	mg/kg	J	MS<LCL	Stage 4
K1409777-005	14366325	EPA6020	N	Soil	Antimony	0.010	0.048	1.03	mg/kg	J	MS<LCL	Stage 4
K1409777-006	14366326	EPA6020	N	Soil	Antimony	0.010	0.048	1.01	mg/kg	J	MS<LCL	Stage 4
K1409777-007	14366333	EPA6020	N	Soil	Antimony	0.010	0.050	1.31	mg/kg	J	MS<LCL	Stage 4
K1409777-008	14366334	EPA6020	N	Soil	Antimony	0.010	0.048	0.531	mg/kg	J	MS<LCL	Stage 4
K1409777-009	14366335	EPA6020	N	Soil	Antimony	0.010	0.049	0.779	mg/kg	J	MS<LCL	Stage 4
K1409777-010	14366336	EPA6020	N	Soil	Antimony	0.009	0.046	1	mg/kg	J	MS<LCL	Stage 4
K1409777-011	14366337	EPA6020	N	Soil	Antimony	0.010	0.048	0.804	mg/kg	J	MS<LCL	Stage 4
K1409777-012	14366339	EPA6020	N	Soil	Antimony	0.010	0.049	1.26	mg/kg	J	MS<LCL	Stage 4
K1409777-013	14366340	EPA6020	N	Soil	Antimony	0.010	0.052	4.54	mg/kg	J	MS<LCL	Stage 4
K1409777-014	14366341	EPA6020	N	Soil	Antimony	0.010	0.051	2.34	mg/kg	J	MS<LCL	Stage 4
K1409777-015	14366342	EPA6020	N	Soil	Antimony	0.010	0.051	2.69	mg/kg	J	MS<LCL	Stage 4
K1409777-016	14366348	EPA6020	N	Soil	Antimony	0.010	0.051	4.69	mg/kg	J	MS<LCL	Stage 4
K1409790-001	14346165	EPA6020	N	Soil	Antimony	0.009	0.046	1.26	mg/kg	J	MS<LCL	Stage 2B
K1409790-002	14346166	EPA6020	N	Soil	Antimony	0.010	0.049	0.872	mg/kg	J	MS<LCL	Stage 2B
K1409790-003	14346167	EPA6020	N	Soil	Antimony	0.009	0.047	0.631	mg/kg	J	MS<LCL	Stage 2B
K1409790-004	14346168	EPA6020	N	Soil	Antimony	0.009	0.045	0.692	mg/kg	J	MS<LCL	Stage 2B
K1409790-005	14346169	EPA6020	FD	Soil	Antimony	0.009	0.046	0.732	mg/kg	J	MS<LCL	Stage 2B
K1409790-006	14346170	EPA6020	N	Soil	Antimony	0.009	0.047	0.358	mg/kg	J	MS<LCL	Stage 2B
K1409790-007	14346180	EPA6020	N	Soil	Antimony	0.009	0.047	0.66	mg/kg	J	MS<LCL	Stage 2B
K1409790-008	14346181	EPA6020	N	Soil	Antimony	0.009	0.047	0.719	mg/kg	J	MS<LCL	Stage 2B
K1409790-009	14346182	EPA6020	N	Soil	Antimony	0.009	0.047	2.34	mg/kg	J	MS<LCL	Stage 2B
K1409790-010	14346183	EPA6020	N	Soil	Antimony	0.010	0.048	1.74	mg/kg	J	MS<LCL	Stage 2B
K1409790-011	14346184	EPA6020	N	Soil	Antimony	0.009	0.047	0.95	mg/kg	J	MS<LCL	Stage 2B
K1409790-012	14346185	EPA6020	FD	Soil	Antimony	0.009	0.047	1.26	mg/kg	J	MS<LCL	Stage 2B
K1409790-013	14346188	EPA6020	N	Soil	Antimony	0.009	0.046	2.02	mg/kg	J	MS<LCL	Stage 2B
K1409790-014	14346189	EPA6020	N	Soil	Antimony	0.010	0.048	1.07	mg/kg	J	MS<LCL	Stage 2B
K1409790-015	14346190	EPA6020	N	Soil	Antimony	0.009	0.047	6.36	mg/kg	J	MS<LCL	Stage 2B
K1409790-016	14346191	EPA6020	FD	Soil	Antimony	0.009	0.047	6.62	mg/kg	J	MS<LCL	Stage 2B
K1409790-017	14346192	EPA6020	N	Soil	Antimony	0.009	0.045	2.68	mg/kg	J	MS<LCL	Stage 2B
K1409790-018	14346193	EPA6020	N	Soil	Antimony	0.009	0.047	1.43	mg/kg	J	MS<LCL	Stage 2B
K1409790-019	14346199	EPA6020	N	Soil	Antimony	0.010	0.048	0.266	mg/kg	J	MS<LCL	Stage 2B
K1409790-020	14346200	EPA6020	N	Soil	Antimony	0.009	0.047	0.874	mg/kg	J	MS<LCL	Stage 2B
K1409793-001	14346201	EPA6020	N	Soil	Antimony	0.008	0.042	0.434	mg/kg	J	MS<LCL	Stage 2B
K1409793-002	14346202	EPA6020	FD	Soil	Antimony	0.008	0.041	0.445	mg/kg	J	MS<LCL	Stage 2B
K1409793-003	14346203	EPA6020	N	Soil	Antimony	0.008	0.041	0.562	mg/kg	J	MS<LCL	Stage 2B
K1409793-004	14346204	EPA6020	N	Soil	Antimony	0.008	0.042	0.339	mg/kg	J	MS<LCL	Stage 2B
K1409793-005	14356221	EPA6020	N	Soil	Antimony	0.009	0.043	2.85	mg/kg	J	MS<LCL	Stage 2B
K1409793-006	14356222	EPA6020	N	Soil	Antimony	0.008	0.041	0.97	mg/kg	J	MS<LCL	Stage 2B
K1409793-007	14356223	EPA6020	N	Soil	Antimony	0.009	0.044	1.64	mg/kg	J	MS<LCL	Stage 2B
K1409793-008	14356224	EPA6020	N	Soil	Antimony	0.008	0.042	2.53	mg/kg	J	MS<LCL	Stage 2B
K1409793-009	14356225	EPA6020	N	Soil	Antimony	0.008	0.042	1.47	mg/kg	J	MS<LCL	Stage 2B
K1409793-010	14356232	EPA6020	N	Soil	Antimony	0.008	0.041	2.49	mg/kg	J	MS<LCL	Stage 2B
K1409793-011	14356233	EPA6020	N	Soil	Antimony	0.008	0.042	3.98	mg/kg	J	MS<LCL	Stage 2B
K1409793-012	14356234	EPA6020	N	Soil	Antimony	0.009	0.044	5.45	mg/kg	J	MS<LCL	Stage 2B
K1409793-013	14356235	EPA6020	N	Soil	Antimony	0.008	0.041	0.959	mg/kg	J	MS<LCL	Stage 2B
K1409793-014	14356236	EPA6020	N	Soil	Antimony	0.008	0.042	1.69	mg/kg	J	MS<LCL	Stage 2B
K1409793-015	14356251	EPA6020	N	Soil	Antimony	0.009	0.044	0.143	mg/kg	J	MS<LCL	Stage 2B
K1409793-016	14356252	EPA6020	N	Soil	Antimony	0.009	0.045	0.233	mg/kg	J	MS<LCL	Stage 2B
K1409793-017	14356253	EPA6020	N	Soil	Antimony	0.009	0.043	1.79	mg/kg	J	MS<LCL	Stage 2B
K1409793-018	14356254	EPA6020	N	Soil	Antimony	0.009	0.043	2.18	mg/kg	J	MS<LCL	Stage 2B
K1409793-019	14356255	EPA6020	FD	Soil	Antimony	0.009	0.043	2.21	mg/kg	J	MS<LCL	Stage 2B
K1409793-020	14356256	EPA6020	N	Soil	Antimony	0.009	0.043	4.77	mg/kg	J	MS<LCL	Stage 2B
K1409795-001	14356268	EPA6020	N	Soil	Antimony	0.009	0.046	1.05	mg/kg	J	MS<LCL	Stage 2B
K1409795-002	14356269	EPA6020	N	Soil	Antimony	0.009	0.043	1.08	mg/kg	J	MS<LCL	Stage 2B
K1409795-003	14356270	EPA6020	N	Soil	Antimony	0.008	0.042	0.579	mg/kg	J	MS<LCL	Stage 2B
K1409795-004	14356271	EPA6020	N	Soil	Antimony	0.009	0.043	0.549	mg/kg	J	MS<LCL	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1409795-005	14356272	EPA6020	N	Soil	Antimony	0.009	0.044	0.577	mg/kg	J	MS<LCL	Stage 2B
K1409795-006	14356273	EPA6020	FD	Soil	Antimony	0.010	0.048	0.681	mg/kg	J	MS<LCL	Stage 2B
K1409795-007	14356289	EPA6020	N	Soil	Antimony	0.008	0.041	1.05	mg/kg	J	MS<LCL	Stage 2B
K1409795-008	14356290	EPA6020	N	Soil	Antimony	0.009	0.044	1.6	mg/kg	J	MS<LCL	Stage 2B
K1409795-009	14356291	EPA6020	N	Soil	Antimony	0.009	0.044	1.19	mg/kg	J	MS<LCL	Stage 2B
K1409795-010	14356292	EPA6020	N	Soil	Antimony	0.008	0.041	1.51	mg/kg	J	MS<LCL	Stage 2B
K1409795-011	14356293	EPA6020	N	Soil	Antimony	0.008	0.042	1.67	mg/kg	J	MS<LCL	Stage 2B
K1409795-012	14366318	EPA6020	N	Soil	Antimony	0.009	0.046	5.68	mg/kg	J	MS<LCL	Stage 2B
K1409795-013	14366319	EPA6020	N	Soil	Antimony	0.009	0.044	6.81	mg/kg	J	MS<LCL	Stage 2B
K1409795-014	14366320	EPA6020	N	Soil	Antimony	0.009	0.043	3.62	mg/kg	J	MS<LCL	Stage 2B
K1409795-015	14366321	EPA6020	N	Soil	Antimony	0.008	0.042	5.48	mg/kg	J	MS<LCL	Stage 2B
K1409795-016	14366322	EPA6020	N	Soil	Antimony	0.009	0.047	4.03	mg/kg	J	MS<LCL	Stage 2B
K1409795-017	14366327	EPA6020	N	Soil	Antimony	0.008	0.041	0.364	mg/kg	J	MS<LCL	Stage 2B
K1409795-018	14366328	EPA6020	N	Soil	Antimony	0.009	0.044	1.93	mg/kg	J	MS<LCL	Stage 2B
K1409795-019	14366329	EPA6020	N	Soil	Antimony	0.009	0.041	0.364	mg/kg	J	MS<LCL	Stage 2B
K1409795-020	14366330	EPA6020	FD	Soil	Antimony	0.009	0.045	0.407	mg/kg	J	MS<LCL	Stage 2B
K1409796-001	14366331	EPA6020	N	Soil	Antimony	0.010	0.048	0.588	mg/kg	J	MS<LCL	Stage 2B
K1409796-002	14366332	EPA6020	N	Soil	Antimony	0.010	0.048	1.13	mg/kg	J	MS<LCL	Stage 2B
K1409796-003	14366343	EPA6020	N	Soil	Antimony	0.010	0.049	3.09	mg/kg	J	MS<LCL	Stage 2B
K1409796-004	14366344	EPA6020	N	Soil	Antimony	0.010	0.049	1.98	mg/kg	J	MS<LCL	Stage 2B
K1409796-005	14366345	EPA6020	N	Soil	Antimony	0.010	0.049	2.69	mg/kg	J	MS<LCL	Stage 2B
K1409796-006	14366346	EPA6020	N	Soil	Antimony	0.010	0.049	2.7	mg/kg	J	MS<LCL	Stage 2B
K1409796-007	14366347	EPA6020	N	Soil	Antimony	0.010	0.048	1.13	mg/kg	J	MS<LCL	Stage 2B
K1410290-001	14366350	EPA6020	N	Soil	Antimony	0.010	0.050	4.08	mg/kg	J	MS<LCL	Stage 2B
K1410290-002	14366357	EPA6020	N	Soil	Antimony	0.010	0.051	7.03	mg/kg	J	MS<LCL	Stage 2B
K1410290-003	14366364	EPA6020	N	Soil	Antimony	0.010	0.050	6.33	mg/kg	J	MS<LCL	Stage 2B
K1410290-004	14366371	EPA6020	N	Soil	Antimony	0.010	0.049	5.75	mg/kg	J	MS<LCL	Stage 2B
K1410290-005	14366372	EPA6020	N	Soil	Antimony	0.010	0.049	5.61	mg/kg	J	MS<LCL	Stage 2B
K1410290-006	14366373	EPA6020	N	Soil	Antimony	0.010	0.049	5.78	mg/kg	J	MS<LCL	Stage 2B
K1410290-007	14366375	EPA6020	N	Soil	Antimony	0.010	0.050	3.87	mg/kg	J	MS<LCL	Stage 2B
K1410290-008	14366376	EPA6020	N	Soil	Antimony	0.010	0.050	4.29	mg/kg	J	MS<LCL	Stage 2B
K1410290-009	14366377	EPA6020	N	Soil	Antimony	0.010	0.050	4.02	mg/kg	J	MS<LCL	Stage 2B
K1410290-010	14366378	EPA6020	N	Soil	Antimony	0.010	0.050	4.61	mg/kg	J	MS<LCL	Stage 2B
K1410290-011	14366379	EPA6020	N	Soil	Antimony	0.010	0.049	4.58	mg/kg	J	MS<LCL	Stage 2B
K1410290-012	14366380	EPA6020	N	Soil	Antimony	0.010	0.050	5.23	mg/kg	J	MS<LCL	Stage 2B
K1410290-013	14366381	EPA6020	N	Soil	Antimony	0.010	0.048	3.15	mg/kg	J	MS<LCL	Stage 2B
K1410290-014	14366382	EPA6020	N	Soil	Antimony	0.010	0.048	2.61	mg/kg	J	MS<LCL	Stage 2B
K1410290-015	14366389	EPA6020	N	Soil	Antimony	0.010	0.050	11.6	mg/kg	J	MS<LCL	Stage 2B
K1410290-016	14366390	EPA6020	N	Soil	Antimony	0.010	0.050	9.74	mg/kg	J	MS<LCL	Stage 2B
K1410290-017	14366391	EPA6020	N	Soil	Antimony	0.010	0.050	10.6	mg/kg	J	MS<LCL	Stage 2B
K1410290-018	14366398	EPA6020	N	Soil	Antimony	0.010	0.048	2.64	mg/kg	J	MS<LCL	Stage 2B
K1410290-019	14366399	EPA6020	N	Soil	Antimony	0.010	0.048	1.09	mg/kg	J	MS<LCL	Stage 2B
K1410291-001	14366404	EPA6020	N	Soil	Antimony	0.010	0.050	8.39	mg/kg	J	MS<LCL	Stage 2B
K1410291-002	14366405	EPA6020	N	Soil	Antimony	0.010	0.050	2.92	mg/kg	J	MS<LCL	Stage 2B
K1410291-003	14366406	EPA6020	N	Soil	Antimony	0.010	0.050	3.43	mg/kg	J	MS<LCL	Stage 2B
K1410291-004	14366407	EPA6020	N	Soil	Antimony	0.010	0.050	3.14	mg/kg	J	MS<LCL	Stage 2B
K1410291-005	14366409	EPA6020	N	Soil	Antimony	0.010	0.048	1.08	mg/kg	J	MS<LCL	Stage 2B
K1410291-006	14366410	EPA6020	N	Soil	Antimony	0.010	0.048	0.924	mg/kg	J	MS<LCL	Stage 2B
K1410291-007	14366411	EPA6020	N	Soil	Antimony	0.010	0.048	2.15	mg/kg	J	MS<LCL	Stage 2B
K1410291-008	14366412	EPA6020	N	Soil	Antimony	0.010	0.049	1.27	mg/kg	J	MS<LCL	Stage 2B
K1410291-009	14366413	EPA6020	N	Soil	Antimony	0.010	0.049	1.28	mg/kg	J	MS<LCL	Stage 2B
K1410291-010	14366414	EPA6020	N	Soil	Antimony	0.010	0.049	1.36	mg/kg	J	MS<LCL	Stage 2B
K1410291-011	14366415	EPA6020	N	Soil	Antimony	0.010	0.049	1.72	mg/kg	J	MS<LCL	Stage 2B
K1410291-012	14366416	EPA6020	N	Soil	Antimony	0.010	0.049	1.39	mg/kg	J	MS<LCL	Stage 2B
K1410291-013	14366418	EPA6020	N	Soil	Antimony	0.010	0.051	1.76	mg/kg	J	MS<LCL	Stage 2B
K1410291-014	14366419	EPA6020	N	Soil	Antimony	0.010	0.051	1.6	mg/kg	J	MS<LCL	Stage 2B
K1410291-015	14366420	EPA6020	N	Soil	Antimony	0.010	0.050	1.78	mg/kg	J	MS<LCL	Stage 2B
K1410291-016	14366421	EPA6020	N	Soil	Antimony	0.010	0.051	6.66	mg/kg	J	MS<LCL	Stage 2B
K1410291-017	14366422	EPA6020	N	Soil	Antimony	0.010	0.050	3.22	mg/kg	J	MS<LCL	Stage 2B
K1410291-018	14366428	EPA6020	N	Soil	Antimony	0.010	0.050	18	mg/kg	J	MS<LCL	Stage 2B
K1410291-019	14366429	EPA6020	N	Soil	Antimony	0.010	0.050	10	mg/kg	J	MS<LCL	Stage 2B
K1410291-020	14366430	EPA6020	N	Soil	Antimony	0.010	0.049	11.9	mg/kg	J	MS<LCL	Stage 2B
K1410292-001	14366445	EPA6020	N	Soil	Antimony	0.010	0.048	1.57	mg/kg	J	MS<LCL	Stage 2B
K1410292-002	14366451	EPA6020	N	Soil	Antimony	0.010	0.049	12.4	mg/kg	J	MS<LCL	Stage 2B
K1410292-003	14366452	EPA6020	N	Soil	Antimony	0.010	0.049	13.1	mg/kg	J	MS<LCL	Stage 2B
K1410292-004	14366453	EPA6020	N	Soil	Antimony	0.010	0.049	11	mg/kg	J	MS<LCL	Stage 2B
K1410292-005	14376464	EPA6020	N	Soil	Antimony	0.010	0.050	4.9	mg/kg	J	MS<LCL	Stage 2B
K1410292-006	14376465	EPA6020	N	Soil	Antimony	0.010	0.050	5.16	mg/kg	J	MS<LCL	Stage 2B
K1410292-007	14376466	EPA6020	N	Soil	Antimony	0.010	0.049	5.03	mg/kg	J	MS<LCL	Stage 2B
K1410292-008	14376467	EPA6020	N	Soil	Antimony	0.010	0.050	1.53	mg/kg	J	MS<LCL	Stage 2B
K1410292-009	14376468	EPA6020	N	Soil	Antimony	0.010	0.049	1.4	mg/kg	J	MS<LCL	Stage 2B
K1410292-010	14376469	EPA6020	N	Soil	Antimony	0.010	0.050	1.39	mg/kg	J	MS<LCL	Stage 2B
K1410292-011	14376476	EPA6020	N	Soil	Antimony	0.010	0.049	6.27	mg/kg	J	MS<LCL	Stage 2B
K1410292-012	14376481	EPA6020	N	Soil	Antimony	0.010	0.049	10.8	mg/kg	J	MS<LCL	Stage 2B
K1410292-013	14376482	EPA6020	N	Soil	Antimony	0.010	0.049	9.97	mg/kg	J	MS<LCL	Stage 2B
K1410292-014	14376483	EPA6020	N	Soil	Antimony	0.010	0.049	9.53	mg/kg	J	MS<LCL	Stage 2B
K1410292-015	14376490	EPA6020	N	Soil	Antimony	0.010	0.048	3.52	mg/kg	J	MS<LCL	Stage 2B
K1410292-016	14376491	EPA6020	N	Soil	Antimony	0.010	0.049	4.1	mg/kg	J	MS<LCL	Stage 2B
K1410292-017	14376492	EPA6020	N	Soil	Antimony	0.010	0.049	4.01	mg/kg	J	MS<LCL	Stage 2B
K1410292-018	14376493	EPA6020	N	Soil	Antimony	0.010	0.048	1.03	mg/kg	J	MS<LCL	Stage 2B
K1410292-019	14376494	EPA6020	N	Soil	Antimony	0.010	0.049	8.97	mg/kg	J	MS<LCL	Stage 2B
K1410292-020	14376495	EPA6020	N	Soil	Antimony	0.010	0.049	8.41	mg/kg	J	MS<LCL	Stage 2B
K1410293-001	14376497	EPA6020	N	Soil	Antimony	0.010	0.051	25.6	mg/kg	J	MS<LCL	Stage 2B
K1410293-002	14376498	EPA6020	N	Soil	Antimony	0.010	0.050	24.1	mg/kg	J	MS<LCL	Stage 2B
K1410293-003	14376499	EPA6020	N	Soil	Antimony	0.010	0.051	23.5	mg/kg	J	MS<LCL	Stage 2B
K1410293-004	14376500	EPA6020	N	Soil	Antimony	0.010	0.048	1.93	mg/kg	J	MS<LCL	Stage 2B
K1410293-005	14376501	EPA6020	N	Soil	Antimony	0.010	0.048	2.9	mg/kg	J	MS<LCL	Stage 2B
K1410293-006	14376502	EPA6020	N	Soil	Antimony	0.010	0.048	2.62	mg/kg	J	MS<LCL	Stage 2B
K1410293-007	14376503	EPA6020	N	Soil	Antimony	0.010	0.049	2.46	mg/kg	J	MS<LCL	Stage 2B
K1410293-008	14376510	EPA6020	N	Soil	Antimony	0.010	0.050	1.75	mg/kg	J	MS<LCL	Stage 2B
K1410293-009	14376518	EPA6020	N	Soil	Antimony	0.010	0.049	10.3	mg/kg	J	MS<LCL	Stage 2B
K1410293-010	14376522	EPA6020	N	Soil	Antimony	0.010	0.049	13.2	mg/kg	J	MS<LCL	Stage 2B
K1410293-011	14376523	EPA6020	N	Soil	Antimony	0.010	0.048	14.5	mg/kg	J	MS<LCL	Stage 2B
K1410293-012	14376531	EPA6020	N	Soil	Antimony	0.010	0.048	10.8	mg/kg	J	MS<LCL	Stage 2B
K1410293-013	14376542	EPA6020	N	Soil	Antimony	0.010	0.048	3.33	mg/kg	J	MS<LCL	Stage 2B
K1410293-014	14376543	EPA6020	N	Soil	Antimony	0.010	0.048	3.42	mg/kg	J	MS<LCL	Stage 2B
K1410293-015	14376544	EPA6020	N	Soil	Antimony	0.010	0.048	3.69	mg/kg	J	MS<LCL	Stage 2B
K1410293-016	14376545	EPA6020	N	Soil	Antimony	0.010	0.050	21.2	mg/kg	J	MS<LCL	Stage 2B
K1410293-017	14376546	EPA6020	N	Soil	Antimony	0.010	0.050	17.3	mg/kg	J	MS<LCL	Stage 2B
K1410293-018	14376547	EPA6020	N	Soil	Antimony	0.010	0.050	17.8	mg/kg	J	MS<LCL	Stage 2B
K1410293-019	14376554	EPA6020	N	Soil	Antimony	0.010	0.049	9.71	mg/kg	J	MS<LCL	Stage 2B
K1410293-020	14376556	EPA6020	N	Soil	Antimony	0.010	0.050	1.8	mg/kg	J	MS<LCL	Stage 2B
K1410296-001	14376557	EPA6020	N	Soil	Antimony	0.010	0.049	1.68	mg/kg	J	MS<LCL	Stage 2B
K1410296-002	14376558	EPA6020	N	Soil	Antimony	0.010	0.050	11.4	mg/kg	J	MS<LCL	Stage 2B
K1410296-003	14376559	EPA6020	N	Soil	Antimony	0.010	0.050	12.2	mg/kg	J	MS<LCL	Stage 2B
K1410296-004	14376560	EPA6020	N	Soil	Antimony	0.010	0.050	12.5	mg/kg	J	MS<LCL	Stage 2B
K1410296-005	14376581	EPA6020	N	Soil	Antimony	0.010	0.048	8.68	mg/kg	J	MS<LCL	Stage 2B
K1410296-006	14376582	EPA6020	N	Soil	Antimony	0.010	0.048	10	mg/kg	J	MS<LCL	Stage 2B
K1410296-007	14376583	EPA6020	N	Soil	Antimony	0.010	0.048	9.04	mg/kg	J	MS<LCL	Stage 2B
K1410296-008	14376584	EPA6020	N	Soil	Antimony	0.010	0.049	15.7	mg/kg	J	MS<LCL	Stage 2B
K1410296-009	14376585	EPA6020	N	Soil	Antimony	0.010	0.049	14.4	mg/kg	J	MS<LCL	Stage 2B
K1410296-010	14376586	EPA6020	N	Soil	Antimony	0.010	0.049	18.4	mg/kg	J	MS<LCL	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1410296-011	14376594	EPA6020	N	Soil	Antimony	0.010	0.050	15.7	mg/kg	J	MS<LCL	Stage 2B
K1410296-012	14376595	EPA6020	N	Soil	Antimony	0.010	0.048	6.25	mg/kg	J	MS<LCL	Stage 2B
K1410296-013	14376596	EPA6020	N	Soil	Antimony	0.010	0.049	6.84	mg/kg	J	MS<LCL	Stage 2B
K1410296-014	14376597	EPA6020	N	Soil	Antimony	0.010	0.048	7.14	mg/kg	J	MS<LCL	Stage 2B
K1410296-015	14376598	EPA6020	N	Soil	Antimony	0.010	0.048	7.41	mg/kg	J	MS<LCL	Stage 2B
K1410296-016	14376599	EPA6020	N	Soil	Antimony	0.010	0.048	6.69	mg/kg	J	MS<LCL	Stage 2B
K1410296-017	14376600	EPA6020	N	Soil	Antimony	0.010	0.048	6.86	mg/kg	J	MS<LCL	Stage 2B
K1410296-018	14376601	EPA6020	N	Soil	Antimony	0.010	0.050	24.3	mg/kg	J	MS<LCL	Stage 2B
K1410296-019	14376602	EPA6020	N	Soil	Antimony	0.010	0.050	21.3	mg/kg	J	MS<LCL	Stage 2B
K1410296-020	14376603	EPA6020	N	Soil	Antimony	0.010	0.049	23.4	mg/kg	J	MS<LCL	Stage 2B
K1410297-001	14366401	EPA6020	N	Soil	Antimony	0.010	0.048	7.88	mg/kg	J	MS<LCL	Stage 2B
K1410297-002	14366402	EPA6020	N	Soil	Antimony	0.010	0.048	10.5	mg/kg	J	MS<LCL	Stage 2B
K1410297-003	14366403	EPA6020	N	Soil	Antimony	0.010	0.048	9.41	mg/kg	J	MS<LCL	Stage 2B
K1410297-004	14366441	EPA6020	N	Soil	Antimony	0.010	0.048	5.24	mg/kg	J	MS<LCL	Stage 2B
K1410297-005	14366442	EPA6020	N	Soil	Antimony	0.010	0.048	8.67	mg/kg	J	MS<LCL	Stage 2B
K1410297-006	14366443	EPA6020	N	Soil	Antimony	0.010	0.048	7.04	mg/kg	J	MS<LCL	Stage 2B
K1410297-007	14366460	EPA6020	N	Soil	Antimony	0.010	0.048	2.52	mg/kg	J	MS<LCL	Stage 2B
K1410297-008	14366461	EPA6020	N	Soil	Antimony	0.009	0.047	2.18	mg/kg	J	MS<LCL	Stage 2B
K1410297-009	14366462	EPA6020	N	Soil	Antimony	0.009	0.047	2.35	mg/kg	J	MS<LCL	Stage 2B
K1410297-010	14376477	EPA6020	N	Soil	Antimony	0.010	0.048	53.4	mg/kg	J	MS<LCL	Stage 2B
K1410297-011	14376478	EPA6020	N	Soil	Antimony	0.009	0.047	45.2	mg/kg	J	MS<LCL	Stage 2B
K1410297-012	14376479	EPA6020	N	Soil	Antimony	0.009	0.047	47.2	mg/kg	J	MS<LCL	Stage 2B
K1410297-013	14376519	EPA6020	N	Soil	Antimony	0.010	0.048	4.03	mg/kg	J	MS<LCL	Stage 2B
K1410297-014	14376520	EPA6020	N	Soil	Antimony	0.010	0.048	2.87	mg/kg	J	MS<LCL	Stage 2B
K1410297-015	14376521	EPA6020	N	Soil	Antimony	0.010	0.048	2.72	mg/kg	J	MS<LCL	Stage 2B
K1410297-016	14376533	EPA6020	N	Soil	Antimony	0.010	0.048	4.94	mg/kg	J	MS<LCL	Stage 2B
K1410297-017	14376534	EPA6020	N	Soil	Antimony	0.010	0.048	3.94	mg/kg	J	MS<LCL	Stage 2B
K1410297-018	14376535	EPA6020	N	Soil	Antimony	0.010	0.048	3.98	mg/kg	J	MS<LCL	Stage 2B
K1410299-001	14376567	EPA6020	N	Soil	Antimony	0.010	0.048	14.8	mg/kg	J	MS<LCL	Stage 2B
K1410299-002	14376568	EPA6020	N	Soil	Antimony	0.010	0.049	12.8	mg/kg	J	MS<LCL	Stage 2B
K1410299-003	14376569	EPA6020	N	Soil	Antimony	0.010	0.049	13.6	mg/kg	J	MS<LCL	Stage 2B
K1410299-004	14376578	EPA6020	N	Soil	Antimony	0.010	0.049	3.52	mg/kg	J	MS<LCL	Stage 2B
K1410299-005	14376579	EPA6020	N	Soil	Antimony	0.010	0.049	3.66	mg/kg	J	MS<LCL	Stage 2B
K1410299-006	14376580	EPA6020	N	Soil	Antimony	0.010	0.049	3.09	mg/kg	J	MS<LCL	Stage 2B
K1410317-001	14366351	EPA6020	N	Soil	Antimony	0.010	0.050	4.16	mg/kg	J	MS<LCL	Stage 2B
K1410317-002	14366352	EPA6020	N	Soil	Antimony	0.010	0.049	2.3	mg/kg	J	MS<LCL	Stage 2B
K1410317-003	14366353	EPA6020	N	Soil	Antimony	0.010	0.052	2.29	mg/kg	J	MS<LCL	Stage 2B
K1410317-004	14366354	EPA6020	N	Soil	Antimony	0.010	0.051	3.9	mg/kg	J	MS<LCL	Stage 2B
K1410317-005	14366355	EPA6020	FD	Soil	Antimony	0.010	0.050	3.97	mg/kg	J	MS<LCL	Stage 2B
K1410317-006	14366356	EPA6020	N	Soil	Antimony	0.010	0.049	3.67	mg/kg	J	MS<LCL	Stage 2B
K1410317-007	14366358	EPA6020	N	Soil	Antimony	0.010	0.050	4.26	mg/kg	J	MS<LCL	Stage 2B
K1410317-008	14366359	EPA6020	N	Soil	Antimony	0.010	0.051	12.7	mg/kg	J	MS<LCL	Stage 2B
K1410317-009	14366360	EPA6020	N	Soil	Antimony	0.010	0.051	5.58	mg/kg	J	MS<LCL	Stage 2B
K1410317-010	14366361	EPA6020	N	Soil	Antimony	0.010	0.051	4.67	mg/kg	J	MS<LCL	Stage 2B
K1410317-011	14366362	EPA6020	FD	Soil	Antimony	0.010	0.051	5.08	mg/kg	J	MS<LCL	Stage 2B
K1410317-012	14366363	EPA6020	N	Soil	Antimony	0.010	0.050	3.19	mg/kg	J	MS<LCL	Stage 2B
K1410317-013	14366365	EPA6020	N	Soil	Antimony	0.010	0.050	5.62	mg/kg	J	MS<LCL	Stage 2B
K1410317-014	14366366	EPA6020	N	Soil	Antimony	0.010	0.050	3.82	mg/kg	J	MS<LCL	Stage 2B
K1410317-015	14366367	EPA6020	N	Soil	Antimony	0.010	0.050	2.88	mg/kg	J	MS<LCL	Stage 2B
K1410317-016	14366368	EPA6020	FD	Soil	Antimony	0.010	0.050	2.99	mg/kg	J	MS<LCL	Stage 2B
K1410317-017	14366369	EPA6020	N	Soil	Antimony	0.010	0.050	5.42	mg/kg	J	MS<LCL	Stage 2B
K1410317-018	14366370	EPA6020	N	Soil	Antimony	0.010	0.050	4.76	mg/kg	J	MS<LCL	Stage 2B
K1410317-019	14366384	EPA6020	N	Soil	Antimony	0.010	0.050	6.4	mg/kg	J	MS<LCL	Stage 2B
K1410317-020	14366385	EPA6020	N	Soil	Antimony	0.010	0.050	5.94	mg/kg	J	MS<LCL	Stage 2B
K1410319-001	14366386	EPA6020	N	Soil	Antimony	0.010	0.050	2.74	mg/kg	J	MS<LCL	Stage 2B
K1410319-002	14366387	EPA6020	N	Soil	Antimony	0.010	0.052	5.3	mg/kg	J	MS<LCL	Stage 2B
K1410319-003	14366388	EPA6020	N	Soil	Antimony	0.010	0.050	4.71	mg/kg	J	MS<LCL	Stage 2B
K1410319-004	14366392	EPA6020	N	Soil	Antimony	0.010	0.048	1.69	mg/kg	J	MS<LCL	Stage 2B
K1410319-005	14366393	EPA6020	N	Soil	Antimony	0.010	0.048	1.14	mg/kg	J	MS<LCL	Stage 2B
K1410319-006	14366394	EPA6020	N	Soil	Antimony	0.010	0.048	6.28	mg/kg	J	MS<LCL	Stage 2B
K1410319-007	14366395	EPA6020	N	Soil	Antimony	0.010	0.048	1.81	mg/kg	J	MS<LCL	Stage 2B
K1410319-008	14366396	EPA6020	N	Soil	Antimony	0.010	0.048	1.14	mg/kg	J	MS<LCL	Stage 2B
K1410319-009	14366397	EPA6020	FD	Soil	Antimony	0.010	0.048	1.03	mg/kg	J	MS<LCL	Stage 2B
K1410319-010	14366423	EPA6020	N	Soil	Antimony	0.010	0.050	21.8	mg/kg	J	MS<LCL	Stage 2B
K1410319-011	14366424	EPA6020	N	Soil	Antimony	0.010	0.050	10.6	mg/kg	J	MS<LCL	Stage 2B
K1410319-012	14366425	EPA6020	N	Soil	Antimony	0.010	0.049	5.35	mg/kg	J	MS<LCL	Stage 2B
K1410319-013	14366426	EPA6020	N	Soil	Antimony	0.011	0.054	10.1	mg/kg	J	MS<LCL	Stage 2B
K1410319-014	14366427	EPA6020	N	Soil	Antimony	0.011	0.053	37	mg/kg	J	MS<LCL	Stage 2B
K1410319-015	14366435	EPA6020	N	Soil	Antimony	0.010	0.050	6.08	mg/kg	J	MS<LCL	Stage 2B
K1410319-016	14366436	EPA6020	N	Soil	Antimony	0.010	0.050	2.35	mg/kg	J	MS<LCL	Stage 2B
K1410319-017	14366437	EPA6020	N	Soil	Antimony	0.010	0.050	3.44	mg/kg	J	MS<LCL	Stage 2B
K1410319-018	14366438	EPA6020	N	Soil	Antimony	0.010	0.049	1.49	mg/kg	J	MS<LCL	Stage 2B
K1410319-019	14366439	EPA6020	N	Soil	Antimony	0.010	0.052	3.47	mg/kg	J	MS<LCL	Stage 2B
K1410319-020	14366440	EPA6020	FD	Soil	Antimony	0.010	0.051	3.67	mg/kg	J	MS<LCL	Stage 2B
K1410321-001	14366446	EPA6020	N	Soil	Antimony	0.010	0.048	1.13	mg/kg	J	MS<LCL	Stage 2B
K1410321-002	14366447	EPA6020	N	Soil	Antimony	0.010	0.048	0.992	mg/kg	J	MS<LCL	Stage 2B
K1410321-003	14366448	EPA6020	N	Soil	Antimony	0.010	0.048	2.47	mg/kg	J	MS<LCL	Stage 2B
K1410321-004	14366449	EPA6020	N	Soil	Antimony	0.010	0.048	1.64	mg/kg	J	MS<LCL	Stage 2B
K1410321-005	14366450	EPA6020	N	Soil	Antimony	0.010	0.049	1.46	mg/kg	J	MS<LCL	Stage 2B
K1410321-006	14366454	EPA6020	N	Soil	Antimony	0.010	0.049	8.25	mg/kg	J	MS<LCL	Stage 2B
K1410321-007	14366455	EPA6020	N	Soil	Antimony	0.010	0.049	13.5	mg/kg	J	MS<LCL	Stage 2B
K1410321-008	14366456	EPA6020	FD	Soil	Antimony	0.010	0.049	12.8	mg/kg	J	MS<LCL	Stage 2B
K1410321-009	14366457	EPA6020	N	Soil	Antimony	0.010	0.049	4.09	mg/kg	J	MS<LCL	Stage 2B
K1410321-010	14366458	EPA6020	N	Soil	Antimony	0.010	0.049	4.39	mg/kg	J	MS<LCL	Stage 2B
K1410321-011	14366459	EPA6020	N	Soil	Antimony	0.010	0.048	4.04	mg/kg	J	MS<LCL	Stage 2B
K1410321-012	14376587	EPA6020	N	Soil	Antimony	0.010	0.049	5.44	mg/kg	J	MS<LCL	Stage 2B
K1410321-013	14376588	EPA6020	N	Soil	Antimony	0.010	0.049	4.15	mg/kg	J	MS<LCL	Stage 2B
K1410321-014	14376589	EPA6020	N	Soil	Antimony	0.010	0.050	6.2	mg/kg	J	MS<LCL	Stage 2B
K1410321-015	14376590	EPA6020	FD	Soil	Antimony	0.010	0.049	6.26	mg/kg	J	MS<LCL	Stage 2B
K1410321-016	14376591	EPA6020	N	Soil	Antimony	0.010	0.049	2.17	mg/kg	J	MS<LCL	Stage 2B
K1410321-017	14376592	EPA6020	N	Soil	Antimony	0.010	0.051	6.45	mg/kg	J	MS<LCL	Stage 2B
K1410321-018	14376470	EPA6020	N	Soil	Antimony	0.010	0.050	6.22	mg/kg	J	MS<LCL	Stage 2B
K1410321-019	14376471	EPA6020	FD	Soil	Antimony	0.010	0.050	6.3	mg/kg	J	MS<LCL	Stage 2B
K1410321-020	14376472	EPA6020	N	Soil	Antimony	0.010	0.050	4.47	mg/kg	J	MS<LCL	Stage 2B
K1410323-001	14376473	EPA6020	N	Soil	Antimony	0.010	0.051	6.89	mg/kg	J	MS<LCL	Stage 2B
K1410323-002	14376474	EPA6020	N	Soil	Antimony	0.010	0.049	6.8	mg/kg	J	MS<LCL	Stage 2B
K1410323-003	14376475	EPA6020	N	Soil	Antimony	0.010	0.050	3.17	mg/kg	J	MS<LCL	Stage 2B
K1410323-004	14376484	EPA6020	N	Soil	Antimony	0.010	0.050	6.15	mg/kg	J	MS<LCL	Stage 2B
K1410323-005	14376485	EPA6020	N	Soil	Antimony	0.010	0.051	4.55	mg/kg	J	MS<LCL	Stage 2B
K1410323-006	14376486	EPA6020	FD	Soil	Antimony	0.010	0.052	4.89	mg/kg	J	MS<LCL	Stage 2B
K1410323-007	14376487	EPA6020	N	Soil	Antimony	0.010	0.049	8.88	mg/kg	J	MS<LCL	Stage 2B
K1410323-008	14376488	EPA6020	N	Soil	Antimony	0.010	0.049	2.11	mg/kg	J	MS<LCL	Stage 2B
K1410323-009	14376489	EPA6020	N	Soil	Antimony	0.010	0.049	2.25	mg/kg	J	MS<LCL	Stage 2B
K1410323-010	14376504	EPA6020	N	Soil	Antimony	0.010	0.048	0.328	mg/kg	J	MS<LCL	Stage 2B
K1410323-011	14376505	EPA6020	N	Soil	Antimony	0.010	0.048	0.189	mg/kg	J	MS<LCL	Stage 2B
K1410323-012	14376506	EPA6020	N	Soil	Antimony	0.010	0.048	0.258	mg/kg	J	MS<LCL	Stage 2B
K1410323-013	14376507	EPA6020	FD	Soil	Antimony	0.010	0.049	0.271	mg/kg	J	MS<LCL	Stage 2B
K1410323-014	14376508	EPA6020	N	Soil	Antimony	0.010	0.049	0.222	mg/kg	J	MS<LCL	Stage 2B
K1410323-015	14376509	EPA6020	N	Soil	Antimony	0.010	0.049	5.49	mg/kg	J	MS<LCL	Stage 2B
K1410323-016	14376512	EPA6020	N	Soil	Antimony	0.010	0.048	4.19	mg/kg	J	MS<LCL	Stage 2B
K1410323-017	14376513	EPA6020	N	Soil	Antimony	0.010	0.048	2.25	mg/kg	J	MS<LCL	Stage 2B
K1410323-018	14376514	EPA6020	N	Soil	Antimony	0.010	0.051	19.2	mg/kg	J	MS<LCL	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1410323-019	14376515	EPA6020	FD	Soil	Antimony	0.010	0.052	17.8	mg/kg	J	MS<LCL	Stage 2B
K1410323-020	14376516	EPA6020	N	Soil	Antimony	0.010	0.050	9.42	mg/kg	J	MS<LCL	Stage 2B
K1410325-001	14376517	EPA6020	N	Soil	Antimony	0.010	0.050	14.6	mg/kg	J	MS<LCL	Stage 2B
K1410325-002	14376525	EPA6020	N	Soil	Antimony	0.010	0.048	2.09	mg/kg	J	MS<LCL	Stage 2B
K1410325-003	14376526	EPA6020	N	Soil	Antimony	0.010	0.049	6.96	mg/kg	J	MS<LCL	Stage 2B
K1410325-004	14376527	EPA6020	N	Soil	Antimony	0.010	0.048	4.12	mg/kg	J	MS<LCL	Stage 2B
K1410325-005	14376528	EPA6020	FD	Soil	Antimony	0.010	0.048	3.98	mg/kg	J	MS<LCL	Stage 2B
K1410325-006	14376529	EPA6020	N	Soil	Antimony	0.010	0.049	8.3	mg/kg	J	MS<LCL	Stage 2B
K1410325-007	14376530	EPA6020	N	Soil	Antimony	0.010	0.050	16.6	mg/kg	J	MS<LCL	Stage 2B
K1410325-008	14376536	EPA6020	N	Soil	Antimony	0.010	0.048	3.75	mg/kg	J	MS<LCL	Stage 2B
K1410325-009	14376537	EPA6020	N	Soil	Antimony	0.009	0.047	8.95	mg/kg	J	MS<LCL	Stage 2B
K1410325-010	14376538	EPA6020	N	Soil	Antimony	0.010	0.048	6.45	mg/kg	J	MS<LCL	Stage 2B
K1410325-011	14376539	EPA6020	N	Soil	Antimony	0.010	0.048	5.76	mg/kg	J	MS<LCL	Stage 2B
K1410325-012	14376540	EPA6020	N	Soil	Antimony	0.010	0.048	3.93	mg/kg	J	MS<LCL	Stage 2B
K1410325-013	14376541	EPA6020	FD	Soil	Antimony	0.010	0.048	3.84	mg/kg	J	MS<LCL	Stage 2B
K1410325-014	14376548	EPA6020	N	Soil	Antimony	0.010	0.050	15.7	mg/kg	J	MS<LCL	Stage 2B
K1410325-015	14376549	EPA6020	N	Soil	Antimony	0.010	0.049	10.2	mg/kg	J	MS<LCL	Stage 2B
K1410325-016	14376550	EPA6020	FD	Soil	Antimony	0.010	0.050	9.94	mg/kg	J	MS<LCL	Stage 2B
K1410325-017	14376551	EPA6020	N	Soil	Antimony	0.010	0.050	4.19	mg/kg	J	MS<LCL	Stage 2B
K1410325-018	14376552	EPA6020	N	Soil	Antimony	0.010	0.050	5.15	mg/kg	J	MS<LCL	Stage 2B
K1410325-019	14376553	EPA6020	N	Soil	Antimony	0.010	0.050	2.18	mg/kg	J	MS<LCL	Stage 2B
K1410325-020	14376561	EPA6020	N	Soil	Antimony	0.010	0.050	24.8	mg/kg	J	MS<LCL	Stage 2B
K1410327-001	14376562	EPA6020	N	Soil	Antimony	0.010	0.050	10.2	mg/kg	J	MS<LCL	Stage 2B
K1410327-002	14376563	EPA6020	N	Soil	Antimony	0.010	0.050	10.1	mg/kg	J	MS<LCL	Stage 2B
K1410327-003	14376564	EPA6020	FD	Soil	Antimony	0.010	0.050	10.1	mg/kg	J	MS<LCL	Stage 2B
K1410327-004	14376565	EPA6020	N	Soil	Antimony	0.010	0.051	14.5	mg/kg	J	MS<LCL	Stage 2B
K1410327-005	14376566	EPA6020	N	Soil	Antimony	0.010	0.050	7.21	mg/kg	J	MS<LCL	Stage 2B
K1410327-006	14376571	EPA6020	N	Soil	Antimony	0.010	0.050	6.47	mg/kg	J	MS<LCL	Stage 2B
K1410327-007	14376572	EPA6020	N	Soil	Antimony	0.010	0.050	4.18	mg/kg	J	MS<LCL	Stage 2B
K1410327-008	14376573	EPA6020	N	Soil	Antimony	0.010	0.050	5.86	mg/kg	J	MS<LCL	Stage 2B
K1410327-009	14376574	EPA6020	N	Soil	Antimony	0.010	0.050	9.54	mg/kg	J	MS<LCL	Stage 2B
K1410327-010	14376575	EPA6020	N	Soil	Antimony	0.010	0.051	11.3	mg/kg	J	MS<LCL	Stage 2B
K1410327-011	14376576	EPA6020	FD	Soil	Antimony	0.010	0.050	12.2	mg/kg	J	MS<LCL	Stage 2B
K1410344-001	14366432	EPA6020	N	Soil	Antimony	0.010	0.049	3.52	mg/kg	J	MS<LCL	Stage 2B
K1410344-002	14366433	EPA6020	N	Soil	Antimony	0.010	0.050	4.01	mg/kg	J	MS<LCL	Stage 2B
K1410344-003	14366434	EPA6020	N	Soil	Antimony	0.010	0.049	3.68	mg/kg	J	MS<LCL	Stage 2B
K1410344-004	14376524	EPA6020	N	Soil	Antimony	0.010	0.049	15.8	mg/kg	J	MS<LCL	Stage 2B
K1410344-005	14376570	EPA6020	N	Soil	Antimony	0.010	0.050	25.2	mg/kg	J	MS<LCL	Stage 2B
K1411017-001	14396997	EPA6020	N	Soil	Antimony	0.010	0.049	3	mg/kg	J	MS<LCL	Stage 2B
K1411017-002	14396998	EPA6020	N	Soil	Antimony	0.010	0.048	2.45	mg/kg	J	MS<LCL	Stage 2B
K1411017-003	14396999	EPA6020	N	Soil	Antimony	0.010	0.048	1.07	mg/kg	J	MS<LCL	Stage 2B
K1411017-004	14397000	EPA6020	N	Soil	Antimony	0.010	0.048	1.29	mg/kg	J	MS<LCL	Stage 2B
K1411017-005	14397001	EPA6020	FD	Soil	Antimony	0.010	0.048	1.36	mg/kg	J	MS<LCL	Stage 2B
K1411017-006	14397002	EPA6020	N	Soil	Antimony	0.010	0.048	1.23	mg/kg	J	MS<LCL	Stage 2B
K1411019-001	14386798	EPA6020	N	Soil	Antimony	0.010	0.050	14.9	mg/kg	J	MS<LCL	Stage 2B
K1411019-002	14386799	EPA6020	N	Soil	Antimony	0.010	0.052	25.4	mg/kg	J	MS<LCL	Stage 2B
K1411019-003	14386800	EPA6020	N	Soil	Antimony	0.010	0.049	1.12	mg/kg	J	MS<LCL	Stage 2B
K1411019-004	14386801	EPA6020	N	Soil	Antimony	0.010	0.049	2.61	mg/kg	J	MS<LCL	Stage 2B
K1411019-005	14386802	EPA6020	N	Soil	Antimony	0.010	0.050	10.2	mg/kg	J	MS<LCL	Stage 2B
K1411019-006	14386803	EPA6020	FD	Soil	Antimony	0.010	0.050	10.9	mg/kg	J	MS<LCL	Stage 2B
K1411019-007	14386813	EPA6020	N	Soil	Antimony	0.010	0.049	2.84	mg/kg	J	MS<LCL	Stage 2B
K1411019-008	14386814	EPA6020	N	Soil	Antimony	0.010	0.050	8.98	mg/kg	J	MS<LCL	Stage 2B
K1411019-009	14386815	EPA6020	N	Soil	Antimony	0.010	0.050	7.49	mg/kg	J	MS<LCL	Stage 2B
K1411019-010	14386816	EPA6020	N	Soil	Antimony	0.010	0.049	4.86	mg/kg	J	MS<LCL	Stage 2B
K1411019-011	14386817	EPA6020	N	Soil	Antimony	0.010	0.050	6.65	mg/kg	J	MS<LCL	Stage 2B
K1411019-012	14386821	EPA6020	N	Soil	Antimony	0.010	0.048	0.616	mg/kg	J	MS<LCL	Stage 2B
K1411019-013	14386822	EPA6020	N	Soil	Antimony	0.010	0.048	0.622	mg/kg	J	MS<LCL	Stage 2B
K1411019-014	14386823	EPA6020	N	Soil	Antimony	0.010	0.050	3.98	mg/kg	J	MS<LCL	Stage 2B
K1411019-015	14386824	EPA6020	N	Soil	Antimony	0.010	0.048	1.01	mg/kg	J	MS<LCL	Stage 2B
K1411019-016	14386825	EPA6020	N	Soil	Antimony	0.010	0.048	0.991	mg/kg	J	MS<LCL	Stage 2B
K1411019-017	14386834	EPA6020	N	Soil	Antimony	0.010	0.048	1.93	mg/kg	J	MS<LCL	Stage 2B
K1411019-018	14386835	EPA6020	N	Soil	Antimony	0.010	0.048	1.61	mg/kg	J	MS<LCL	Stage 2B
K1411019-019	14386836	EPA6020	N	Soil	Antimony	0.010	0.048	1.63	mg/kg	J	MS<LCL	Stage 2B
K1411019-020	14386837	EPA6020	N	Soil	Antimony	0.010	0.048	1.53	mg/kg	J	MS<LCL	Stage 2B
K1411020-001	14386838	EPA6020	N	Soil	Antimony	0.010	0.049	2.5	mg/kg	J	MS<LCL	Stage 2B
K1411020-002	14386839	EPA6020	FD	Soil	Antimony	0.010	0.050	2.46	mg/kg	J	MS<LCL	Stage 2B
K1411020-003	14386843	EPA6020	N	Soil	Antimony	0.010	0.049	4.57	mg/kg	J	MS<LCL	Stage 2B
K1411020-004	14386844	EPA6020	N	Soil	Antimony	0.010	0.048	3.85	mg/kg	J	MS<LCL	Stage 2B
K1411020-005	14386845	EPA6020	N	Soil	Antimony	0.010	0.049	2.79	mg/kg	J	MS<LCL	Stage 2B
K1411020-006	14386846	EPA6020	FD	Soil	Antimony	0.010	0.048	2.7	mg/kg	J	MS<LCL	Stage 2B
K1411020-007	14386847	EPA6020	N	Soil	Antimony	0.010	0.049	4.11	mg/kg	J	MS<LCL	Stage 2B
K1411020-008	14386848	EPA6020	N	Soil	Antimony	0.010	0.049	2.59	mg/kg	J	MS<LCL	Stage 2B
K1411020-009	14386857	EPA6020	N	Soil	Antimony	0.010	0.049	4.31	mg/kg	J	MS<LCL	Stage 2B
K1411020-010	14386858	EPA6020	FD	Soil	Antimony	0.010	0.049	4.33	mg/kg	J	MS<LCL	Stage 2B
K1411020-011	14386859	EPA6020	N	Soil	Antimony	0.010	0.048	2.7	mg/kg	J	MS<LCL	Stage 2B
K1411020-012	14386860	EPA6020	N	Soil	Antimony	0.010	0.049	1.51	mg/kg	J	MS<LCL	Stage 2B
K1411020-013	14386861	EPA6020	N	Soil	Antimony	0.010	0.048	0.843	mg/kg	J	MS<LCL	Stage 2B
K1411020-014	14386862	EPA6020	N	Soil	Antimony	0.010	0.048	2.48	mg/kg	J	MS<LCL	Stage 2B
K1411020-015	14396882	EPA6020	N	Soil	Antimony	0.010	0.048	3.43	mg/kg	J	MS<LCL	Stage 2B
K1411020-016	14396883	EPA6020	N	Soil	Antimony	0.010	0.048	3.35	mg/kg	J	MS<LCL	Stage 2B
K1411020-017	14396884	EPA6020	N	Soil	Antimony	0.010	0.048	5.22	mg/kg	J	MS<LCL	Stage 2B
K1411020-018	14396885	EPA6020	N	Soil	Antimony	0.010	0.048	2.95	mg/kg	J	MS<LCL	Stage 2B
K1411020-019	14396886	EPA6020	N	Soil	Antimony	0.010	0.048	2.68	mg/kg	J	MS<LCL	Stage 2B
K1411020-020	14396887	EPA6020	FD	Soil	Antimony	0.010	0.048	2.51	mg/kg	J	MS<LCL	Stage 2B
K1411022-001	14396933	EPA6020	N	Soil	Antimony	0.010	0.048	1.28	mg/kg	J	MS<LCL	Stage 2B
K1411022-002	14396934	EPA6020	FD	Soil	Antimony	0.010	0.048	1.22	mg/kg	J	MS<LCL	Stage 2B
K1411022-003	14396935	EPA6020	N	Soil	Antimony	0.010	0.049	2.33	mg/kg	J	MS<LCL	Stage 2B
K1411022-004	14396936	EPA6020	N	Soil	Antimony	0.010	0.048	0.721	mg/kg	J	MS<LCL	Stage 2B
K1411022-005	14396944	EPA6020	N	Soil	Antimony	0.010	0.048	0.202	mg/kg	J	MS<LCL	Stage 2B
K1411022-006	14396945	EPA6020	N	Soil	Antimony	0.010	0.048	1.97	mg/kg	J	MS<LCL	Stage 2B
K1411022-007	14396946	EPA6020	N	Soil	Antimony	0.010	0.049	2.24	mg/kg	J	MS<LCL	Stage 2B
K1411022-008	14396947	EPA6020	N	Soil	Antimony	0.010	0.048	0.474	mg/kg	J	MS<LCL	Stage 2B
K1411022-009	14396948	EPA6020	N	Soil	Antimony	0.010	0.048	1.86	mg/kg	J	MS<LCL	Stage 2B
K1411022-010	14396957	EPA6020	N	Soil	Antimony	0.010	0.050	2.69	mg/kg	J	MS<LCL	Stage 2B
K1411022-011	14396958	EPA6020	FD	Soil	Antimony	0.010	0.049	2.45	mg/kg	J	MS<LCL	Stage 2B
K1411022-012	14396959	EPA6020	N	Soil	Antimony	0.010	0.049	1.56	mg/kg	J	MS<LCL	Stage 2B
K1411022-013	14396960	EPA6020	N	Soil	Antimony	0.010	0.049	3.5	mg/kg	J	MS<LCL	Stage 2B
K1411022-014	14396961	EPA6020	N	Soil	Antimony	0.010	0.049	1.07	mg/kg	J	MS<LCL	Stage 2B
K1411022-015	14396962	EPA6020	N	Soil	Antimony	0.010	0.050	2.92	mg/kg	J	MS<LCL	Stage 2B
K1411022-016	14396988	EPA6020	N	Soil	Antimony	0.010	0.048	1.27	mg/kg	J	MS<LCL	Stage 2B
K1411022-017	14396989	EPA6020	N	Soil	Antimony	0.010	0.049	1.58	mg/kg	J	MS<LCL	Stage 2B
K1411022-018	14396990	EPA6020	N	Soil	Antimony	0.010	0.049	1.66	mg/kg	J	MS<LCL	Stage 2B
K1411022-019	14396991	EPA6020	N	Soil	Antimony	0.010	0.048	1.45	mg/kg	J	MS<LCL	Stage 2B
K1411022-020	14396992	EPA6020	N	Soil	Antimony	0.010	0.048	0.828	mg/kg	J	MS<LCL	Stage 2B
K1411025-001	14386753	EPA6020	N	Soil	Antimony	0.010	0.048	0.462	mg/kg	J	MS<LCL	Stage 2B
K1411025-002	14386754	EPA6020	N	Soil	Antimony	0.010	0.048	0.744	mg/kg	J	MS<LCL	Stage 2B
K1411025-003	14386755	EPA6020	N	Soil	Antimony	0.010	0.048	0.395	mg/kg	J	MS<LCL	Stage 2B
K1411025-004	14386770	EPA6020	N	Soil	Antimony	0.010	0.050	2.88	mg/kg	J	MS<LCL	Stage 2B
K1411025-005	14386771	EPA6020	N	Soil	Antimony	0.010	0.049	5.08	mg/kg	J	MS<LCL	Stage 2B
K1411025-006	14386772	EPA6020	FD	Soil	Antimony	0.010	0.049	5.13	mg/kg	J	MS<LCL	Stage 2B
K1411025-007	14386773	EPA6020	N	Soil	Antimony	0.010	0.049	2.9	mg/kg	J	MS<LCL	Stage 2B
K1411025-008	14386774	EPA6020	N	Soil	Antimony	0.010	0.049	4.28	mg/kg	J	MS<LCL	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1411025-009	14386775	EPA6020	N	Soil	Antimony	0.010	0.049	2.12	mg/kg	J	MS<LCL	Stage 2B
K1411025-010	14386779	EPA6020	N	Soil	Antimony	0.010	0.048	0.908	mg/kg	J	MS<LCL	Stage 2B
K1411025-011	14386780	EPA6020	N	Soil	Antimony	0.010	0.048	1.03	mg/kg	J	MS<LCL	Stage 2B
K1411025-012	14386781	EPA6020	N	Soil	Antimony	0.010	0.048	1.25	mg/kg	J	MS<LCL	Stage 2B
K1411025-013	14386782	EPA6020	N	Soil	Antimony	0.010	0.048	0.877	mg/kg	J	MS<LCL	Stage 2B
K1411025-014	14386783	EPA6020	N	Soil	Antimony	0.010	0.048	0.8	mg/kg	J	MS<LCL	Stage 2B
K1411025-015	14386788	EPA6020	N	Soil	Antimony	0.010	0.048	1.36	mg/kg	J	MS<LCL	Stage 2B
K1411025-016	14386789	EPA6020	N	Soil	Antimony	0.010	0.048	0.613	mg/kg	J	MS<LCL	Stage 2B
K1411025-017	14386790	EPA6020	FD	Soil	Antimony	0.010	0.048	0.627	mg/kg	J	MS<LCL	Stage 2B
K1411025-018	14386791	EPA6020	N	Soil	Antimony	0.010	0.048	0.475	mg/kg	J	MS<LCL	Stage 2B
K1411025-019	14386792	EPA6020	N	Soil	Antimony	0.010	0.048	0.448	mg/kg	J	MS<LCL	Stage 2B
K1411025-020	14386793	EPA6020	N	Soil	Antimony	0.010	0.048	0.393	mg/kg	J	MS<LCL	Stage 2B
K1411026-001	14376653	EPA6020	N	Soil	Antimony	0.010	0.049	1.09	mg/kg	J	MS<LCL	Stage 2B
K1411026-002	14376654	EPA6020	N	Soil	Antimony	0.010	0.049	0.904	mg/kg	J	MS<LCL	Stage 2B
K1411026-003	14376655	EPA6020	N	Soil	Antimony	0.011	0.053	1.25	mg/kg	J	MS<LCL	Stage 2B
K1411026-004	14376656	EPA6020	FD	Soil	Antimony	0.010	0.049	1.16	mg/kg	J	MS<LCL	Stage 2B
K1411026-005	14376667	EPA6020	N	Soil	Antimony	0.010	0.048	2.46	mg/kg	J	MS<LCL	Stage 2B
K1411026-006	14376668	EPA6020	N	Soil	Antimony	0.010	0.048	0.405	mg/kg	J	MS<LCL	Stage 2B
K1411026-007	14376669	EPA6020	FD	Soil	Antimony	0.010	0.048	0.397	mg/kg	J	MS<LCL	Stage 2B
K1411026-008	14376670	EPA6020	N	Soil	Antimony	0.010	0.048	0.957	mg/kg	J	MS<LCL	Stage 2B
K1411026-009	14376671	EPA6020	N	Soil	Antimony	0.010	0.048	0.508	mg/kg	J	MS<LCL	Stage 2B
K1411026-010	14376672	EPA6020	N	Soil	Antimony	0.010	0.048	0.711	mg/kg	J	MS<LCL	Stage 2B
K1411026-011	14386674	EPA6020	N	Soil	Antimony	0.010	0.048	1.12	mg/kg	J	MS<LCL	Stage 2B
K1411026-012	14386675	EPA6020	N	Soil	Antimony	0.010	0.048	0.921	mg/kg	J	MS<LCL	Stage 2B
K1411026-013	14386676	EPA6020	N	Soil	Antimony	0.010	0.049	0.796	mg/kg	J	MS<LCL	Stage 2B
K1411026-014	14386677	EPA6020	N	Soil	Antimony	0.010	0.048	0.42	mg/kg	J	MS<LCL	Stage 2B
K1411026-015	14386678	EPA6020	N	Soil	Antimony	0.010	0.049	0.815	mg/kg	J	MS<LCL	Stage 2B
K1411026-016	14386697	EPA6020	N	Soil	Antimony	0.010	0.048	0.597	mg/kg	J	MS<LCL	Stage 2B
K1411026-017	14386698	EPA6020	N	Soil	Antimony	0.010	0.048	0.143	mg/kg	J	MS<LCL	Stage 2B
K1411026-018	14386699	EPA6020	N	Soil	Antimony	0.010	0.048	0.674	mg/kg	J	MS<LCL	Stage 2B
K1411026-019	14386700	EPA6020	N	Soil	Antimony	0.010	0.048	1.8	mg/kg	J	MS<LCL	Stage 2B
K1411026-020	14386701	EPA6020	N	Soil	Antimony	0.010	0.049	0.941	mg/kg	J	MS<LCL	Stage 2B
K1411028-001	14386703	EPA6020	N	Soil	Antimony	0.010	0.049	1.54	mg/kg	J	MS<LCL	Stage 2B
K1411028-002	14386704	EPA6020	FD	Soil	Antimony	0.010	0.049	1.58	mg/kg	J	MS<LCL	Stage 2B
K1411028-003	14386705	EPA6020	N	Soil	Antimony	0.010	0.048	0.847	mg/kg	J	MS<LCL	Stage 2B
K1411028-004	14386706	EPA6020	N	Soil	Antimony	0.010	0.049	0.813	mg/kg	J	MS<LCL	Stage 2B
K1411028-005	14386707	EPA6020	N	Soil	Antimony	0.010	0.048	1.18	mg/kg	J	MS<LCL	Stage 2B
K1411028-006	14386708	EPA6020	N	Soil	Antimony	0.010	0.048	0.465	mg/kg	J	MS<LCL	Stage 2B
K1411028-007	14386724	EPA6020	N	Soil	Antimony	0.009	0.047	0.248	mg/kg	J	MS<LCL	Stage 2B
K1411028-008	14386725	EPA6020	N	Soil	Antimony	0.010	0.048	0.189	mg/kg	J	MS<LCL	Stage 2B
K1411028-009	14386726	EPA6020	FD	Soil	Antimony	0.009	0.047	0.187	mg/kg	J	MS<LCL	Stage 2B
K1411028-010	14386727	EPA6020	N	Soil	Antimony	0.010	0.048	0.33	mg/kg	J	MS<LCL	Stage 2B
K1411028-011	14386728	EPA6020	N	Soil	Antimony	0.010	0.048	0.302	mg/kg	J	MS<LCL	Stage 2B
K1411028-012	14386729	EPA6020	N	Soil	Antimony	0.010	0.048	0.213	mg/kg	J	MS<LCL	Stage 2B
K1411028-013	14386744	EPA6020	N	Soil	Antimony	0.010	0.048	0.729	mg/kg	J	MS<LCL	Stage 2B
K1411028-014	14386745	EPA6020	N	Soil	Antimony	0.010	0.048	1.52	mg/kg	J	MS<LCL	Stage 2B
K1411028-015	14386746	EPA6020	N	Soil	Antimony	0.010	0.048	1.04	mg/kg	J	MS<LCL	Stage 2B
K1411028-016	14386747	EPA6020	N	Soil	Antimony	0.010	0.048	0.668	mg/kg	J	MS<LCL	Stage 2B
K1411028-017	14386748	EPA6020	N	Soil	Antimony	0.010	0.048	0.226	mg/kg	J	MS<LCL	Stage 2B
K1411028-018	14386750	EPA6020	N	Soil	Antimony	0.010	0.048	1	mg/kg	J	MS<LCL	Stage 2B
K1411028-019	14386751	EPA6020	N	Soil	Antimony	0.010	0.048	0.947	mg/kg	J	MS<LCL	Stage 2B
K1411028-020	14386752	EPA6020	FD	Soil	Antimony	0.010	0.048	0.932	mg/kg	J	MS<LCL	Stage 2B
K1411030-001	14396893	EPA6020	N	Soil	Antimony	0.010	0.048	1.25	mg/kg	J	MS<LCL	Stage 2B
K1411030-002	14396894	EPA6020	FD	Soil	Antimony	0.010	0.048	1.36	mg/kg	J	MS<LCL	Stage 2B
K1411030-003	14396895	EPA6020	N	Soil	Antimony	0.010	0.048	0.501	mg/kg	J	MS<LCL	Stage 2B
K1411030-004	14396896	EPA6020	N	Soil	Antimony	0.010	0.048	1.95	mg/kg	J	MS<LCL	Stage 2B
K1411030-005	14396897	EPA6020	N	Soil	Antimony	0.010	0.048	1.79	mg/kg	J	MS<LCL	Stage 2B
K1411030-006	14396898	EPA6020	N	Soil	Antimony	0.010	0.048	1.56	mg/kg	J	MS<LCL	Stage 2B
K1411030-007	14396899	EPA6020	N	Soil	Antimony	0.010	0.048	3.01	mg/kg	J	MS<LCL	Stage 2B
K1411030-008	14396906	EPA6020	N	Soil	Antimony	0.010	0.048	2.33	mg/kg	J	MS<LCL	Stage 2B
K1411030-009	14396907	EPA6020	N	Soil	Antimony	0.010	0.048	3.64	mg/kg	J	MS<LCL	Stage 2B
K1411030-010	14396908	EPA6020	N	Soil	Antimony	0.010	0.049	3.63	mg/kg	J	MS<LCL	Stage 2B
K1411030-011	14396909	EPA6020	N	Soil	Antimony	0.010	0.048	2.4	mg/kg	J	MS<LCL	Stage 2B
K1411030-012	14396910	EPA6020	N	Soil	Antimony	0.010	0.048	6.01	mg/kg	J	MS<LCL	Stage 2B
K1411030-013	14396911	EPA6020	FD	Soil	Antimony	0.010	0.048	6.18	mg/kg	J	MS<LCL	Stage 2B
K1411030-014	14396923	EPA6020	N	Soil	Antimony	0.010	0.048	1.1	mg/kg	J	MS<LCL	Stage 2B
K1411030-015	14396924	EPA6020	N	Soil	Antimony	0.010	0.048	1.28	mg/kg	J	MS<LCL	Stage 2B
K1411030-016	14396925	EPA6020	N	Soil	Antimony	0.010	0.048	1.05	mg/kg	J	MS<LCL	Stage 2B
K1411030-017	14396926	EPA6020	N	Soil	Antimony	0.010	0.048	1.57	mg/kg	J	MS<LCL	Stage 2B
K1411030-018	14396927	EPA6020	N	Soil	Antimony	0.010	0.048	1.11	mg/kg	J	MS<LCL	Stage 2B
K1411030-019	14396931	EPA6020	N	Soil	Antimony	0.010	0.048	1.08	mg/kg	J	MS<LCL	Stage 2B
K1411030-020	14396932	EPA6020	N	Soil	Antimony	0.010	0.048	1.45	mg/kg	J	MS<LCL	Stage 2B
K1411037-001	14376620	EPA6020	N	Soil	Antimony	0.010	0.048	1.76	mg/kg	J	MS<LCL	Stage 2B
K1411037-002	14376621	EPA6020	N	Soil	Antimony	0.010	0.048	1.46	mg/kg	J	MS<LCL	Stage 2B
K1411037-003	14376622	EPA6020	N	Soil	Antimony	0.010	0.048	1.4	mg/kg	J	MS<LCL	Stage 2B
K1411037-004	14376623	EPA6020	N	Soil	Antimony	0.010	0.048	1.48	mg/kg	J	MS<LCL	Stage 2B
K1411037-005	14376624	EPA6020	FD	Soil	Antimony	0.010	0.048	1.42	mg/kg	J	MS<LCL	Stage 2B
K1411037-006	14376625	EPA6020	N	Soil	Antimony	0.010	0.048	1.12	mg/kg	J	MS<LCL	Stage 2B
K1411037-007	14376634	EPA6020	N	Soil	Antimony	0.010	0.048	0.566	mg/kg	J	MS<LCL	Stage 2B
K1411037-008	14376635	EPA6020	N	Soil	Antimony	0.010	0.048	0.275	mg/kg	J	MS<LCL	Stage 2B
K1411037-009	14376636	EPA6020	N	Soil	Antimony	0.010	0.049	0.947	mg/kg	J	MS<LCL	Stage 2B
K1411037-010	14376637	EPA6020	FD	Soil	Antimony	0.010	0.049	0.915	mg/kg	J	MS<LCL	Stage 2B
K1411037-011	14376638	EPA6020	N	Soil	Antimony	0.010	0.049	1.31	mg/kg	J	MS<LCL	Stage 2B
K1411037-012	14376639	EPA6020	N	Soil	Antimony	0.010	0.048	0.461	mg/kg	J	MS<LCL	Stage 2B
K1411037-013	14376640	EPA6020	N	Soil	Antimony	0.010	0.049	1.02	mg/kg	J	MS<LCL	Stage 2B
K1411037-014	14376641	EPA6020	N	Soil	Antimony	0.009	0.047	1.92	mg/kg	J	MS<LCL	Stage 2B
K1411037-015	14376642	EPA6020	N	Soil	Antimony	0.010	0.052	1.01	mg/kg	J	MS<LCL	Stage 2B
K1411037-016	14376643	EPA6020	FD	Soil	Antimony	0.010	0.050	0.92	mg/kg	J	MS<LCL	Stage 2B
K1411037-017	14376644	EPA6020	N	Soil	Antimony	0.010	0.050	1.83	mg/kg	J	MS<LCL	Stage 2B
K1411037-018	14376645	EPA6020	N	Soil	Antimony	0.010	0.050	1.24	mg/kg	J	MS<LCL	Stage 2B
K1411037-019	14376651	EPA6020	N	Soil	Antimony	0.010	0.050	0.962	mg/kg	J	MS<LCL	Stage 2B
K1411037-020	14376652	EPA6020	N	Soil	Antimony	0.010	0.049	1.18	mg/kg	J	MS<LCL	Stage 2B
K1411074-001	14386712	EPA6020	N	Soil	Antimony	0.010	0.048	1.99	mg/kg	J	MS<LCL	Stage 2B
K1411074-002	14386713	EPA6020	N	Soil	Antimony	0.009	0.047	3.04	mg/kg	J	MS<LCL	Stage 2B
K1411074-003	14386714	EPA6020	N	Soil	Antimony	0.010	0.048	2	mg/kg	J	MS<LCL	Stage 2B
K1411074-004	14386869	EPA6020	N	Soil	Antimony	0.010	0.048	4.77	mg/kg	J	MS<LCL	Stage 2B
K1411074-005	14386870	EPA6020	N	Soil	Antimony	0.010	0.048	4.3	mg/kg	J	MS<LCL	Stage 2B
K1411074-006	14386871	EPA6020	N	Soil	Antimony	0.010	0.048	6.3	mg/kg	J	MS<LCL	Stage 2B
K1411074-007	14396876	EPA6020	N	Soil	Antimony	0.010	0.048	5.17	mg/kg	J	MS<LCL	Stage 2B
K1411074-008	14396877	EPA6020	N	Soil	Antimony	0.010	0.048	5.09	mg/kg	J	MS<LCL	Stage 2B
K1411074-009	14396878	EPA6020	N	Soil	Antimony	0.010	0.048	5.04	mg/kg	J	MS<LCL	Stage 2B
K1411074-010	14397007	EPA6020	N	Soil	Antimony	0.009	0.047	8.72	mg/kg	J	MS<LCL	Stage 2B
K1411074-011	14397008	EPA6020	N	Soil	Antimony	0.009	0.047	10.3	mg/kg	J	MS<LCL	Stage 2B
K1411074-012	14397009	EPA6020	N	Soil	Antimony	0.009	0.047	7.31	mg/kg	J	MS<LCL	Stage 2B
K1411077-002	14386849	EPA6020	N	Soil	Antimony	0.010	0.048	3.54	mg/kg	J	MS<LCL	Stage 2B
K1411077-003	14386851	EPA6020	N	Soil	Antimony	0.010	0.048	3.25	mg/kg	J	MS<LCL	Stage 2B
K1411077-004	14386852	EPA6020	N	Soil	Antimony	0.010	0.048	2.97	mg/kg	J	MS<LCL	Stage 2B
K1411077-005	14386853	EPA6020	N	Soil	Antimony	0.010	0.048	2.6	mg/kg	J	MS<LCL	Stage 2B
K1411077-006	14386854	EPA6020	N	Soil	Antimony	0.010	0.049	2.22	mg/kg	J	MS<LCL	Stage 2B
K1411077-007	14386855	EPA6020	N	Soil	Antimony	0.010	0.049	2.4	mg/kg	J	MS<LCL	Stage 2B
K1411077-008	14386856	EPA6020	N	Soil	Antimony	0.010	0.049	2.54	mg/kg	J	MS<LCL	Stage 2B
K1411077-009	14386863	EPA6020	N	Soil	Antimony	0.010	0.049	4.5	mg/kg	J	MS<LCL	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1411077-010	14386864	EPA6020	N	Soil	Antimony	0.010	0.050	3.75	mg/kg	J	MS<LCL	Stage 2B
K1411077-011	14386865	EPA6020	N	Soil	Antimony	0.010	0.050	3.98	mg/kg	J	MS<LCL	Stage 2B
K1411077-012	14386866	EPA6020	N	Soil	Antimony	0.010	0.051	2.69	mg/kg	J	MS<LCL	Stage 2B
K1411077-013	14386868	EPA6020	N	Soil	Antimony	0.010	0.052	3.51	mg/kg	J	MS<LCL	Stage 2B
K1411077-014	14386872	EPA6020	N	Soil	Antimony	0.009	0.044	2.51	mg/kg	J	MS<LCL	Stage 2B
K1411077-015	14386873	EPA6020	N	Soil	Antimony	0.009	0.047	2.45	mg/kg	J	MS<LCL	Stage 2B
K1411077-016	14386874	EPA6020	N	Soil	Antimony	0.010	0.048	2.83	mg/kg	J	MS<LCL	Stage 2B
K1411077-017	14396879	EPA6020	N	Soil	Antimony	0.010	0.048	8.84	mg/kg	J	MS<LCL	Stage 2B
K1411077-018	14396880	EPA6020	N	Soil	Antimony	0.010	0.048	9.75	mg/kg	J	MS<LCL	Stage 2B
K1411077-019	14396881	EPA6020	N	Soil	Antimony	0.010	0.048	7.35	mg/kg	J	MS<LCL	Stage 2B
K1411081-001	14396888	EPA6020	N	Soil	Antimony	0.010	0.102	1.09	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-002	14396890	EPA6020	N	Soil	Antimony	0.010	0.098	1.53	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-003	14396891	EPA6020	N	Soil	Antimony	0.010	0.097	1.66	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-004	14396892	EPA6020	N	Soil	Antimony	0.010	0.097	1.66	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-005	14396900	EPA6020	N	Soil	Antimony	0.010	0.100	2.78	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-006	14396901	EPA6020	N	Soil	Antimony	0.010	0.100	2.47	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-007	14396902	EPA6020	N	Soil	Antimony	0.010	0.099	2.51	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-008	14396903	EPA6020	N	Soil	Antimony	0.010	0.097	3.21	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-009	14396904	EPA6020	N	Soil	Antimony	0.010	0.097	3.08	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-010	14396905	EPA6020	N	Soil	Antimony	0.010	0.097	3.05	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-011	14396913	EPA6020	N	Soil	Antimony	0.010	0.102	1.77	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-012	14396914	EPA6020	N	Soil	Antimony	0.010	0.101	1.72	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-013	14396915	EPA6020	N	Soil	Antimony	0.010	0.103	1.65	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-014	14396916	EPA6020	N	Soil	Antimony	0.010	0.099	1.06	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-015	14396917	EPA6020	N	Soil	Antimony	0.010	0.099	0.966	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-016	14396918	EPA6020	N	Soil	Antimony	0.010	0.097	0.958	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-017	14396920	EPA6020	N	Soil	Antimony	0.010	0.098	1.13	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-018	14396921	EPA6020	N	Soil	Antimony	0.010	0.098	1.07	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411081-019	14396922	EPA6020	N	Soil	Antimony	0.010	0.099	1.25	mg/kg	J	MS<LCL, SerDil	Stage 2B
K1411083-001	14376605	EPA6020	N	Soil	Antimony	0.010	0.096	2.17	mg/kg	J	MS<LCL	Stage 2B
K1411083-002	14376606	EPA6020	N	Soil	Antimony	0.010	0.097	2.01	mg/kg	J	MS<LCL	Stage 2B
K1411083-003	14376607	EPA6020	N	Soil	Antimony	0.010	0.097	1.88	mg/kg	J	MS<LCL	Stage 2B
K1411083-004	14376608	EPA6020	N	Soil	Antimony	0.010	0.097	1.4	mg/kg	J	MS<LCL	Stage 2B
K1411083-005	14376609	EPA6020	N	Soil	Antimony	0.010	0.097	1.42	mg/kg	J	MS<LCL	Stage 2B
K1411083-006	14376610	EPA6020	N	Soil	Antimony	0.010	0.097	1.44	mg/kg	J	MS<LCL	Stage 2B
K1411083-007	14376611	EPA6020	N	Soil	Antimony	0.010	0.096	0.822	mg/kg	J	MS<LCL	Stage 2B
K1411083-008	14376612	EPA6020	N	Soil	Antimony	0.010	0.096	0.857	mg/kg	J	MS<LCL	Stage 2B
K1411083-009	14376613	EPA6020	N	Soil	Antimony	0.010	0.096	0.799	mg/kg	J	MS<LCL	Stage 2B
K1411083-010	14376614	EPA6020	N	Soil	Antimony	0.010	0.096	0.672	mg/kg	J	MS<LCL	Stage 2B
K1411083-011	14376616	EPA6020	N	Soil	Antimony	0.010	0.096	0.637	mg/kg	J	MS<LCL	Stage 2B
K1411083-012	14376617	EPA6020	N	Soil	Antimony	0.010	0.096	2.03	mg/kg	J	MS<LCL	Stage 2B
K1411083-013	14376618	EPA6020	N	Soil	Antimony	0.010	0.097	1.95	mg/kg	J	MS<LCL	Stage 2B
K1411083-014	14376619	EPA6020	N	Soil	Antimony	0.010	0.096	1.66	mg/kg	J	MS<LCL	Stage 2B
K1411083-015	14376626	EPA6020	N	Soil	Antimony	0.010	0.097	1.47	mg/kg	J	MS<LCL	Stage 2B
K1411083-016	14376627	EPA6020	N	Soil	Antimony	0.010	0.096	1.59	mg/kg	J	MS<LCL	Stage 2B
K1411083-017	14376628	EPA6020	N	Soil	Antimony	0.010	0.096	1.5	mg/kg	J	MS<LCL	Stage 2B
K1411083-018	14376629	EPA6020	N	Soil	Antimony	0.010	0.096	2.29	mg/kg	J	MS<LCL	Stage 2B
K1411083-019	14376631	EPA6020	N	Soil	Antimony	0.010	0.097	0.792	mg/kg	J	MS<LCL	Stage 2B
K1411083-020	14376632	EPA6020	N	Soil	Antimony	0.010	0.097	0.68	mg/kg	J	MS<LCL	Stage 2B
K1411084-001	14376633	EPA6020	N	Soil	Antimony	0.010	0.049	0.791	mg/kg	J	MS<LCL	Stage 2B
K1411084-002	14376646	EPA6020	N	Soil	Antimony	0.010	0.050	1.64	mg/kg	J	MS<LCL	Stage 2B
K1411084-003	14376647	EPA6020	N	Soil	Antimony	0.010	0.050	1.5	mg/kg	J	MS<LCL	Stage 2B
K1411084-004	14376648	EPA6020	N	Soil	Antimony	0.010	0.050	1.41	mg/kg	J	MS<LCL	Stage 2B
K1411084-005	14376649	EPA6020	N	Soil	Antimony	0.010	0.050	1.4	mg/kg	J	MS<LCL	Stage 2B
K1411084-006	14376657	EPA6020	N	Soil	Antimony	0.010	0.051	1.09	mg/kg	J	MS<LCL	Stage 2B
K1411084-007	14376658	EPA6020	N	Soil	Antimony	0.010	0.051	1.09	mg/kg	J	MS<LCL	Stage 2B
K1411084-008	14376659	EPA6020	N	Soil	Antimony	0.010	0.051	0.996	mg/kg	J	MS<LCL	Stage 2B
K1411084-009	14376660	EPA6020	N	Soil	Antimony	0.010	0.050	0.438	mg/kg	J	MS<LCL	Stage 2B
K1411084-010	14376661	EPA6020	N	Soil	Antimony	0.010	0.049	0.81	mg/kg	J	MS<LCL	Stage 2B
K1411084-011	14376662	EPA6020	N	Soil	Antimony	0.010	0.049	0.828	mg/kg	J	MS<LCL	Stage 2B
K1411084-012	14376663	EPA6020	N	Soil	Antimony	0.010	0.049	0.791	mg/kg	J	MS<LCL	Stage 2B
K1411084-013	14376664	EPA6020	N	Soil	Antimony	0.010	0.049	1.2	mg/kg	J	MS<LCL	Stage 2B
K1411084-014	14376665	EPA6020	N	Soil	Antimony	0.010	0.049	0.953	mg/kg	J	MS<LCL	Stage 2B
K1411084-015	14376666	EPA6020	N	Soil	Antimony	0.010	0.049	0.987	mg/kg	J	MS<LCL	Stage 2B
K1411084-016	14386679	EPA6020	N	Soil	Antimony	0.010	0.052	0.83	mg/kg	J	MS<LCL	Stage 2B
K1411084-017	14386680	EPA6020	N	Soil	Antimony	0.010	0.050	0.733	mg/kg	J	MS<LCL	Stage 2B
K1411084-018	14386681	EPA6020	N	Soil	Antimony	0.010	0.051	0.898	mg/kg	J	MS<LCL	Stage 2B
K1411084-019	14386682	EPA6020	N	Soil	Antimony	0.010	0.050	0.767	mg/kg	J	MS<LCL	Stage 2B
K1411084-020	14386683	EPA6020	N	Soil	Antimony	0.010	0.052	0.471	mg/kg	J	MS<LCL	Stage 2B
K1411085-001	14396928	EPA6020	N	Soil	Antimony	0.010	0.049	1.67	mg/kg	J	MS<LCL	Stage 2B
K1411085-002	14396929	EPA6020	N	Soil	Antimony	0.010	0.049	1.51	mg/kg	J	MS<LCL	Stage 2B
K1411085-003	14396930	EPA6020	N	Soil	Antimony	0.010	0.049	1.78	mg/kg	J	MS<LCL	Stage 2B
K1411085-004	14396937	EPA6020	N	Soil	Antimony	0.010	0.050	1.68	mg/kg	J	MS<LCL	Stage 2B
K1411085-005	14396938	EPA6020	N	Soil	Antimony	0.010	0.050	1.54	mg/kg	J	MS<LCL	Stage 2B
K1411085-006	14396939	EPA6020	N	Soil	Antimony	0.010	0.050	1.6	mg/kg	J	MS<LCL	Stage 2B
K1411085-007	14396941	EPA6020	N	Soil	Antimony	0.010	0.048	0.266	mg/kg	J	MS<LCL	Stage 2B
K1411085-008	14396942	EPA6020	N	Soil	Antimony	0.010	0.048	0.369	mg/kg	J	MS<LCL	Stage 2B
K1411085-009	14396943	EPA6020	N	Soil	Antimony	0.010	0.048	0.347	mg/kg	J	MS<LCL	Stage 2B
K1411085-010	14396949	EPA6020	N	Soil	Antimony	0.010	0.050	3.32	mg/kg	J	MS<LCL	Stage 2B
K1411085-011	14396950	EPA6020	N	Soil	Antimony	0.010	0.049	2.32	mg/kg	J	MS<LCL	Stage 2B
K1411085-012	14396951	EPA6020	N	Soil	Antimony	0.010	0.049	3.08	mg/kg	J	MS<LCL	Stage 2B
K1411085-013	14396952	EPA6020	N	Soil	Antimony	0.010	0.049	2.39	mg/kg	J	MS<LCL	Stage 2B
K1411085-014	14396954	EPA6020	N	Soil	Antimony	0.011	0.056	1.67	mg/kg	J	MS<LCL	Stage 2B
K1411085-015	14396955	EPA6020	N	Soil	Antimony	0.011	0.055	1.39	mg/kg	J	MS<LCL	Stage 2B
K1411085-016	14396956	EPA6020	N	Soil	Antimony	0.011	0.055	1.62	mg/kg	J	MS<LCL	Stage 2B
K1411085-017	14396963	EPA6020	N	Soil	Antimony	0.010	0.052	0.75	mg/kg	J	MS<LCL	Stage 2B
K1411085-018	14396964	EPA6020	N	Soil	Antimony	0.010	0.048	1.4	mg/kg	J	MS<LCL	Stage 2B
K1411085-019	14396965	EPA6020	N	Soil	Antimony	0.010	0.048	1.41	mg/kg	J	MS<LCL	Stage 2B
K1411085-020	14396966	EPA6020	N	Soil	Antimony	0.010	0.048	1.51	mg/kg	J	MS<LCL	Stage 2B
K1411087-001	14396968	EPA6020	N	Soil	Antimony	0.010	0.050	1.21	mg/kg	J	MS<LCL	Stage 4
K1411087-002	14396969	EPA6020	N	Soil	Antimony	0.010	0.049	1.12	mg/kg	J	MS<LCL	Stage 4
K1411087-003	14396970	EPA6020	N	Soil	Antimony	0.010	0.049	1.15	mg/kg	J	MS<LCL	Stage 4
K1411087-004	14396971	EPA6020	N	Soil	Antimony	0.011	0.054	1.2	mg/kg	J	MS<LCL	Stage 4
K1411087-005	14396972	EPA6020	N	Soil	Antimony	0.010	0.051	1.64	mg/kg	J	MS<LCL	Stage 4
K1411087-006	14396973	EPA6020	N	Soil	Antimony	0.010	0.051	1.17	mg/kg	J	MS<LCL	Stage 4
K1411087-007	14396974	EPA6020	N	Soil	Antimony	0.010	0.050	2.81	mg/kg	J	MS<LCL	Stage 4
K1411087-008	14396975	EPA6020	N	Soil	Antimony	0.010	0.052	3	mg/kg	J	MS<LCL	Stage 4
K1411087-009	14396976	EPA6020	N	Soil	Antimony	0.010	0.051	2.66	mg/kg	J	MS<LCL	Stage 4
K1411087-010	14396977	EPA6020	N	Soil	Antimony	0.010	0.050	1.51	mg/kg	J	MS<LCL	Stage 4
K1411087-011	14396979	EPA6020	N	Soil	Antimony	0.011	0.056	2.23	mg/kg	J	MS<LCL	Stage 4
K1411087-012	14396980	EPA6020	N	Soil	Antimony	0.011	0.055	1.91	mg/kg	J	MS<LCL	Stage 4
K1411087-013	14396981	EPA6020	N	Soil	Antimony	0.011	0.056	2.02	mg/kg	J	MS<LCL	Stage 4
K1411087-014	14396982	EPA6020	N	Soil	Antimony	0.010	0.049	0.827	mg/kg	J	MS<LCL	Stage 4
K1411087-015	14396983	EPA6020	N	Soil	Antimony	0.010	0.049	0.85	mg/kg	J	MS<LCL	Stage 4
K1411087-016	14396984	EPA6020	N	Soil	Antimony	0.010	0.049	0.819	mg/kg	J	MS<LCL	Stage 4
K1411087-017	14396985	EPA6020	N	Soil	Antimony	0.011	0.054	2.7	mg/kg	J	MS<LCL	Stage 4
K1411087-018	14396986	EPA6020	N	Soil	Antimony	0.011	0.057	3.15	mg/kg	J	MS<LCL	Stage 4
K1411087-019	14396987	EPA6020	N	Soil	Antimony	0.011	0.056	2.86	mg/kg	J	MS<LCL	Stage 4
K1411090-001	14396994	EPA6020	N	Soil	Antimony	0.011	0.053	2.35	mg/kg	J	MS<LCL	Stage 4
K1411090-002	14396995	EPA6020	N	Soil	Antimony	0.011	0.053	1.92	mg/kg	J	MS<LCL	Stage 4
K1411090-003	14396996	EPA6020	N	Soil	Antimony	0.011	0.053	2.78	mg/kg	J	MS<LCL	Stage 4
K1411090-004	14397003	EPA6020	N	Soil	Antimony	0.010	0.051	1.88	mg/kg	J	MS<LCL	Stage 4

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1411090-005	14397004	EPA6020	N	Soil	Antimony	0.010	0.051	2.08	mg/kg	J	MS<LCL	Stage 4
K1411090-006	14397005	EPA6020	N	Soil	Antimony	0.010	0.051	2.02	mg/kg	J	MS<LCL	Stage 4
K1411090-007	14397010	EPA6020	N	Soil	Antimony	0.010	0.048	3.98	mg/kg	J	MS<LCL	Stage 4
K1411090-008	14397011	EPA6020	N	Soil	Antimony	0.010	0.048	2.7	mg/kg	J	MS<LCL	Stage 4
K1411090-009	14397012	EPA6020	N	Soil	Antimony	0.010	0.048	3.76	mg/kg	J	MS<LCL	Stage 4
K1411090-010	14397013	EPA6020	N	Soil	Antimony	0.010	0.049	1.38	mg/kg	J	MS<LCL	Stage 4
K1411091-001	14386684	EPA6020	N	Soil	Antimony	0.010	0.051	0.472	mg/kg	J	MS<LCL	Stage 2B
K1411091-002	14386685	EPA6020	N	Soil	Antimony	0.010	0.051	0.495	mg/kg	J	MS<LCL	Stage 2B
K1411091-003	14386686	EPA6020	N	Soil	Antimony	0.010	0.050	1.45	mg/kg	J	MS<LCL	Stage 2B
K1411091-004	14386687	EPA6020	N	Soil	Antimony	0.010	0.050	0.714	mg/kg	J	MS<LCL	Stage 2B
K1411091-005	14386688	EPA6020	N	Soil	Antimony	0.010	0.048	0.857	mg/kg	J	MS<LCL	Stage 2B
K1411091-006	14386689	EPA6020	N	Soil	Antimony	0.010	0.049	0.9	mg/kg	J	MS<LCL	Stage 2B
K1411091-007	14386690	EPA6020	N	Soil	Antimony	0.010	0.048	0.838	mg/kg	J	MS<LCL	Stage 2B
K1411091-008	14386691	EPA6020	N	Soil	Antimony	0.010	0.049	2.2	mg/kg	J	MS<LCL	Stage 2B
K1411091-009	14386693	EPA6020	N	Soil	Antimony	0.010	0.048	1.36	mg/kg	J	MS<LCL	Stage 2B
K1411091-010	14386694	EPA6020	N	Soil	Antimony	0.010	0.049	1.39	mg/kg	J	MS<LCL	Stage 2B
K1411091-011	14386695	EPA6020	N	Soil	Antimony	0.010	0.049	1.17	mg/kg	J	MS<LCL	Stage 2B
K1411091-012	14386696	EPA6020	N	Soil	Antimony	0.010	0.048	1.18	mg/kg	J	MS<LCL	Stage 2B
K1411091-013	14386702	EPA6020	N	Soil	Antimony	0.010	0.050	1.62	mg/kg	J	MS<LCL	Stage 2B
K1411091-014	14386709	EPA6020	N	Soil	Antimony	0.010	0.048	1.29	mg/kg	J	MS<LCL	Stage 2B
K1411091-015	14386710	EPA6020	N	Soil	Antimony	0.010	0.048	1.32	mg/kg	J	MS<LCL	Stage 2B
K1411091-016	14386711	EPA6020	N	Soil	Antimony	0.010	0.049	1.5	mg/kg	J	MS<LCL	Stage 2B
K1411091-017	14386715	EPA6020	N	Soil	Antimony	0.010	0.049	0.587	mg/kg	J	MS<LCL	Stage 2B
K1411091-018	14386716	EPA6020	N	Soil	Antimony	0.010	0.048	0.564	mg/kg	J	MS<LCL	Stage 2B
K1411091-019	14386717	EPA6020	N	Soil	Antimony	0.010	0.048	0.652	mg/kg	J	MS<LCL	Stage 2B
K1411091-020	14386718	EPA6020	N	Soil	Antimony	0.010	0.048	0.677	mg/kg	J	MS<LCL	Stage 2B
K1411094-001	14386719	EPA6020	N	Soil	Antimony	0.010	0.048	0.566	mg/kg	J	MS<LCL	Stage 2B
K1411094-002	14386720	EPA6020	N	Soil	Antimony	0.010	0.048	0.535	mg/kg	J	MS<LCL	Stage 2B
K1411094-003	14386721	EPA6020	N	Soil	Antimony	0.010	0.048	0.514	mg/kg	J	MS<LCL	Stage 2B
K1411094-004	14386730	EPA6020	N	Soil	Antimony	0.010	0.048	0.284	mg/kg	J	MS<LCL	Stage 2B
K1411094-005	14386731	EPA6020	N	Soil	Antimony	0.010	0.048	0.284	mg/kg	J	MS<LCL	Stage 2B
K1411094-006	14386732	EPA6020	N	Soil	Antimony	0.010	0.048	0.282	mg/kg	J	MS<LCL	Stage 2B
K1411094-007	14386733	EPA6020	N	Soil	Antimony	0.010	0.048	0.365	mg/kg	J	MS<LCL	Stage 2B
K1411094-008	14386734	EPA6020	N	Soil	Antimony	0.010	0.049	1.07	mg/kg	J	MS<LCL	Stage 2B
K1411094-009	14386735	EPA6020	N	Soil	Antimony	0.010	0.049	1.27	mg/kg	J	MS<LCL	Stage 2B
K1411094-010	14386736	EPA6020	N	Soil	Antimony	0.010	0.049	1.02	mg/kg	J	MS<LCL	Stage 2B
K1411094-011	14386737	EPA6020	N	Soil	Antimony	0.010	0.048	0.515	mg/kg	J	MS<LCL	Stage 2B
K1411094-012	14386738	EPA6020	N	Soil	Antimony	0.010	0.048	0.506	mg/kg	J	MS<LCL	Stage 2B
K1411094-013	14386739	EPA6020	N	Soil	Antimony	0.010	0.048	0.486	mg/kg	J	MS<LCL	Stage 2B
K1411094-014	14386741	EPA6020	N	Soil	Antimony	0.010	0.048	0.377	mg/kg	J	MS<LCL	Stage 2B
K1411094-015	14386742	EPA6020	N	Soil	Antimony	0.010	0.048	0.42	mg/kg	J	MS<LCL	Stage 2B
K1411094-016	14386743	EPA6020	N	Soil	Antimony	0.010	0.048	0.451	mg/kg	J	MS<LCL	Stage 2B
K1411094-017	14386749	EPA6020	N	Soil	Antimony	0.010	0.048	0.743	mg/kg	J	MS<LCL	Stage 2B
K1411094-018	14386756	EPA6020	N	Soil	Antimony	0.009	0.047	0.607	mg/kg	J	MS<LCL	Stage 2B
K1411094-019	14386757	EPA6020	N	Soil	Antimony	0.010	0.048	0.593	mg/kg	J	MS<LCL	Stage 2B
K1411094-020	14386758	EPA6020	N	Soil	Antimony	0.010	0.048	0.532	mg/kg	J	MS<LCL	Stage 2B
K1411095-001	14386759	EPA6020	N	Soil	Antimony	0.010	0.048	0.637	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-002	14386760	EPA6020	N	Soil	Antimony	0.009	0.047	0.561	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-003	14386761	EPA6020	N	Soil	Antimony	0.010	0.048	0.606	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-004	14386763	EPA6020	N	Soil	Antimony	0.010	0.048	1.66	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-005	14386764	EPA6020	N	Soil	Antimony	0.010	0.048	1.45	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-006	14386765	EPA6020	N	Soil	Antimony	0.010	0.048	1.44	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-007	14386766	EPA6020	N	Soil	Antimony	0.010	0.049	1.91	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-008	14386767	EPA6020	N	Soil	Antimony	0.010	0.049	1.6	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-009	14386768	EPA6020	N	Soil	Antimony	0.010	0.049	2.38	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-010	14386769	EPA6020	N	Soil	Antimony	0.010	0.050	1.82	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-011	14386776	EPA6020	N	Soil	Antimony	0.010	0.048	1.42	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-012	14386777	EPA6020	N	Soil	Antimony	0.010	0.048	1.76	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-013	14386778	EPA6020	N	Soil	Antimony	0.010	0.048	1.16	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-014	14386785	EPA6020	N	Soil	Antimony	0.010	0.048	0.757	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-015	14386786	EPA6020	N	Soil	Antimony	0.010	0.048	0.788	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-016	14386787	EPA6020	N	Soil	Antimony	0.010	0.048	0.805	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-017	14386794	EPA6020	N	Soil	Antimony	0.010	0.048	0.639	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-018	14386795	EPA6020	N	Soil	Antimony	0.009	0.047	0.575	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-019	14386796	EPA6020	N	Soil	Antimony	0.010	0.048	0.567	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411095-020	14386797	EPA6020	N	Soil	Antimony	0.010	0.048	0.583	mg/kg	J	MS<LCL, LCS>UCL	Stage 2B
K1411096-001	14386804	EPA6020	N	Soil	Antimony	0.010	0.049	6.39	mg/kg	J	MS<LCL	Stage 2B
K1411096-002	14386805	EPA6020	N	Soil	Antimony	0.010	0.048	1.29	mg/kg	J	MS<LCL	Stage 2B
K1411096-003	14386807	EPA6020	N	Soil	Antimony	0.010	0.049	6.98	mg/kg	J	MS<LCL	Stage 2B
K1411096-004	14386808	EPA6020	N	Soil	Antimony	0.010	0.049	8.3	mg/kg	J	MS<LCL	Stage 2B
K1411096-005	14386809	EPA6020	N	Soil	Antimony	0.010	0.049	10.1	mg/kg	J	MS<LCL	Stage 2B
K1411096-006	14386810	EPA6020	N	Soil	Antimony	0.010	0.050	7.49	mg/kg	J	MS<LCL	Stage 2B
K1411096-007	14386811	EPA6020	N	Soil	Antimony	0.010	0.050	7.94	mg/kg	J	MS<LCL	Stage 2B
K1411096-008	14386812	EPA6020	N	Soil	Antimony	0.010	0.050	7.2	mg/kg	J	MS<LCL	Stage 2B
K1411096-009	14386818	EPA6020	N	Soil	Antimony	0.010	0.049	1.71	mg/kg	J	MS<LCL	Stage 2B
K1411096-010	14386819	EPA6020	N	Soil	Antimony	0.010	0.049	1.96	mg/kg	J	MS<LCL	Stage 2B
K1411096-011	14386820	EPA6020	N	Soil	Antimony	0.010	0.050	2.37	mg/kg	J	MS<LCL	Stage 2B
K1411096-012	14386826	EPA6020	N	Soil	Antimony	0.010	0.048	1.26	mg/kg	J	MS<LCL	Stage 2B
K1411096-013	14386828	EPA6020	N	Soil	Antimony	0.010	0.050	0.92	mg/kg	J	MS<LCL	Stage 2B
K1411096-014	14386829	EPA6020	N	Soil	Antimony	0.010	0.050	1.01	mg/kg	J	MS<LCL	Stage 2B
K1411096-015	14386830	EPA6020	N	Soil	Antimony	0.010	0.049	0.927	mg/kg	J	MS<LCL	Stage 2B
K1411096-016	14386831	EPA6020	N	Soil	Antimony	0.010	0.049	3.2	mg/kg	J	MS<LCL	Stage 2B
K1411096-017	14386832	EPA6020	N	Soil	Antimony	0.010	0.049	3.3	mg/kg	J	MS<LCL	Stage 2B
K1411096-018	14386833	EPA6020	N	Soil	Antimony	0.010	0.049	2.58	mg/kg	J	MS<LCL	Stage 2B
K1411096-019	14386840	EPA6020	N	Soil	Antimony	0.010	0.049	3.89	mg/kg	J	MS<LCL	Stage 2B
K1411096-020	14386841	EPA6020	N	Soil	Antimony	0.010	0.049	3.54	mg/kg	J	MS<LCL	Stage 2B
K1411096-021	14386842	EPA6020	N	Soil	Antimony	0.010	0.049	3.65	mg/kg	J	MS<LCL	Stage 2B
K1410321-018	14376470	EPA6020	N	Soil	Arsenic	0.04	0.50	25	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6020	FD	Soil	Arsenic	0.04	0.50	34.9	mg/kg	J	FD>UCL	Stage 2B
K1409773-001	14346186	EPA6020	N	Soil	Barium	0.02	0.04	332	mg/kg	J	MS<LCL	Stage 2B
K1409773-002	14346187	EPA6020	N	Soil	Barium	0.02	0.04	328	mg/kg	J	MS<LCL	Stage 2B
K1409773-003	14356241	EPA6020	N	Soil	Barium	0.02	0.04	362	mg/kg	J	MS<LCL	Stage 2B
K1409773-004	14356242	EPA6020	N	Soil	Barium	0.02	0.04	317	mg/kg	J	MS<LCL	Stage 2B
K1409773-005	14356243	EPA6020	N	Soil	Barium	0.02	0.04	303	mg/kg	J	MS<LCL	Stage 2B
K1409773-006	14346276	EPA6020	N	Soil	Barium	0.02	0.04	294	mg/kg	J	MS<LCL	Stage 2B
K1410321-018	14376470	EPA6020	N	Soil	Barium	0.02	0.20	364	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6020	FD	Soil	Barium	0.02	0.20	227	mg/kg	J	FD>UCL	Stage 2B
K1409228-001	14336005	EPA6020	N	Soil	Beryllium	0.005	0.019	0.433	mg/kg	J	SerDil	Stage 2B
K1409228-002	14336006	EPA6020	N	Soil	Beryllium	0.005	0.019	0.629	mg/kg	J	SerDil	Stage 2B
K1409228-003	14336007	EPA6020	N	Soil	Beryllium	0.005	0.020	0.522	mg/kg	J	SerDil	Stage 2B
K1409228-004	14336008	EPA6020	N	Soil	Beryllium	0.004	0.017	0.591	mg/kg	J	SerDil	Stage 2B
K1409228-005	14336009	EPA6020	FD	Soil	Beryllium	0.004	0.016	0.455	mg/kg	J	SerDil	Stage 2B
K1409228-006	14336021	EPA6020	N	Soil	Beryllium	0.005	0.018	0.719	mg/kg	J	SerDil	Stage 2B
K1409228-007	14336022	EPA6020	N	Soil	Beryllium	0.004	0.017	0.67	mg/kg	J	SerDil	Stage 2B
K1409228-008	14336023	EPA6020	N	Soil	Beryllium	0.005	0.020	0.622	mg/kg	J	SerDil	Stage 2B
K1409228-009	14336024	EPA6020	N	Soil	Beryllium	0.004	0.017	0.671	mg/kg	J	SerDil	Stage 2B
K1409228-010	14336025	EPA6020	FD	Soil	Beryllium	0.005	0.018	0.658	mg/kg	J	SerDil	Stage 2B
K1409228-011	14336026	EPA6020	N	Soil	Beryllium	0.005	0.020	0.633	mg/kg	J	SerDil	Stage 2B
K1409228-012	14336046	EPA6020	N	Soil	Beryllium	0.005	0.019	0.731	mg/kg	J	SerDil	Stage 2B
K1409228-013	14336047	EPA6020	N	Soil	Beryllium	0.004	0.016	0.412	mg/kg	J	SerDil	Stage 2B
K1409228-014	14336048	EPA6020	N	Soil	Beryllium	0.005	0.020	0.631	mg/kg	J	SerDil	Stage 2B
K1409228-015	14336049	EPA6020	FD	Soil	Beryllium	0.004	0.017	0.406	mg/kg	J	SerDil	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1409228-016	14336050	EPA6020	N	Soil	Beryllium	0.005	0.020	0.541	mg/kg	J	SerDil	Stage 2B
K1409228-017	14336051	EPA6020	N	Soil	Beryllium	0.005	0.019	0.613	mg/kg	J	SerDil	Stage 2B
K1409228-018	14336058	EPA6020	N	Soil	Beryllium	0.005	0.019	0.604	mg/kg	J	SerDil	Stage 2B
K1409228-019	14336059	EPA6020	N	Soil	Beryllium	0.005	0.020	0.948	mg/kg	J	SerDil	Stage 2B
K1409228-020	14336060	EPA6020	N	Soil	Beryllium	0.005	0.021	1.16	mg/kg	J	SerDil	Stage 2B
K1409229-001	14336061	EPA6020	N	Soil	Beryllium	0.005	0.020	0.992	mg/kg	J	SerDil	Stage 2B
K1409229-002	14336062	EPA6020	N	Soil	Beryllium	0.004	0.018	0.825	mg/kg	J	SerDil	Stage 2B
K1409229-003	14336063	EPA6020	FD	Soil	Beryllium	0.004	0.017	0.572	mg/kg	J	SerDil	Stage 2B
K1409229-004	14336071	EPA6020	N	Soil	Beryllium	0.004	0.017	0.448	mg/kg	J	SerDil	Stage 2B
K1409229-005	14336072	EPA6020	FD	Soil	Beryllium	0.004	0.017	0.454	mg/kg	J	SerDil	Stage 2B
K1409229-006	14336073	EPA6020	N	Soil	Beryllium	0.005	0.019	0.433	mg/kg	J	SerDil	Stage 2B
K1409229-007	14336074	EPA6020	N	Soil	Beryllium	0.004	0.017	0.311	mg/kg	J	SerDil	Stage 2B
K1409229-008	14336075	EPA6020	N	Soil	Beryllium	0.005	0.019	0.553	mg/kg	J	SerDil	Stage 2B
K1409229-009	14336076	EPA6020	N	Soil	Beryllium	0.005	0.019	0.547	mg/kg	J	SerDil	Stage 2B
K1409229-010	14336078	EPA6020	N	Soil	Beryllium	0.004	0.017	0.492	mg/kg	J	SerDil	Stage 2B
K1409229-011	14336079	EPA6020	N	Soil	Beryllium	0.004	0.017	0.544	mg/kg	J	SerDil	Stage 2B
K1409229-012	14336080	EPA6020	N	Soil	Beryllium	0.004	0.018	0.549	mg/kg	J	SerDil	Stage 2B
K1409229-013	14336081	EPA6020	N	Soil	Beryllium	0.004	0.016	0.419	mg/kg	J	SerDil	Stage 2B
K1409229-014	14336082	EPA6020	N	Soil	Beryllium	0.005	0.019	0.471	mg/kg	J	SerDil	Stage 2B
K1409229-015	14336083	EPA6020	FD	Soil	Beryllium	0.004	0.017	0.485	mg/kg	J	SerDil	Stage 2B
K1409229-016	14336092	EPA6020	N	Soil	Beryllium	0.005	0.019	0.504	mg/kg	J	SerDil	Stage 2B
K1409229-017	14336093	EPA6020	N	Soil	Beryllium	0.004	0.016	0.599	mg/kg	J	SerDil	Stage 2B
K1409229-018	14336094	EPA6020	N	Soil	Beryllium	0.005	0.020	0.612	mg/kg	J	SerDil	Stage 2B
K1409229-019	14336095	EPA6020	N	Soil	Beryllium	0.005	0.020	0.81	mg/kg	J	SerDil	Stage 2B
K1409229-020	14336096	EPA6020	N	Soil	Beryllium	0.004	0.017	0.246	mg/kg	J	SerDil	Stage 2B
K1409230-001	14346102	EPA6020	N	Soil	Beryllium	0.004	0.018	0.485	mg/kg	J	SerDil	Stage 2B
K1409230-002	14346103	EPA6020	N	Soil	Beryllium	0.005	0.018	0.385	mg/kg	J	SerDil	Stage 2B
K1409230-003	14346104	EPA6020	N	Soil	Beryllium	0.004	0.016	0.328	mg/kg	J	SerDil	Stage 2B
K1409230-004	14346105	EPA6020	N	Soil	Beryllium	0.005	0.018	0.455	mg/kg	J	SerDil	Stage 2B
K1409230-005	14346106	EPA6020	N	Soil	Beryllium	0.005	0.019	0.393	mg/kg	J	SerDil	Stage 2B
K1409230-006	14346107	EPA6020	FD	Soil	Beryllium	0.005	0.018	0.404	mg/kg	J	SerDil	Stage 2B
K1409230-007	14346128	EPA6020	N	Soil	Beryllium	0.004	0.017	0.37	mg/kg	J	SerDil	Stage 2B
K1409230-008	14346129	EPA6020	N	Soil	Beryllium	0.005	0.019	0.335	mg/kg	J	SerDil	Stage 2B
K1409230-009	14346130	EPA6020	N	Soil	Beryllium	0.004	0.016	0.348	mg/kg	J	SerDil	Stage 2B
K1409230-010	14346131	EPA6020	N	Soil	Beryllium	0.005	0.018	0.309	mg/kg	J	SerDil	Stage 2B
K1409230-011	14346132	EPA6020	FD	Soil	Beryllium	0.004	0.017	0.314	mg/kg	J	SerDil	Stage 2B
K1409230-012	14346133	EPA6020	N	Soil	Beryllium	0.004	0.018	0.3	mg/kg	J	SerDil	Stage 2B
K1409230-013	14346138	EPA6020	N	Soil	Beryllium	0.005	0.019	0.276	mg/kg	J	SerDil	Stage 2B
K1409230-014	14346139	EPA6020	FD	Soil	Beryllium	0.005	0.019	0.292	mg/kg	J	SerDil	Stage 2B
K1409230-015	14346140	EPA6020	N	Soil	Beryllium	0.005	0.019	0.623	mg/kg	J	SerDil	Stage 2B
K1409230-016	14346141	EPA6020	N	Soil	Beryllium	0.004	0.016	0.424	mg/kg	J	SerDil	Stage 2B
K1409230-017	14346142	EPA6020	N	Soil	Beryllium	0.005	0.020	0.442	mg/kg	J	SerDil	Stage 2B
K1409230-018	14346143	EPA6020	N	Soil	Beryllium	0.005	0.018	0.34	mg/kg	J	SerDil	Stage 2B
K1409764-001	14346177	EPA6020	N	Soil	Beryllium	0.005	0.020	0.266	mg/kg	J	SerDil	Stage 2B
K1409764-002	14346178	EPA6020	N	Soil	Beryllium	0.005	0.020	0.26	mg/kg	J	SerDil	Stage 2B
K1409764-003	14346179	EPA6020	N	Soil	Beryllium	0.005	0.020	0.247	mg/kg	J	SerDil	Stage 2B
K1409764-004	14346194	EPA6020	N	Soil	Beryllium	0.005	0.020	0.258	mg/kg	J	SerDil	Stage 2B
K1409764-005	14346196	EPA6020	N	Soil	Beryllium	0.005	0.019	0.307	mg/kg	J	SerDil	Stage 2B
K1409764-006	14346197	EPA6020	N	Soil	Beryllium	0.005	0.020	0.335	mg/kg	J	SerDil	Stage 2B
K1409764-007	14346198	EPA6020	N	Soil	Beryllium	0.005	0.020	0.322	mg/kg	J	SerDil	Stage 2B
K1409764-008	14346205	EPA6020	N	Soil	Beryllium	0.005	0.020	0.474	mg/kg	J	SerDil	Stage 2B
K1409764-009	14346206	EPA6020	N	Soil	Beryllium	0.005	0.020	0.485	mg/kg	J	SerDil	Stage 2B
K1409764-010	14346207	EPA6020	N	Soil	Beryllium	0.005	0.020	0.458	mg/kg	J	SerDil	Stage 2B
K1409764-011	14346209	EPA6020	N	Soil	Beryllium	0.005	0.020	0.607	mg/kg	J	SerDil	Stage 2B
K1409764-012	14346210	EPA6020	N	Soil	Beryllium	0.005	0.020	0.613	mg/kg	J	SerDil	Stage 2B
K1409764-013	14346211	EPA6020	N	Soil	Beryllium	0.005	0.020	0.623	mg/kg	J	SerDil	Stage 2B
K1409764-014	14346212	EPA6020	N	Soil	Beryllium	0.005	0.020	0.58	mg/kg	J	SerDil	Stage 2B
K1409764-015	14346213	EPA6020	N	Soil	Beryllium	0.005	0.020	1.08	mg/kg	J	SerDil	Stage 2B
K1409764-016	14346214	EPA6020	N	Soil	Beryllium	0.005	0.020	0.571	mg/kg	J	SerDil	Stage 2B
K1409764-017	14346215	EPA6020	N	Soil	Beryllium	0.005	0.021	0.598	mg/kg	J	SerDil	Stage 2B
K1409764-018	14346216	EPA6020	N	Soil	Beryllium	0.005	0.020	0.466	mg/kg	J	SerDil	Stage 2B
K1409764-019	14346217	EPA6020	N	Soil	Beryllium	0.005	0.020	0.511	mg/kg	J	SerDil	Stage 2B
K1409764-020	14346218	EPA6020	N	Soil	Beryllium	0.005	0.020	0.492	mg/kg	J	SerDil	Stage 2B
K1409772-001	14356296	EPA6020	N	Soil	Beryllium	0.004	0.017	0.518	mg/kg	J	SerDil	Stage 2B
K1409772-002	14356297	EPA6020	N	Soil	Beryllium	0.004	0.016	0.476	mg/kg	J	SerDil	Stage 2B
K1409772-003	14356298	EPA6020	N	Soil	Beryllium	0.004	0.018	0.5	mg/kg	J	SerDil	Stage 2B
K1409772-004	14356299	EPA6020	N	Soil	Beryllium	0.004	0.018	0.495	mg/kg	J	SerDil	Stage 2B
K1409772-005	14366301	EPA6020	N	Soil	Beryllium	0.005	0.018	0.691	mg/kg	J	SerDil	Stage 2B
K1409772-006	14366302	EPA6020	N	Soil	Beryllium	0.005	0.018	0.718	mg/kg	J	SerDil	Stage 2B
K1409772-007	14366303	EPA6020	N	Soil	Beryllium	0.004	0.017	0.661	mg/kg	J	SerDil	Stage 2B
K1409772-008	14366304	EPA6020	N	Soil	Beryllium	0.004	0.017	0.389	mg/kg	J	SerDil	Stage 2B
K1409772-009	14366305	EPA6020	N	Soil	Beryllium	0.004	0.016	0.376	mg/kg	J	SerDil	Stage 2B
K1409772-010	14366306	EPA6020	N	Soil	Beryllium	0.004	0.017	0.388	mg/kg	J	SerDil	Stage 2B
K1409772-011	14366307	EPA6020	N	Soil	Beryllium	0.004	0.018	0.369	mg/kg	J	SerDil	Stage 2B
K1409772-012	14366308	EPA6020	N	Soil	Beryllium	0.004	0.018	0.553	mg/kg	J	SerDil	Stage 2B
K1409772-013	14366309	EPA6020	N	Soil	Beryllium	0.005	0.018	0.568	mg/kg	J	SerDil	Stage 2B
K1409772-014	14366311	EPA6020	N	Soil	Beryllium	0.004	0.016	0.29	mg/kg	J	SerDil	Stage 2B
K1409772-015	14366312	EPA6020	N	Soil	Beryllium	0.004	0.017	0.302	mg/kg	J	SerDil	Stage 2B
K1409772-016	14366313	EPA6020	N	Soil	Beryllium	0.004	0.017	0.306	mg/kg	J	SerDil	Stage 2B
K1409772-017	14366314	EPA6020	N	Soil	Beryllium	0.004	0.017	0.302	mg/kg	J	SerDil	Stage 2B
K1409777-001	14366315	EPA6020	N	Soil	Beryllium	0.005	0.020	0.619	mg/kg	J	SerDil	Stage 4
K1409777-002	14366316	EPA6020	N	Soil	Beryllium	0.005	0.020	0.633	mg/kg	J	SerDil	Stage 4
K1409777-003	14366317	EPA6020	N	Soil	Beryllium	0.005	0.020	0.645	mg/kg	J	SerDil	Stage 4
K1409777-004	14366324	EPA6020	N	Soil	Beryllium	0.005	0.018	0.358	mg/kg	J	SerDil	Stage 4
K1409777-005	14366325	EPA6020	N	Soil	Beryllium	0.005	0.019	0.358	mg/kg	J	SerDil	Stage 4
K1409777-006	14366326	EPA6020	N	Soil	Beryllium	0.005	0.019	0.35	mg/kg	J	SerDil	Stage 4
K1409777-007	14366333	EPA6020	N	Soil	Beryllium	0.005	0.020	0.38	mg/kg	J	SerDil	Stage 4
K1409777-008	14366334	EPA6020	N	Soil	Beryllium	0.005	0.019	0.361	mg/kg	J	SerDil	Stage 4
K1409777-009	14366335	EPA6020	N	Soil	Beryllium	0.005	0.019	0.373	mg/kg	J	SerDil	Stage 4
K1409777-010	14366336	EPA6020	N	Soil	Beryllium	0.005	0.019	0.365	mg/kg	J	SerDil	Stage 4
K1409777-011	14366337	EPA6020	N	Soil	Beryllium	0.005	0.019	0.35	mg/kg	J	SerDil	Stage 4
K1409777-012	14366339	EPA6020	N	Soil	Beryllium	0.005	0.020	0.532	mg/kg	J	SerDil	Stage 4
K1409777-013	14366340	EPA6020	N	Soil	Beryllium	0.005	0.021	0.596	mg/kg	J	SerDil	Stage 4
K1409777-014	14366341	EPA6020	N	Soil	Beryllium	0.005	0.021	0.609	mg/kg	J	SerDil	Stage 4
K1409777-015	14366342	EPA6020	N	Soil	Beryllium	0.005	0.020	0.598	mg/kg	J	SerDil	Stage 4
K1409777-016	14366348	EPA6020	N	Soil	Beryllium	0.005	0.020	0.527	mg/kg	J	SerDil	Stage 4
K1409790-001	14346165	EPA6020	N	Soil	Beryllium	0.005	0.018	0.508	mg/kg	J	SerDil	Stage 2B
K1409790-002	14346166	EPA6020	N	Soil	Beryllium	0.005	0.019	0.647	mg/kg	J	SerDil	Stage 2B
K1409790-003	14346167	EPA6020	N	Soil	Beryllium	0.005	0.019	0.589	mg/kg	J	SerDil	Stage 2B
K1409790-004	14346168	EPA6020	N	Soil	Beryllium	0.005	0.018	0.891	mg/kg	J	SerDil	Stage 2B
K1409790-005	14346169	EPA6020	FD	Soil	Beryllium	0.005	0.018	0.887	mg/kg	J	SerDil	Stage 2B
K1409790-006	14346170	EPA6020	N	Soil	Beryllium	0.005	0.019	0.872	mg/kg	J	SerDil	Stage 2B
K1409790-007	14346180	EPA6020	N	Soil	Beryllium	0.005	0.019	0.254	mg/kg	J	SerDil	Stage 2B
K1409790-008	14346181	EPA6020	N	Soil	Beryllium	0.005	0.019	0.279	mg/kg	J	SerDil	Stage 2B
K1409790-009	14346182	EPA6020	N	Soil	Beryllium	0.005	0.019	0.321	mg/kg	J	SerDil	Stage 2B
K1409790-010	14346183	EPA6020	N	Soil	Beryllium	0.005	0.019	0.221	mg/kg	J	SerDil	Stage 2B
K1409790-011	14346184	EPA6020	N	Soil	Beryllium	0.005	0.019	0.265	mg/kg	J	SerDil	Stage 2B
K1409790-012	14346185	EPA6020	FD	Soil	Beryllium	0.005	0.019	0.263	mg/kg	J	SerDil	Stage 2B
K1409790-013	14346188	EPA6020	N	Soil	Beryllium	0.005	0.019	0.271	mg/kg	J	SerDil	Stage 2B
K1409790-014	14346189	EPA6020	N	Soil	Beryllium	0.005	0.019	0.273	mg/kg	J	SerDil	Stage 2B
K1409790-015	14346190	EPA6020	N	Soil	Beryllium	0.005	0.019	0.274	mg/kg	J	SerDil	Stage 2B
K1409790-016	14346191	EPA6020	FD	Soil	Beryllium	0.005	0.019	0.27	mg/kg	J	SerDil	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1409790-017	14346192	EPA6020	N	Soil	Beryllium	0.005	0.018	0.274	mg/kg	J	SerDil	Stage 2B
K1409790-018	14346193	EPA6020	N	Soil	Beryllium	0.005	0.019	0.355	mg/kg	J	SerDil	Stage 2B
K1409790-019	14346199	EPA6020	N	Soil	Beryllium	0.005	0.019	0.464	mg/kg	J	SerDil	Stage 2B
K1409790-020	14346200	EPA6020	N	Soil	Beryllium	0.005	0.019	0.489	mg/kg	J	SerDil	Stage 2B
K1409793-001	14346201	EPA6020	N	Soil	Beryllium	0.004	0.017	0.427	mg/kg	J	SerDil	Stage 2B
K1409793-002	14346202	EPA6020	FD	Soil	Beryllium	0.004	0.016	0.462	mg/kg	J	SerDil	Stage 2B
K1409793-003	14346203	EPA6020	N	Soil	Beryllium	0.004	0.016	0.455	mg/kg	J	SerDil	Stage 2B
K1409793-004	14346204	EPA6020	N	Soil	Beryllium	0.004	0.017	0.46	mg/kg	J	SerDil	Stage 2B
K1409793-005	14356221	EPA6020	N	Soil	Beryllium	0.004	0.017	0.529	mg/kg	J	SerDil	Stage 2B
K1409793-006	14356222	EPA6020	N	Soil	Beryllium	0.004	0.017	0.446	mg/kg	J	SerDil	Stage 2B
K1409793-007	14356223	EPA6020	N	Soil	Beryllium	0.004	0.018	0.51	mg/kg	J	SerDil	Stage 2B
K1409793-008	14356224	EPA6020	N	Soil	Beryllium	0.004	0.017	0.441	mg/kg	J	SerDil	Stage 2B
K1409793-009	14356225	EPA6020	N	Soil	Beryllium	0.004	0.017	0.493	mg/kg	J	SerDil	Stage 2B
K1409793-010	14356232	EPA6020	N	Soil	Beryllium	0.004	0.016	0.407	mg/kg	J	SerDil	Stage 2B
K1409793-011	14356233	EPA6020	N	Soil	Beryllium	0.004	0.017	0.401	mg/kg	J	SerDil	Stage 2B
K1409793-012	14356234	EPA6020	N	Soil	Beryllium	0.004	0.018	0.376	mg/kg	J	SerDil	Stage 2B
K1409793-013	14356235	EPA6020	N	Soil	Beryllium	0.004	0.016	0.258	mg/kg	J	SerDil	Stage 2B
K1409793-014	14356236	EPA6020	N	Soil	Beryllium	0.004	0.017	0.243	mg/kg	J	SerDil	Stage 2B
K1409793-015	14356251	EPA6020	N	Soil	Beryllium	0.004	0.017	0.343	mg/kg	J	SerDil	Stage 2B
K1409793-016	14356252	EPA6020	N	Soil	Beryllium	0.004	0.018	0.439	mg/kg	J	SerDil	Stage 2B
K1409793-017	14356253	EPA6020	N	Soil	Beryllium	0.004	0.017	0.375	mg/kg	J	SerDil	Stage 2B
K1409793-018	14356254	EPA6020	N	Soil	Beryllium	0.004	0.017	0.382	mg/kg	J	SerDil	Stage 2B
K1409793-019	14356255	EPA6020	FD	Soil	Beryllium	0.004	0.017	0.378	mg/kg	J	SerDil	Stage 2B
K1409793-020	14356256	EPA6020	N	Soil	Beryllium	0.004	0.017	0.379	mg/kg	J	SerDil	Stage 2B
K1410290-001	14366350	EPA6020	N	Soil	Beryllium	0.005	0.020	0.482	mg/kg	J	SerDil	Stage 2B
K1410290-002	14366357	EPA6020	N	Soil	Beryllium	0.005	0.020	0.701	mg/kg	J	SerDil	Stage 2B
K1410290-003	14366364	EPA6020	N	Soil	Beryllium	0.005	0.020	0.617	mg/kg	J	SerDil	Stage 2B
K1410290-004	14366371	EPA6020	N	Soil	Beryllium	0.005	0.020	0.537	mg/kg	J	SerDil	Stage 2B
K1410290-005	14366372	EPA6020	N	Soil	Beryllium	0.005	0.020	0.557	mg/kg	J	SerDil	Stage 2B
K1410290-006	14366373	EPA6020	N	Soil	Beryllium	0.005	0.020	0.567	mg/kg	J	SerDil	Stage 2B
K1410290-007	14366375	EPA6020	N	Soil	Beryllium	0.005	0.020	0.632	mg/kg	J	SerDil	Stage 2B
K1410290-008	14366376	EPA6020	N	Soil	Beryllium	0.005	0.020	0.608	mg/kg	J	SerDil	Stage 2B
K1410290-009	14366377	EPA6020	N	Soil	Beryllium	0.005	0.020	0.636	mg/kg	J	SerDil	Stage 2B
K1410290-010	14366378	EPA6020	N	Soil	Beryllium	0.005	0.020	0.555	mg/kg	J	SerDil	Stage 2B
K1410290-011	14366379	EPA6020	N	Soil	Beryllium	0.005	0.020	0.578	mg/kg	J	SerDil	Stage 2B
K1410290-012	14366380	EPA6020	N	Soil	Beryllium	0.005	0.020	0.531	mg/kg	J	SerDil	Stage 2B
K1410290-013	14366381	EPA6020	N	Soil	Beryllium	0.005	0.019	0.443	mg/kg	J	SerDil	Stage 2B
K1410290-014	14366382	EPA6020	N	Soil	Beryllium	0.005	0.019	0.482	mg/kg	J	SerDil	Stage 2B
K1410290-015	14366389	EPA6020	N	Soil	Beryllium	0.005	0.020	0.588	mg/kg	J	SerDil	Stage 2B
K1410290-016	14366390	EPA6020	N	Soil	Beryllium	0.005	0.020	0.646	mg/kg	J	SerDil	Stage 2B
K1410290-017	14366391	EPA6020	N	Soil	Beryllium	0.005	0.020	0.63	mg/kg	J	SerDil	Stage 2B
K1410290-018	14366398	EPA6020	N	Soil	Beryllium	0.005	0.019	0.36	mg/kg	J	SerDil	Stage 2B
K1410290-019	14366399	EPA6020	N	Soil	Beryllium	0.005	0.019	0.329	mg/kg	J	SerDil	Stage 2B
K1410292-001	14366445	EPA6020	N	Soil	Beryllium	0.005	0.019	0.331	mg/kg	J	SerDil	Stage 2B
K1410292-002	14366451	EPA6020	N	Soil	Beryllium	0.005	0.020	0.456	mg/kg	J	SerDil	Stage 2B
K1410292-003	14366452	EPA6020	N	Soil	Beryllium	0.005	0.020	0.44	mg/kg	J	SerDil	Stage 2B
K1410292-004	14366453	EPA6020	N	Soil	Beryllium	0.005	0.019	0.464	mg/kg	J	SerDil	Stage 2B
K1410292-005	14376464	EPA6020	N	Soil	Beryllium	0.005	0.020	0.654	mg/kg	J	SerDil	Stage 2B
K1410292-006	14376465	EPA6020	N	Soil	Beryllium	0.005	0.020	0.67	mg/kg	J	SerDil	Stage 2B
K1410292-007	14376466	EPA6020	N	Soil	Beryllium	0.005	0.020	0.654	mg/kg	J	SerDil	Stage 2B
K1410292-008	14376467	EPA6020	N	Soil	Beryllium	0.005	0.020	0.504	mg/kg	J	SerDil	Stage 2B
K1410292-009	14376468	EPA6020	N	Soil	Beryllium	0.005	0.020	0.503	mg/kg	J	SerDil	Stage 2B
K1410292-010	14376469	EPA6020	N	Soil	Beryllium	0.005	0.020	0.507	mg/kg	J	SerDil	Stage 2B
K1410292-011	14376476	EPA6020	N	Soil	Beryllium	0.005	0.020	0.623	mg/kg	J	SerDil	Stage 2B
K1410292-012	14376481	EPA6020	N	Soil	Beryllium	0.005	0.020	0.553	mg/kg	J	SerDil	Stage 2B
K1410292-013	14376482	EPA6020	N	Soil	Beryllium	0.005	0.020	0.541	mg/kg	J	SerDil	Stage 2B
K1410292-014	14376483	EPA6020	N	Soil	Beryllium	0.005	0.020	0.569	mg/kg	J	SerDil	Stage 2B
K1410292-015	14376490	EPA6020	N	Soil	Beryllium	0.005	0.019	0.416	mg/kg	J	SerDil	Stage 2B
K1410292-016	14376491	EPA6020	N	Soil	Beryllium	0.005	0.019	0.408	mg/kg	J	SerDil	Stage 2B
K1410292-017	14376492	EPA6020	N	Soil	Beryllium	0.005	0.019	0.442	mg/kg	J	SerDil	Stage 2B
K1410292-018	14376493	EPA6020	N	Soil	Beryllium	0.005	0.019	0.314	mg/kg	J	SerDil	Stage 2B
K1410292-019	14376494	EPA6020	N	Soil	Beryllium	0.005	0.020	0.579	mg/kg	J	SerDil	Stage 2B
K1410292-020	14376495	EPA6020	N	Soil	Beryllium	0.005	0.019	0.537	mg/kg	J	SerDil	Stage 2B
K1410293-001	14376497	EPA6020	N	Soil	Beryllium	0.005	0.020	0.766	mg/kg	J	SerDil	Stage 2B
K1410293-002	14376498	EPA6020	N	Soil	Beryllium	0.005	0.020	0.858	mg/kg	J	SerDil	Stage 2B
K1410293-003	14376499	EPA6020	N	Soil	Beryllium	0.005	0.020	0.874	mg/kg	J	SerDil	Stage 2B
K1410293-004	14376500	EPA6020	N	Soil	Beryllium	0.005	0.019	0.484	mg/kg	J	SerDil	Stage 2B
K1410293-005	14376501	EPA6020	N	Soil	Beryllium	0.005	0.019	0.483	mg/kg	J	SerDil	Stage 2B
K1410293-006	14376502	EPA6020	N	Soil	Beryllium	0.005	0.019	0.516	mg/kg	J	SerDil	Stage 2B
K1410293-007	14376503	EPA6020	N	Soil	Beryllium	0.005	0.019	0.538	mg/kg	J	SerDil	Stage 2B
K1410293-008	14376510	EPA6020	N	Soil	Beryllium	0.005	0.020	0.603	mg/kg	J	SerDil	Stage 2B
K1410293-009	14376518	EPA6020	N	Soil	Beryllium	0.005	0.020	0.654	mg/kg	J	SerDil	Stage 2B
K1410293-010	14376522	EPA6020	N	Soil	Beryllium	0.005	0.020	0.618	mg/kg	J	SerDil	Stage 2B
K1410293-011	14376523	EPA6020	N	Soil	Beryllium	0.005	0.019	0.609	mg/kg	J	SerDil	Stage 2B
K1410293-012	14376531	EPA6020	N	Soil	Beryllium	0.005	0.019	0.424	mg/kg	J	SerDil	Stage 2B
K1410293-013	14376542	EPA6020	N	Soil	Beryllium	0.005	0.019	0.252	mg/kg	J	SerDil	Stage 2B
K1410293-014	14376543	EPA6020	N	Soil	Beryllium	0.005	0.019	0.245	mg/kg	J	SerDil	Stage 2B
K1410293-015	14376544	EPA6020	N	Soil	Beryllium	0.005	0.019	0.248	mg/kg	J	SerDil	Stage 2B
K1410293-016	14376545	EPA6020	N	Soil	Beryllium	0.005	0.020	0.619	mg/kg	J	SerDil	Stage 2B
K1410293-017	14376546	EPA6020	N	Soil	Beryllium	0.005	0.020	0.66	mg/kg	J	SerDil	Stage 2B
K1410293-018	14376547	EPA6020	N	Soil	Beryllium	0.005	0.020	0.577	mg/kg	J	SerDil	Stage 2B
K1410293-019	14376554	EPA6020	N	Soil	Beryllium	0.005	0.020	0.524	mg/kg	J	SerDil	Stage 2B
K1410293-020	14376556	EPA6020	N	Soil	Beryllium	0.005	0.020	0.583	mg/kg	J	SerDil	Stage 2B
K1410319-001	14366386	EPA6020	N	Soil	Beryllium	0.005	0.020	0.495	mg/kg	J	SerDil	Stage 2B
K1410319-002	14366387	EPA6020	N	Soil	Beryllium	0.005	0.021	0.724	mg/kg	J	SerDil	Stage 2B
K1410319-003	14366388	EPA6020	N	Soil	Beryllium	0.005	0.020	0.629	mg/kg	J	SerDil	Stage 2B
K1410319-004	14366392	EPA6020	N	Soil	Beryllium	0.005	0.019	0.358	mg/kg	J	SerDil	Stage 2B
K1410319-005	14366393	EPA6020	N	Soil	Beryllium	0.005	0.019	0.378	mg/kg	J	SerDil	Stage 2B
K1410319-006	14366394	EPA6020	N	Soil	Beryllium	0.005	0.019	0.368	mg/kg	J	SerDil	Stage 2B
K1410319-007	14366395	EPA6020	N	Soil	Beryllium	0.005	0.019	0.333	mg/kg	J	SerDil	Stage 2B
K1410319-008	14366396	EPA6020	N	Soil	Beryllium	0.005	0.019	0.365	mg/kg	J	SerDil	Stage 2B
K1410319-009	14366397	EPA6020	FD	Soil	Beryllium	0.005	0.019	0.372	mg/kg	J	SerDil	Stage 2B
K1410319-010	14366423	EPA6020	N	Soil	Beryllium	0.005	0.020	0.653	mg/kg	J	SerDil	Stage 2B
K1410319-011	14366424	EPA6020	N	Soil	Beryllium	0.005	0.020	0.594	mg/kg	J	SerDil	Stage 2B
K1410319-012	14366425	EPA6020	N	Soil	Beryllium	0.005	0.020	0.571	mg/kg	J	SerDil	Stage 2B
K1410319-013	14366426	EPA6020	N	Soil	Beryllium	0.005	0.022	0.707	mg/kg	J	SerDil	Stage 2B
K1410319-014	14366427	EPA6020	N	Soil	Beryllium	0.005	0.021	0.515	mg/kg	J	SerDil	Stage 2B
K1410319-015	14366435	EPA6020	N	Soil	Beryllium	0.005	0.020	0.845	mg/kg	J	SerDil	Stage 2B
K1410319-016	14366436	EPA6020	N	Soil	Beryllium	0.005	0.020	0.539	mg/kg	J	SerDil	Stage 2B
K1410319-017	14366437	EPA6020	N	Soil	Beryllium	0.005	0.020	0.629	mg/kg	J	SerDil	Stage 2B
K1410319-018	14366438	EPA6020	N	Soil	Beryllium	0.005	0.020	0.484	mg/kg	J	SerDil	Stage 2B
K1410319-019	14366439	EPA6020	N	Soil	Beryllium	0.005	0.021	0.586	mg/kg	J	SerDil	Stage 2B
K1410319-020	14366440	EPA6020	FD	Soil	Beryllium	0.005	0.020	0.583	mg/kg	J	SerDil	Stage 2B
K1410327-001	14376562	EPA6020	N	Soil	Beryllium	0.005	0.020	0.697	mg/kg	J	SerDil	Stage 2B
K1410327-002	14376563	EPA6020	N	Soil	Beryllium	0.005	0.020	0.762	mg/kg	J	SerDil	Stage 2B
K1410327-003	14376564	EPA6020	FD	Soil	Beryllium	0.005	0.020	0.756	mg/kg	J	SerDil	Stage 2B
K1410327-004	14376565	EPA6020	N	Soil	Beryllium	0.005	0.020	0.816	mg/kg	J	SerDil	Stage 2B
K1410327-005	14376566	EPA6020	N	Soil	Beryllium	0.005	0.020	0.938	mg/kg	J	SerDil	Stage 2B
K1410327-006	14376571	EPA6020	N	Soil	Beryllium	0.005	0.020	0.742	mg/kg	J	SerDil	Stage 2B
K1410327-007	14376572	EPA6020	N	Soil	Beryllium	0.005	0.020	0.873	mg/kg	J	SerDil	Stage 2B
K1410327-008	14376573	EPA6020	N	Soil	Beryllium	0.005	0.020	0.859	mg/kg	J	SerDil	Stage 2B
K1410327-009	14376574	EPA6020	N	Soil	Beryllium	0.005	0.020	0.846	mg/kg	J	SerDil	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1410327-010	14376575	EPA6020	N	Soil	Beryllium	0.005	0.020	0.827	mg/kg	J	SerDil	Stage 2B
K1410327-011	14376576	EPA6020	FD	Soil	Beryllium	0.005	0.020	0.82	mg/kg	J	SerDil	Stage 2B
K1410344-001	14366432	EPA6020	N	Soil	Beryllium	0.005	0.020	0.428	mg/kg	J	SerDil	Stage 2B
K1410344-002	14366433	EPA6020	N	Soil	Beryllium	0.005	0.020	0.469	mg/kg	J	SerDil	Stage 2B
K1410344-003	14366434	EPA6020	N	Soil	Beryllium	0.005	0.020	0.48	mg/kg	J	SerDil	Stage 2B
K1410344-004	14376524	EPA6020	N	Soil	Beryllium	0.005	0.020	0.535	mg/kg	J	SerDil	Stage 2B
K1410344-005	14376570	EPA6020	N	Soil	Beryllium	0.005	0.020	0.672	mg/kg	J	SerDil	Stage 2B
K1411017-001	14396997	EPA6020	N	Soil	Beryllium	0.005	0.020	0.449	mg/kg	J	SerDil	Stage 2B
K1411017-002	14396998	EPA6020	N	Soil	Beryllium	0.005	0.019	0.417	mg/kg	J	SerDil	Stage 2B
K1411017-003	14396999	EPA6020	N	Soil	Beryllium	0.005	0.019	0.354	mg/kg	J	SerDil	Stage 2B
K1411017-004	14397000	EPA6020	N	Soil	Beryllium	0.005	0.019	0.445	mg/kg	J	SerDil	Stage 2B
K1411017-005	14397001	EPA6020	FD	Soil	Beryllium	0.005	0.019	0.477	mg/kg	J	SerDil	Stage 2B
K1411017-006	14397002	EPA6020	N	Soil	Beryllium	0.005	0.019	0.445	mg/kg	J	SerDil	Stage 2B
K1411019-001	14386798	EPA6020	N	Soil	Beryllium	0.005	0.020	0.71	mg/kg	J	SerDil	Stage 2B
K1411019-002	14386799	EPA6020	N	Soil	Beryllium	0.005	0.021	0.744	mg/kg	J	SerDil	Stage 2B
K1411019-003	14386800	EPA6020	N	Soil	Beryllium	0.005	0.020	0.762	mg/kg	J	SerDil	Stage 2B
K1411019-004	14386801	EPA6020	N	Soil	Beryllium	0.005	0.020	0.679	mg/kg	J	SerDil	Stage 2B
K1411019-005	14386802	EPA6020	N	Soil	Beryllium	0.005	0.020	0.765	mg/kg	J	SerDil	Stage 2B
K1411019-006	14386803	EPA6020	FD	Soil	Beryllium	0.005	0.020	0.792	mg/kg	J	SerDil	Stage 2B
K1411019-007	14386813	EPA6020	N	Soil	Beryllium	0.005	0.020	0.58	mg/kg	J	SerDil	Stage 2B
K1411019-008	14386814	EPA6020	N	Soil	Beryllium	0.005	0.020	0.832	mg/kg	J	SerDil	Stage 2B
K1411019-009	14386815	EPA6020	N	Soil	Beryllium	0.005	0.020	0.842	mg/kg	J	SerDil	Stage 2B
K1411019-010	14386816	EPA6020	N	Soil	Beryllium	0.005	0.020	0.728	mg/kg	J	SerDil	Stage 2B
K1411019-011	14386817	EPA6020	N	Soil	Beryllium	0.005	0.020	0.698	mg/kg	J	SerDil	Stage 2B
K1411019-012	14386821	EPA6020	N	Soil	Beryllium	0.005	0.019	0.377	mg/kg	J	SerDil	Stage 2B
K1411019-013	14386822	EPA6020	N	Soil	Beryllium	0.005	0.019	0.417	mg/kg	J	SerDil	Stage 2B
K1411019-014	14386823	EPA6020	N	Soil	Beryllium	0.005	0.020	0.455	mg/kg	J	SerDil	Stage 2B
K1411019-015	14386824	EPA6020	N	Soil	Beryllium	0.005	0.019	0.367	mg/kg	J	SerDil	Stage 2B
K1411019-016	14386825	EPA6020	N	Soil	Beryllium	0.005	0.019	0.368	mg/kg	J	SerDil	Stage 2B
K1411019-017	14386834	EPA6020	N	Soil	Beryllium	0.005	0.019	0.456	mg/kg	J	SerDil	Stage 2B
K1411019-018	14386835	EPA6020	N	Soil	Beryllium	0.005	0.019	0.544	mg/kg	J	SerDil	Stage 2B
K1411019-019	14386836	EPA6020	N	Soil	Beryllium	0.005	0.019	0.664	mg/kg	J	SerDil	Stage 2B
K1411019-020	14386837	EPA6020	N	Soil	Beryllium	0.005	0.019	0.66	mg/kg	J	SerDil	Stage 2B
K1411022-001	14396933	EPA6020	N	Soil	Beryllium	0.005	0.019	0.511	mg/kg	J	SerDil	Stage 2B
K1411022-002	14396934	EPA6020	FD	Soil	Beryllium	0.005	0.019	0.506	mg/kg	J	SerDil	Stage 2B
K1411022-003	14396935	EPA6020	N	Soil	Beryllium	0.005	0.019	0.6	mg/kg	J	SerDil	Stage 2B
K1411022-004	14396936	EPA6020	N	Soil	Beryllium	0.005	0.019	0.567	mg/kg	J	SerDil	Stage 2B
K1411022-005	14396944	EPA6020	N	Soil	Beryllium	0.005	0.019	0.376	mg/kg	J	SerDil	Stage 2B
K1411022-006	14396945	EPA6020	N	Soil	Beryllium	0.005	0.019	0.414	mg/kg	J	SerDil	Stage 2B
K1411022-007	14396946	EPA6020	N	Soil	Beryllium	0.005	0.020	0.575	mg/kg	J	SerDil	Stage 2B
K1411022-008	14396947	EPA6020	N	Soil	Beryllium	0.005	0.019	0.366	mg/kg	J	SerDil	Stage 2B
K1411022-009	14396948	EPA6020	N	Soil	Beryllium	0.005	0.019	0.493	mg/kg	J	SerDil	Stage 2B
K1411022-010	14396957	EPA6020	N	Soil	Beryllium	0.005	0.020	0.53	mg/kg	J	SerDil	Stage 2B
K1411022-011	14396958	EPA6020	FD	Soil	Beryllium	0.005	0.020	0.488	mg/kg	J	SerDil	Stage 2B
K1411022-012	14396959	EPA6020	N	Soil	Beryllium	0.005	0.019	0.573	mg/kg	J	SerDil	Stage 2B
K1411022-013	14396960	EPA6020	N	Soil	Beryllium	0.005	0.020	0.689	mg/kg	J	SerDil	Stage 2B
K1411022-014	14396961	EPA6020	N	Soil	Beryllium	0.005	0.019	0.569	mg/kg	J	SerDil	Stage 2B
K1411022-015	14396962	EPA6020	N	Soil	Beryllium	0.005	0.020	0.579	mg/kg	J	SerDil	Stage 2B
K1411022-016	14396988	EPA6020	N	Soil	Beryllium	0.005	0.019	0.427	mg/kg	J	SerDil	Stage 2B
K1411022-017	14396989	EPA6020	N	Soil	Beryllium	0.005	0.019	0.365	mg/kg	J	SerDil	Stage 2B
K1411022-018	14396990	EPA6020	N	Soil	Beryllium	0.005	0.019	0.322	mg/kg	J	SerDil	Stage 2B
K1411022-019	14396991	EPA6020	N	Soil	Beryllium	0.005	0.019	0.412	mg/kg	J	SerDil	Stage 2B
K1411022-020	14396992	EPA6020	N	Soil	Beryllium	0.005	0.019	0.433	mg/kg	J	SerDil	Stage 2B
K1411074-001	14386712	EPA6020	N	Soil	Beryllium	0.005	0.019	0.245	mg/kg	J	SerDil	Stage 2B
K1411074-002	14386713	EPA6020	N	Soil	Beryllium	0.005	0.019	0.246	mg/kg	J	SerDil	Stage 2B
K1411074-003	14386714	EPA6020	N	Soil	Beryllium	0.005	0.019	0.262	mg/kg	J	SerDil	Stage 2B
K1411074-004	14386869	EPA6020	N	Soil	Beryllium	0.005	0.019	0.257	mg/kg	J	SerDil	Stage 2B
K1411074-005	14386870	EPA6020	N	Soil	Beryllium	0.005	0.019	0.289	mg/kg	J	SerDil	Stage 2B
K1411074-006	14386871	EPA6020	N	Soil	Beryllium	0.005	0.019	0.267	mg/kg	J	SerDil	Stage 2B
K1411074-007	14396876	EPA6020	N	Soil	Beryllium	0.005	0.019	0.235	mg/kg	J	SerDil	Stage 2B
K1411074-008	14396877	EPA6020	N	Soil	Beryllium	0.005	0.019	0.224	mg/kg	J	SerDil	Stage 2B
K1411074-009	14396878	EPA6020	N	Soil	Beryllium	0.005	0.019	0.233	mg/kg	J	SerDil	Stage 2B
K1411074-010	14397007	EPA6020	N	Soil	Beryllium	0.005	0.019	0.191	mg/kg	J	SerDil	Stage 2B
K1411074-011	14397008	EPA6020	N	Soil	Beryllium	0.005	0.019	0.185	mg/kg	J	SerDil	Stage 2B
K1411074-012	14397009	EPA6020	N	Soil	Beryllium	0.005	0.019	0.203	mg/kg	J	SerDil	Stage 2B
K1409773-001	14346186	EPA6020	N	Soil	Cadmium	0.006	0.017	3.36	mg/kg	J	MS>UCL	Stage 2B
K1409773-002	14346187	EPA6020	N	Soil	Cadmium	0.006	0.017	3.56	mg/kg	J	MS>UCL	Stage 2B
K1409773-003	14356241	EPA6020	N	Soil	Cadmium	0.006	0.017	3.64	mg/kg	J	MS>UCL	Stage 2B
K1409773-004	14356242	EPA6020	N	Soil	Cadmium	0.006	0.017	3.85	mg/kg	J	MS>UCL	Stage 2B
K1409773-005	14356243	EPA6020	N	Soil	Cadmium	0.006	0.017	3.85	mg/kg	J	MS>UCL	Stage 2B
K1409773-006	14346276	EPA6020	N	Soil	Cadmium	0.006	0.017	3.13	mg/kg	J	MS>UCL	Stage 2B
K1410321-018	14376470	EPA6020	N	Soil	Cadmium	0.007	0.020	14	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6020	FD	Soil	Cadmium	0.007	0.020	4.98	mg/kg	J	FD>UCL	Stage 2B
K1410321-018	14376470	EPA6010	N	Soil	Calcium	0.9	4.0	2,640	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6010	FD	Soil	Calcium	0.9	4.0	7,930	mg/kg	J	FD>UCL	Stage 2B
K1410317-001	14366351	EPA6010	N	Soil	Iron	0.9	8.0	22,100	mg/kg	J	SerDil	Stage 2B
K1410317-002	14366352	EPA6010	N	Soil	Iron	0.9	7.8	21,600	mg/kg	J	SerDil	Stage 2B
K1410317-003	14366353	EPA6010	N	Soil	Iron	0.9	8.2	23,100	mg/kg	J	SerDil	Stage 2B
K1410317-004	14366354	EPA6010	N	Soil	Iron	0.9	8.1	24,000	mg/kg	J	SerDil	Stage 2B
K1410317-005	14366355	EPA6010	FD	Soil	Iron	0.9	8.0	23,900	mg/kg	J	SerDil	Stage 2B
K1410317-006	14366356	EPA6010	N	Soil	Iron	0.9	7.8	18,300	mg/kg	J	SerDil	Stage 2B
K1410317-007	14366358	EPA6010	N	Soil	Iron	0.9	8.0	18,600	mg/kg	J	SerDil	Stage 2B
K1410317-008	14366359	EPA6010	N	Soil	Iron	0.9	8.1	17800	mg/kg	J	SerDil	Stage 2B
K1410317-009	14366360	EPA6010	N	Soil	Iron	0.9	8.1	18,000	mg/kg	J	SerDil	Stage 2B
K1410317-010	14366361	EPA6010	N	Soil	Iron	0.9	8.1	17,700	mg/kg	J	SerDil	Stage 2B
K1410317-011	14366362	EPA6010	FD	Soil	Iron	0.9	8.2	17,900	mg/kg	J	SerDil	Stage 2B
K1410317-012	14366363	EPA6010	N	Soil	Iron	0.9	8.0	19,100	mg/kg	J	SerDil	Stage 2B
K1410317-013	14366365	EPA6010	N	Soil	Iron	0.9	8.0	17,500	mg/kg	J	SerDil	Stage 2B
K1410317-014	14366366	EPA6010	N	Soil	Iron	0.9	8.0	17800	mg/kg	J	SerDil	Stage 2B
K1410317-015	14366367	EPA6010	N	Soil	Iron	0.9	8.0	18,300	mg/kg	J	SerDil	Stage 2B
K1410317-016	14366368	EPA6010	FD	Soil	Iron	0.9	8.1	18,200	mg/kg	J	SerDil	Stage 2B
K1410317-017	14366369	EPA6010	N	Soil	Iron	0.9	8.1	17,200	mg/kg	J	SerDil	Stage 2B
K1410317-018	14366370	EPA6010	N	Soil	Iron	0.9	7.9	17,200	mg/kg	J	SerDil	Stage 2B
K1410317-019	14366384	EPA6010	N	Soil	Iron	0.9	8.1	14,300	mg/kg	J	SerDil	Stage 2B
K1410317-020	14366385	EPA6010	N	Soil	Iron	0.9	8.0	14,900	mg/kg	J	SerDil	Stage 2B
K1409228-003	14336007	EPA6020	N	Soil	Lead	0.02	0.20	204	mg/kg	J	FD>UCL	Stage 2B
K1409228-005	14336009	EPA6020	FD	Soil	Lead	0.02	0.16	137	mg/kg	J	FD>UCL	Stage 2B
K1409229-014	14336082	EPA6020	N	Soil	Lead	0.02	0.19	89.6	mg/kg	J	FD>UCL	Stage 2B
K1409229-015	14336083	EPA6020	FD	Soil	Lead	0.02	0.17	122	mg/kg	J	FD>UCL	Stage 2B
K1409229-001	14336061	EPA6010	N	Soil	Magnesium	0.20	2.04	7,860	mg/kg	J	ICSA	Stage 2B
K1409229-002	14336062	EPA6010	N	Soil	Magnesium	0.18	1.77	6,080	mg/kg	J	ICSA	Stage 2B
K1409229-003	14336063	EPA6010	FD	Soil	Magnesium	0.17	1.74	5,480	mg/kg	J	ICSA	Stage 2B
K1409229-004	14336071	EPA6010	N	Soil	Magnesium	0.17	1.74	7,150	mg/kg	J	ICSA	Stage 2B
K1409229-005	14336072	EPA6010	FD	Soil	Magnesium	0.17	1.67	7,150	mg/kg	J	ICSA	Stage 2B
K1409229-008	14336075	EPA6010	N	Soil	Magnesium	0.19	1.92	5,720	mg/kg	J	ICSA	Stage 2B
K1409229-009	14336076	EPA6010	N	Soil	Magnesium	0.19	1.92	5,630	mg/kg	J	ICSA	Stage 2B
K1409229-010	14336078	EPA6010	N	Soil	Magnesium	0.17	1.67	6,940	mg/kg	J	ICSA	Stage 2B
K1409229-011	14336079	EPA6010	N	Soil	Magnesium	0.17	1.71	5,050	mg/kg	J	ICSA	Stage 2B
K1409229-012	14336080	EPA6010	N	Soil	Magnesium	0.18	1.75	6,290	mg/kg	J	ICSA	Stage 2B
K1409229-013	14336081	EPA6010	N	Soil	Magnesium	0.16	1.62	5,580	mg/kg	J	ICSA	Stage 2B
K1409229-014	14336082	EPA6010	N	Soil	Magnesium	0.19	1.88	5,730	mg/kg	J	ICSA	Stage 2B
K1409229-015	14336083	EPA6010	FD	Soil	Magnesium	0.17	1.69	5,700	mg/kg	J	ICSA	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1409229-016	14336092	EPA6010	N	Soil	Magnesium	0.19	1.92	5,560	mg/kg	J	ICSA	Stage 2B
K1409229-017	14336093	EPA6010	N	Soil	Magnesium	0.16	1.62	7,320	mg/kg	J	ICSA	Stage 2B
K1409229-018	14336094	EPA6010	N	Soil	Magnesium	0.20	1.96	6,910	mg/kg	J	ICSA	Stage 2B
K1409229-019	14336095	EPA6010	N	Soil	Magnesium	0.20	1.96	6,020	mg/kg	J	ICSA	Stage 2B
K1409230-001	14346102	EPA6010	N	Soil	Magnesium	0.18	1.79	10,400	mg/kg	J	ICSA	Stage 2B
K1409230-007	14346128	EPA6010	N	Soil	Magnesium	0.17	1.66	5,810	mg/kg	J	ICSA	Stage 2B
K1409230-015	14346140	EPA6010	N	Soil	Magnesium	0.19	1.91	5,650	mg/kg	J	ICSA	Stage 2B
K1409762-007	14346155	EPA6010	N	Soil	Magnesium	0.20	2.01	24,200	mg/kg	J	ICSA	Stage 2B
K1409762-008	14346156	EPA6010	N	Soil	Magnesium	0.20	1.99	27,200	mg/kg	J	ICSA	Stage 2B
K1409762-009	14346157	EPA6010	N	Soil	Magnesium	0.20	2.01	21,400	mg/kg	J	ICSA	Stage 2B
K1409762-010	14346158	EPA6010	N	Soil	Magnesium	0.20	1.99	24,300	mg/kg	J	ICSA	Stage 2B
K1409762-011	14346159	EPA6010	N	Soil	Magnesium	0.20	1.98	27,200	mg/kg	J	ICSA	Stage 2B
K1409762-012	14346160	EPA6010	N	Soil	Magnesium	0.20	1.99	25,000	mg/kg	J	ICSA	Stage 2B
K1409762-016	14346171	EPA6010	N	Soil	Magnesium	0.20	2.02	5,270	mg/kg	J	ICSA	Stage 2B
K1409762-017	14346172	EPA6010	N	Soil	Magnesium	0.20	2.03	5,160	mg/kg	J	ICSA	Stage 2B
K1409762-018	14346173	EPA6010	N	Soil	Magnesium	0.20	2.03	5,630	mg/kg	J	ICSA	Stage 2B
K1409762-019	14346174	EPA6010	N	Soil	Magnesium	0.20	2.01	5,210	mg/kg	J	ICSA	Stage 2B
K1409762-020	14346175	EPA6010	N	Soil	Magnesium	0.21	2.08	5,800	mg/kg	J	ICSA	Stage 2B
K1409764-005	14346196	EPA6010	N	Soil	Magnesium	0.19	1.91	11,300	mg/kg	J	ICSA	Stage 2B
K1409764-006	14346197	EPA6010	N	Soil	Magnesium	0.20	2.01	12,600	mg/kg	J	ICSA	Stage 2B
K1409764-007	14346198	EPA6010	N	Soil	Magnesium	0.20	2.01	10,500	mg/kg	J	ICSA	Stage 2B
K1409764-015	14346213	EPA6010	N	Soil	Magnesium	0.20	2.03	9,140	mg/kg	J	ICSA	Stage 2B
K1409764-017	14346215	EPA6010	N	Soil	Magnesium	0.21	2.08	4,360	mg/kg	J	ICSA	Stage 2B
K1410321-018	14376470	EPA6010	N	Soil	Magnesium	0.20	2.01	3,090	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6010	FD	Soil	Magnesium	0.20	1.99	4,400	mg/kg	J	FD>UCL	Stage 2B
K1411091-005	14386688	EPA6010	N	Soil	Magnesium	0.20	1.95	4,790	mg/kg	J	ICSA	Stage 2B
K1411091-006	14386689	EPA6010	N	Soil	Magnesium	0.20	1.95	4,860	mg/kg	J	ICSA	Stage 2B
K1411091-007	14386690	EPA6010	N	Soil	Magnesium	0.19	1.93	4,730	mg/kg	J	ICSA	Stage 2B
K1409229-001	14336061	EPA6010	N	Soil	Manganese	0.02	0.20	690	mg/kg	J	SerDil	Stage 2B
K1409229-002	14336062	EPA6010	N	Soil	Manganese	0.02	0.18	1,240	mg/kg	J	SerDil	Stage 2B
K1409229-003	14336063	EPA6010	FD	Soil	Manganese	0.02	0.17	776	mg/kg	J	SerDil	Stage 2B
K1409229-004	14336071	EPA6010	N	Soil	Manganese	0.02	0.17	519	mg/kg	J	SerDil	Stage 2B
K1409229-005	14336072	EPA6010	FD	Soil	Manganese	0.02	0.17	522	mg/kg	J	SerDil	Stage 2B
K1409229-006	14336073	EPA6010	N	Soil	Manganese	0.02	0.19	439	mg/kg	J	SerDil	Stage 2B
K1409229-007	14336074	EPA6010	N	Soil	Manganese	0.02	0.17	253	mg/kg	J	SerDil	Stage 2B
K1409229-008	14336075	EPA6010	N	Soil	Manganese	0.02	0.19	752	mg/kg	J	SerDil	Stage 2B
K1409229-009	14336076	EPA6010	N	Soil	Manganese	0.02	0.19	795	mg/kg	J	SerDil	Stage 2B
K1409229-010	14336078	EPA6010	N	Soil	Manganese	0.02	0.17	436	mg/kg	J	SerDil	Stage 2B
K1409229-011	14336079	EPA6010	N	Soil	Manganese	0.02	0.17	434	mg/kg	J	SerDil	Stage 2B
K1409229-012	14336080	EPA6010	N	Soil	Manganese	0.02	0.18	272	mg/kg	J	SerDil	Stage 2B
K1409229-013	14336081	EPA6010	N	Soil	Manganese	0.02	0.16	416	mg/kg	J	SerDil	Stage 2B
K1409229-014	14336082	EPA6010	N	Soil	Manganese	0.02	0.19	273	mg/kg	J	SerDil	Stage 2B
K1409229-015	14336083	EPA6010	FD	Soil	Manganese	0.02	0.17	269	mg/kg	J	SerDil	Stage 2B
K1409229-016	14336092	EPA6010	N	Soil	Manganese	0.02	0.19	443	mg/kg	J	SerDil	Stage 2B
K1409229-017	14336093	EPA6010	N	Soil	Manganese	0.02	0.16	464	mg/kg	J	SerDil	Stage 2B
K1409229-018	14336094	EPA6010	N	Soil	Manganese	0.02	0.20	526	mg/kg	J	SerDil	Stage 2B
K1409229-019	14336095	EPA6010	N	Soil	Manganese	0.02	0.20	1,040	mg/kg	J	SerDil	Stage 2B
K1409229-020	14336096	EPA6010	N	Soil	Manganese	0.02	0.17	216	mg/kg	J	SerDil	Stage 2B
K1410321-018	14376470	EPA6010	N	Soil	Manganese	0.02	0.20	1,170	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6010	FD	Soil	Manganese	0.02	0.20	596	mg/kg	J	FD>UCL	Stage 2B
K1410319-010	14366423	EPA6010	N	Soil	Potassium	8.9	39.7	1,190	mg/kg	J	ICSA	Stage 2B
K1410319-011	14366424	EPA6010	N	Soil	Potassium	9.0	40.1	1,970	mg/kg	J	ICSA	Stage 2B
K1410319-012	14366425	EPA6010	N	Soil	Potassium	8.8	39.0	6,230	mg/kg	J	ICSA	Stage 2B
K1410319-013	14366426	EPA6010	N	Soil	Potassium	9.7	43.1	1,330	mg/kg	J	ICSA	Stage 2B
K1410319-014	14366427	EPA6010	N	Soil	Potassium	9.5	42.4	1,210	mg/kg	J	ICSA	Stage 2B
K1411074-001	14386712	EPA6010	N	Soil	Potassium	8.6	38.2	971	mg/kg	J	ICSA	Stage 2B
K1411074-002	14386713	EPA6010	N	Soil	Potassium	8.5	37.6	993	mg/kg	J	ICSA	Stage 2B
K1411074-003	14386714	EPA6010	N	Soil	Potassium	8.6	38.2	984	mg/kg	J	ICSA	Stage 2B
K1411074-004	14386869	EPA6010	N	Soil	Potassium	8.6	38.1	889	mg/kg	J	ICSA	Stage 2B
K1411074-005	14386870	EPA6010	N	Soil	Potassium	8.6	38.2	903	mg/kg	J	ICSA	Stage 2B
K1411074-006	14386871	EPA6010	N	Soil	Potassium	8.6	38.1	896	mg/kg	J	ICSA	Stage 2B
K1411074-007	14396876	EPA6010	N	Soil	Potassium	8.6	38.2	788	mg/kg	J	ICSA	Stage 2B
K1411074-008	14396877	EPA6010	N	Soil	Potassium	8.6	38.4	781	mg/kg	J	ICSA	Stage 2B
K1411074-009	14396878	EPA6010	N	Soil	Potassium	8.6	38.1	775	mg/kg	J	ICSA	Stage 2B
K1411074-010	14397007	EPA6010	N	Soil	Potassium	8.5	38.0	737	mg/kg	J	ICSA	Stage 2B
K1411074-011	14397008	EPA6010	N	Soil	Potassium	8.5	38.0	719	mg/kg	J	ICSA	Stage 2B
K1411074-012	14397009	EPA6010	N	Soil	Potassium	8.5	37.8	738	mg/kg	J	ICSA	Stage 2B
K1409213-020	14336034	EPA6020	N	Soil	Selenium	0.07	0.21	0.2	mg/kg	J	>MDL<RL	Stage 4
K1409214-009	14336045	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 4
K1409217-013	14346109	EPA6020	N	Soil	Selenium	0.07	0.20	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1409217-014	14346110	EPA6020	N	Soil	Selenium	0.07	0.20	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1409217-015	14346111	EPA6020	N	Soil	Selenium	0.07	0.20	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1409220-009	14346127	EPA6020	N	Soil	Selenium	0.07	0.20	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1409220-013	14346144	EPA6020	N	Soil	Selenium	0.07	0.20	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1409220-014	14346145	EPA6020	N	Soil	Selenium	0.07	0.20	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1409220-015	14346146	EPA6020	N	Soil	Selenium	0.07	0.20	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1409229-007	14336074	EPA6020	N	Soil	Selenium	0.06	0.17	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1409229-012	14336080	EPA6020	N	Soil	Selenium	0.06	0.18	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1409229-016	14336092	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1409229-020	14336096	EPA6020	N	Soil	Selenium	0.06	0.17	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1409230-001	14346102	EPA6020	N	Soil	Selenium	0.06	0.18	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1409230-003	14346104	EPA6020	N	Soil	Selenium	0.06	0.16	0.08	mg/kg	J	>MDL<RL	Stage 2B
K1409230-010	14346131	EPA6020	N	Soil	Selenium	0.06	0.18	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1409230-011	14346132	EPA6020	FD	Soil	Selenium	0.06	0.17	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1409230-012	14346133	EPA6020	N	Soil	Selenium	0.06	0.18	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409230-013	14346138	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1409230-014	14346139	EPA6020	FD	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1409762-001	14346148	EPA6020	N	Soil	Selenium	0.07	0.20	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1409762-002	14346149	EPA6020	N	Soil	Selenium	0.07	0.20	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1409762-003	14346150	EPA6020	N	Soil	Selenium	0.07	0.20	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1409762-004	14346151	EPA6020	N	Soil	Selenium	0.07	0.20	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1409762-005	14346152	EPA6020	N	Soil	Selenium	0.07	0.20	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1409762-006	14346153	EPA6020	N	Soil	Selenium	0.07	0.20	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409762-013	14346161	EPA6020	N	Soil	Selenium	0.07	0.20	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1409762-014	14346163	EPA6020	N	Soil	Selenium	0.07	0.20	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1409762-015	14346164	EPA6020	N	Soil	Selenium	0.07	0.20	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409764-001	14346177	EPA6020	N	Soil	Selenium	0.07	0.20	0.2	mg/kg	J	>MDL<RL	Stage 2B
K1409764-004	14346194	EPA6020	N	Soil	Selenium	0.07	0.20	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1409764-008	14346205	EPA6020	N	Soil	Selenium	0.07	0.20	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1409764-009	14346206	EPA6020	N	Soil	Selenium	0.07	0.20	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409764-010	14346207	EPA6020	N	Soil	Selenium	0.07	0.20	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409765-008	14356238	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1409765-009	14356239	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1409765-010	14356240	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1409765-011	14356245	EPA6020	N	Soil	Selenium	0.07	0.19	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1409765-012	14356246	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1409765-013	14356247	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1409771-005	14356266	EPA6020	N	Soil	Selenium	0.06	0.17	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409771-006	14356267	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1409771-008	14356278	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1409771-014	14356284	EPA6020	N	Soil	Selenium	0.06	0.17	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1409771-015	14356285	EPA6020	N	Soil	Selenium	0.06	0.17	0.12	mg/kg	J	>MDL<RL	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1409771-016	14356286	EPA6020	N	Soil	Selenium	0.06	0.18	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1409772-014	14366311	EPA6020	N	Soil	Selenium	0.06	0.16	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1409772-015	14366312	EPA6020	N	Soil	Selenium	0.06	0.18	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1409772-016	14366313	EPA6020	N	Soil	Selenium	0.06	0.17	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1409777-004	14366324	EPA6020	N	Soil	Selenium	0.06	0.18	0.16	mg/kg	J	>MDL<RL	Stage 4
K1409777-005	14366325	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 4
K1409777-006	14366326	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 4
K1409777-008	14366334	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 4
K1409777-009	14366335	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 4
K1409777-010	14366336	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 4
K1409777-011	14366337	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 4
K1409790-007	14346180	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1409790-008	14346181	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1409790-010	14346183	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409790-011	14346184	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1409790-012	14346185	EPA6020	FD	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1409790-013	14346188	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1409790-014	14346189	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1409790-019	14346199	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1409790-020	14346200	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1409793-001	14346201	EPA6020	N	Soil	Selenium	0.06	0.17	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409793-002	14346202	EPA6020	FD	Soil	Selenium	0.06	0.16	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409793-004	14346204	EPA6020	N	Soil	Selenium	0.06	0.17	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1409793-013	14356235	EPA6020	N	Soil	Selenium	0.06	0.16	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1409793-015	14356251	EPA6020	N	Soil	Selenium	0.06	0.17	0.08	mg/kg	J	>MDL<RL	Stage 2B
K1409793-016	14356252	EPA6020	N	Soil	Selenium	0.06	0.18	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1409795-003	14356270	EPA6020	N	Soil	Selenium	0.06	0.17	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1409795-005	14356272	EPA6020	N	Soil	Selenium	0.06	0.18	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1409795-006	14356273	EPA6020	FD	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1409795-017	14366327	EPA6020	N	Soil	Selenium	0.06	0.16	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1409795-019	14366329	EPA6020	N	Soil	Selenium	0.06	0.16	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1409795-020	14366330	EPA6020	FD	Soil	Selenium	0.06	0.18	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1409796-001	14366331	EPA6020	N	Soil	Selenium	0.07	0.19	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1409796-002	14366332	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1410290-019	14366399	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1410291-005	14366409	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1410291-006	14366410	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1410291-008	14366412	EPA6020	N	Soil	Selenium	0.07	0.20	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1410291-009	14366413	EPA6020	N	Soil	Selenium	0.07	0.20	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1410291-010	14366414	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1410291-011	14366415	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1410291-012	14366416	EPA6020	N	Soil	Selenium	0.07	0.20	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1410292-001	14366445	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1410319-004	14366392	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1410319-005	14366393	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1410319-007	14366395	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1410319-008	14366396	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1410319-009	14366397	EPA6020	FD	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1410319-018	14366438	EPA6020	N	Soil	Selenium	0.07	0.20	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1410321-001	14366446	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1410321-002	14366447	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1410321-003	14366448	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1410321-004	14366449	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1410321-005	14366450	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1410321-018	14376470	EPA6020	N	Soil	Selenium	0.07	0.20	0.55	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6020	FD	Soil	Selenium	0.07	0.20	0.95	mg/kg	J	FD>UCL	Stage 2B
K1410323-013	14376507	EPA6020	FD	Soil	Selenium	0.07	0.19	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411019-017	14386834	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411019-018	14386835	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411022-005	14396944	EPA6020	N	Soil	Selenium	0.07	0.19	0.09	mg/kg	J	>MDL<RL	Stage 2B
K1411022-008	14396947	EPA6020	N	Soil	Selenium	0.07	0.19	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1411025-001	14386753	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411025-003	14386755	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411025-010	14386779	EPA6020	N	Soil	Selenium	0.07	0.19	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411025-011	14386780	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411025-014	14386783	EPA6020	N	Soil	Selenium	0.07	0.19	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411025-016	14386789	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411025-018	14386791	EPA6020	N	Soil	Selenium	0.07	0.19	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411025-020	14386793	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411026-006	14376668	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411026-007	14376669	EPA6020	FD	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411026-008	14376670	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411026-009	14376671	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411026-010	14376672	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411026-011	14386674	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411026-013	14386676	EPA6020	N	Soil	Selenium	0.07	0.20	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411026-015	14386678	EPA6020	N	Soil	Selenium	0.07	0.20	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411026-016	14386697	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411026-017	14386698	EPA6020	N	Soil	Selenium	0.07	0.19	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1411028-007	14386724	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1411028-008	14386725	EPA6020	N	Soil	Selenium	0.07	0.19	0.09	mg/kg	J	>MDL<RL	Stage 2B
K1411028-009	14386726	EPA6020	FD	Soil	Selenium	0.07	0.19	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1411028-010	14386727	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1411028-011	14386728	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411028-012	14386729	EPA6020	N	Soil	Selenium	0.07	0.19	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1411028-013	14386744	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411028-014	14386745	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411028-017	14386748	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411028-019	14386751	EPA6020	N	Soil	Selenium	0.07	0.19	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411028-020	14386752	EPA6020	FD	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411030-003	14396895	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411030-014	14396923	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411030-015	14396924	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411030-016	14396925	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411030-017	14396926	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411030-018	14396927	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411037-001	14376620	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411037-002	14376621	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411037-003	14376622	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411037-004	14376623	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411037-005	14376624	EPA6020	FD	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1411037-006	14376625	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1411037-007	14376634	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411037-008	14376635	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411037-009	14376636	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1411037-010	14376637	EPA6020	FD	Soil	Selenium	0.07	0.20	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1411037-011	14376638	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411037-012	14376639	EPA6020	N	Soil	Selenium	0.07	0.19	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1411081-002	14396890	EPA6020	N	Soil	Selenium	0.07	0.20	0.2	mg/kg	J	>MDL<RL	Stage 2B
K1411081-003	14396891	EPA6020	N	Soil	Selenium	0.07	0.19	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411081-017	14396920	EPA6020	N	Soil	Selenium	0.07	0.20	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411081-018	14396921	EPA6020	N	Soil	Selenium	0.07	0.20	0.15	mg/kg	J	>MDL<RL	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1411081-019	14396922	EPA6020	N	Soil	Selenium	0.07	0.20	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411083-001	14376605	EPA6020	N	Soil	Selenium	0.07	0.19	0.2	mg/kg	J	MSRPD	Stage 2B
K1411083-002	14376606	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	MSRPD	Stage 2B
K1411083-003	14376607	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	MSRPD	Stage 2B
K1411083-004	14376608	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	MSRPD	Stage 2B
K1411083-005	14376609	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	MSRPD	Stage 2B
K1411083-006	14376610	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	MSRPD	Stage 2B
K1411083-007	14376611	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	MSRPD	Stage 2B
K1411083-008	14376612	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	MSRPD	Stage 2B
K1411083-009	14376613	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	MSRPD	Stage 2B
K1411083-010	14376614	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	MSRPD	Stage 2B
K1411083-011	14376616	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	MSRPD	Stage 2B
K1411083-012	14376617	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	MSRPD	Stage 2B
K1411083-013	14376618	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	MSRPD	Stage 2B
K1411083-014	14376619	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	MSRPD	Stage 2B
K1411083-015	14376626	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	MSRPD	Stage 2B
K1411083-016	14376627	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	MSRPD	Stage 2B
K1411083-017	14376628	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	MSRPD	Stage 2B
K1411083-018	14376629	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	MSRPD	Stage 2B
K1411083-019	14376631	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	MSRPD	Stage 2B
K1411083-020	14376632	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	MSRPD	Stage 2B
K1411084-001	14376633	EPA6020	N	Soil	Selenium	0.07	0.20	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411084-009	14376660	EPA6020	N	Soil	Selenium	0.07	0.20	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1411084-010	14376661	EPA6020	N	Soil	Selenium	0.07	0.20	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1411084-011	14376662	EPA6020	N	Soil	Selenium	0.07	0.20	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411084-012	14376663	EPA6020	N	Soil	Selenium	0.07	0.20	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411084-013	14376664	EPA6020	N	Soil	Selenium	0.07	0.20	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411084-014	14376665	EPA6020	N	Soil	Selenium	0.07	0.20	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411084-015	14376666	EPA6020	N	Soil	Selenium	0.07	0.20	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411084-016	14386679	EPA6020	N	Soil	Selenium	0.07	0.21	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411084-017	14386680	EPA6020	N	Soil	Selenium	0.07	0.20	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411084-019	14386682	EPA6020	N	Soil	Selenium	0.07	0.20	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411085-007	14396941	EPA6020	N	Soil	Selenium	0.07	0.19	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1411085-008	14396942	EPA6020	N	Soil	Selenium	0.07	0.19	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1411085-009	14396943	EPA6020	N	Soil	Selenium	0.07	0.19	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1411091-005	14386688	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411091-006	14386689	EPA6020	N	Soil	Selenium	0.07	0.20	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411091-007	14386690	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411091-020	14386718	EPA6020	N	Soil	Selenium	0.07	0.19	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1411094-001	14386719	EPA6020	N	Soil	Selenium	0.07	0.19	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1411094-002	14386720	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1411094-003	14386721	EPA6020	N	Soil	Selenium	0.07	0.19	0.1	mg/kg	J	>MDL<RL	Stage 2B
K1411094-004	14386730	EPA6020	N	Soil	Selenium	0.07	0.19	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1411094-005	14386731	EPA6020	N	Soil	Selenium	0.07	0.19	0.13	mg/kg	J	>MDL<RL	Stage 2B
K1411094-006	14386732	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1411094-007	14386733	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411094-008	14386734	EPA6020	N	Soil	Selenium	0.07	0.20	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411094-009	14386735	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411094-010	14386736	EPA6020	N	Soil	Selenium	0.07	0.20	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411094-011	14386737	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411094-012	14386738	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411094-013	14386739	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411094-014	14386741	EPA6020	N	Soil	Selenium	0.07	0.19	0.14	mg/kg	J	>MDL<RL	Stage 2B
K1411094-015	14386742	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411094-016	14386743	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411094-017	14386749	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411094-018	14386756	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411094-019	14386757	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411094-020	14386758	EPA6020	N	Soil	Selenium	0.07	0.19	0.15	mg/kg	J	>MDL<RL	Stage 2B
K1411095-001	14386759	EPA6020	N	Soil	Selenium	0.07	0.19	0.12	mg/kg	J	>MDL<RL	Stage 2B
K1411095-002	14386760	EPA6020	N	Soil	Selenium	0.07	0.19	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1411095-003	14386761	EPA6020	N	Soil	Selenium	0.07	0.19	0.11	mg/kg	J	>MDL<RL	Stage 2B
K1411095-011	14386776	EPA6020	N	Soil	Selenium	0.07	0.19	0.18	mg/kg	J	>MDL<RL	Stage 2B
K1411095-013	14386778	EPA6020	N	Soil	Selenium	0.07	0.19	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411095-015	14386786	EPA6020	N	Soil	Selenium	0.07	0.19	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411095-016	14386787	EPA6020	N	Soil	Selenium	0.07	0.19	0.19	mg/kg	J	>MDL<RL	Stage 2B
K1411095-018	14386795	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411095-019	14386796	EPA6020	N	Soil	Selenium	0.07	0.19	0.17	mg/kg	J	>MDL<RL	Stage 2B
K1411095-020	14386797	EPA6020	N	Soil	Selenium	0.07	0.19	0.16	mg/kg	J	>MDL<RL	Stage 2B
K1411096-013	14386828	EPA6020	N	Soil	Selenium	0.07	0.20	0.2	mg/kg	J	>MDL<RL	Stage 2B
K1409773-001	14346186	EPA6020	N	Soil	Silver	0.003	0.017	1.67	mg/kg	J	LabDupRPD	Stage 2B
K1409773-002	14346187	EPA6020	N	Soil	Silver	0.003	0.017	0.944	mg/kg	J	LabDupRPD	Stage 2B
K1409773-003	14356241	EPA6020	N	Soil	Silver	0.003	0.017	1.24	mg/kg	J	LabDupRPD	Stage 2B
K1409773-004	14356242	EPA6020	N	Soil	Silver	0.003	0.017	0.441	mg/kg	J	LabDupRPD	Stage 2B
K1409773-005	14356243	EPA6020	N	Soil	Silver	0.003	0.017	0.531	mg/kg	J	LabDupRPD	Stage 2B
K1409773-006	14346276	EPA6020	N	Soil	Silver	0.003	0.017	0.382	mg/kg	J	LabDupRPD	Stage 2B
K1410319-008	14366396	EPA6020	N	Soil	Silver	0.004	0.019	0.149	mg/kg	J	FD>UCL	Stage 2B
K1410319-009	14366397	EPA6020	FD	Soil	Silver	0.004	0.019	0.374	mg/kg	J	FD>UCL	Stage 2B
K1410321-018	14376470	EPA6020	N	Soil	Silver	0.004	0.020	0.408	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6020	FD	Soil	Silver	0.004	0.020	0.632	mg/kg	J	FD>UCL	Stage 2B
K1410323-001	14376473	EPA6020	N	Soil	Silver	0.004	0.020	0.856	mg/kg	J	LabDupRPD	Stage 2B
K1410323-002	14376474	EPA6020	N	Soil	Silver	0.004	0.020	0.589	mg/kg	J	LabDupRPD	Stage 2B
K1410323-003	14376475	EPA6020	N	Soil	Silver	0.004	0.020	0.409	mg/kg	J	LabDupRPD	Stage 2B
K1410323-004	14376484	EPA6020	N	Soil	Silver	0.004	0.020	0.485	mg/kg	J	LabDupRPD	Stage 2B
K1410323-005	14376485	EPA6020	N	Soil	Silver	0.004	0.020	0.374	mg/kg	J	LabDupRPD, FD>UCL	Stage 2B
K1410323-006	14376486	EPA6020	FD	Soil	Silver	0.004	0.021	1.15	mg/kg	J	LabDupRPD, FD>UCL	Stage 2B
K1410323-007	14376487	EPA6020	N	Soil	Silver	0.004	0.020	0.511	mg/kg	J	LabDupRPD	Stage 2B
K1410323-008	14376488	EPA6020	N	Soil	Silver	0.004	0.020	0.165	mg/kg	J	LabDupRPD	Stage 2B
K1410323-009	14376489	EPA6020	N	Soil	Silver	0.004	0.020	0.197	mg/kg	J	LabDupRPD	Stage 2B
K1410323-010	14376504	EPA6020	N	Soil	Silver	0.004	0.019	0.141	mg/kg	J	LabDupRPD	Stage 2B
K1410323-011	14376505	EPA6020	N	Soil	Silver	0.004	0.019	0.14	mg/kg	J	LabDupRPD	Stage 2B
K1410323-012	14376506	EPA6020	N	Soil	Silver	0.004	0.019	0.116	mg/kg	J	LabDupRPD	Stage 2B
K1410323-013	14376507	EPA6020	FD	Soil	Silver	0.004	0.019	0.127	mg/kg	J	LabDupRPD	Stage 2B
K1410323-014	14376508	EPA6020	N	Soil	Silver	0.004	0.019	0.1	mg/kg	J	LabDupRPD	Stage 2B
K1410323-015	14376509	EPA6020	N	Soil	Silver	0.004	0.020	0.314	mg/kg	J	LabDupRPD	Stage 2B
K1410323-016	14376512	EPA6020	N	Soil	Silver	0.004	0.019	0.42	mg/kg	J	LabDupRPD	Stage 2B
K1410323-017	14376513	EPA6020	N	Soil	Silver	0.004	0.019	0.211	mg/kg	J	LabDupRPD	Stage 2B
K1410323-018	14376514	EPA6020	N	Soil	Silver	0.004	0.021	1.31	mg/kg	J	LabDupRPD	Stage 2B
K1410323-019	14376515	EPA6020	FD	Soil	Silver	0.004	0.021	1.27	mg/kg	J	LabDupRPD	Stage 2B
K1410323-020	14376516	EPA6020	N	Soil	Silver	0.004	0.020	0.879	mg/kg	J	LabDupRPD	Stage 2B
K1410325-004	14376527	EPA6020	N	Soil	Silver	0.004	0.019	0.887	mg/kg	J	FD>UCL	Stage 2B
K1410325-005	14376528	EPA6020	FD	Soil	Silver	0.004	0.019	0.34	mg/kg	J	FD>UCL	Stage 2B
K1411096-001	14386804	EPA6020	N	Soil	Silver	0.004	0.020	1.17	mg/kg	J	LabDupRPD	Stage 2B
K1411096-002	14386805	EPA6020	N	Soil	Silver	0.004	0.019	0.272	mg/kg	J	LabDupRPD	Stage 2B
K1411096-003	14386807	EPA6020	N	Soil	Silver	0.004	0.019	0.829	mg/kg	J	LabDupRPD	Stage 2B
K1411096-004	14386808	EPA6020	N	Soil	Silver	0.004	0.019	0.929	mg/kg	J	LabDupRPD	Stage 2B
K1411096-005	14386809	EPA6020	N	Soil	Silver	0.004	0.020	0.913	mg/kg	J	LabDupRPD	Stage 2B
K1411096-006	14386810	EPA6020	N	Soil	Silver	0.004	0.020	0.752	mg/kg	J	LabDupRPD	Stage 2B
K1411096-007	14386811	EPA6020	N	Soil	Silver	0.004	0.020	0.754	mg/kg	J	LabDupRPD	Stage 2B
K1411096-008	14386812	EPA6020	N	Soil	Silver	0.004	0.020	0.699	mg/kg	J	LabDupRPD	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1411096-009	14386818	EPA6020	N	Soil	Silver	0.004	0.019	0.319	mg/kg	J	LabDupRPD	Stage 2B
K1411096-010	14386819	EPA6020	N	Soil	Silver	0.004	0.020	0.341	mg/kg	J	LabDupRPD	Stage 2B
K1411096-011	14386820	EPA6020	N	Soil	Silver	0.004	0.020	0.391	mg/kg	J	LabDupRPD	Stage 2B
K1411096-012	14386826	EPA6020	N	Soil	Silver	0.004	0.019	0.26	mg/kg	J	LabDupRPD	Stage 2B
K1411096-013	14386828	EPA6020	N	Soil	Silver	0.004	0.020	0.144	mg/kg	J	LabDupRPD	Stage 2B
K1411096-014	14386829	EPA6020	N	Soil	Silver	0.004	0.020	0.155	mg/kg	J	LabDupRPD	Stage 2B
K1411096-015	14386830	EPA6020	N	Soil	Silver	0.004	0.020	0.15	mg/kg	J	LabDupRPD	Stage 2B
K1411096-016	14386831	EPA6020	N	Soil	Silver	0.004	0.020	0.355	mg/kg	J	LabDupRPD	Stage 2B
K1411096-017	14386832	EPA6020	N	Soil	Silver	0.004	0.019	0.307	mg/kg	J	LabDupRPD	Stage 2B
K1411096-018	14386833	EPA6020	N	Soil	Silver	0.004	0.020	0.29	mg/kg	J	LabDupRPD	Stage 2B
K1411096-019	14386840	EPA6020	N	Soil	Silver	0.004	0.019	0.492	mg/kg	J	LabDupRPD	Stage 2B
K1411096-020	14386841	EPA6020	N	Soil	Silver	0.004	0.019	0.477	mg/kg	J	LabDupRPD	Stage 2B
K1411096-021	14386842	EPA6020	N	Soil	Silver	0.004	0.020	0.445	mg/kg	J	SerDil	Stage 2B
K1409213-008	14336012	EPA6010	N	Soil	Sodium	3.4	33.5	123	mg/kg	J	ICSA	Stage 4
K1409213-011	14336017	EPA6010	N	Soil	Sodium	3.4	34.4	142	mg/kg	J	ICSA	Stage 4
K1409213-012	14336018	EPA6010	N	Soil	Sodium	3.5	34.6	134	mg/kg	J	ICSA	Stage 4
K1409214-011	14336053	EPA6010	N	Soil	Sodium	4.0	40.1	169	mg/kg	J	ICSA	Stage 4
K1409214-013	14336055	EPA6010	N	Soil	Sodium	4.0	40.0	174	mg/kg	J	ICSA	Stage 4
K1409214-017	14336066	EPA6010	N	Soil	Sodium	4.1	41.4	140	mg/kg	J	ICSA	Stage 4
K1409214-018	14336067	EPA6010	N	Soil	Sodium	4.0	40.4	144	mg/kg	J	ICSA	Stage 4
K1409214-019	14336068	EPA6010	N	Soil	Sodium	4.0	40.2	136	mg/kg	J	ICSA	Stage 4
K1409214-020	14336069	EPA6010	N	Soil	Sodium	3.9	38.7	144	mg/kg	J	ICSA	Stage 4
K1409217-002	14336084	EPA6010	N	Soil	Sodium	4.1	40.5	156	mg/kg	J	ICSA	Stage 2B
K1409217-003	14336085	EPA6010	N	Soil	Sodium	4.0	40.4	182	mg/kg	J	ICSA	Stage 2B
K1409217-004	14336086	EPA6010	N	Soil	Sodium	4.0	40.1	179	mg/kg	J	ICSA	Stage 2B
K1409217-005	14336087	EPA6010	N	Soil	Sodium	4.0	40.2	188	mg/kg	J	ICSA	Stage 2B
K1409217-006	14336089	EPA6010	N	Soil	Sodium	4.1	40.8	124	mg/kg	J	ICSA	Stage 2B
K1409217-007	14336090	EPA6010	N	Soil	Sodium	4.0	40.4	135	mg/kg	J	ICSA	Stage 2B
K1409217-008	14336091	EPA6010	N	Soil	Sodium	4.1	40.7	134	mg/kg	J	ICSA	Stage 2B
K1409217-009	14336098	EPA6010	N	Soil	Sodium	4.0	40.2	226	mg/kg	J	ICSA	Stage 2B
K1409217-011	14336100	EPA6010	N	Soil	Sodium	4.1	40.7	112	mg/kg	J	ICSA	Stage 2B
K1409217-018	14346115	EPA6010	N	Soil	Sodium	4.0	39.6	108	mg/kg	J	ICSA	Stage 2B
K1409217-019	14346116	EPA6010	N	Soil	Sodium	4.1	40.9	101	mg/kg	J	ICSA	Stage 2B
K1409217-020	14346117	EPA6010	N	Soil	Sodium	4.1	40.5	128	mg/kg	J	ICSA	Stage 2B
K1409220-009	14346127	EPA6010	N	Soil	Sodium	4.1	81.2	84.3	mg/kg	J	-CCB>2xDL	Stage 2B
K1409220-013	14346144	EPA6010	N	Soil	Sodium	4.0	80.1	82.6	mg/kg	J	-CCB>2xDL	Stage 2B
K1409228-004	14336008	EPA6010	N	Soil	Sodium	3.4	33.9	117	mg/kg	J	ICSA	Stage 2B
K1409228-012	14336046	EPA6010	N	Soil	Sodium	3.8	37.9	100	mg/kg	J	ICSA	Stage 2B
K1409228-013	14336047	EPA6010	N	Soil	Sodium	3.2	32.1	191	mg/kg	J	ICSA	Stage 2B
K1409228-015	14336049	EPA6010	FD	Soil	Sodium	3.4	34.0	186	mg/kg	J	ICSA	Stage 2B
K1409228-016	14336050	EPA6010	N	Soil	Sodium	4.0	39.7	173	mg/kg	J	ICSA	Stage 2B
K1409228-017	14336051	EPA6010	N	Soil	Sodium	3.8	38.2	167	mg/kg	J	ICSA	Stage 2B
K1409228-018	14336058	EPA6010	N	Soil	Sodium	3.8	38.0	91	mg/kg	J	ICSA	Stage 2B
K1409228-019	14336059	EPA6010	N	Soil	Sodium	4.0	39.6	146	mg/kg	J	ICSA	Stage 2B
K1409228-020	14336060	EPA6010	N	Soil	Sodium	4.2	42.3	107	mg/kg	J	ICSA	Stage 2B
K1409230-001	14346102	EPA6010	N	Soil	Sodium	3.6	35.9	110	mg/kg	J	ICSA	Stage 2B
K1409230-007	14346128	EPA6010	N	Soil	Sodium	3.3	33.2	111	mg/kg	J	ICSA	Stage 2B
K1409230-015	14346140	EPA6010	N	Soil	Sodium	3.8	38.2	78.3	mg/kg	J	ICSA	Stage 2B
K1409762-007	14346155	EPA6010	N	Soil	Sodium	4.0	40.2	116	mg/kg	J	ICSA	Stage 2B
K1409762-008	14346156	EPA6010	N	Soil	Sodium	4.0	39.8	115	mg/kg	J	ICSA	Stage 2B
K1409762-009	14346157	EPA6010	N	Soil	Sodium	4.0	40.2	121	mg/kg	J	ICSA	Stage 2B
K1409762-010	14346158	EPA6010	N	Soil	Sodium	4.0	39.8	105	mg/kg	J	ICSA	Stage 2B
K1409762-011	14346159	EPA6010	N	Soil	Sodium	4.0	39.6	104	mg/kg	J	ICSA	Stage 2B
K1409762-012	14346160	EPA6010	N	Soil	Sodium	4.0	39.8	112	mg/kg	J	ICSA	Stage 2B
K1409762-016	14346171	EPA6010	N	Soil	Sodium	4.0	40.4	188	mg/kg	J	ICSA	Stage 2B
K1409762-017	14346172	EPA6010	N	Soil	Sodium	4.1	40.7	196	mg/kg	J	ICSA	Stage 2B
K1409762-018	14346173	EPA6010	N	Soil	Sodium	4.1	40.6	206	mg/kg	J	ICSA	Stage 2B
K1409762-019	14346174	EPA6010	N	Soil	Sodium	4.0	40.3	203	mg/kg	J	ICSA	Stage 2B
K1409762-020	14346175	EPA6010	N	Soil	Sodium	4.2	41.6	169	mg/kg	J	ICSA	Stage 2B
K1409764-005	14346196	EPA6010	N	Soil	Sodium	3.8	38.2	85.5	mg/kg	J	ICSA	Stage 2B
K1409764-006	14346197	EPA6010	N	Soil	Sodium	4.0	40.1	96	mg/kg	J	ICSA	Stage 2B
K1409764-007	14346198	EPA6010	N	Soil	Sodium	4.0	40.2	89.1	mg/kg	J	ICSA	Stage 2B
K1409764-015	14346213	EPA6010	N	Soil	Sodium	4.1	40.6	192	mg/kg	J	ICSA	Stage 2B
K1409764-017	14346215	EPA6010	N	Soil	Sodium	4.2	41.5	141	mg/kg	J	ICSA	Stage 2B
K1409773-001	14346186	EPA6010	N	Soil	Sodium	3.5	34.6	119	mg/kg	J	ICSA	Stage 2B
K1409773-002	14346187	EPA6010	N	Soil	Sodium	3.5	34.6	118	mg/kg	J	ICSA	Stage 2B
K1409773-003	14356241	EPA6010	N	Soil	Sodium	3.5	35.0	123	mg/kg	J	ICSA	Stage 2B
K1409773-004	14356242	EPA6010	N	Soil	Sodium	3.4	33.7	158	mg/kg	J	ICSA	Stage 2B
K1409773-005	14356243	EPA6010	N	Soil	Sodium	3.4	33.9	149	mg/kg	J	ICSA	Stage 2B
K1409773-006	14346276	EPA6010	N	Soil	Sodium	3.5	34.7	156	mg/kg	J	ICSA	Stage 2B
K1409777-012	14366339	EPA6010	N	Soil	Sodium	4.0	39.5	209	mg/kg	J	ICSA	Stage 4
K1410291-002	14366405	EPA6010	N	Soil	Sodium	4.0	39.8	86.9	mg/kg	J	ICSA	Stage 2B
K1410291-003	14366406	EPA6010	N	Soil	Sodium	4.0	39.7	87.3	mg/kg	J	ICSA	Stage 2B
K1410291-004	14366407	EPA6010	N	Soil	Sodium	4.0	39.6	81.9	mg/kg	J	ICSA	Stage 2B
K1410291-017	14366422	EPA6010	N	Soil	Sodium	4.0	40.0	159	mg/kg	J	ICSA	Stage 2B
K1410291-018	14366428	EPA6010	N	Soil	Sodium	4.0	40.1	137	mg/kg	J	ICSA	Stage 2B
K1410291-019	14366429	EPA6010	N	Soil	Sodium	4.0	40.1	151	mg/kg	J	ICSA	Stage 2B
K1410291-020	14366430	EPA6010	N	Soil	Sodium	4.0	39.6	152	mg/kg	J	ICSA	Stage 2B
K1410292-014	14376483	EPA6010	N	Soil	Sodium	3.9	39.3	138	mg/kg	J	ICSA	Stage 2B
K1410297-001	14366401	EPA6010	N	Soil	Sodium	4.8	38.4	159	mg/kg	J	ICSA	Stage 2B
K1410297-002	14366402	EPA6010	N	Soil	Sodium	4.8	38.0	147	mg/kg	J	ICSA	Stage 2B
K1410297-003	14366403	EPA6010	N	Soil	Sodium	4.8	38.6	146	mg/kg	J	ICSA	Stage 2B
K1410297-004	14366441	EPA6010	N	Soil	Sodium	4.8	38.2	153	mg/kg	J	ICSA	Stage 2B
K1410297-005	14366442	EPA6010	N	Soil	Sodium	4.8	38.3	152	mg/kg	J	ICSA	Stage 2B
K1410297-006	14366443	EPA6010	N	Soil	Sodium	4.8	38.2	148	mg/kg	J	ICSA	Stage 2B
K1410297-010	14376477	EPA6010	N	Soil	Sodium	4.8	38.2	271	mg/kg	J	ICSA	Stage 2B
K1410297-011	14376478	EPA6010	N	Soil	Sodium	4.7	38.0	327	mg/kg	J	ICSA	Stage 2B
K1410297-012	14376479	EPA6010	N	Soil	Sodium	4.7	37.9	373	mg/kg	J	ICSA	Stage 2B
K1410297-016	14376533	EPA6010	N	Soil	Sodium	4.8	38.6	150	mg/kg	J	ICSA	Stage 2B
K1410297-017	14376534	EPA6010	N	Soil	Sodium	4.8	38.2	148	mg/kg	J	ICSA	Stage 2B
K1410297-018	14376535	EPA6010	N	Soil	Sodium	4.8	38.3	140	mg/kg	J	ICSA	Stage 2B
K1410299-001	14376567	EPA6010	N	Soil	Sodium	3.8	38.3	202	mg/kg	J	ICSA	Stage 2B
K1410299-002	14376568	EPA6010	N	Soil	Sodium	3.9	39.0	193	mg/kg	J	ICSA	Stage 2B
K1410299-003	14376569	EPA6010	N	Soil	Sodium	3.9	39.0	209	mg/kg	J	ICSA	Stage 2B
K1410299-004	14376578	EPA6010	N	Soil	Sodium	3.9	38.9	107	mg/kg	J	ICSA	Stage 2B
K1410299-005	14376579	EPA6010	N	Soil	Sodium	3.9	38.9	108	mg/kg	J	ICSA	Stage 2B
K1410299-006	14376580	EPA6010	N	Soil	Sodium	3.9	39.0	105	mg/kg	J	ICSA	Stage 2B
K1410319-010	14366423	EPA6010	N	Soil	Sodium	4.0	39.7	125	mg/kg	J	ICSA	Stage 2B
K1410319-011	14366424	EPA6010	N	Soil	Sodium	4.0	40.1	148	mg/kg	J	ICSA	Stage 2B
K1410319-012	14366425	EPA6010	N	Soil	Sodium	3.9	39.0	285	mg/kg	J	ICSA	Stage 2B
K1410319-013	14366426	EPA6010	N	Soil	Sodium	4.3	43.1	135	mg/kg	J	ICSA	Stage 2B
K1410319-014	14366427	EPA6010	N	Soil	Sodium	4.2	42.4	112	mg/kg	J	ICSA	Stage 2B
K1411074-001	14386712	EPA6010	N	Soil	Sodium	3.8	38.2	106	mg/kg	J	ICSA	Stage 2B
K1411074-002	14386713	EPA6010	N	Soil	Sodium	3.8	37.6	94.8	mg/kg	J	ICSA	Stage 2B
K1411074-003	14386714	EPA6010	N	Soil	Sodium	3.8	38.2	100	mg/kg	J	ICSA	Stage 2B
K1411074-004	14386869	EPA6010	N	Soil	Sodium	3.8	38.1	117	mg/kg	J	ICSA	Stage 2B
K1411074-005	14386870	EPA6010	N	Soil	Sodium	3.8	38.2	115	mg/kg	J	ICSA	Stage 2B
K1411074-006	14386871	EPA6010	N	Soil	Sodium	3.8	38.1	119	mg/kg	J	ICSA	Stage 2B
K1411074-007	14396876	EPA6010	N	Soil	Sodium	3.8	38.2	119	mg/kg	J	ICSA	Stage 2B
K1411074-008	14396877	EPA6010	N	Soil	Sodium	3.8	38.4	112	mg/kg	J	ICSA	Stage 2B
K1411074-009	14396878	EPA6010	N	Soil	Sodium	3.8	38.1	124	mg/kg	J	ICSA	Stage 2B
K1411074-010	14397007	EPA6010	N	Soil	Sodium	3.8	38.0	135	mg/kg	J	ICSA	Stage 2B

TABLE 5-2

Listing of Samples Affected by Validation Flags

UCR Residential Soil Study Field Sampling and Data Summary Report

Lab Sample ID	Sample ID	Matrix	QA/QC Type	Method	Analyte	DL	RL	Result	Units	DV Flag	DV Reason	DV Level
K1411074-011	14397008	EPA6010	N	Soil	Sodium	3.8	38.0	136	mg/kg	J	ICSA	Stage 2B
K1411074-012	14397009	EPA6010	N	Soil	Sodium	3.8	37.8	127	mg/kg	J	ICSA	Stage 2B
K1411090-007	14397010	EPA6010	N	Soil	Sodium	116	116	116	mg/kg	U*	CCB>DL	Stage 4
K1411090-008	14397011	EPA6010	N	Soil	Sodium	125	125	125	mg/kg	U*	CCB>DL	Stage 4
K1411090-009	14397012	EPA6010	N	Soil	Sodium	120	120	120	mg/kg	U*	CCB>DL	Stage 4
K1411091-005	14386688	EPA6010	N	Soil	Sodium	3.9	39.0	146	mg/kg	J	ICSA	Stage 2B
K1411091-006	14386689	EPA6010	N	Soil	Sodium	3.9	39.0	146	mg/kg	J	ICSA	Stage 2B
K1411091-007	14386690	EPA6010	N	Soil	Sodium	3.9	38.7	152	mg/kg	J	ICSA	Stage 2B
K1411096-021	14386842	EPA6010	N	Soil	Sodium	145	145	145	mg/kg	U*	CCB>DL	Stage 2B
K1410321-018	14376470	EPA6020	N	Soil	Vanadium	0.02	0.20	27.2	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6020	FD	Soil	Vanadium	0.02	0.20	39.3	mg/kg	J	FD>UCL	Stage 2B
K1410321-018	14376470	EPA6020	N	Soil	Zinc	0.2	0.5	806	mg/kg	J	FD>UCL	Stage 2B
K1410321-019	14376471	EPA6020	FD	Soil	Zinc	0.2	0.5	263	mg/kg	J	FD>UCL	Stage 2B

DV = Data validation

J = Analyte was detected; the quantitation was estimated because of discrepancies in meeting certain analyte-specific QC criteria.

UJ = Analyte was not detected; however, the quantitation was estimated because of discrepancies in meeting certain analyte-specific QC criteria.

U = Analyte was analyzed for but not detected, or was qualified as not detected because of blank contamination.

>MDL<RL = Greater than the method detection limit and less than the reporting limit.

CCB->2xDL = Continuing calibration blank negative bias greater than two times the detection limit.

CCB>DL = Continuing calibration blank greater than the detection limit.

FD>UCL = Field duplicate greater than the upper control limit.

ICSA = Interference check standard solution A exceeded control criteria.

LabDupRPD = Laboratory duplicate relative percent difference criteria exceeded.

LCS<LCL = Laboratory control standard less than lower control limit.

MS<LCL = Matrix spike less than lower control limit.

MS>UCL = Matrix spike greater than the upper control limit.

MSRPD = Matrix spike relative percent difference criteria exceeded.

SerDil = Serial dilution criteria exceeded.

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Cadmium	mg/kg	0.02	5.44		0.016	4.06		29.05	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6010	Aluminum	mg/kg	2	15,200		1.6	12,200		21.9	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Vanadium	mg/kg	0.2	28.4		0.16	26.5		6.92	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Thallium	mg/kg	0.02	0.31		0.016	0.259		17.93	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Silver	mg/kg	0.02	0.382		0.016	0.291		27.04	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Selenium	mg/kg	0.2	0.37		0.16	0.27		<2X CRQL	2X CRQL	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Nickel	mg/kg	0.2	23.3		0.16	23.9		2.54	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Lead	mg/kg	0.2	204		0.16	137		39.3	30	X
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Copper	mg/kg	0.1	26.4		0.08	21.9		18.63	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6010	Aluminum	mg/kg	1.9	12,200		1.7	12,500		2.43	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Chromium	mg/kg	0.2	19.7		0.16	18.6		5.74	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6010	Calcium	mg/kg	3.8	7,580		3.5	7,790		2.73	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Beryllium	mg/kg	0.02	0.522	J	0.016	0.455	J	13.72	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Barium	mg/kg	0.05	176		0.04	139		23.49	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Arsenic	mg/kg	0.51	18.6		0.41	14.3		26.14	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Antimony	mg/kg	0.051	2.83	J	0.041	2.1	J	29.61	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6010	Potassium	mg/kg	40.7	2,070		32.8	1,950		5.97	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Zinc	mg/kg	0.5	400		0.4	406		1.49	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6010	Magnesium	mg/kg	2.04	3,940		1.64	3,640		7.92	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6010	Iron	mg/kg	4.1	16,000		3.3	14,500		9.84	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6010	Calcium	mg/kg	4.1	4,470		3.3	3,890		13.88	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Cobalt	mg/kg	0.02	7.17		0.016	6.37		11.82	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Cadmium	mg/kg	0.019	8.45		0.017	8.76		3.6	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6010	Aluminum	mg/kg	1.6	8,830		1.7	9,060		2.57	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Vanadium	mg/kg	0.19	49.5		0.17	42.4		15.45	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Thallium	mg/kg	0.019	0.408		0.017	0.449		9.57	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Silver	mg/kg	0.019	0.164		0.017	0.172		4.76	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Selenium	mg/kg	0.19	0.43		0.17	0.39		<2X CRQL	2X CRQL	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Nickel	mg/kg	0.19	25.7		0.17	25.3		1.57	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Lead	mg/kg	0.19	359		0.17	374		4.09	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Copper	mg/kg	0.1	36.3		0.09	37.3		2.72	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6020	Zinc	mg/kg	0.5	376		0.4	290		25.83	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Chromium	mg/kg	0.19	37.5		0.17	32.8		13.37	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6010	Manganese	mg/kg	0.2	499		0.16	392		24.02	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Beryllium	mg/kg	0.019	0.604	J	0.017	0.572	J	5.44	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Barium	mg/kg	0.05	223		0.04	230		3.09	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Arsenic	mg/kg	0.48	21.2		0.44	21.2		0	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Antimony	mg/kg	0.047	3.53	J	0.044	3.14	J	11.69	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6010	Sodium	mg/kg	38	91	J	34.8	145		<2X CRQL	2X CRQL	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6010	Potassium	mg/kg	38	1,880		34.8	2,020		7.18	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6010	Manganese	mg/kg	0.19	779		0.17	776	J	0.39	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6010	Magnesium	mg/kg	1.9	5,330		1.74	5,480	J	2.78	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6010	Iron	mg/kg	3.8	22,500		3.5	20,700		8.33	30	
K1409228	2014R-SS-151-D-01-01	2014R-SS-151-D-01-02	EPA6020	Cobalt	mg/kg	0.019	9.78		0.017	9.68		1.03	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Arsenic	mg/kg	0.43	7.1		0.45	7.97		11.55	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Silver	mg/kg	0.017	0.181		0.018	0.19		4.85	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Selenium	mg/kg	0.17	0.32		0.18	0.31		<2X CRQL	2X CRQL	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6010	Calcium	mg/kg	3.2	5,570		3.4	5,570		0	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Lead	mg/kg	0.17	22.6		0.18	26.1		14.37	30	
K1409228	2014R-SS-15-D-03-01	2014R-SS-15-D-03-02	EPA6010	Sodium	mg/kg	40.7	121		32.8	93.8		<2X CRQL	2X CRQL	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Cobalt	mg/kg	0.017	6.69		0.018	6.67		0.3	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Chromium	mg/kg	0.17	20.8		0.18	21		0.96	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Cadmium	mg/kg	0.017	0.641		0.018	0.728		12.71	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Thallium	mg/kg	0.017	0.197		0.018	0.201		2.01	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Barium	mg/kg	0.04	191		0.05	188		1.58	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Nickel	mg/kg	0.17	14		0.18	13.9		0.72	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Antimony	mg/kg	0.043	0.937	J	0.045	1.05	J	11.37	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6010	Sodium	mg/kg	34.5	138		36.2	135		<2X CRQL	2X CRQL	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6010	Potassium	mg/kg	34.5	1,310		36.2	1,290		1.54	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6010	Manganese	mg/kg	0.17	447		0.18	445		0.45	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6010	Magnesium	mg/kg	1.73	3,560		1.81	3,510		1.41	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6010	Iron	mg/kg	3.5	15,500		3.6	15,500		0	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6010	Calcium	mg/kg	3.5	3,190		3.6	3,240		1.56	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6010	Aluminum	mg/kg	1.7	22,400		1.8	21,900		2.26	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Zinc	mg/kg	0.4	157		0.4	176		11.41	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Beryllium	mg/kg	0.017	0.67	J	0.018	0.658	J	1.81	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Antimony	mg/kg	0.04	0.392	J	0.042	0.403	J	2.77	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6010	Iron	mg/kg	3.2	23,800		3.4	22,700		4.73	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6010	Magnesium	mg/kg	1.6	6,280		1.7	6,310		0.48	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6010	Manganese	mg/kg	0.16	319		0.17	330		3.39	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6010	Potassium	mg/kg	32.1	1,680		34	1,700		1.18	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Copper	mg/kg	0.09	23.9		0.09	24.2		1.25	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6010	Sodium	mg/kg	32.1	191	J	34	186	J	2.65	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Vanadium	mg/kg	0.17	29.7		0.18	29.6		0.34	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Arsenic	mg/kg	0.4	13.5		0.43	12		11.76	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Barium	mg/kg	0.04	105		0.04	104		0.96	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Beryllium	mg/kg	0.016	0.412	J	0.017	0.406	J	1.47	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Silver	mg/kg	0.016	0.157		0.017	0.161		2.52	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Cadmium	mg/kg	0.016	0.631		0.017	0.65		2.97	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Thallium	mg/kg	0.016	0.154		0.017	0.151		1.97	30	
K1409228	2014R-SS-40-D-02-01	2014R-SS-40-D-02-02	EPA6020	Zinc	mg/kg	0.4	76.7		0.5	79.7		3.84	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Selenium	mg/kg	0.16	0.26		0.17	0.25		<2X CRQL	2X CRQL	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Nickel	mg/kg	0.16	32.3		0.17	31.9		1.25	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Lead	mg/kg	0.16	27.9		0.17	28.7		2.83	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Copper	mg/kg	0.08	34.5		0.09	34		1.46	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Cobalt	mg/kg	0.016	11.8		0.017	11.4		3.45	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Chromium	mg/kg	0.16	41.4		0.17	40		3.44	30	
K1409228	2014R-SS-192-D-02-01	2014R-SS-192-D-02-02	EPA6020	Vanadium	mg/kg	0.16	60.8		0.17	56.7		6.98	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6010	Potassium	mg/kg	37.5	1,530		33.7	1,530		0	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Barium	mg/kg	0.05	92.5		0.04	94.4		2.03	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Arsenic	mg/kg	0.47	8.8		0.42	9.16		4.01	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Antimony	mg/kg	0.047	0.981	J	0.042	1.29	J	27.21	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6010	Sodium	mg/kg	37.5	216		33.7	223		3.19	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6010	Manganese	mg/kg	0.19	273	J	0.17	269	J	1.48	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6010	Magnesium	mg/kg	1.88	5,730	J	1.69	5,700	J	0.52	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6010	Iron	mg/kg	3.8	25,500		3.4	24,800		2.78	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Beryllium	mg/kg	0.019	0.471	J	0.017	0.485	J	2.93	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6010	Aluminum	mg/kg	1.9	8,590		1.7	8,650		0.7	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6010	Calcium	mg/kg	3.8	5,590		3.4	5,630		0.71	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6010	Sodium	mg/kg	34.9	226		33.4	217		4.06	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Lead	mg/kg	0.17	88.7		0.17	85		4.26	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Copper	mg/kg	0.09	39.5		0.08	40.3		2.01	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Cobalt	mg/kg	0.017	10.9		0.017	10.9		0	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Cadmium	mg/kg	0.017	1.84		0.017	1.85		0.54	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Barium	mg/kg	0.04	217		0.04	217		0	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Nickel	mg/kg	0.17	30.9		0.17	31.4		1.61	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Antimony	mg/kg	0.044	1.12	J	0.042	1.12	J	0	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Chromium	mg/kg	0.17	42.2		0.17	41.3		2.16	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6010	Potassium	mg/kg	34.9	2,520		33.4	2,520		0	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6010	Manganese	mg/kg	0.17	519	J	0.17	522	J	0.58	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6010	Magnesium	mg/kg	1.74	7,150	J	1.67	7,150	J	0	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6010	Iron	mg/kg	3.5	22,700		3.3	22,100		2.68	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6010	Calcium	mg/kg	3.5	10,600		3.3	10,400		1.9	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Cadmium	mg/kg	0.019	0.795		0.017	0.979		20.74	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Arsenic	mg/kg	0.44	15.1		0.42	15.3		1.32	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Nickel	mg/kg	0.19	22.6		0.17	22.4		0.89	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Chromium	mg/kg	0.19	43.2		0.17	42.9		0.7	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Cobalt	mg/kg	0.019	8.98		0.017	8.81		1.91	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Beryllium	mg/kg	0.017	0.448	J	0.017	0.454	J	1.33	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Lead	mg/kg	0.19	89.6		0.17	122		30.62	30	X
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Selenium	mg/kg	0.17	0.34		0.17	0.34		<2X CRQL	2X CRQL	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Selenium	mg/kg	0.19	0.23		0.17	0.24		<2X CRQL	2X CRQL	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Silver	mg/kg	0.019	0.253		0.017	0.257		1.57	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Thallium	mg/kg	0.019	0.178		0.017	0.192		7.57	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6010	Aluminum	mg/kg	1.7	10,700		1.7	10,500		1.89	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Zinc	mg/kg	0.5	82.1		0.4	88.9		7.95	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Zinc	mg/kg	0.4	162		0.4	166		2.44	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Vanadium	mg/kg	0.17	55.7		0.17	54		3.1	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Thallium	mg/kg	0.017	0.195		0.017	0.184		5.8	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Vanadium	mg/kg	0.19	62.5		0.17	61.4		1.78	30	
K1409229	2014R-SS-185-D-05-01	2014R-SS-185-D-05-02	EPA6020	Copper	mg/kg	0.09	26.8		0.08	26.7		0.37	30	
K1409229	2014R-SS-186-D-01-01	2014R-SS-186-D-01-02	EPA6020	Silver	mg/kg	0.017	0.385		0.017	0.449		15.35	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Zinc	mg/kg	0.5	196		0.5	203		3.51	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Cobalt	mg/kg	0.019	5.29		0.019	5.49		3.71	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Copper	mg/kg	0.09	21.5		0.09	22.9		6.31	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Lead	mg/kg	0.19	162		0.19	167		3.04	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Nickel	mg/kg	0.19	12.9		0.19	13.3		3.05	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Selenium	mg/kg	0.19	0.16	J	0.19	0.16	J	<2X CRQL	2X CRQL	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Silver	mg/kg	0.019	0.233		0.019	0.245		5.02	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Vanadium	mg/kg	0.19	22.1		0.19	23.2		4.86	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6010	Manganese	mg/kg	0.19	404		0.19	406		0.49	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Chromium	mg/kg	0.19	16.7		0.19	17.1		2.37	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Thallium	mg/kg	0.019	0.19		0.019	0.199		4.63	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6010	Sodium	mg/kg	36.2	69.1		34.5	67.9		<2X CRQL	2X CRQL	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Cobalt	mg/kg	0.018	5.57		0.017	5.62		0.89	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Chromium	mg/kg	0.18	18.4		0.17	18.8		2.15	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Cadmium	mg/kg	0.018	1.43		0.017	1.43		0	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Beryllium	mg/kg	0.018	0.309	J	0.017	0.314	J	1.61	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Barium	mg/kg	0.05	101		0.04	101		0	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6010	Sodium	mg/kg	37.2	51		37.6	51.9		<2X CRQL	2X CRQL	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Antimony	mg/kg	0.045	0.597	J	0.043	0.633	J	5.85	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Nickel	mg/kg	0.18	14.6		0.17	14.9		2.03	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6010	Potassium	mg/kg	36.2	1,640		34.5	1,660		1.21	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6010	Manganese	mg/kg	0.18	279		0.17	276		1.08	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6010	Magnesium	mg/kg	1.81	3,930		1.72	3,990		1.52	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6010	Iron	mg/kg	3.6	13,300		3.5	13,400		0.75	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6010	Calcium	mg/kg	3.6	5,270		3.5	5,290		0.38	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6010	Aluminum	mg/kg	1.8	7,320		1.7	7,410		1.22	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Arsenic	mg/kg	0.45	4.92		0.43	5.1		3.59	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6010	Calcium	mg/kg	3.7	2,870		3.8	3,030		5.42	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Beryllium	mg/kg	0.019	0.276	J	0.019	0.292	J	5.63	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Barium	mg/kg	0.05	141		0.05	146		3.48	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Arsenic	mg/kg	0.47	9.79		0.47	9.96		1.72	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Antimony	mg/kg	0.046	1.46	J	0.047	1.43	J	2.08	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6010	Aluminum	mg/kg	1.9	7,250		1.9	7,310		0.82	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6010	Potassium	mg/kg	37.2	2,020		37.6	2,050		1.47	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Copper	mg/kg	0.09	14.7		0.09	14.9		1.35	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6010	Iron	mg/kg	3.7	13,000		3.8	13,400		3.03	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Lead	mg/kg	0.18	59.7		0.17	59.6		0.17	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Zinc	mg/kg	0.5	139		0.4	137		1.45	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Vanadium	mg/kg	0.18	24.9		0.17	26		4.32	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Thallium	mg/kg	0.018	0.175		0.017	0.168		4.08	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Silver	mg/kg	0.018	0.128		0.017	0.135		5.32	30	
K1409230	2014R-SS-288-D-04-01	2014R-SS-288-D-04-02	EPA6020	Selenium	mg/kg	0.18	0.13	J	0.17	0.12	J	<2X CRQL	2X CRQL	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6020	Cadmium	mg/kg	0.019	2.84		0.019	2.89		1.75	30	
K1409230	2014R-SS-253-D-01-01	2014R-SS-253-D-01-02	EPA6010	Magnesium	mg/kg	1.86	3,530		1.88	3,600		1.96	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Antimony	mg/kg	0.047	1.78	J	0.046	1.87	J	4.93	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Thallium	mg/kg	0.019	0.219		0.018	0.232		5.76	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Silver	mg/kg	0.019	0.337		0.018	0.34		0.89	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Selenium	mg/kg	0.19	0.27		0.18	0.3		<2X CRQL	2X CRQL	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Lead	mg/kg	0.19	151		0.18	157		3.9	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Cobalt	mg/kg	0.019	7.14		0.018	7.3		2.22	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Chromium	mg/kg	0.19	23		0.18	23.8		3.42	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Cadmium	mg/kg	0.019	2.96		0.018	3.05		3	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Beryllium	mg/kg	0.019	0.393	J	0.018	0.404	J	2.76	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Vanadium	mg/kg	0.19	29.8		0.18	30.1		1	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Arsenic	mg/kg	0.47	8.57		0.46	9.04		5.34	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Nickel	mg/kg	0.19	16.9		0.18	17.4		2.92	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6010	Sodium	mg/kg	37.7	87.5		36.5	87.4		<2X CRQL	2X CRQL	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6010	Potassium	mg/kg	37.7	2,150		36.5	2,230		3.65	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6010	Manganese	mg/kg	0.19	377		0.18	384		1.84	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6010	Magnesium	mg/kg	1.89	5,050		1.83	5,220		3.31	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6010	Iron	mg/kg	3.8	15,900		3.7	16,200		1.87	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6010	Calcium	mg/kg	3.8	5,620		3.7	5,790		2.98	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6010	Aluminum	mg/kg	1.9	10,500		1.8	10,600		0.95	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Zinc	mg/kg	0.5	230		0.5	236		2.58	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Barium	mg/kg	0.05	145		0.05	149		2.72	30	
K1409230	2014R-SS-85-D-05-01	2014R-SS-85-D-05-02	EPA6020	Copper	mg/kg	0.09	30.5		0.09	31		1.63	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Selenium	mg/kg	0.19	0.36		0.19	0.36		<2X CRQL	2X CRQL	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Selenium	mg/kg	0.18	0.28		0.18	0.26		<2X CRQL	2X CRQL	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Silver	mg/kg	0.018	0.23		0.018	0.238		3.42	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Thallium	mg/kg	0.018	0.16		0.018	0.158		1.26	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Zinc	mg/kg	0.5	266		0.5	267		0.38	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Vanadium	mg/kg	0.19	26.1		0.19	26		0.38	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Lead	mg/kg	0.18	43		0.18	43.2		0.46	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Silver	mg/kg	0.019	0.331		0.019	0.358		7.84	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Copper	mg/kg	0.09	26		0.09	25.6		1.55	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Nickel	mg/kg	0.19	12.6		0.19	12.3		2.41	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Lead	mg/kg	0.19	518		0.19	527		1.72	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Copper	mg/kg	0.1	34.3		0.1	35		2.02	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Cobalt	mg/kg	0.019	4.99		0.019	5.09		1.98	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Chromium	mg/kg	0.19	17.1		0.19	16.9		1.18	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Vanadium	mg/kg	0.18	30.6		0.18	29.3		4.34	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Thallium	mg/kg	0.019	0.502		0.019	0.496		1.2	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Antimony	mg/kg	0.045	0.692	J	0.046	0.732	J	5.62	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6010	Calcium	mg/kg	3.6	2,900		3.7	2,870		1.04	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6010	Iron	mg/kg	7.3	20,500		7.4	20,300		0.98	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6010	Magnesium	mg/kg	3.63	3,790		3.67	3,700		2.4	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6010	Manganese	mg/kg	0.18	564		0.18	565		0.18	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Barium	mg/kg	0.05	97.4		0.05	98.8		1.43	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6010	Potassium	mg/kg	36.3	1,480		36.7	1,450		2.05	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Nickel	mg/kg	0.18	21.9		0.18	21.4		2.31	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6010	Sodium	mg/kg	36.3	182		36.7	170		<2X CRQL	2X CRQL	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6010	Aluminum	mg/kg	3.6	16,100		3.7	15,500		3.8	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Arsenic	mg/kg	0.45	8.88		0.46	9		1.34	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Barium	mg/kg	0.05	233		0.05	233		0	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Beryllium	mg/kg	0.018	0.891	J	0.018	0.887	J	0.45	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Cadmium	mg/kg	0.018	0.753		0.018	0.751		0.27	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Chromium	mg/kg	0.18	19.7		0.18	19.3		2.05	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Cobalt	mg/kg	0.018	9.51		0.018	9.23		2.99	30	
K1409790	2014R-SS-999M1-D-04-01	2014R-SS-999M1-D-04-02	EPA6020	Zinc	mg/kg	0.5	102		0.5	101		0.99	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Lead	mg/kg	0.19	88.1		0.19	109		21.21	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Arsenic	mg/kg	0.47	7.52		0.47	8.78		15.46	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Barium	mg/kg	0.05	85.5		0.05	90.8		6.01	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Beryllium	mg/kg	0.019	0.265	J	0.019	0.263	J	0.76	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Cadmium	mg/kg	0.019	2.04		0.019	2.34		13.7	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Chromium	mg/kg	0.19	16.9		0.19	15.4		9.29	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Antimony	mg/kg	0.047	0.95	J	0.047	1.26	J	28.05	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Copper	mg/kg	0.09	16.1		0.09	19.6		19.61	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Nickel	mg/kg	0.19	13.4		0.19	12.7		5.36	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Beryllium	mg/kg	0.019	0.274	J	0.019	0.27	J	1.47	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Selenium	mg/kg	0.19	0.13	J	0.19	0.14	J	<2X CRQL	2X CRQL	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Cadmium	mg/kg	0.019	5.56		0.019	5.68		2.14	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Thallium	mg/kg	0.019	0.167		0.019	0.181		8.05	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Vanadium	mg/kg	0.19	24.6		0.19	21.4		13.91	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Zinc	mg/kg	0.5	163		0.5	158		3.12	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Cobalt	mg/kg	0.019	5.18		0.019	5.1		1.56	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6010	Potassium	mg/kg	37.9	1,180		38	1,190		0.84	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6020	Silver	mg/kg	0.019	0.126		0.019	0.146		14.71	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6010	Sodium	mg/kg	37.5	61.2		37.3	51.4		<2X CRQL	2X CRQL	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Arsenic	mg/kg	0.47	26.4		0.48	26.6		0.75	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6010	Sodium	mg/kg	37.9	61.7		38	58.3		<2X CRQL	2X CRQL	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6010	Manganese	mg/kg	0.19	324		0.19	332		2.44	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6010	Magnesium	mg/kg	3.79	3,160		3.8	3,190		0.94	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6010	Iron	mg/kg	7.6	13,100		7.6	13,200		0.76	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6010	Manganese	mg/kg	0.19	281		0.19	298		5.87	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6010	Aluminum	mg/kg	3.8	6,890		3.8	6,890		0	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6010	Aluminum	mg/kg	3.8	6,900		3.7	6,400		7.52	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6010	Calcium	mg/kg	3.8	3,210		3.7	3,120		2.84	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6010	Iron	mg/kg	7.5	12,500		7.5	11,400		9.21	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6010	Magnesium	mg/kg	3.75	3,480		3.73	3,420		1.74	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6010	Calcium	mg/kg	3.8	2,600		3.8	2,650		1.9	30	
K1409790	2014R-SS-116M-D-03-01	2014R-SS-116M-D-03-02	EPA6020	Antimony	mg/kg	0.047	6.36	J	0.047	6.62	J	4.01	30	
K1409790	2014R-SS-226C-D-05-01	2014R-SS-226C-D-05-02	EPA6010	Potassium	mg/kg	37.5	1,460		37.3	1,460		0	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Cobalt	mg/kg	0.017	6.2		0.017	6.19		0.16	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Copper	mg/kg	0.09	21.4		0.09	21.1		1.41	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Lead	mg/kg	0.17	158		0.17	158		0	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Nickel	mg/kg	0.17	15.5		0.17	15.7		1.28	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Selenium	mg/kg	0.17	0.25		0.17	0.26		<2X CRQL	2X CRQL	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Silver	mg/kg	0.017	0.308		0.017	0.311		0.97	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Vanadium	mg/kg	0.17	28		0.17	27.9		0.36	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Chromium	mg/kg	0.17	21.2		0.17	21.2		0	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6010	Iron	mg/kg	3.4	15,000		3.4	15,100		0.66	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Thallium	mg/kg	0.017	0.197		0.017	0.204		3.49	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Cadmium	mg/kg	0.017	3.41		0.017	3.38		0.88	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Beryllium	mg/kg	0.017	0.382	J	0.017	0.378	J	1.05	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Barium	mg/kg	0.04	236		0.04	237		0.42	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Arsenic	mg/kg	0.43	10.7		0.43	10.8		0.93	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Antimony	mg/kg	0.043	2.18	J	0.043	2.21	J	1.37	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6010	Sodium	mg/kg	34.2	129		34	130		<2X CRQL	2X CRQL	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6010	Potassium	mg/kg	34.2	2,020		34	2,040		0.99	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6010	Magnesium	mg/kg	1.71	3,690		1.7	3,730		1.08	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6010	Calcium	mg/kg	3.4	3,320		3.4	3,400		2.38	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6010	Aluminum	mg/kg	3.4	12,800		3.4	12,900		0.78	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6010	Manganese	mg/kg	0.17	476		0.17	477		0.21	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Lead	mg/kg	0.17	24.7		0.16	25.8		4.36	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Vanadium	mg/kg	0.17	33.7		0.16	35.8		6.04	30	
K1409793	2014R-SS-206-D-04-01	2014R-SS-206-D-04-02	EPA6020	Zinc	mg/kg	0.4	240		0.4	240		0	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Thallium	mg/kg	0.017	0.14		0.016	0.178		23.9	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Silver	mg/kg	0.017	0.13		0.016	0.138		5.97	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6010	Aluminum	mg/kg	3.4	12,600		3.3	13,300		5.41	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Nickel	mg/kg	0.17	22.4		0.16	23.4		4.37	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Zinc	mg/kg	0.4	82.5		0.4	86.6		4.85	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Copper	mg/kg	0.08	18.7		0.08	19.6		4.7	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Cobalt	mg/kg	0.017	7.58		0.016	7.95		4.76	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Chromium	mg/kg	0.17	25.4		0.16	26.9		5.74	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6010	Iron	mg/kg	3.4	17,300		3.3	18,200		5.07	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Beryllium	mg/kg	0.017	0.427	J	0.016	0.462	J	7.87	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Barium	mg/kg	0.04	164		0.04	170		3.59	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Arsenic	mg/kg	0.42	6.79		0.41	7.04		3.62	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Antimony	mg/kg	0.042	0.434	J	0.041	0.445	J	2.5	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6010	Sodium	mg/kg	33.8	126		32.5	135		<2X CRQL	2X CRQL	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6010	Potassium	mg/kg	33.8	2,200		32.5	2,290		4.01	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6010	Manganese	mg/kg	0.17	329		0.16	339		2.99	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6010	Magnesium	mg/kg	1.69	4,270		1.62	4,480		4.8	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Cadmium	mg/kg	0.017	0.546		0.016	0.58		6.04	30	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6020	Selenium	mg/kg	0.17	0.15	J	0.16	0.15	J	<2X CRQL	2X CRQL	
K1409793	2014R-SS-315-D-03-01	2014R-SS-315-D-03-02	EPA6010	Calcium	mg/kg	3.4	2,840		3.3	2,980		4.81	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Barium	mg/kg	0.04	261		0.05	298		13.24	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Arsenic	mg/kg	0.44	9.03		0.48	10.4		14.1	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Antimony	mg/kg	0.044	0.577	J	0.048	0.681	J	16.53	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6010	Sodium	mg/kg	35	156		38.1	175		<2X CRQL	2X CRQL	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6010	Potassium	mg/kg	35	2,140		38.1	2,440		13.1	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6010	Manganese	mg/kg	0.18	435		0.19	499		13.7	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6010	Magnesium	mg/kg	1.75	4,760		1.9	5,440		13.33	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6010	Calcium	mg/kg	3.5	3,280		3.8	3,750		13.37	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6010	Iron	mg/kg	3.5	19,000		3.8	21,800		13.73	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Beryllium	mg/kg	0.018	0.508		0.019	0.584		13.92	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Cadmium	mg/kg	0.018	0.782		0.019	0.895		13.48	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Chromium	mg/kg	0.18	23.8		0.19	26.6		11.11	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Cobalt	mg/kg	0.018	7.96		0.019	8.98		12.04	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Copper	mg/kg	0.09	17.9		0.1	20.2		12.07	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Lead	mg/kg	0.18	29.8		0.19	34.3		14.04	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Nickel	mg/kg	0.18	21.7		0.19	24.5		12.12	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Selenium	mg/kg	0.18	0.15	J	0.19	0.17	J	<2X CRQL	2X CRQL	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Silver	mg/kg	0.018	0.117		0.019	0.131		11.29	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6010	Aluminum	mg/kg	3.5	16,500		3.8	18,900		13.56	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Vanadium	mg/kg	0.18	29.8		0.19	33.5		11.69	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Cadmium	mg/kg	0.016	0.182		0.018	0.191		4.83	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Thallium	mg/kg	0.018	0.188		0.019	0.208		10.1	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Beryllium	mg/kg	0.016	0.379		0.018	0.386		1.83	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Zinc	mg/kg	0.4	57		0.5	57.6		1.05	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Vanadium	mg/kg	0.16	25.5		0.18	25.6		0.39	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Thallium	mg/kg	0.016	0.105		0.018	0.111		5.56	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Silver	mg/kg	0.016	0.058		0.018	0.059		<2X CRQL	2X CRQL	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Selenium	mg/kg	0.16	0.12	J	0.18	0.11	J	<2X CRQL	2X CRQL	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Nickel	mg/kg	0.16	13.8		0.18	14		1.44	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Lead	mg/kg	0.16	7.49		0.18	7.91		5.45	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Copper	mg/kg	0.08	9.93		0.09	9.76		1.73	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Barium	mg/kg	0.04	108		0.05	111		2.74	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Chromium	mg/kg	0.16	16		0.18	15.9		0.63	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6010	Aluminum	mg/kg	3.2	11,700		3.6	11,800		0.85	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Arsenic	mg/kg	0.41	5.98		0.45	5.8		3.06	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Antimony	mg/kg	0.041	0.364	J	0.045	0.407	J	11.15	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6010	Sodium	mg/kg	32.4	75.6		36	77.5		<2X CRQL	2X CRQL	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6010	Potassium	mg/kg	32.4	980		36	992		1.22	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6010	Manganese	mg/kg	0.16	253		0.18	262		3.5	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6010	Magnesium	mg/kg	1.62	2,880		1.8	2,910		1.04	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6010	Iron	mg/kg	3.2	13,800		3.6	13,900		0.72	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6010	Calcium	mg/kg	3.2	2,160		3.6	2,170		0.46	30	
K1409795	2014R-SS-55-D-05-01	2014R-SS-55-D-05-02	EPA6020	Zinc	mg/kg	0.4	126		0.5	141		11.24	30	
K1409795	2014R-SS-110-D-03-01	2014R-SS-110-D-03-02	EPA6020	Cobalt	mg/kg	0.016	4.87		0.018	4.86		0.21	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Vanadium	mg/kg	0.2	35.1		0.2	34.9		0.57	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Beryllium	mg/kg	0.02	0.733		0.02	0.773		5.31	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6010	Aluminum	mg/kg	4	28,500		4	28,800		1.05	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6010	Calcium	mg/kg	4	3,840		4	3,850		0.26	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6010	Iron	mg/kg	8	18,300	J	8.1	18,200	J	0.55	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6010	Magnesium	mg/kg	4	3,660		4.03	3,640		0.55	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6010	Manganese	mg/kg	0.4	619		0.4	626		1.12	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6010	Potassium	mg/kg	79.9	1,280		80.5	1,270		0.78	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6010	Sodium	mg/kg	40	166		40.3	160		<2X CRQL	2X CRQL	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Antimony	mg/kg	0.05	2.88	J	0.05	2.99	J	3.75	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Thallium	mg/kg	0.02	0.276		0.02	0.295		6.65	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Barium	mg/kg	0.05	219		0.05	226		3.15	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Thallium	mg/kg	0.02	0.322		0.02	0.326		1.23	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Cadmium	mg/kg	0.02	3.12		0.02	3.25		4.08	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Chromium	mg/kg	0.2	16.3		0.2	16.4		0.61	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Cobalt	mg/kg	0.02	7.45		0.02	7.53		1.07	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Copper	mg/kg	0.1	30.7		0.1	31.5		2.57	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Lead	mg/kg	0.2	125		0.2	132		5.45	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Nickel	mg/kg	0.2	14.8		0.2	14.7		0.68	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Selenium	mg/kg	0.2	0.35		0.2	0.38		<2X CRQL	2X CRQL	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6010	Aluminum	mg/kg	4.1	27,900		4.1	27,500		1.44	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Arsenic	mg/kg	0.5	13.2		0.5	13.6		2.99	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Beryllium	mg/kg	0.02	0.707		0.02	0.713		0.85	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6010	Aluminum	mg/kg	4.1	17,300		4	16,800		2.93	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6010	Calcium	mg/kg	4.1	4,940		4	4,900		0.81	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6010	Iron	mg/kg	8.1	24,000	J	8	23,900	J	0.42	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6010	Magnesium	mg/kg	4.06	6,480		3.99	6,470		0.15	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6010	Manganese	mg/kg	0.41	478		0.4	479		0.21	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6010	Potassium	mg/kg	81.3	1,700		79.9	1,720		1.17	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6010	Sodium	mg/kg	40.6	186		39.9	171		<2X CRQL	2X CRQL	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Antimony	mg/kg	0.051	3.9	J	0.05	3.97	J	1.78	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Zinc	mg/kg	0.5	290		0.5	295		1.71	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Barium	mg/kg	0.05	158		0.05	157		0.63	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Vanadium	mg/kg	0.2	45.7		0.2	44.4		2.89	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Cadmium	mg/kg	0.02	5.64		0.02	5.85		3.66	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Chromium	mg/kg	0.2	43.1		0.2	42.2		2.11	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Cobalt	mg/kg	0.02	11.1		0.02	11		0.9	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Copper	mg/kg	0.1	47.2		0.1	47.4		0.42	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Lead	mg/kg	0.2	240		0.2	248		3.28	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Nickel	mg/kg	0.2	26		0.2	25.9		0.39	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Selenium	mg/kg	0.2	1.16		0.2	1.2		3.39	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Silver	mg/kg	0.02	0.342		0.02	0.348		1.74	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Zinc	mg/kg	0.5	210		0.5	216		2.82	30	
K1410317	2014R-SS-403-D-04-01	2014R-SS-403-D-04-02	EPA6020	Arsenic	mg/kg	0.51	20		0.5	20.2		1	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Chromium	mg/kg	0.2	15.3		0.2	15.3		0	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6010	Iron	mg/kg	8.1	17,700	J	8.2	17,900	J	1.12	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6010	Magnesium	mg/kg	4.06	3,430		4.08	3,470		1.16	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6010	Manganese	mg/kg	0.41	740		0.41	752		1.61	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6010	Potassium	mg/kg	81.2	1,100		81.5	1,130		2.69	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6010	Sodium	mg/kg	40.6	158		40.8	160		<2X CRQL	2X CRQL	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Antimony	mg/kg	0.051	4.67	J	0.051	5.08	J	8.41	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Arsenic	mg/kg	0.51	27.9		0.51	32.1		14	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Barium	mg/kg	0.05	256		0.05	254		0.78	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6010	Calcium	mg/kg	4.1	4,990		4.1	5,050		1.2	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Cadmium	mg/kg	0.02	5.7		0.02	6.98		20.19	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Vanadium	mg/kg	0.2	33		0.2	32.6		1.22	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Cobalt	mg/kg	0.02	7.24		0.02	7.12		1.67	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Copper	mg/kg	0.1	37.9		0.1	39.7		4.64	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Lead	mg/kg	0.2	198		0.2	257		25.93	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Nickel	mg/kg	0.2	14.9		0.2	15		0.67	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Selenium	mg/kg	0.2	0.43		0.2	0.47		<2X CRQL	2X CRQL	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Silver	mg/kg	0.02	0.349		0.02	0.411		16.32	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Thallium	mg/kg	0.02	0.339		0.02	0.379		11.14	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Zinc	mg/kg	0.5	356		0.5	402		12.14	30	
K1410317	2014R-SS-410-D-03-01	2014R-SS-410-D-03-02	EPA6020	Silver	mg/kg	0.02	0.276		0.02	0.293		5.98	30	
K1410317	2014R-SS-420-D-04-01	2014R-SS-420-D-04-02	EPA6020	Beryllium	mg/kg	0.02	0.727		0.02	0.706		2.93	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Beryllium	mg/kg	0.021	0.586	J	0.02	0.583	J	0.51	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6010	Aluminum	mg/kg	2.1	18,700		2.1	18,400		1.62	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6010	Calcium	mg/kg	4.2	3,990		4.1	3,990		0	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6010	Iron	mg/kg	4.2	17,500		4.1	17,700		1.14	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6010	Magnesium	mg/kg	2.1	4,310		2.05	4,320		0.23	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6010	Manganese	mg/kg	0.21	756		0.21	768		1.57	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6010	Potassium	mg/kg	41.9	1,310		41	1,300		0.77	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6010	Sodium	mg/kg	41.9	86.4		41	85.1		<2X CRQL	2X CRQL	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Antimony	mg/kg	0.052	3.47	J	0.051	3.67	J	5.6	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Vanadium	mg/kg	0.21	33.5		0.21	34.4		2.65	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Barium	mg/kg	0.05	223		0.05	226		1.34	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6010	Aluminum	mg/kg	1.9	8,750		1.9	8,970		2.48	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Cadmium	mg/kg	0.021	6.01		0.02	6.4		6.29	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Chromium	mg/kg	0.21	21.5		0.21	21.7		0.93	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Cobalt	mg/kg	0.021	7.12		0.02	7.25		1.81	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Copper	mg/kg	0.11	24		0.1	24.7		2.87	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Lead	mg/kg	0.52	239		0.51	255		6.48	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Nickel	mg/kg	0.21	13.8		0.21	14.1		2.15	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Selenium	mg/kg	0.21	0.35		0.21	0.37		<2X CRQL	2X CRQL	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Silver	mg/kg	0.021	0.301		0.02	0.325		7.67	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Thallium	mg/kg	0.021	0.305		0.02	0.316		3.54	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Arsenic	mg/kg	0.52	20.6		0.51	21.5		4.28	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Cadmium	mg/kg	0.019	1.97		0.019	1.73		12.97	30	
K1410319	2014R-SS-216-D-05-01	2014R-SS-216-D-05-02	EPA6020	Zinc	mg/kg	0.5	270		0.5	285		5.41	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Zinc	mg/kg	0.5	146		0.5	135		7.83	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Vanadium	mg/kg	0.19	34		0.19	33.6		1.18	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Thallium	mg/kg	0.019	0.161		0.019	0.174		7.76	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Silver	mg/kg	0.019	0.149		0.019	0.374		86.04	30	X
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Selenium	mg/kg	0.19	0.15	J	0.19	0.15	J	<2X CRQL	2X CRQL	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Nickel	mg/kg	0.19	13.7		0.19	13.8		0.73	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Lead	mg/kg	0.48	61.9		0.48	66.7		7.47	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Copper	mg/kg	0.1	16.1		0.1	14.7		9.09	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6010	Calcium	mg/kg	3.9	3,060		3.9	2,930		4.34	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Chromium	mg/kg	0.19	20.6		0.19	20.6		0	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6010	Iron	mg/kg	3.9	16,300		3.9	16,300		0	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Beryllium	mg/kg	0.019	0.365	J	0.019	0.372	J	1.9	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Barium	mg/kg	0.05	111		0.05	111		0	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Arsenic	mg/kg	0.48	8.52		0.48	7.25		16.11	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Antimony	mg/kg	0.048	1.14	J	0.048	1.03	J	10.14	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6010	Sodium	mg/kg	38.6	65.2		38.6	64.7		<2X CRQL	2X CRQL	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6010	Potassium	mg/kg	38.6	1,100		38.6	1,140		3.57	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6010	Manganese	mg/kg	0.19	443		0.19	415		6.53	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6010	Magnesium	mg/kg	1.93	3,560		1.93	3,660		2.77	30	
K1410319	2014R-SS-430-D-05-01	2014R-SS-430-D-05-02	EPA6020	Cobalt	mg/kg	0.019	5.66		0.019	5.59		1.24	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Beryllium	mg/kg	0.02	0.563		0.02	0.527		6.61	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6010	Calcium	mg/kg	3.9	1,890		3.9	1,930		2.09	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6010	Iron	mg/kg	3.9	15,800		3.9	15,800		0	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6010	Magnesium	mg/kg	1.95	3,100		1.96	3,020		2.61	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6010	Manganese	mg/kg	0.2	314		0.2	293		6.92	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6010	Potassium	mg/kg	39	1,190		39.2	1,140		4.29	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6010	Sodium	mg/kg	39	126		39.2	121		<2X CRQL	2X CRQL	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Antimony	mg/kg	0.049	13.5	J	0.049	12.8	J	5.32	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Arsenic	mg/kg	0.49	66.6		0.49	63.8		4.29	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Barium	mg/kg	0.2	188		0.2	170		10.06	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Chromium	mg/kg	0.2	17.7		0.2	18		1.68	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Cadmium	mg/kg	0.02	6.41		0.02	5.81		9.82	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Cadmium	mg/kg	0.02	14		0.02	4.98		95.05	30	X
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Cobalt	mg/kg	0.02	5.11		0.02	4.92		3.79	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Copper	mg/kg	0.1	48.2		0.1	44.3		8.43	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Lead	mg/kg	0.49	693		0.49	646		7.02	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Nickel	mg/kg	0.2	11.8		0.2	11.5		2.58	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Selenium	mg/kg	0.2	0.69		0.2	0.58		<2X CRQL	2X CRQL	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Silver	mg/kg	0.02	0.582		0.02	0.547		6.2	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Thallium	mg/kg	0.02	0.675		0.02	0.656		2.85	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6010	Aluminum	mg/kg	2	18,200		2	16,900		7.41	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Vanadium	mg/kg	0.2	31.4		0.2	31.8		1.27	30	
K1410321	2014R-SS-203-D-02-01	2014R-SS-203-D-02-02	EPA6020	Zinc	mg/kg	0.5	341		0.5	320		6.35	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Thallium	mg/kg	0.02	0.348		0.02	0.422		19.22	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Chromium	mg/kg	0.2	13.1		0.2	16.6		23.57	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Silver	mg/kg	0.02	0.309		0.02	0.319		3.18	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Thallium	mg/kg	0.02	0.285		0.02	0.289		1.39	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Vanadium	mg/kg	0.2	27.1		0.2	25.4		6.48	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Zinc	mg/kg	0.5	506		0.5	491		3.01	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Copper	mg/kg	0.1	28.7		0.1	27.9		2.83	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Vanadium	mg/kg	0.2	27.2		0.2	39.3		36.39	30	X
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Cobalt	mg/kg	0.02	6.29		0.02	6.16		2.09	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Silver	mg/kg	0.02	0.408		0.02	0.632		43.08	30	X

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Selenium	mg/kg	0.2	0.55		0.2	0.95		>=2X CRQL	2X CRQL	X
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Nickel	mg/kg	0.2	13.4		0.2	14.7		9.25	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Lead	mg/kg	0.5	312		0.5	407		26.43	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Copper	mg/kg	0.1	40.5		0.1	44		8.28	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Cobalt	mg/kg	0.02	7.13		0.02	7.54		5.59	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Zinc	mg/kg	0.5	806		0.5	263		101.59	30	X
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6010	Sodium	mg/kg	39.7	133		39.6	128		<2X CRQL	2X CRQL	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Barium	mg/kg	0.2	364		0.2	227		46.36	30	X
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6010	Aluminum	mg/kg	2	22,800		2	22,500		1.32	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6010	Calcium	mg/kg	4	3,290		4	3,260		0.92	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6010	Iron	mg/kg	4	14,900		4	14,400		3.41	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6010	Magnesium	mg/kg	1.98	3,250		1.98	3,190		1.86	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Nickel	mg/kg	0.2	13.4		0.2	12.7		5.36	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6010	Potassium	mg/kg	39.7	1,020		39.6	1,000		1.98	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Selenium	mg/kg	0.2	0.47		0.2	0.5		<2X CRQL	2X CRQL	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Antimony	mg/kg	0.05	6.2	J	0.049	6.26	J	0.96	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Arsenic	mg/kg	0.5	37.3		0.49	36.6		1.89	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Barium	mg/kg	0.2	238		0.2	236		0.84	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Beryllium	mg/kg	0.02	0.702		0.02	0.732		4.18	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Cadmium	mg/kg	0.02	6.61		0.02	6.44		2.61	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Chromium	mg/kg	0.2	14.2		0.2	13.3		6.55	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6010	Manganese	mg/kg	0.2	859		0.2	852		0.82	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6010	Calcium	mg/kg	4	2,640		4	7,930		100.09	30	X
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Beryllium	mg/kg	0.02	0.948		0.02	0.853		10.55	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6010	Aluminum	mg/kg	2	29,200		2	29,600		1.36	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6010	Iron	mg/kg	4	15,400		4	17,800		14.46	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6010	Magnesium	mg/kg	2.01	3,090		1.99	4,400		34.98	30	X
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6010	Manganese	mg/kg	0.2	1,170		0.2	596		65.01	30	X
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6010	Sodium	mg/kg	40.2	143		39.8	219		<2X CRQL	2X CRQL	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Antimony	mg/kg	0.05	6.22	J	0.05	6.3	J	1.28	30	
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6020	Arsenic	mg/kg	0.5	25		0.5	34.9		33.06	30	X
K1410321	2014R-SS-21-D-01-01	2014R-SS-21-D-01-02	EPA6010	Potassium	mg/kg	40.2	1,110		39.8	995		10.93	30	
K1410321	2014R-SS-170-D-03-01	2014R-SS-170-D-03-02	EPA6020	Lead	mg/kg	0.5	167		0.49	165		1.2	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Barium	mg/kg	0.05	207		0.05	204		1.46	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Selenium	mg/kg	0.21	1.18		0.21	1.22		3.33	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Nickel	mg/kg	0.21	16.1		0.21	15.8		1.88	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Lead	mg/kg	0.21	999		0.21	975		2.43	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Copper	mg/kg	0.1	93.2		0.1	91.8		1.51	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Cobalt	mg/kg	0.021	8.16		0.021	8.06		1.23	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Cadmium	mg/kg	0.021	14.7		0.021	14.4		2.06	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Antimony	mg/kg	0.051	19.2	J	0.052	17.8	J	7.57	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Silver	mg/kg	0.021	1.31	J	0.021	1.27	J	3.1	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Arsenic	mg/kg	0.51	91.2		0.52	89.9		1.44	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Thallium	mg/kg	0.02	0.405		0.021	0.416		2.68	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Zinc	mg/kg	0.5	74.6		0.5	79.3		6.11	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Thallium	mg/kg	0.021	0.748		0.021	0.782		4.44	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Vanadium	mg/kg	0.21	42		0.21	42.7		1.65	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Zinc	mg/kg	0.5	482		0.5	468		2.95	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6010	Sodium	mg/kg	41	75.7		41.2	90.1		<2X CRQL	2X CRQL	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Vanadium	mg/kg	0.2	29.3		0.21	29.8		1.69	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Thallium	mg/kg	0.019	0.171		0.019	0.173		1.16	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Silver	mg/kg	0.02	0.374	J	0.021	1.15	J	101.84	30	X
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Selenium	mg/kg	0.2	0.38		0.21	0.41		<2X CRQL	2X CRQL	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Nickel	mg/kg	0.2	15.2		0.21	15.4		1.31	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Lead	mg/kg	0.2	337		0.21	346		2.64	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Copper	mg/kg	0.1	36.2		0.1	36.9		1.92	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Cobalt	mg/kg	0.02	7.52		0.021	7.55		0.4	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Chromium	mg/kg	0.2	17.9		0.21	18		0.56	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Cadmium	mg/kg	0.02	8.07		0.021	8.54		5.66	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Zinc	mg/kg	0.5	467		0.5	471		0.85	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Beryllium	mg/kg	0.019	0.527		0.019	0.534		1.32	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6010	Aluminum	mg/kg	2.1	20,900		2.1	21,300		1.9	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6010	Aluminum	mg/kg	1.9	15,800		1.9	16,600		4.94	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6010	Calcium	mg/kg	3.9	2,590		3.9	2,670		3.04	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6010	Iron	mg/kg	3.9	15,300		3.9	15,800		3.22	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6010	Magnesium	mg/kg	1.93	4,000		1.94	4,170		4.16	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6010	Manganese	mg/kg	0.19	334		0.19	348		4.11	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Chromium	mg/kg	0.21	24.8		0.21	25		0.8	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6010	Potassium	mg/kg	38.5	1,230		38.9	1,280		3.98	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Beryllium	mg/kg	0.02	0.679		0.021	0.699		2.9	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6010	Sodium	mg/kg	38.5	104		38.9	112		<2X CRQL	2X CRQL	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Antimony	mg/kg	0.048	0.258	J	0.049	0.271	J	4.91	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6010	Calcium	mg/kg	4.1	2,140		4.1	2,230		4.12	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Barium	mg/kg	0.05	154		0.05	162		5.06	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6010	Potassium	mg/kg	41	1,690		41.2	1,700		0.59	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Cadmium	mg/kg	0.019	0.379		0.019	0.432		13.07	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Chromium	mg/kg	0.19	16.2		0.19	17.4		7.14	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Cobalt	mg/kg	0.019	5.83		0.019	5.97		2.37	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Copper	mg/kg	0.1	14.6		0.1	15.1		3.37	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Lead	mg/kg	0.19	10		0.19	10.5		4.88	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Nickel	mg/kg	0.19	13.3		0.19	13.9		4.41	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Selenium	mg/kg	0.19	0.21		0.19	0.19	J	<2X CRQL	2X CRQL	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Silver	mg/kg	0.019	0.116	J	0.019	0.127	J	9.05	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Vanadium	mg/kg	0.19	27.9		0.19	29.7		6.25	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6010	Iron	mg/kg	4.1	22,700		4.1	23,200		2.18	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6010	Magnesium	mg/kg	2.05	5,770		2.06	5,810		0.69	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6010	Manganese	mg/kg	0.21	638		0.21	642		0.62	30	
K1410323	2014R-SS-193-D-03-01	2014R-SS-193-D-03-02	EPA6020	Arsenic	mg/kg	0.48	3.25		0.49	3.19		1.86	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6010	Aluminum	mg/kg	2	21,400		2.1	21,600		0.93	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Arsenic	mg/kg	0.51	22.6		0.52	23.1		2.19	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Antimony	mg/kg	0.051	4.55	J	0.052	4.89	J	7.2	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6010	Sodium	mg/kg	40.5	168		41.8	170		<2X CRQL	2X CRQL	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6010	Potassium	mg/kg	40.5	2,180		41.8	2,240		2.71	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6010	Manganese	mg/kg	0.2	627		0.21	642		2.36	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6010	Magnesium	mg/kg	2.03	4,220		2.09	4,360		3.26	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6010	Iron	mg/kg	4.1	18,400		4.2	18,900		2.68	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6010	Calcium	mg/kg	4.1	4,500		4.2	4,480		0.45	30	
K1410323	2014R-SS-7-D-02-01	2014R-SS-7-D-02-02	EPA6020	Barium	mg/kg	0.05	260		0.05	268		3.03	30	
K1410323	2014R-SS-201G-D-03-01	2014R-SS-201G-D-03-02	EPA6020	Beryllium	mg/kg	0.021	0.879		0.021	0.857		2.53	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Beryllium	mg/kg	0.019	0.302		0.019	0.296		2.01	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Barium	mg/kg	0.05	346		0.05	320		7.81	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Antimony	mg/kg	0.048	3.93	J	0.048	3.84	J	2.32	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6010	Potassium	mg/kg	38.4	1,060		38.2	1,060		0	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6010	Manganese	mg/kg	0.19	224		0.19	236		5.22	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Cadmium	mg/kg	0.019	3.11		0.019	3.13		0.64	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6010	Iron	mg/kg	3.8	21,000		3.8	21,700		3.28	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Selenium	mg/kg	0.19	0.5		0.19	0.5		<2X CRQL	2X CRQL	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6010	Magnesium	mg/kg	1.92	13,000		1.91	12,700		2.33	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Chromium	mg/kg	0.19	17.9		0.19	17.8		0.56	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Cobalt	mg/kg	0.019	5.3		0.019	5.38		1.5	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Copper	mg/kg	0.1	86.4		0.1	96.2		10.73	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Zinc	mg/kg	0.5	161		0.5	157		2.52	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Nickel	mg/kg	0.19	11.8		0.19	11.7		0.85	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Lead	mg/kg	0.48	256		0.48	249		2.77	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Silver	mg/kg	0.019	0.749		0.019	0.719		4.09	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Thallium	mg/kg	0.019	0.252		0.019	0.272		7.63	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Vanadium	mg/kg	0.19	25.1		0.19	24.1		4.07	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Zinc	mg/kg	4.8	1,400		4.8	1,520		8.22	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Lead	mg/kg	0.48	171		0.48	181		5.68	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Beryllium	mg/kg	0.019	0.478		0.019	0.461		3.62	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6010	Aluminum	mg/kg	1.9	10,400		1.9	10,300		0.97	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6010	Calcium	mg/kg	3.9	1,730		3.8	1,650		4.73	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6010	Iron	mg/kg	3.9	14,100		3.8	12,600		11.24	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6010	Magnesium	mg/kg	1.93	2,510		1.92	2,460		2.01	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6010	Manganese	mg/kg	0.19	432		0.19	427		1.16	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6010	Potassium	mg/kg	38.6	688		38.3	650		5.68	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6010	Sodium	mg/kg	38.6	59.7		38.3	48.5		<2X CRQL	2X CRQL	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Antimony	mg/kg	0.048	4.12	J	0.048	3.98	J	3.46	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Selenium	mg/kg	0.19	0.31		0.19	0.27		<2X CRQL	2X CRQL	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Barium	mg/kg	0.05	59.7		0.05	59.2		0.84	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Vanadium	mg/kg	0.19	24.7		0.19	21.3		14.78	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Cadmium	mg/kg	0.019	5.14		0.019	5.01		2.56	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Chromium	mg/kg	0.19	14.4		0.19	12.9		10.99	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Cobalt	mg/kg	0.019	4.44		0.019	4.33		2.51	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Copper	mg/kg	0.1	18.8		0.1	18.8		0	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6020	Arsenic	mg/kg	0.48	6.81		0.48	6.88		1.02	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Nickel	mg/kg	0.19	9.57		0.19	9.36		2.22	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6010	Aluminum	mg/kg	1.9	6,010		1.9	5,830		3.04	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Silver	mg/kg	0.019	0.887		0.019	0.34		89.16	30	X
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Thallium	mg/kg	0.019	0.31		0.019	0.301		2.95	30	
K1410325	2014R-SS-109-D-03-01	2014R-SS-109-D-03-02	EPA6020	Arsenic	mg/kg	0.48	25.7		0.48	25.6		0.39	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Thallium	mg/kg	0.02	0.435		0.02	0.461		5.8	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6010	Sodium	mg/kg	38.4	133		38.2	131		<2X CRQL	2X CRQL	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Zinc	mg/kg	0.5	413		0.5	423		2.39	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Vanadium	mg/kg	0.2	25.3		0.2	26.2		3.5	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Silver	mg/kg	0.02	0.655		0.02	0.567		14.4	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Selenium	mg/kg	0.2	0.67		0.2	0.69		<2X CRQL	2X CRQL	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Nickel	mg/kg	0.2	11		0.2	11.1		0.9	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Lead	mg/kg	0.49	479		0.5	489		2.07	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Copper	mg/kg	0.1	35.4		0.1	35.8		1.12	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Cobalt	mg/kg	0.02	5.26		0.02	5.41		2.81	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Chromium	mg/kg	0.2	12.2		0.2	12.5		2.43	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Cadmium	mg/kg	0.02	11.4		0.02	11.8		3.45	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6010	Aluminum	mg/kg	2	23,600		2	25,000		5.76	30	
K1410325	2014R-SS-800B-D-05-01	2014R-SS-800B-D-05-02	EPA6010	Calcium	mg/kg	3.8	20,400		3.8	20,400		0	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6010	Calcium	mg/kg	4	3,970		4	3,990		0.5	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6010	Iron	mg/kg	4	14,600		4	15,200		4.03	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6010	Magnesium	mg/kg	1.97	2,700		1.99	2,830		4.7	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6010	Manganese	mg/kg	0.2	576		0.2	606		5.08	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Beryllium	mg/kg	0.02	0.752		0.02	0.732		2.7	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6010	Sodium	mg/kg	39.5	124		39.7	132		<2X CRQL	2X CRQL	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Antimony	mg/kg	0.049	10.2	J	0.05	9.94	J	2.58	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Arsenic	mg/kg	0.49	32.2		0.5	32.3		0.31	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6020	Barium	mg/kg	0.05	178		0.05	187		4.93	30	
K1410325	2014R-SS-35-D-02-01	2014R-SS-35-D-02-02	EPA6010	Potassium	mg/kg	39.5	832		39.7	864		3.77	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Antimony	mg/kg	0.05	10.1	J	0.05	10.1	J	0	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6010	Sodium	mg/kg	40.1	169		39.8	183		<2X CRQL	2X CRQL	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6010	Potassium	mg/kg	40.1	1,490		39.8	1,510		1.33	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6010	Manganese	mg/kg	0.2	776		0.2	800		3.05	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6010	Magnesium	mg/kg	2	4,110		1.99	4,320		4.98	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6010	Aluminum	mg/kg	4	27,400		4	28,400		3.58	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6010	Calcium	mg/kg	4	8,430		4	8,730		3.5	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Arsenic	mg/kg	0.5	58.7		0.5	59		0.51	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Nickel	mg/kg	0.2	14.1		0.2	14.2		0.71	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6010	Iron	mg/kg	4	17,600		4	18,200		3.35	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Barium	mg/kg	0.05	316		0.05	320		1.26	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Beryllium	mg/kg	0.02	0.762	J	0.02	0.756	J	0.79	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Cadmium	mg/kg	0.02	12.9		0.02	13.3		3.05	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Chromium	mg/kg	0.2	15.3		0.2	16.3		6.33	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Cobalt	mg/kg	0.02	7.13		0.02	7.12		0.14	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Vanadium	mg/kg	0.2	32.3		0.2	32.3		0	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Lead	mg/kg	0.5	540		0.5	555		2.74	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Selenium	mg/kg	0.2	0.77		0.2	0.75		<2X CRQL	2X CRQL	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Silver	mg/kg	0.02	0.714		0.02	0.723		1.25	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Thallium	mg/kg	0.02	0.526		0.02	0.522		0.76	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Copper	mg/kg	0.1	50		0.1	50.1		0.2	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Nickel	mg/kg	0.2	13.9		0.2	14.1		1.43	30	
K1410327	2014R-SS-194-D-03-01	2014R-SS-194-D-03-02	EPA6020	Zinc	mg/kg	0.5	660		0.5	661		0.15	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6010	Aluminum	mg/kg	4	30,800		4	30,600		0.65	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6010	Calcium	mg/kg	4	2,410		4	2,410		0	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Zinc	mg/kg	0.5	319		0.5	329		3.09	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Vanadium	mg/kg	0.2	34.1		0.2	34.2		0.29	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Thallium	mg/kg	0.02	0.469		0.02	0.492		4.79	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Selenium	mg/kg	0.2	0.8		0.2	0.83		<2X CRQL	2X CRQL	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Lead	mg/kg	0.51	520		0.5	555		6.51	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Copper	mg/kg	0.1	63.2		0.1	66.5		5.09	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Cobalt	mg/kg	0.02	7.62		0.02	7.77		1.95	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Chromium	mg/kg	0.2	13.9		0.2	14.1		1.43	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6010	Magnesium	mg/kg	2.02	3,060		2.01	3,100		1.3	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Silver	mg/kg	0.02	0.641		0.02	0.657		2.47	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6010	Iron	mg/kg	4	18,400		4	18,300		0.54	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Cadmium	mg/kg	0.02	15.4		0.02	15.6		1.29	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6010	Manganese	mg/kg	0.2	1,010		0.2	1,010		0	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6010	Potassium	mg/kg	40.4	1,160		40.3	1,170		0.86	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6010	Sodium	mg/kg	40.4	200		40.3	199		<2X CRQL	2X CRQL	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Antimony	mg/kg	0.051	11.3	J	0.05	12.2	J	7.66	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Arsenic	mg/kg	0.51	58.9		0.5	63.1		6.89	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Barium	mg/kg	0.05	293		0.05	299		2.03	30	
K1410327	2014R-SS-196-D-05-01	2014R-SS-196-D-05-02	EPA6020	Beryllium	mg/kg	0.02	0.827	J	0.02	0.82	J	0.85	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Cadmium	mg/kg	0.019	1.38		0.019	1.38		0	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6010	Aluminum	mg/kg	1.9	18,500		1.9	18,600		0.54	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Vanadium	mg/kg	0.19	26.5		0.19	26.3		0.76	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Thallium	mg/kg	0.019	0.151		0.019	0.152		0.66	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Selenium	mg/kg	0.19	0.31		0.19	0.3		<2X CRQL	2X CRQL	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Nickel	mg/kg	0.19	23.2		0.19	23.5		1.28	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Lead	mg/kg	0.19	38.1		0.19	38.9		2.08	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Copper	mg/kg	0.1	23.1		0.1	23.1		0	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Cobalt	mg/kg	0.019	7.31		0.019	7.21		1.38	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Chromium	mg/kg	0.19	19.3		0.19	19.4		0.52	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Zinc	mg/kg	0.5	185		0.5	185		0	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Beryllium	mg/kg	0.019	0.445	J	0.019	0.477	J	6.94	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Barium	mg/kg	0.05	196		0.05	197		0.51	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Arsenic	mg/kg	0.48	12.1		0.48	12		0.83	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Antimony	mg/kg	0.048	1.29	J	0.048	1.36	J	5.28	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6010	Sodium	mg/kg	38.1	222		38.6	228		2.67	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6010	Potassium	mg/kg	38.1	1,680		38.6	1,710		1.77	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6010	Manganese	mg/kg	0.19	363		0.19	366		0.82	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6010	Magnesium	mg/kg	1.91	4,240		1.93	4,280		0.94	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6010	Iron	mg/kg	3.8	16,500		3.9	16,700		1.2	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6010	Calcium	mg/kg	3.8	3,470		3.9	3,510		1.15	30	
K1411017	2014R-SS-70-D-04-01	2014R-SS-70-D-04-02	EPA6020	Silver	mg/kg	0.019	0.301		0.019	0.305		1.32	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Zinc	mg/kg	0.5	380		0.5	422		10.47	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6010	Potassium	mg/kg	39.9	1100		39.7	1,150		4.44	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Thallium	mg/kg	0.02	0.599		0.02	0.633		5.52	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6010	Aluminum	mg/kg	2	25,300		2	26,300		3.88	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6010	Calcium	mg/kg	4	2,000		4	2,100		4.88	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6010	Iron	mg/kg	4	17,500		4	17,900		2.26	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6010	Manganese	mg/kg	0.2	723		0.2	748		3.4	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Vanadium	mg/kg	0.2	33.5		0.2	33.9		1.19	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6010	Sodium	mg/kg	39.9	130		39.7	138		<2X CRQL	2X CRQL	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Antimony	mg/kg	0.05	10.2	J	0.05	10.9	J	6.64	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Arsenic	mg/kg	0.5	39.9		0.5	43.8		9.32	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Selenium	mg/kg	0.2	0.58		0.2	0.64		<2X CRQL	2X CRQL	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6010	Magnesium	mg/kg	1.99	2,940		1.99	3,030		3.02	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Silver	mg/kg	0.02	0.48		0.02	0.568		16.79	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Barium	mg/kg	0.05	209		0.05	214		2.36	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Nickel	mg/kg	0.2	13		0.2	13.1		0.77	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Lead	mg/kg	0.2	517		0.2	596		14.2	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Copper	mg/kg	0.1	38.9		0.1	40.9		5.01	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Cobalt	mg/kg	0.02	6.16		0.02	6.13		0.49	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Chromium	mg/kg	0.2	15.8		0.2	15.7		0.63	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Cadmium	mg/kg	0.02	12.1		0.02	12.7		4.84	30	
K1411019	2014R-SS-18-D-05-01	2014R-SS-18-D-05-02	EPA6020	Beryllium	mg/kg	0.02	0.765	J	0.02	0.792	J	3.47	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Cadmium	mg/kg	0.019	3.38		0.019	3.21		5.16	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6010	Calcium	mg/kg	3.8	2,850		3.8	2,810		1.41	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6010	Iron	mg/kg	3.8	15,600		3.8	15,200		2.6	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6010	Magnesium	mg/kg	1.91	3,360		1.91	3,340		0.6	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6010	Manganese	mg/kg	0.19	498		0.19	501		0.6	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6010	Potassium	mg/kg	38.3	1,510		38.2	1,510		0	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6010	Sodium	mg/kg	38.3	87.8		38.2	86.4		<2X CRQL	2X CRQL	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Antimony	mg/kg	0.048	2.68	J	0.048	2.51	J	6.55	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Barium	mg/kg	0.05	172		0.05	163		5.37	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6010	Aluminum	mg/kg	1.9	13,000		1.9	12,900		0.77	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Chromium	mg/kg	0.19	18.1		0.19	16.5		9.25	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Cobalt	mg/kg	0.019	6.23		0.019	5.79		7.32	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Copper	mg/kg	0.1	13.9		0.1	13.2		5.17	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Lead	mg/kg	0.48	134		0.48	126		6.15	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Nickel	mg/kg	0.19	15.1		0.19	14		7.56	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Selenium	mg/kg	0.19	0.21		0.19	0.21		<2X CRQL	2X CRQL	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Silver	mg/kg	0.019	0.218		0.019	0.204		6.64	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Thallium	mg/kg	0.019	0.239		0.019	0.228		4.71	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6010	Calcium	mg/kg	4	2,810		4	2,780		1.07	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Zinc	mg/kg	0.5	276		0.5	258		6.74	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6010	Iron	mg/kg	4	15,800		4	15,800		0	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Vanadium	mg/kg	0.19	27.3		0.19	24.8		9.6	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Cobalt	mg/kg	0.019	9.78		0.019	9.8		0.2	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6010	Magnesium	mg/kg	1.95	5,250		1.92	5,130		2.31	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6010	Manganese	mg/kg	0.2	875		0.19	819		6.61	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6010	Potassium	mg/kg	39	1,490		38.5	1,450		2.72	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6010	Sodium	mg/kg	39	122		38.5	115		<2X CRQL	2X CRQL	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Antimony	mg/kg	0.049	2.79	J	0.048	2.7	J	3.28	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Arsenic	mg/kg	0.49	15.3		0.48	15.1		1.32	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Barium	mg/kg	0.05	211		0.05	209		0.95	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Beryllium	mg/kg	0.019	0.505		0.019	0.484		4.25	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6010	Aluminum	mg/kg	2	30,100		2	30,200		0.33	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Chromium	mg/kg	0.2	30.9		0.19	30.8		0.32	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6010	Aluminum	mg/kg	2	13,400		1.9	12,700		5.36	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Copper	mg/kg	0.1	34.2		0.1	33.6		1.77	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Lead	mg/kg	0.49	212		0.48	209		1.43	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Nickel	mg/kg	0.2	25.7		0.19	25.4		1.17	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Selenium	mg/kg	0.2	0.61		0.19	0.56		<2X CRQL	2X CRQL	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Silver	mg/kg	0.019	0.44		0.019	0.423		3.94	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Thallium	mg/kg	0.019	0.331		0.019	0.32		3.38	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Vanadium	mg/kg	0.2	35		0.19	35.1		0.29	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Zinc	mg/kg	0.5	337		0.5	329		2.4	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6020	Cadmium	mg/kg	0.019	5.91		0.019	5.77		2.4	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Cobalt	mg/kg	0.02	6.67		0.02	6.7		0.45	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6010	Magnesium	mg/kg	1.97	3,070		1.99	3,080		0.33	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6010	Manganese	mg/kg	0.2	749		0.2	745		0.54	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6010	Potassium	mg/kg	39.5	1,780		39.8	1,740		2.27	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6010	Sodium	mg/kg	39.5	214		39.8	212		0.94	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Antimony	mg/kg	0.049	2.5	J	0.05	2.46	J	1.61	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Arsenic	mg/kg	0.49	18.4		0.5	18.2		1.09	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Barium	mg/kg	0.05	359		0.05	361		0.56	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Beryllium	mg/kg	0.02	0.741		0.02	0.777		4.74	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6010	Iron	mg/kg	3.9	19,500		3.9	18,900		3.12	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Chromium	mg/kg	0.2	13.7		0.2	13.7		0	30	
K1411020	2014R-SS-168-D-03-01	2014R-SS-168-D-03-02	EPA6010	Calcium	mg/kg	3.9	8,220		3.9	7,760		5.76	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Copper	mg/kg	0.1	25.9		0.1	25.7		0.78	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Lead	mg/kg	0.49	150		0.5	147		2.02	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Nickel	mg/kg	0.2	14.8		0.2	14.8		0	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Selenium	mg/kg	0.2	0.3		0.2	0.31		<2X CRQL	2X CRQL	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Silver	mg/kg	0.02	0.313		0.02	0.33		5.29	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Thallium	mg/kg	0.02	0.331		0.02	0.342		3.27	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Vanadium	mg/kg	0.2	22.8		0.2	22.9		0.44	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Zinc	mg/kg	0.5	363		0.5	362		0.28	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Beryllium	mg/kg	0.019	0.388		0.019	0.384		1.04	30	
K1411020	2014R-SS-33-D-05-01	2014R-SS-33-D-05-02	EPA6020	Cadmium	mg/kg	0.02	5.36		0.02	5.32		0.75	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Chromium	mg/kg	0.2	16.1		0.2	15.9		1.25	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6010	Calcium	mg/kg	3.9	4,190		3.9	3,950		5.9	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6010	Iron	mg/kg	3.9	18,900		3.9	18,600		1.6	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6010	Magnesium	mg/kg	1.96	3,050		1.97	2,920		4.36	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6010	Manganese	mg/kg	0.2	938		0.2	949		1.17	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6010	Potassium	mg/kg	39.1	729		39.4	710		2.64	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6010	Sodium	mg/kg	39.1	203		39.4	193		<2X CRQL	2X CRQL	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Antimony	mg/kg	0.049	4.31	J	0.049	4.33	J	0.46	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Arsenic	mg/kg	0.49	29.9		0.49	29.8		0.34	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6010	Aluminum	mg/kg	2	27,200		2	26,700		1.86	30	
K1411020	2014R-SS-218-D-05-01	2014R-SS-218-D-05-02	EPA6020	Arsenic	mg/kg	0.48	16		0.48	14.9		7.12	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Barium	mg/kg	0.05	322		0.05	328		1.85	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Cobalt	mg/kg	0.02	6.22		0.02	6.25		0.48	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Copper	mg/kg	0.1	25.9		0.1	25.7		0.78	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Lead	mg/kg	0.49	168		0.49	157		6.77	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Nickel	mg/kg	0.2	15.9		0.2	16		0.63	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Selenium	mg/kg	0.2	0.5		0.2	0.5		<2X CRQL	2X CRQL	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Silver	mg/kg	0.02	0.386		0.02	0.382		1.04	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Thallium	mg/kg	0.02	0.323		0.02	0.311		3.79	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Vanadium	mg/kg	0.2	33		0.2	33.1		0.3	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Zinc	mg/kg	0.5	378		0.5	372		1.6	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Beryllium	mg/kg	0.02	0.639		0.02	0.655		2.47	30	
K1411020	2014R-SS-106-D-01-01	2014R-SS-106-D-01-02	EPA6020	Cadmium	mg/kg	0.02	6.51		0.02	6.57		0.92	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Silver	mg/kg	0.02	0.322		0.02	0.246		26.76	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Selenium	mg/kg	0.2	0.44		0.2	0.39		<2X CRQL	2X CRQL	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Nickel	mg/kg	0.2	12.5		0.2	11.9		4.92	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Lead	mg/kg	0.5	187		0.49	164		13.11	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Copper	mg/kg	0.1	24.8		0.1	22.5		9.73	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Cobalt	mg/kg	0.02	4.82		0.02	4.5		6.87	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Chromium	mg/kg	0.2	12		0.2	11.4		5.13	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Cadmium	mg/kg	0.02	2.76		0.02	2.45		11.9	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Thallium	mg/kg	0.02	0.228		0.02	0.199		13.58	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Antimony	mg/kg	0.05	2.69	J	0.049	2.45	J	9.34	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Beryllium	mg/kg	0.02	0.53	J	0.02	0.488	J	8.25	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6010	Sodium	mg/kg	40	203		39.2	184		<2X CRQL	2X CRQL	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6010	Potassium	mg/kg	40	857		39.2	804		6.38	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6010	Manganese	mg/kg	0.2	412		0.2	374		9.67	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6010	Magnesium	mg/kg	2	2,910		1.96	2,700		7.49	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6010	Iron	mg/kg	4	13,700		3.9	13,100		4.48	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6010	Calcium	mg/kg	4	14,200		3.9	13,800		2.86	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6010	Aluminum	mg/kg	2	17,800		2	16,200		9.41	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6010	Aluminum	mg/kg	1.9	20,200		1.9	20,100		0.5	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Zinc	mg/kg	0.5	160		0.5	151		5.79	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Barium	mg/kg	0.05	216		0.05	200		7.69	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Cobalt	mg/kg	0.019	8.01		0.019	7.89		1.51	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Arsenic	mg/kg	0.5	14.8		0.49	13.2		11.43	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6010	Calcium	mg/kg	3.9	2,920		3.9	2,900		0.69	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Silver	mg/kg	0.019	0.236		0.019	0.221		6.56	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Selenium	mg/kg	0.19	0.25		0.19	0.26		<2X CRQL	2X CRQL	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Nickel	mg/kg	0.19	20.8		0.19	20.5		1.45	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Vanadium	mg/kg	0.19	35.6		0.19	35.5		0.28	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Copper	mg/kg	0.1	22.9		0.1	22.4		2.21	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Thallium	mg/kg	0.019	0.246		0.019	0.264		7.06	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Chromium	mg/kg	0.19	25.5		0.19	25.3		0.79	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Cadmium	mg/kg	0.019	1.78		0.019	1.66		6.98	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Beryllium	mg/kg	0.019	0.511	J	0.019	0.506	J	0.98	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6010	Magnesium	mg/kg	1.92	5,000		1.94	4,970		0.6	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Lead	mg/kg	0.48	65.5		0.48	61.2		6.79	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6010	Iron	mg/kg	3.9	18,900		3.9	18,700		1.06	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Vanadium	mg/kg	0.2	24.7		0.2	23.6		4.55	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6010	Manganese	mg/kg	0.19	436		0.19	419		3.98	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6010	Potassium	mg/kg	38.5	2,080		38.7	2,080		0	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6010	Sodium	mg/kg	38.5	172		38.7	176		<2X CRQL	2X CRQL	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Antimony	mg/kg	0.048	1.28	J	0.048	1.22	J	4.8	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Arsenic	mg/kg	0.48	11.5		0.48	11.1		3.54	30	
K1411022	2014R-SS-231-D-01-01	2014R-SS-231-D-01-02	EPA6020	Zinc	mg/kg	0.5	158		0.5	143		9.97	30	
K1411022	2014R-SS-189-D-03-01	2014R-SS-189-D-03-02	EPA6020	Barium	mg/kg	0.05	212		0.05	210		0.95	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Thallium	mg/kg	0.019	0.19		0.019	0.176		7.65	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Selenium	mg/kg	0.19	0.18	J	0.19	0.2		<2X CRQL	2X CRQL	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Nickel	mg/kg	0.19	16.9		0.19	16.8		0.59	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Lead	mg/kg	0.19	48.5		0.19	45.5		6.38	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Copper	mg/kg	0.1	23		0.1	22.8		0.87	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Cobalt	mg/kg	0.019	7.47		0.019	7.57		1.33	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Chromium	mg/kg	0.19	16.3		0.19	16.4		0.61	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Cadmium	mg/kg	0.019	1.34		0.019	1.32		1.5	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Beryllium	mg/kg	0.019	0.541		0.019	0.55		1.65	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Silver	mg/kg	0.019	0.33		0.019	0.334		1.2	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Barium	mg/kg	0.05	204		0.05	200		1.98	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Arsenic	mg/kg	0.48	9.85		0.48	9.78		0.71	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Antimony	mg/kg	0.048	0.613	J	0.048	0.627	J	2.26	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6010	Sodium	mg/kg	38.6	106		38.6	106		<2X CRQL	2X CRQL	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6010	Potassium	mg/kg	38.6	1520		38.6	1,500		1.32	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6010	Manganese	mg/kg	0.19	503		0.19	500		0.6	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6010	Magnesium	mg/kg	1.93	4,130		1.93	4,150		0.48	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6010	Iron	mg/kg	3.9	16,800		3.9	16,900		0.59	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6010	Calcium	mg/kg	3.9	2,570		3.9	2,570		0	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Zinc	mg/kg	0.5	460		0.5	444		3.54	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Vanadium	mg/kg	0.2	28.6		0.2	29.1		1.73	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6010	Aluminum	mg/kg	1.9	16,600		1.9	16,900		1.79	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6010	Sodium	mg/kg	38.9	93.4		39.2	93.2		<2X CRQL	2X CRQL	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Vanadium	mg/kg	0.19	30.7		0.19	30.4		0.98	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6010	Calcium	mg/kg	3.9	9,290		3.9	9,260		0.32	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6010	Iron	mg/kg	3.9	15,800		3.9	16,000		1.26	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6010	Magnesium	mg/kg	1.95	3,910		1.96	3,980		1.77	30	
K1411025	2014R-SS-146-D-02-01	2014R-SS-146-D-02-02	EPA6020	Zinc	mg/kg	0.5	127		0.5	127		0	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6010	Potassium	mg/kg	38.9	1,330		39.2	1,360		2.23	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Antimony	mg/kg	0.049	5.08	J	0.049	5.13	J	0.98	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Arsenic	mg/kg	0.49	55.2		0.49	53.1		3.88	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Barium	mg/kg	0.05	298		0.05	294		1.35	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Beryllium	mg/kg	0.019	0.437		0.02	0.436		0.23	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Thallium	mg/kg	0.019	0.376		0.02	0.376		0	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Chromium	mg/kg	0.2	17.3		0.2	17.3		0	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Cobalt	mg/kg	0.019	8.4		0.02	8.32		0.96	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Copper	mg/kg	0.1	66.9		0.1	65.3		2.42	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Lead	mg/kg	0.2	308		0.2	306		0.65	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Nickel	mg/kg	0.2	13.6		0.2	13.6		0	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Selenium	mg/kg	0.2	1.36		0.2	1.34		1.48	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Silver	mg/kg	0.019	0.429		0.02	0.41		4.53	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6020	Cadmium	mg/kg	0.019	13.1		0.02	13		0.77	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6010	Aluminum	mg/kg	2	11,600		2	11,600		0	30	
K1411025	2014R-SS-176M-D-02-01	2014R-SS-176M-D-02-02	EPA6010	Manganese	mg/kg	0.2	2,020		0.2	1,970		2.51	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Beryllium	mg/kg	0.021	0.497		0.02	0.448		10.37	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Barium	mg/kg	0.05	315		0.05	289		8.61	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Arsenic	mg/kg	0.53	12.3		0.49	10.8		12.99	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Antimony	mg/kg	0.053	1.25	J	0.049	1.16	J	7.47	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6010	Sodium	mg/kg	42.2	318		39.1	311		2.23	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6010	Potassium	mg/kg	42.2	1,970		39.1	1,780		10.13	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6010	Manganese	mg/kg	0.21	777		0.2	696		11	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6010	Iron	mg/kg	4.2	20,100		3.9	17,800		12.14	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Zinc	mg/kg	0.5	133		0.5	117		12.8	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6010	Magnesium	mg/kg	2.11	7,950		1.96	6,970		13.14	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Cadmium	mg/kg	0.021	2.52		0.02	2.15		15.85	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Chromium	mg/kg	0.21	40.9		0.2	37.1		9.74	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Cobalt	mg/kg	0.021	10.8		0.02	9.8		9.71	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Copper	mg/kg	0.11	67.9		0.1	62.1		8.92	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Lead	mg/kg	0.21	55.3		0.2	46.8		16.65	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Nickel	mg/kg	0.21	24.6		0.2	22.7		8.03	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Selenium	mg/kg	0.21	0.92		0.2	0.8		<2X CRQL	2X CRQL	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Silver	mg/kg	0.021	0.241		0.02	0.234		2.95	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6010	Calcium	mg/kg	3.9	2,770		3.9	2,860		3.2	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Vanadium	mg/kg	0.21	52.3		0.2	47.1		10.46	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6010	Aluminum	mg/kg	1.9	18,400		1.9	19,000		3.21	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6020	Thallium	mg/kg	0.021	0.26		0.02	0.235		10.1	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Cobalt	mg/kg	0.019	8.89		0.019	9.04		1.67	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6010	Aluminum	mg/kg	2.1	15,600		2	14,100		10.1	30	
K1411026	2014R-SS-122-D-05-01	2014R-SS-122-D-05-02	EPA6010	Calcium	mg/kg	4.2	141,000		3.9	131,000		7.35	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Zinc	mg/kg	0.5	64.5		0.5	65.9		2.15	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Vanadium	mg/kg	0.19	41.6		0.19	43.4		4.24	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Thallium	mg/kg	0.019	0.135		0.019	0.133		1.49	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Silver	mg/kg	0.019	0.135		0.019	0.13		3.77	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Selenium	mg/kg	0.19	0.17	J	0.19	0.16	J	<2X CRQL	2X CRQL	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Nickel	mg/kg	0.19	19.6		0.19	20		2.02	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Cadmium	mg/kg	0.019	0.316		0.019	0.319		0.94	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Copper	mg/kg	0.1	21.9		0.1	22.1		0.91	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6010	Iron	mg/kg	3.9	20,300		3.9	20,700		1.95	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Chromium	mg/kg	0.19	27.7		0.19	28.7		3.55	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Beryllium	mg/kg	0.019	0.572		0.019	0.579		1.22	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Barium	mg/kg	0.05	206		0.05	202		1.96	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Arsenic	mg/kg	0.48	10.2		0.48	10.2		0	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Antimony	mg/kg	0.048	0.405	J	0.048	0.397	J	2	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6010	Sodium	mg/kg	38.7	146		38.6	158		<2X CRQL	2X CRQL	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6010	Potassium	mg/kg	38.7	1,920		38.6	1,940		1.04	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6010	Manganese	mg/kg	0.19	376		0.19	378		0.53	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6010	Magnesium	mg/kg	1.93	4,800		1.93	4,910		2.27	30	
K1411026	2014R-SS-62-D-02-01	2014R-SS-62-D-02-02	EPA6020	Lead	mg/kg	0.19	12.3		0.19	12.3		0	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Beryllium	mg/kg	0.019	0.351		0.019	0.361		2.81	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6010	Iron	mg/kg	3.8	13,600		3.8	14,200		4.32	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Silver	mg/kg	0.019	0.173		0.019	0.163		5.95	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Thallium	mg/kg	0.019	0.136		0.019	0.137		0.73	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Chromium	mg/kg	0.19	17.9		0.19	18.8		4.9	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Vanadium	mg/kg	0.19	21.4		0.19	20.2		5.77	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Zinc	mg/kg	0.5	173		0.5	179		3.41	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Barium	mg/kg	0.05	78.3		0.05	83		5.83	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6010	Calcium	mg/kg	3.8	3,290		3.8	3,360		2.11	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Lead	mg/kg	0.19	114		0.19	111		2.67	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6010	Magnesium	mg/kg	1.92	3,200		1.89	3,410		6.35	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6010	Manganese	mg/kg	0.19	220		0.19	234		6.17	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6010	Potassium	mg/kg	38.4	1,500		37.9	1,590		5.83	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6010	Sodium	mg/kg	38.4	109		37.9	110		<2X CRQL	2X CRQL	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Antimony	mg/kg	0.048	0.189	J	0.047	0.187	J	<2X CRQL	2X CRQL	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Arsenic	mg/kg	0.48	3		0.47	3.24		7.69	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6010	Aluminum	mg/kg	1.9	8,180		1.9	8,720		6.39	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Barium	mg/kg	0.05	188		0.05	189		0.53	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6010	Calcium	mg/kg	3.8	3,030		3.8	2,990		1.33	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6010	Iron	mg/kg	3.8	12,300		3.8	12,100		1.64	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6010	Magnesium	mg/kg	1.92	2,350		1.92	2,360		0.42	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6010	Manganese	mg/kg	0.19	304		0.19	306		0.66	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6010	Potassium	mg/kg	38.3	895		38.4	895		0	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6010	Sodium	mg/kg	38.3	82.7		38.4	80		<2X CRQL	2X CRQL	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Selenium	mg/kg	0.19	0.19	J	0.19	0.16	J	<2X CRQL	2X CRQL	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Arsenic	mg/kg	0.48	8.25		0.48	8.05		2.45	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Nickel	mg/kg	0.19	11.7		0.19	11.3		3.48	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Beryllium	mg/kg	0.019	0.317		0.019	0.313		1.27	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Cadmium	mg/kg	0.019	1.48		0.019	1.49		0.67	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Chromium	mg/kg	0.19	13.8		0.19	13.3		3.69	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Cobalt	mg/kg	0.019	4.07		0.019	3.97		2.49	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Copper	mg/kg	0.1	15.8		0.1	15.8		0	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Zinc	mg/kg	0.5	183		0.5	183		0	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6020	Antimony	mg/kg	0.048	0.947	J	0.048	0.932	J	1.6	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Beryllium	mg/kg	0.02	0.643		0.019	0.681		5.74	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6010	Aluminum	mg/kg	2	19,400		1.9	20,100		3.54	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6010	Calcium	mg/kg	3.9	5,300		3.9	5,310		0.19	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6010	Iron	mg/kg	3.9	17,300		3.9	17,400		0.58	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6010	Magnesium	mg/kg	1.95	4,000		1.94	4,090		2.22	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6010	Manganese	mg/kg	0.2	658		0.19	666		1.21	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6010	Potassium	mg/kg	39	1,750		38.8	1,780		1.7	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6010	Sodium	mg/kg	39	264		38.8	271		2.62	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Antimony	mg/kg	0.049	1.54	J	0.049	1.58	J	2.56	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Zinc	mg/kg	0.5	63.5		0.5	67.8		6.55	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Barium	mg/kg	0.05	267		0.05	273		2.22	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Nickel	mg/kg	0.2	18		0.19	18.5		2.74	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Cadmium	mg/kg	0.02	3.11		0.019	3.14		0.96	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Chromium	mg/kg	0.2	16.9		0.19	17.4		2.92	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Cobalt	mg/kg	0.02	7.28		0.019	7.41		1.77	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Copper	mg/kg	0.1	33.4		0.1	34		1.78	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Lead	mg/kg	0.2	141		0.19	140		0.71	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Cadmium	mg/kg	0.019	0.227		0.019	0.246		8.03	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Selenium	mg/kg	0.2	0.24		0.19	0.27		<2X CRQL	2X CRQL	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Thallium	mg/kg	0.02	0.247		0.019	0.273		10	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Vanadium	mg/kg	0.2	30.2		0.19	30.9		2.29	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Arsenic	mg/kg	0.49	15.1		0.49	15.9		5.16	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Nickel	mg/kg	0.19	13.8		0.19	14.4		4.26	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Thallium	mg/kg	0.019	0.117		0.019	0.124		5.81	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Selenium	mg/kg	0.19	0.09	J	0.19	0.1	J	<2X CRQL	2X CRQL	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Vanadium	mg/kg	0.19	24.2		0.19	24.8		2.45	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Lead	mg/kg	0.19	14.6		0.19	15.6		6.62	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Copper	mg/kg	0.1	13		0.1	13.3		2.28	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Cobalt	mg/kg	0.019	5.39		0.019	5.67		5.06	30	
K1411028	2014R-SS-154-D-02-01	2014R-SS-154-D-02-02	EPA6010	Aluminum	mg/kg	1.9	7,520		1.9	7,480		0.53	30	
K1411028	2014R-SS-160-D-01-01	2014R-SS-160-D-01-02	EPA6020	Silver	mg/kg	0.02	0.34		0.019	0.351		3.18	30	
K1411028	2014R-SS-174M-D-02-01	2014R-SS-174M-D-02-02	EPA6020	Silver	mg/kg	0.019	0.068		0.019	0.071		<2X CRQL	2X CRQL	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Thallium	mg/kg	0.019	0.376		0.019	0.39		3.66	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Silver	mg/kg	0.019	0.4		0.019	0.431		7.46	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Copper	mg/kg	0.1	16.8		0.1	17.4		3.51	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Vanadium	mg/kg	0.19	28.2		0.19	29.2		3.48	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Beryllium	mg/kg	0.019	0.404		0.019	0.337		18.08	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Cadmium	mg/kg	0.019	1.46		0.019	1.67		13.42	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Chromium	mg/kg	0.19	17.3		0.19	17.6		1.72	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Cobalt	mg/kg	0.019	6.61		0.019	6.63		0.3	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Lead	mg/kg	0.19	13		0.19	16.1		21.31	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Selenium	mg/kg	0.19	0.19		0.19	0.2		<2X CRQL	2X CRQL	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Thallium	mg/kg	0.019	0.149		0.019	0.167		11.39	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Selenium	mg/kg	0.19	0.4		0.19	0.42		<2X CRQL	2X CRQL	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Zinc	mg/kg	0.5	148		0.5	154		3.97	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Nickel	mg/kg	0.19	14.3		0.19	14.7		2.76	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Zinc	mg/kg	0.5	365		0.5	383		4.81	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6010	Aluminum	mg/kg	1.9	11,000	J	1.9	11,300	J	2.69	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Vanadium	mg/kg	0.19	26.2		0.19	26.7		1.89	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6010	Potassium	mg/kg	38.4	1,320		38.4	1,350		2.25	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6010	Calcium	mg/kg	3.8	2,290		3.8	2,410		5.11	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6010	Iron	mg/kg	3.8	14,600		3.8	15,000		2.7	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Silver	mg/kg	0.019	0.129		0.019	0.131		1.54	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6010	Manganese	mg/kg	0.19	518		0.19	535		3.23	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Nickel	mg/kg	0.19	15.3		0.19	15.7		2.58	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6010	Sodium	mg/kg	38.4	95.9		38.4	103		<2X CRQL	2X CRQL	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Antimony	mg/kg	0.048	1.25	J	0.048	1.36	J	8.43	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Arsenic	mg/kg	0.48	23.6		0.48	25.1		6.16	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6020	Barium	mg/kg	0.05	163		0.05	165		1.22	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6010	Aluminum	mg/kg	1.9	16,500	J	1.9	16,700	J	1.2	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6010	Calcium	mg/kg	3.9	2,450		3.9	2,530		3.21	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6010	Iron	mg/kg	3.9	16,900		3.9	17,100		1.18	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6010	Magnesium	mg/kg	1.94	3,520		1.93	3,630		3.08	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Cobalt	mg/kg	0.019	6.73		0.019	7.01		4.08	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Lead	mg/kg	0.19	327		0.19	342		4.48	30	
K1411030	2014R-SS-22-D-01-01	2014R-SS-22-D-01-02	EPA6010	Magnesium	mg/kg	1.92	3,450		1.92	3,520		2.01	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6010	Manganese	mg/kg	0.19	752		0.19	775		3.01	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Copper	mg/kg	0.1	27.2		0.1	28.6		5.02	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Chromium	mg/kg	0.19	17.3		0.19	18		3.97	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Cadmium	mg/kg	0.019	6.46		0.019	6.84		5.71	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Beryllium	mg/kg	0.019	0.443		0.019	0.454		2.45	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6010	Sodium	mg/kg	38.8	118		38.5	117		<2X CRQL	2X CRQL	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Arsenic	mg/kg	0.48	30.2		0.48	31.6		4.53	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Antimony	mg/kg	0.048	6.01	J	0.048	6.18	J	2.79	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6010	Potassium	mg/kg	38.8	1,220		38.5	1,270		4.02	30	
K1411030	2014R-SS-67-D-05-01	2014R-SS-67-D-05-02	EPA6020	Barium	mg/kg	0.05	212		0.05	220		3.7	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Beryllium	mg/kg	0.019	0.375		0.019	0.369		1.61	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Barium	mg/kg	0.05	175		0.05	172		1.73	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Arsenic	mg/kg	0.48	11.3		0.48	11.1		1.79	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6010	Iron	mg/kg	3.9	15,000		3.9	14,700		2.02	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6010	Manganese	mg/kg	0.19	405		0.19	391		3.52	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6010	Sodium	mg/kg	38.5	135		38.7	118		<2X CRQL	2X CRQL	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6010	Potassium	mg/kg	38.5	1,920		38.7	1,850		3.71	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Cadmium	mg/kg	0.019	1.9		0.019	1.71		10.53	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6010	Magnesium	mg/kg	1.93	3,540		1.94	3,420		3.45	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Silver	mg/kg	0.019	0.139		0.019	0.133		4.41	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Antimony	mg/kg	0.048	1.48	J	0.048	1.42	J	4.14	30	

TABLE 5-3

Field Duplicate Evaluation - Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

SDG	Parent Sample ID	FD Sample ID	Method	Analyte	Units	CRQL	PRIMARY	N_FLAG	CRQL FD	FIELD DUPLICATE	FD_FLAG	RPD	RPD Control Limit	Exceeds Control Limit
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Chromium	mg/kg	0.19	17.4		0.19	17.1		1.74	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Cobalt	mg/kg	0.019	5.72		0.019	5.68		0.7	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Copper	mg/kg	0.1	13.8		0.1	13.6		1.46	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Lead	mg/kg	0.19	74.7		0.19	65.5		13.12	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Selenium	mg/kg	0.19	0.15	J	0.19	0.13	J	<2X CRQL	2X CRQL	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Thallium	mg/kg	0.019	0.179		0.019	0.166		7.54	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Vanadium	mg/kg	0.19	23.3		0.19	23.2		0.43	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Zinc	mg/kg	0.5	141		0.5	134		5.09	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Nickel	mg/kg	0.21	35.4		0.2	33.3		6.11	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6010	Calcium	mg/kg	3.9	2,390		3.9	2,310		3.4	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6020	Nickel	mg/kg	0.19	12.4		0.19	12.2		1.63	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Beryllium	mg/kg	0.019	0.406		0.019	0.404		0.49	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Copper	mg/kg	0.1	47.3		0.1	44.9		5.21	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Thallium	mg/kg	0.019	0.13		0.019	0.126		3.13	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Silver	mg/kg	0.019	0.24		0.019	0.226		6.01	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Selenium	mg/kg	0.19	0.12	J	0.2	0.13	J	<2X CRQL	2X CRQL	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Nickel	mg/kg	0.19	16.1		0.2	15.9		1.25	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Lead	mg/kg	0.19	53.3		0.2	53.7		0.75	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Copper	mg/kg	0.1	16.7		0.1	16.6		0.6	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Cobalt	mg/kg	0.019	7.31		0.019	7.3		0.14	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Zinc	mg/kg	0.5	115		0.5	114		0.87	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Cadmium	mg/kg	0.019	1.07		0.019	1.06		0.94	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Zinc	mg/kg	0.5	219		0.5	203		7.58	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6010	Aluminum	mg/kg	1.9	14,500	J	2	14,100	J	2.8	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6010	Calcium	mg/kg	3.9	3,610		3.9	3,540		1.96	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6010	Iron	mg/kg	3.9	18,900		3.9	18,700		1.06	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6010	Magnesium	mg/kg	1.94	4,260		1.95	4,220		0.94	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6010	Manganese	mg/kg	0.19	431		0.2	428		0.7	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6010	Potassium	mg/kg	38.9	2,000		38.9	1,980		1.01	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6010	Sodium	mg/kg	38.9	141		38.9	129		<2X CRQL	2X CRQL	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Antimony	mg/kg	0.049	0.947	J	0.049	0.915	J	3.44	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Arsenic	mg/kg	0.49	7.08		0.49	7		1.14	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Chromium	mg/kg	0.19	23.9		0.2	23.7		0.84	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Beryllium	mg/kg	0.021	0.694		0.02	0.655		5.78	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6010	Aluminum	mg/kg	2.1	28,200	J	2	27,100	J	3.98	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6010	Calcium	mg/kg	4.2	8,090		4	7,710		4.81	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6010	Iron	mg/kg	4.2	27,100		4	25,800		4.91	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6010	Magnesium	mg/kg	2.08	10,900		1.98	10,400		4.69	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6010	Manganese	mg/kg	0.21	805		0.2	763		5.36	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6010	Potassium	mg/kg	41.7	3,170		39.6	3,020		4.85	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6010	Sodium	mg/kg	41.7	308		39.6	289		6.37	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Antimony	mg/kg	0.052	1.01	J	0.05	0.92	J	9.33	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Vanadium	mg/kg	0.19	32		0.2	31.5		1.57	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Barium	mg/kg	0.05	247		0.05	230		7.13	30	
K1411037	2014R-SS-42-D-04-01	2014R-SS-42-D-04-02	EPA6010	Aluminum	mg/kg	1.9	12,300	J	1.9	11,800	J	4.15	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Cadmium	mg/kg	0.021	2.83		0.02	2.61		8.09	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Chromium	mg/kg	0.21	40.3		0.2	37.3		7.73	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Cobalt	mg/kg	0.021	14.2		0.02	13.4		5.8	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Lead	mg/kg	0.21	48.9		0.2	46		6.11	30	
K1411037	2014R-SS-82-D-03-01	2014R-SS-82-D-03-02	EPA6020	Barium	mg/kg	0.05	231		0.05	230		0.43	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Selenium	mg/kg	0.21	0.36		0.2	0.31		<2X CRQL	2X CRQL	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Silver	mg/kg	0.021	0.248		0.02	0.228		8.4	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Thallium	mg/kg	0.021	0.309		0.02	0.293		5.32	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Vanadium	mg/kg	0.21	55.5		0.2	51.7		7.09	30	
K1411037	2014R-SS-121-D-03-01	2014R-SS-121-D-03-02	EPA6020	Arsenic	mg/kg	0.52	26		0.5	24.3		6.76	30	

SDG = Sample delivery group

FD = Field duplicate

mg/kg = milligrams per kilogram

CRQL = Contract required quantitation limit

RPD = Relative percent difference

TABLE 5-4

Field Replicate (IC) Evaluation

UCR Residential Soil Study Field Sampling and Data Summary Report

Decision Unit[a]	Analyte	RSD (%)	RSD Limit (%)	Exceeds
7	Arsenic	6.0	30	
9	Arsenic	2.4	30	
15	Arsenic	5.3	30	
17	Arsenic	5.2	30	
18	Arsenic	15.4	30	
21	Arsenic	1.5	30	
22	Arsenic	10.0	30	
25	Arsenic	9.8	30	
28	Arsenic	5.8	30	
30	Arsenic	4.2	30	
33	Arsenic	8.9	30	
35	Arsenic	12.8	30	
39	Arsenic	2.6	30	
40	Arsenic	16.0	30	
42	Arsenic	6.8	30	
44	Arsenic	5.5	30	
46	Arsenic	7.7	30	
49	Arsenic	26.0	30	
55	Arsenic	5.9	30	
56	Arsenic	10.3	30	
58	Arsenic	2.1	30	
59	Arsenic	4.5	30	
60	Arsenic	4.7	30	
61	Arsenic	3.8	30	
62	Arsenic	3.9	30	
66	Arsenic	5.2	30	
67	Arsenic	5.0	30	
70	Arsenic	6.5	30	
71	Arsenic	0.8	30	
72	Arsenic	3.1	30	
75	Arsenic	7.6	30	
82	Arsenic	9.5	30	
85	Arsenic	1.6	30	
87	Arsenic	3.9	30	
106	Arsenic	8.4	30	
108	Arsenic	6.4	30	
109	Arsenic	4.5	30	
110	Arsenic	4.6	30	
111	Arsenic	4.4	30	
112	Arsenic	13.4	30	
121	Arsenic	1.5	30	
122	Arsenic	2.3	30	
123	Arsenic	4.0	30	
135	Arsenic	4.1	30	
146	Arsenic	6.0	30	
147	Arsenic	3.3	30	
151	Arsenic	3.2	30	
152	Arsenic	1.0	30	
154	Arsenic	1.7	30	
160	Arsenic	4.4	30	
163	Arsenic	7.7	30	
167	Arsenic	6.3	30	
168	Arsenic	2.9	30	
170	Arsenic	8.0	30	

TABLE 5-4

Field Replicate (IC) Evaluation

UCR Residential Soil Study Field Sampling and Data Summary Report

Decision Unit[a]	Analyte	RSD (%)	RSD Limit (%)	Exceeds
173	Arsenic	4.9	30	
175	Arsenic	8.0	30	
177	Arsenic	4.4	30	
185	Arsenic	13.0	30	
186	Arsenic	10.2	30	
189	Arsenic	7.6	30	
193	Arsenic	9.6	30	
194	Arsenic	4.2	30	
195	Arsenic	3.5	30	
197	Arsenic	22.7	30	
201	Arsenic	7.5	30	
202	Arsenic	1.9	30	
203	Arsenic	5.7	30	
204	Arsenic	7.5	30	
206	Arsenic	3.6	30	
208	Arsenic	3.1	30	
216	Arsenic	13.2	30	
218	Arsenic	5.5	30	
224	Arsenic	0.3	30	
226	Arsenic	19.6	30	
229	Arsenic	2.9	30	
231	Arsenic	8.4	30	
246	Arsenic	6.8	30	
249	Arsenic	3.3	30	
250	Arsenic	7.3	30	
253	Arsenic	7.0	30	
255	Arsenic	6.1	30	
258	Arsenic	6.4	30	
280	Arsenic	1.3	30	
287	Arsenic	6.5	30	
288	Arsenic	4.1	30	
291	Arsenic	3.0	30	
303	Arsenic	25.2	30	
306	Arsenic	3.3	30	
315	Arsenic	5.7	30	
316	Arsenic	5.4	30	
318	Arsenic	5.3	30	
319	Arsenic	11.0	30	
324	Arsenic	6.7	30	
325	Arsenic	5.8	30	
327	Arsenic	5.7	30	
346	Arsenic	11.7	30	
347	Arsenic	4.2	30	
402	Arsenic	7.0	30	
411	Arsenic	3.1	30	
412	Arsenic	2.2	30	
421	Arsenic	2.4	30	
431	Arsenic	5.2	30	
440	Arsenic	2.5	30	
801	Arsenic	12.4	30	
1000	Arsenic	30.5	30	X
1001	Arsenic	1.4	30	
1006	Arsenic	3.8	30	
1007	Arsenic	1.0	30	

TABLE 5-4

Field Replicate (IC) Evaluation

UCR Residential Soil Study Field Sampling and Data Summary Report

Decision Unit[a]	Analyte	RSD (%)	RSD Limit (%)	Exceeds
1011	Arsenic	1.8	30	
1017	Arsenic	0.5	30	
1018	Arsenic	3.8	30	
1020	Arsenic	4.6	30	
1021	Arsenic	7.7	30	
1030	Arsenic	7.8	30	
1035	Arsenic	1.8	30	
1036	Arsenic	1.9	30	
1037	Arsenic	2.5	30	
3000	Arsenic	6.4	30	
3003	Arsenic	14.7	30	
3004	Arsenic	7.5	30	
112G	Arsenic	6.1	30	
113up	Arsenic	5.4	30	
116M	Arsenic	6.7	30	
169A	Arsenic	2.8	30	
172U	Arsenic	2.3	30	
174M	Arsenic	4.3	30	
176M	Arsenic	22.0	30	
201G	Arsenic	5.8	30	
208AA	Arsenic	3.9	30	
208BM	Arsenic	2.4	30	
208G	Arsenic	2.8	30	
209A	Arsenic	9.9	30	
21G	Arsenic	3.5	30	
226A	Arsenic	0.9	30	
226C	Arsenic	6.1	30	
231Lower	Arsenic	1.8	30	
238G	Arsenic	2.7	30	
251B	Arsenic	3.5	30	
280yard	Arsenic	2.5	30	
284M	Arsenic	1.8	30	
285M	Arsenic	1.7	30	
289G3	Arsenic	3.2	30	
317M	Arsenic	11.6	30	
319M	Arsenic	17.9	30	
320new	Arsenic	2.6	30	
35PA	Arsenic	12.8	30	
59A	Arsenic	11.9	30	
62G	Arsenic	6.7	30	
72M	Arsenic	4.6	30	
800B	Arsenic	5.1	30	
999G1	Arsenic	2.7	30	
999M1	Arsenic	4.5	30	
999M3	Arsenic	40.9	30	X
7	Lead	10.3	30	
9	Lead	3.6	30	
15	Lead	6.7	30	
17	Lead	9.8	30	
18	Lead	16.8	30	
21	Lead	11.6	30	
22	Lead	9.8	30	
25	Lead	9.5	30	
28	Lead	2.7	30	

TABLE 5-4

Field Replicate (IC) Evaluation

UCR Residential Soil Study Field Sampling and Data Summary Report

Decision Unit[a]	Analyte	RSD (%)	RSD Limit (%)	Exceeds
30	Lead	2.2	30	
33	Lead	13.7	30	
35	Lead	11.6	30	
39	Lead	4.5	30	
40	Lead	8.3	30	
42	Lead	8.1	30	
44	Lead	3.1	30	
46	Lead	11.5	30	
49	Lead	31.4	30	X
55	Lead	6.8	30	
56	Lead	21.7	30	
58	Lead	0.7	30	
59	Lead	11.6	30	
60	Lead	7.0	30	
61	Lead	23.6	30	
62	Lead	22.9	30	
66	Lead	7.7	30	
67	Lead	0.8	30	
70	Lead	26.7	30	
71	Lead	2.9	30	
72	Lead	8.4	30	
75	Lead	2.3	30	
82	Lead	13.5	30	
85	Lead	4.2	30	
87	Lead	12.3	30	
106	Lead	8.8	30	
108	Lead	7.6	30	
109	Lead	6.7	30	
110	Lead	5.8	30	
111	Lead	12.9	30	
112	Lead	7.4	30	
121	Lead	8.1	30	
122	Lead	4.8	30	
123	Lead	1.6	30	
135	Lead	8.4	30	
146	Lead	10.2	30	
147	Lead	1.1	30	
151	Lead	60.7	30	X
152	Lead	11.1	30	
154	Lead	7.8	30	
160	Lead	13.0	30	
163	Lead	9.9	30	
167	Lead	13.4	30	
168	Lead	6.4	30	
170	Lead	8.6	30	
173	Lead	4.4	30	
175	Lead	22.6	30	
177	Lead	8.3	30	
185	Lead	5.7	30	
186	Lead	1.5	30	
189	Lead	15.5	30	
193	Lead	7.8	30	
194	Lead	11.4	30	
195	Lead	4.7	30	

TABLE 5-4

Field Replicate (IC) Evaluation

UCR Residential Soil Study Field Sampling and Data Summary Report

Decision Unit[a]	Analyte	RSD (%)	RSD Limit (%)	Exceeds
197	Lead	28.3	30	
201	Lead	11.0	30	
202	Lead	2.2	30	
203	Lead	10.0	30	
204	Lead	6.2	30	
206	Lead	7.7	30	
208	Lead	7.5	30	
216	Lead	5.9	30	
218	Lead	18.6	30	
224	Lead	2.9	30	
226	Lead	22.0	30	
229	Lead	14.6	30	
231	Lead	9.1	30	
246	Lead	5.8	30	
249	Lead	7.2	30	
250	Lead	10.5	30	
253	Lead	8.3	30	
255	Lead	2.1	30	
258	Lead	13.2	30	
280	Lead	6.1	30	
287	Lead	6.3	30	
288	Lead	3.1	30	
291	Lead	5.9	30	
303	Lead	24.4	30	
306	Lead	1.6	30	
315	Lead	6.2	30	
316	Lead	13.4	30	
318	Lead	18.8	30	
319	Lead	27.9	30	
324	Lead	2.1	30	
325	Lead	3.9	30	
327	Lead	6.3	30	
346	Lead	17.8	30	
347	Lead	11.3	30	
402	Lead	8.1	30	
411	Lead	6.6	30	
412	Lead	2.8	30	
421	Lead	12.3	30	
431	Lead	8.7	30	
440	Lead	8.0	30	
801	Lead	6.1	30	
1000	Lead	2.8	30	
1001	Lead	7.1	30	
1006	Lead	1.8	30	
1007	Lead	2.0	30	
1011	Lead	6.8	30	
1017	Lead	2.7	30	
1018	Lead	1.8	30	
1020	Lead	3.0	30	
1021	Lead	9.0	30	
1030	Lead	9.3	30	
1035	Lead	1.9	30	
1036	Lead	6.2	30	
1037	Lead	5.8	30	

TABLE 5-4

Field Replicate (IC) Evaluation

UCR Residential Soil Study Field Sampling and Data Summary Report

Decision Unit[a]	Analyte	RSD (%)	RSD Limit (%)	Exceeds
3000	Lead	21.4	30	
3003	Lead	19.4	30	
3004	Lead	8.9	30	
112G	Lead	15.1	30	
113up	Lead	0.7	30	
116M	Lead	9.4	30	
169A	Lead	6.3	30	
172U	Lead	2.9	30	
174M	Lead	1.4	30	
176M	Lead	26.2	30	
201G	Lead	2.8	30	
208AA	Lead	3.9	30	
208BM	Lead	5.7	30	
208G	Lead	4.3	30	
209A	Lead	15.5	30	
21G	Lead	3.7	30	
226A	Lead	4.5	30	
226C	Lead	26.9	30	
231Lower	Lead	3.6	30	
238G	Lead	4.0	30	
251B	Lead	9.1	30	
280yard	Lead	2.6	30	
284M	Lead	6.6	30	
285M	Lead	4.9	30	
289G3	Lead	5.0	30	
317M	Lead	26.2	30	
319M	Lead	20.2	30	
320new	Lead	11.9	30	
35PA	Lead	2.5	30	
59A	Lead	11.2	30	
62G	Lead	18.2	30	
72M	Lead	8.1	30	
800B	Lead	4.0	30	
999G1	Lead	2.5	30	
999M1	Lead	8.7	30	
999M3	Lead	41.4	30	X

[a] Three IC samples (1 primary and 2 replicates collected at each decision unit)

RSD = relative standard deviation

Table 6-1

Cross Referenced Property Numbers, Parcel Numbers, and Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

Property Number	Property Count	Parcel Number	Decision Units
1	1	5088000	9
			13
			14
			15
			16
			17
			15DL
2	2	5096700	40
			40DL
3	3	5078600	42
			44
			46
			47
			1015
			1017
			1018
			42DL
5	4	5689900	49
7	5	5044000	60
			61
8	6	5693400	22
9	7	2394200	25
			27
			28
			29
			30
			31
			25DL
10	8	5703600	33
11	9	5087300	35
			39
			35DL
			35PA
13	10	5087600	224
15	11	5094700	226
			226A
			226C
			226DL
32	12	5089440	55
			56
			58
			55DL

Table 6-1

Cross Referenced Property Numbers, Parcel Numbers, and Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

Property Number	Property Count	Parcel Number	Decision Units
33	13	5090900	59
			59A
			59DL
35	14	2393280	62
			62DL2
			62G
36	15	5693200	67
		5693700	66
38	16	5705035	72
		5705655	70
			71
			72M
			72U
		5704920	1000
			1001
41	17	5691100	75
45	18	2392940	82
47	19	5091300	85
			86
			87
			85DL
			94M
48	20	5092600	106
			107
			108
51	21	5084900	109
			109DL
52	22	2398900	110
			111
			110DL
			110G
57	23	5096210	112
			112DL
			112G
			113low
			113up
58	24	5087301	21
			115SP
			21G
59	25	5094800	116DL
			116M
63a	26	2390400	122

Table 6-1

Cross Referenced Property Numbers, Parcel Numbers, and Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

Property Number	Property Count	Parcel Number	Decision Units
63b	27	2391500	121
			121DL
66	28	5092100	123
			135
67	29	5045675	146
			146G
			147
71	30	2399700	151
			152
			151DL
72	31	5045250	163
			164
			167
			163G
		5045600	160
73	32	5704000	168
			169
			168DL
			169A
74	33	615700	320new
78	34	5078100	216
85	35	5085300	170
			1030
86	36	5704900	173
			172U
88	37	5045800	175
			174M
			238G
			238M
89	38	5098601	177
			176G
			176M
92	39	5091100	206
			208
			213
			208AA
			208DL
			209A
		5091700	208BM
			208G
95a	40	615200	185
			185DL
			185G

Table 6-1

Cross Referenced Property Numbers, Parcel Numbers, and Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

Property Number	Property Count	Parcel Number	Decision Units
95b	41	616500	186
			186DL
97	42	5693000	189
			1037
		5693100	1035
			1036
			187DL
98	43	616100	192
			1060
			192DL
99	44	5704500	194
			195
			1021
		5704600	193
			1020
			193DL
101	45	436000	218
104	46	5087000	201
			202
			201DL
			201G
105	47	5086800	203
			204
106	48	5090320	229
			230G
113	49	5085825	196
			197
119	50	5098600	231
			231DL
			231Lower
120	51	5087315	7
122	52	5093150	154
			154DL
123	53	5093101	246
125	54	5703200	18
			20
			18DL
126	55	5083600	249
			250

Table 6-1

Cross Referenced Property Numbers, Parcel Numbers, and Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

Property Number	Property Count	Parcel Number	Decision Units
127, 128	56, 57	5689800	255
		5095700	253
			251B
			254DL
132, 140	58, 59	5090601	287
			284DL
			284M
			285M
		5089950	999DL1
			999DL2
			999G1
			999M1
			999M2
			999M3
		5090700	288G1
			288G2
			289G3
			288
135	60	5094400	303
			306
		2398875	315
			316
136	61	5096217	317
			318
			319
			317M
			319DL
			319M
139	62	2402360	324
			325
			326
			327
145	63	5706200	1005
			1006
			1007
			1008
			1010
			1011
			1009DL
150	64	5690710	345
			346
		5690800	347

Table 6-1

Cross Referenced Property Numbers, Parcel Numbers, and Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

Property Number	Property Count	Parcel Number	Decision Units
152	65	5689400	801
			800B
300	66	5096216	3000
			3001
			3003
301	67	5687600	3004
302	68	615900	280
			280DL
			280yard
Tribal Allotments	69	151-H-189	430
			431
			432
	70	151-H-192	420
			421
	71	151-H-193	258
			259
	72	151-H-195	410
			411
			412
			413
	73	151-H-196	401
			402
			403
	74	151-H-197	440
			441
			442

TABLE 6-2

UCR Residential Soil Study Sitewide Statistics for IVBA and RBA (%)

UCR Residential Soil Study Field Sampling and Data Summary Report

	Non-Beach DUs			Only Beach DUs		
Statistic	**Arsenic IVBA**	**Lead IVBA**	**Lead RBA**	**Arsenic IVBA**	**Lead IVBA**	**Lead RBA**
n	100	100	100	14	14	14
mean	31.93	76.57	64.43	35.00	68.00	57.15
LCL 95	30.19	74.91	62.97	31.92	64.14	53.52
UCL 95	33.67	78.24	65.89	38.16	72.43	60.79
standard deviation	8.78	8.40	7.37	5.40	7.18	6.30
CV (%)	27.49	10.97	11.44	15.40	10.51	11.02
min	10.90	42.90	34.87	25.70	55.70	46.10
median	31.65	77.20	64.98	35.45	67.55	56.51
P75	37.85	82.15	69.33	37.60	72.90	61.21
P90	42.00	86.50	73.15	41.00	78.00	65.68
P95	46.75	87.15	73.72	46.10	81.30	68.58
P99	55.37	91.40	77.45	46.10	81.30	68.58
max	57.10	92.10	78.06	46.10	81.30	68.58

Notes:

DU = decision unit

IVBA = in vitro bioaccessibility assay

LCL = lower control limit

RBA = relative bioavailability

UCL = upper control limit

TABLE 6-3

Summary of Sample Counts by Decision Unit Category

UCR Residential Soil Study Field Sampling and Data Summary Report

	IC Samples				Discrete Samples		
DU Category	**Primary**	**Replicate 1**	**Replicate 2**	**Total**	**Primary**	**Duplicate**	**Total**
Agriculture	18	12	12	42			
Animal Activity Area	1	1	1	3			
Beach	15	15	15	45	5	1	6
Dripline	34			34			
Garden	38	23	23	84	15	2	17
House	64	60	60	184	285	43	328
Other Not Specified	58	36	36	130	30	5	35
Play Area	7	6	6	19	15	1	16
Total	**235**	**153**	**153**	**541**	**350**	**52**	**402**

Notes:

DU = decision unit

IC = incremental composite (sample)

Table 6-4

Summary of Total Metals Analytical Results and Comparison to Screening Levels - House Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Aluminum	mg/kg	184	184	100%	--	--	6,710	29,300	14,709	77,400	--	--
IC	Antimony	mg/kg	184	184	100%	--	--	0.266	25.6	4.1	31	--	--
IC	Arsenic[a]	mg/kg	184	184	100%	--	--	3.4	105	21	20	48	--
IC	Barium	mg/kg	184	184	100%	--	--	71.3	521	204	15,300	--	--
IC	Beryllium	mg/kg	184	184	100%	--	--	0.247	0.901	0.50	156	--	--
IC	Cadmium	mg/kg	184	184	100%	--	--	0.444	28.2	5.8	70	--	--
IC	Calcium	mg/kg	184	184	100%	--	--	1,970	66,900	8,268	--	--	--
IC	Chromium	mg/kg	184	184	100%	--	--	14	43.8	22	117,000	--	--
IC	Cobalt	mg/kg	184	184	100%	--	--	3.84	14.8	7.0	23	--	--
IC	Copper	mg/kg	184	184	100%	--	--	12.5	116	34	3,130	--	--
IC	Iron	mg/kg	184	184	100%	--	--	10,400	27,200	17,110	54,800	--	--
IC	Lead[b]	mg/kg	184	184	100%	--	--	19.1	1,920	324	400	44	--
IC	Magnesium	mg/kg	184	184	100%	--	--	2,300	14,200	4,631	--	--	--
IC	Manganese	mg/kg	184	184	100%	--	--	224	1,860	553	1,830	1	--
IC	Nickel	mg/kg	184	184	100%	--	--	9.54	50.9	17	1,550	--	--
IC	Potassium	mg/kg	184	184	100%	--	--	846	3,370	1,771	--	--	--
IC	Selenium	mg/kg	184	184	100%	--	--	0.1	2.31	0.40	391	--	--
IC	Silver	mg/kg	184	184	100%	--	--	0.087	1.92	0.43	391	--	--
IC	Sodium	mg/kg	183	184	99%	145	145	49.3	278	139	--	--	--
IC	Thallium	mg/kg	184	184	100%	--	--	0.095	1.12	0.34	0.78	13	--
IC	Vanadium	mg/kg	184	184	100%	--	--	20.7	51.5	31	394	--	--
IC	Zinc	mg/kg	184	184	100%	--	--	69.9	1,520	330	23,500	--	--
D	Aluminum	mg/kg	328	328	100%	--	--	5,390	38,500	16,139	77,400	--	--
D	Antimony	mg/kg	328	328	100%	--	--	0.139	37	3.0	31	1	--
D	Arsenic[a]	mg/kg	328	328	100%	--	--	2.39	164	19	20	99	--
D	Barium	mg/kg	328	328	100%	--	--	40.9	672	204	15,300	--	--
D	Beryllium	mg/kg	328	328	100%	--	--	0.221	1.16	0.53	156	--	--
D	Cadmium	mg/kg	328	328	100%	--	--	0.091	49.8	4.2	70	--	--
D	Calcium	mg/kg	328	328	100%	--	--	1,520	154,000	5,349	--	--	--
D	Chromium	mg/kg	328	328	100%	--	--	11.4	86.8	22	117,000	--	--
D	Cobalt	mg/kg	328	328	100%	--	--	3.52	23.7	7.4	23	1	--
D	Copper	mg/kg	328	328	100%	--	--	9.28	158	29	3,130	--	--
D	Iron	mg/kg	328	328	100%	--	--	10,500	51,200	17,501	54,800	--	--
D	Lead[b]	mg/kg	328	328	100%	--	--	6.87	2,330	178	400	38	--
D	Magnesium	mg/kg	328	328	100%	--	--	1,950	28,700	4,388	--	--	--
D	Manganese	mg/kg	328	328	100%	--	--	171	3,760	569	1,830	5	--
D	Nickel	mg/kg	328	328	100%	--	--	8.53	102	18	1,550	--	--
D	Potassium	mg/kg	328	328	100%	--	--	559	6,230	1,588	--	--	--
D	Selenium	mg/kg	328	328	100%	--	--	0.08	2.45	0.36	391	--	--
D	Silver	mg/kg	328	328	100%	--	--	0.046	2.1	0.32	391	--	--

Table 6-4

Summary of Total Metals Analytical Results and Comparison to Screening Levels - House Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
D	Sodium	mg/kg	328	328	100%	--	--	48.5	308	138	--	--	--
D	Thallium	mg/kg	328	328	100%	--	--	0.094	1.31	0.26	0.78	4	--
D	Vanadium	mg/kg	328	328	100%	--	--	16.6	142	33	394	--	--
D	Zinc	mg/kg	328	328	100%	--	--	44.4	2,230	244	23,500	--	--

Notes:

[a] Total arsenic values reported by the laboratory, see Table 6-12 for adjusted values

[b] Total lead values reported by the laboratory, see Table 6-12 for adjusted values

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-5

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Dripline Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Aluminum	mg/kg	34	34	100%	--	--	6,660	25,200	13,229	77,400	--	--
IC	Antimony	mg/kg	34	34	100%	--	--	0.438	10.8	2.2	31	--	--
IC	Arsenic[a]	mg/kg	34	34	100%	--	--	3.76	32.5	13	20	5	--
IC	Barium	mg/kg	34	34	100%	--	--	62.5	368	187	15,300	--	--
IC	Beryllium	mg/kg	34	34	100%	--	--	0.244	0.748	0.48	156	--	--
IC	Cadmium	mg/kg	34	34	100%	--	--	0.718	12.2	3.9	70	--	--
IC	Calcium	mg/kg	34	34	100%	--	--	2,420	77,700	9,943	--	--	--
IC	Chromium	mg/kg	34	34	100%	--	--	15.6	43.3	26	117,000	--	--
IC	Cobalt	mg/kg	34	34	100%	--	--	4.15	15.1	7.3	23	--	--
IC	Copper	mg/kg	34	34	100%	--	--	13.5	142	36	3,130	--	--
IC	Iron	mg/kg	34	34	100%	--	--	12,100	28,200	17,412	54,800	--	--
IC	Lead[b]	mg/kg	34	34	100%	--	--	33.4	744	193	400	5	--
IC	Magnesium	mg/kg	34	34	100%	--	--	2,590	10,500	4,610	--	--	--
IC	Manganese	mg/kg	34	34	100%	--	--	244	1,150	506	1,830	--	--
IC	Nickel	mg/kg	34	34	100%	--	--	10.6	30.4	18	1,550	--	--
IC	Potassium	mg/kg	34	34	100%	--	--	742	3,500	1,736	--	--	--
IC	Selenium	mg/kg	34	34	100%	--	--	0.13	0.79	0.33	391	--	--
IC	Silver	mg/kg	34	34	100%	--	--	0.132	1.17	0.39	391	--	--
IC	Sodium	mg/kg	34	34	100%	--	--	55.8	279	147	--	--	--
IC	Thallium	mg/kg	34	34	100%	--	--	0.138	0.587	0.27	0.78	--	--
IC	Vanadium	mg/kg	34	34	100%	--	--	21.9	56.7	32	394	--	--
IC	Zinc	mg/kg	34	34	100%	--	--	156	3,110	583	23,500	--	--

Notes:

[a] Total arsenic values reported by the laboratory, see Table 6-13 for adjusted values

[b] Total lead values reported by the laboratory, see Table 6-13 for adjusted values

-- = no value

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-6

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Garden Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Aluminum	mg/kg	84	84	100%	--	--	7,750	23,900	15,357	77,400	--	--
IC	Antimony	mg/kg	84	84	100%	--	--	0.471	10.3	1.8	31	--	--
IC	Arsenic[a]	mg/kg	84	84	100%	--	--	4.66	37.5	12	20	9	--
IC	Barium	mg/kg	84	84	100%	--	--	101	376	203	15,300	--	--
IC	Beryllium	mg/kg	84	84	100%	--	--	0.29	0.718	0.50	156	--	--
IC	Cadmium	mg/kg	84	84	100%	--	--	0.849	13.1	2.9	70	--	--
IC	Calcium	mg/kg	84	84	100%	--	--	2,500	53,000	7,770	--	--	--
IC	Chromium	mg/kg	84	84	100%	--	--	14.4	45	23	117,000	--	--
IC	Cobalt	mg/kg	84	84	100%	--	--	4.64	12.6	7.5	23	--	--
IC	Copper	mg/kg	84	84	100%	--	--	12.9	57.2	27	3,130	--	--
IC	Iron	mg/kg	84	84	100%	--	--	11,100	26,600	17,957	54,800	--	--
IC	Lead[b]	mg/kg	84	84	100%	--	--	34.5	650	125	400	3	--
IC	Magnesium	mg/kg	84	84	100%	--	--	2,950	9,020	4,716	--	--	--
IC	Manganese	mg/kg	84	84	100%	--	--	260	878	502	1,830	--	--
IC	Nickel	mg/kg	84	84	100%	--	--	11.5	47.8	21	1,550	--	--
IC	Potassium	mg/kg	84	84	100%	--	--	964	3,600	1,956	--	--	--
IC	Selenium	mg/kg	84	84	100%	--	--	0.11	9.04	0.46	391	--	--
IC	Silver	mg/kg	84	84	100%	--	--	0.11	0.819	0.29	391	--	--
IC	Sodium	mg/kg	84	84	100%	--	--	68.9	415	166	--	--	--
IC	Thallium	mg/kg	84	84	100%	--	--	0.108	0.559	0.22	0.78	--	--
IC	Vanadium	mg/kg	84	84	100%	--	--	21	59.4	32	394	--	--
IC	Zinc	mg/kg	84	84	100%	--	--	96.4	525	208	23,500	--	--
D	Aluminum	mg/kg	17	17	100%	--	--	10,800	21,300	16,435	77,400	--	--
D	Antimony	mg/kg	17	17	100%	--	--	0.828	19.2	5.8	31	--	--
D	Arsenic[a]	mg/kg	17	17	100%	--	--	7.25	91.2	29	20	8	--
D	Barium	mg/kg	17	17	100%	--	--	128	220	185	15,300	--	--
D	Beryllium	mg/kg	17	17	100%	--	--	0.322	0.935	0.55	156	--	--
D	Cadmium	mg/kg	17	17	100%	--	--	1.32	19.8	6.5	70	--	--
D	Calcium	mg/kg	17	17	100%	--	--	2,130	40,900	7,491	--	--	--
D	Chromium	mg/kg	17	17	100%	--	--	15.5	25.3	20	117,000	--	--
D	Cobalt	mg/kg	17	17	100%	--	--	5.47	9.45	7.2	23	--	--
D	Copper	mg/kg	17	17	100%	--	--	14.4	93.2	36	3,130	--	--
D	Iron	mg/kg	17	17	100%	--	--	12,900	23,200	18,018	54,800	--	--
D	Lead[b]	mg/kg	17	17	100%	--	--	52	1,070	346	400	4	--
D	Magnesium	mg/kg	17	17	100%	--	--	3,320	6,140	4,330	--	--	--
D	Manganese	mg/kg	17	17	100%	--	--	248	1,070	580	1,830	--	--
D	Nickel	mg/kg	17	17	100%	--	--	14.6	21.9	17	1,550	--	--
D	Potassium	mg/kg	17	17	100%	--	--	1,110	1,970	1,419	--	--	--
D	Selenium	mg/kg	17	17	100%	--	--	0.28	1.22	0.55	391	--	--
D	Silver	mg/kg	17	17	100%	--	--	0.162	1.32	0.49	391	--	--

Table 6-6

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Garden Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
D	Sodium	mg/kg	17	17	100%	--	--	74.1	237	130	--	--	--
D	Thallium	mg/kg	17	17	100%	--	--	0.188	0.81	0.38	0.78	2	--
D	Vanadium	mg/kg	17	17	100%	--	--	20.2	42.8	32	394	--	--
D	Zinc	mg/kg	17	17	100%	--	--	117	592	292	23,500	--	--

Notes:

[a] Total arsenic values reported by the laboratory, see Table 6-14 for adjusted values

[b] Total lead values reported by the laboratory, see Table 6-14 for adjusted values

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-7

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Beach Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Aluminum	mg/kg	45	45	100%	--	--	3,360	6,740	5,021	77,400	--	--
IC	Antimony	mg/kg	45	45	100%	--	--	1.99	53.4	8.4	31	3	--
IC	Arsenic[a]	mg/kg	45	45	100%	--	--	4.27	25.4	11	20	2	--
IC	Barium	mg/kg	45	45	100%	--	--	282	628	414	15,300	--	--
IC	Beryllium	mg/kg	45	45	100%	--	--	0.162	0.319	0.24	156	--	--
IC	Cadmium	mg/kg	45	45	100%	--	--	1.76	6.89	4.0	70	--	--
IC	Calcium	mg/kg	45	45	100%	--	--	15,100	117,000	37,193	--	--	--
IC	Chromium	mg/kg	45	45	100%	--	--	10.4	29.4	18	117,000	--	--
IC	Cobalt	mg/kg	45	45	100%	--	--	3.44	11.9	6.2	23	--	--
IC	Copper	mg/kg	45	45	100%	--	--	32	488	125	3,130	--	--
IC	Iron	mg/kg	45	45	100%	--	--	13,000	41,300	24,491	54,800	--	--
IC	Lead[b]	mg/kg	45	45	100%	--	--	96.4	372	239	400	--	--
IC	Magnesium	mg/kg	45	45	100%	--	--	8,720	33,400	17,285	--	--	--
IC	Manganese	mg/kg	45	45	100%	--	--	165	652	354	1,830	--	--
IC	Nickel	mg/kg	45	45	100%	--	--	8.61	15.8	13	1,550	--	--
IC	Potassium	mg/kg	45	45	100%	--	--	691	1,280	926	--	--	--
IC	Selenium	mg/kg	45	45	100%	--	--	0.23	0.69	0.45	391	--	--
IC	Silver	mg/kg	45	45	100%	--	--	0.264	5.34	1.2	391	--	--
IC	Sodium	mg/kg	45	45	100%	--	--	78.4	373	140	--	--	--
IC	Thallium	mg/kg	45	45	100%	--	--	0.083	0.308	0.21	0.78	--	--
IC	Vanadium	mg/kg	45	45	100%	--	--	19.3	41.7	28	394	--	--
IC	Zinc	mg/kg	45	45	100%	--	--	571	3,940	1,623	23,500	--	--
D	Aluminum	mg/kg	6	6	100%	--	--	5,690	7,200	6,213	77,400	--	--
D	Antimony	mg/kg	6	6	100%	--	--	3.75	8.95	5.4	31	--	--
D	Arsenic[a]	mg/kg	6	6	100%	--	--	6.81	15.9	9.3	20	--	--
D	Barium	mg/kg	6	6	100%	--	--	320	433	368	15,300	--	--
D	Beryllium	mg/kg	6	6	100%	--	--	0.286	0.358	0.31	156	--	--
D	Cadmium	mg/kg	6	6	100%	--	--	2.73	3.49	3.1	70	--	--
D	Calcium	mg/kg	6	6	100%	--	--	12,800	20,400	18,400	--	--	--
D	Chromium	mg/kg	6	6	100%	--	--	17.8	31.1	21	117,000	--	--
D	Cobalt	mg/kg	6	6	100%	--	--	5.3	6.77	6.0	23	--	--
D	Copper	mg/kg	6	6	100%	--	--	82.7	126	105	3,130	--	--
D	Iron	mg/kg	6	6	100%	--	--	20,500	33,800	25,500	54,800	--	--
D	Lead[b]	mg/kg	6	6	100%	--	--	157	299	208	400	--	--
D	Magnesium	mg/kg	6	6	100%	--	--	8,420	13,100	11,603	--	--	--
D	Manganese	mg/kg	6	6	100%	--	--	214	427	276	1,830	--	--
D	Nickel	mg/kg	6	6	100%	--	--	11.3	16.5	13	1,550	--	--
D	Potassium	mg/kg	6	6	100%	--	--	856	1,340	1,077	--	--	--
D	Selenium	mg/kg	6	6	100%	--	--	0.41	0.66	0.51	391	--	--
D	Silver	mg/kg	6	6	100%	--	--	0.699	1.65	0.94	391	--	--

Table 6-7

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Beach Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
D	Sodium	mg/kg	6	6	100%	--	--	125	145	133	--	--	--
D	Thallium	mg/kg	6	6	100%	--	--	0.186	0.328	0.27	0.78	--	--
D	Vanadium	mg/kg	6	6	100%	--	--	24.1	55	33	394	--	--
D	Zinc	mg/kg	6	6	100%	--	--	965	2,080	1,583	23,500	--	--

Notes:

[a] Total arsenic values reported by the laboratory, see Table 6-15 for adjusted values

[b] Total lead values reported by the laboratory, see Table 6-15 for adjusted values

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-8

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Play Area Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Aluminum	mg/kg	19	19	100%	--	--	6,730	22,300	14,235	77,400	--	--
IC	Antimony	mg/kg	19	19	100%	--	--	0.377	24.3	6.2	31	--	--
IC	Arsenic[a]	mg/kg	19	19	100%	--	--	3.37	110	32	20	9	--
IC	Barium	mg/kg	19	19	100%	--	--	99.5	238	161	15,300	--	--
IC	Beryllium	mg/kg	19	19	100%	--	--	0.298	0.687	0.50	156	--	--
IC	Cadmium	mg/kg	19	19	100%	--	--	0.753	18.5	6.6	70	--	--
IC	Calcium	mg/kg	19	19	100%	--	--	2,590	14,700	5,176	--	--	--
IC	Chromium	mg/kg	19	19	100%	--	--	14.9	33.6	24	117,000	--	--
IC	Cobalt	mg/kg	19	19	100%	--	--	4.99	10.1	7.0	23	--	--
IC	Copper	mg/kg	19	19	100%	--	--	10.8	76.4	33	3,130	--	--
IC	Iron	mg/kg	19	19	100%	--	--	12,600	21,300	17,526	54,800	--	--
IC	Lead[b]	mg/kg	19	19	100%	--	--	25.7	1,340	455	400	7	--
IC	Magnesium	mg/kg	19	19	100%	--	--	2,900	5,820	4,517	--	--	--
IC	Manganese	mg/kg	19	19	100%	--	--	205	697	445	1,830	--	--
IC	Nickel	mg/kg	19	19	100%	--	--	12.6	22.5	17	1,550	--	--
IC	Potassium	mg/kg	19	19	100%	--	--	1,300	2,630	1,787	--	--	--
IC	Selenium	mg/kg	19	19	100%	--	--	0.1	1.06	0.40	391	--	--
IC	Silver	mg/kg	19	19	100%	--	--	0.085	1.29	0.42	391	--	--
IC	Sodium	mg/kg	16	19	84%	138	141	89.8	191	123	--	--	--
IC	Thallium	mg/kg	19	19	100%	--	--	0.111	1.03	0.46	0.78	6	--
IC	Vanadium	mg/kg	19	19	100%	--	--	24.3	48	33	394	--	--
IC	Zinc	mg/kg	19	19	100%	--	--	97.5	809	341	23,500	--	--
D	Aluminum	mg/kg	16	16	100%	--	--	6,980	27,500	14,626	77,400	--	--
D	Antimony	mg/kg	16	16	100%	--	--	0.226	8.88	2.5	31	--	--
D	Arsenic[a]	mg/kg	16	16	100%	--	--	2.91	45.5	14	20	5	--
D	Barium	mg/kg	16	16	100%	--	--	97.5	305	182	15,300	--	--
D	Beryllium	mg/kg	16	16	100%	--	--	0.276	0.846	0.50	156	--	--
D	Cadmium	mg/kg	16	16	100%	--	--	0.532	12.3	4.1	70	--	--
D	Calcium	mg/kg	16	16	100%	--	--	2,620	13,200	5,369	--	--	--
D	Chromium	mg/kg	16	16	100%	--	--	16.1	23.4	19	117,000	--	--
D	Cobalt	mg/kg	16	16	100%	--	--	4.94	8.86	7.0	23	--	--
D	Copper	mg/kg	16	16	100%	--	--	11.7	51.5	26	3,130	--	--
D	Iron	mg/kg	16	16	100%	--	--	13,100	23,200	17,456	54,800	--	--
D	Lead[b]	mg/kg	16	16	100%	--	--	13.9	584	169	400	1	--
D	Magnesium	mg/kg	16	16	100%	--	--	3,290	5,510	4,375	--	--	--
D	Manganese	mg/kg	16	16	100%	--	--	176	889	460	1,830	--	--
D	Nickel	mg/kg	16	16	100%	--	--	13.5	19.7	16	1,550	--	--
D	Potassium	mg/kg	16	16	100%	--	--	1,180	2,660	1,833	--	--	--
D	Selenium	mg/kg	16	16	100%	--	--	0.15	0.53	0.29	391	--	--
D	Silver	mg/kg	16	16	100%	--	--	0.079	1.15	0.31	391	--	--

Table 6-8

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Play Area Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
D	Sodium	mg/kg	16	16	100%	--	--	107	186	135	--	--	--
D	Thallium	mg/kg	16	16	100%	--	--	0.095	0.485	0.27	0.78	--	--
D	Vanadium	mg/kg	16	16	100%	--	--	23.2	41.8	32	394	--	--
D	Zinc	mg/kg	16	16	100%	--	--	68.6	548	243	23,500	--	--

Notes:

[a] Total arsenic values reported by the laboratory, see Table 6-16 for adjusted values

[b] Total lead values reported by the laboratory, see Table 6-16 for adjusted values

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-9

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Other Not Specified Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Aluminum	mg/kg	130	130	100%	--	--	3,310	31,100	13,226	77,400	--	--
IC	Antimony	mg/kg	130	130	100%	--	--	0.365	15.7	3.0	31	--	--
IC	Arsenic[a]	mg/kg	130	130	100%	--	--	4.4	80.8	18	20	45	--
IC	Barium	mg/kg	130	130	100%	--	--	66.5	644	211	15,300	--	--
IC	Beryllium	mg/kg	130	130	100%	--	--	0.239	1.08	0.48	156	--	--
IC	Cadmium	mg/kg	130	130	100%	--	--	0.831	20.5	5.5	70	--	--
IC	Calcium	mg/kg	130	130	100%	--	--	2,270	64,800	8,915	--	--	--
IC	Chromium	mg/kg	130	130	100%	--	--	11.9	46.9	23	117,000	--	--
IC	Cobalt	mg/kg	130	130	100%	--	--	4.3	16.3	7.3	23	--	--
IC	Copper	mg/kg	130	130	100%	--	--	11.9	104	31	3,130	--	--
IC	Iron	mg/kg	130	130	100%	--	--	12,300	35,300	18,435	54,800	--	--
IC	Lead[b]	mg/kg	130	130	100%	--	--	32.8	1,120	261	400	29	--
IC	Magnesium	mg/kg	130	130	100%	--	--	2,660	38,200	5,781	--	--	--
IC	Manganese	mg/kg	130	130	100%	--	--	188	1,120	537	1,830	--	--
IC	Nickel	mg/kg	130	130	100%	--	--	10.6	42.5	17	1,550	--	--
IC	Potassium	mg/kg	130	130	100%	--	--	656	4,840	1,794	--	--	--
IC	Selenium	mg/kg	130	130	100%	--	--	0.1	0.86	0.34	391	--	--
IC	Silver	mg/kg	130	130	100%	--	--	0.115	1.99	0.35	391	--	--
IC	Sodium	mg/kg	127	130	98%	116	125	59.6	335	127	--	--	--
IC	Thallium	mg/kg	130	130	100%	--	--	0.126	0.792	0.31	0.78	1	--
IC	Vanadium	mg/kg	130	130	100%	--	--	20.8	61.3	34	394	--	--
IC	Zinc	mg/kg	130	130	100%	--	--	72.3	1,710	379	23,500	--	--
D	Aluminum	mg/kg	35	35	100%	--	--	8,510	31,700	20,285	77,400	--	--
D	Antimony	mg/kg	35	35	100%	--	--	0.904	12.7	3.6	31	--	--
D	Arsenic[a]	mg/kg	35	35	100%	--	--	7.25	59.4	21	20	19	--
D	Barium	mg/kg	35	35	100%	--	--	96.6	315	211	15,300	--	--
D	Beryllium	mg/kg	35	35	100%	--	--	0.333	0.814	0.62	156	--	--
D	Cadmium	mg/kg	35	35	100%	--	--	0.97	15	5.1	70	--	--
D	Calcium	mg/kg	35	35	100%	--	--	2,560	141,000	13,098	--	--	--
D	Chromium	mg/kg	35	35	100%	--	--	11.3	43.1	24	117,000	--	--
D	Cobalt	mg/kg	35	35	100%	--	--	5.2	15	8.2	23	--	--
D	Copper	mg/kg	35	35	100%	--	--	14.7	73.3	38	3,130	--	--
D	Iron	mg/kg	35	35	100%	--	--	14,300	27,200	18,909	54,800	--	--
D	Lead[b]	mg/kg	35	35	100%	--	--	34.6	701	189	400	2	--
D	Magnesium	mg/kg	35	35	100%	--	--	2,490	8,910	4,560	--	--	--
D	Manganese	mg/kg	35	35	100%	--	--	383	948	652	1,830	--	--
D	Nickel	mg/kg	35	35	100%	--	--	10.5	33.6	18	1,550	--	--
D	Potassium	mg/kg	35	35	100%	--	--	888	2,240	1,421	--	--	--
D	Selenium	mg/kg	35	35	100%	--	--	0.15	1.2	0.48	391	--	--
D	Silver	mg/kg	35	35	100%	--	--	0.12	0.96	0.33	391	--	--

Table 6-9

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Other Not Specified Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
D	Sodium	mg/kg	35	35	100%	--	--	59.5	318	157	--	--	--
D	Thallium	mg/kg	35	35	100%	--	--	0.161	0.503	0.30	0.78	--	--
D	Vanadium	mg/kg	35	35	100%	--	--	25.4	65.2	38	394	--	--
D	Zinc	mg/kg	35	35	100%	--	--	117	729	292	23,500	--	--

Notes:

[a] Total arsenic values reported by the laboratory, see Table 6-17 for adjusted values

[b] Total lead values reported by the laboratory, see Table 6-17 for adjusted values

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-10

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Agriculture Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Aluminum	mg/kg	42	42	100%	--	--	7,040	26,700	12,959	77,400	--	--
IC	Antimony	mg/kg	42	42	100%	--	--	0.561	7.41	1.9	31	--	--
IC	Arsenic[a]	mg/kg	42	42	100%	--	--	4.88	25.4	11	20	3	--
IC	Barium	mg/kg	42	42	100%	--	--	116	262	172	15,300	--	--
IC	Beryllium	mg/kg	42	42	100%	--	--	0.248	0.823	0.43	156	--	--
IC	Cadmium	mg/kg	42	42	100%	--	--	1.25	9.29	3.2	70	--	--
IC	Calcium	mg/kg	42	42	100%	--	--	2,420	99,100	12,654	--	--	--
IC	Chromium	mg/kg	42	42	100%	--	--	11.3	33.6	20	117,000	--	--
IC	Cobalt	mg/kg	42	42	100%	--	--	3.75	9.91	6.3	23	--	--
IC	Copper	mg/kg	42	42	100%	--	--	11.2	36.3	23	3,130	--	--
IC	Iron	mg/kg	42	42	100%	--	--	9,510	20,200	15,665	54,800	--	--
IC	Lead[b]	mg/kg	42	42	100%	--	--	57.1	633	154	400	3	--
IC	Magnesium	mg/kg	42	42	100%	--	--	3,070	5,590	4,159	--	--	--
IC	Manganese	mg/kg	42	42	100%	--	--	231	691	451	1,830	--	--
IC	Nickel	mg/kg	42	42	100%	--	--	12.3	26.4	17	1,550	--	--
IC	Potassium	mg/kg	42	42	100%	--	--	1,050	2,960	1,884	--	--	--
IC	Selenium	mg/kg	42	42	100%	--	--	0.1	1.25	0.36	391	--	--
IC	Silver	mg/kg	42	42	100%	--	--	0.128	0.655	0.27	391	--	--
IC	Sodium	mg/kg	42	42	100%	--	--	55.6	263	135	--	--	--
IC	Thallium	mg/kg	42	42	100%	--	--	0.147	0.594	0.24	1	--	--
IC	Vanadium	mg/kg	42	42	100%	--	--	14.6	42.4	27	394	--	--
IC	Zinc	mg/kg	42	42	100%	--	--	101	463	202	23,500	--	--

Notes:

[a] Total arsenic values reported by the laboratory, see Table 6-18 for adjusted values

[b] Total lead values reported by the laboratory, see Table 6-18 for adjusted values

-- = no value

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-11

Summary of Total Metals Analytical Results and Comparison to Screening Levels - Animal Activity Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Aluminum	mg/kg	3	3	100%	--	--	10,600	10,800	10,733	77,400	--	--
IC	Antimony	mg/kg	3	3	100%	--	--	1.96	2.03	2.0	31	--	--
IC	Arsenic[a]	mg/kg	3	3	100%	--	--	9.53	10.3	9.9	20	--	--
IC	Barium	mg/kg	3	3	100%	--	--	192	201	196	15,300	--	--
IC	Beryllium	mg/kg	3	3	100%	--	--	0.369	0.388	0.38	156	--	--
IC	Cadmium	mg/kg	3	3	100%	--	--	3.8	3.97	3.9	70	--	--
IC	Calcium	mg/kg	3	3	100%	--	--	3,530	3,960	3,683	--	--	--
IC	Chromium	mg/kg	3	3	100%	--	--	17.7	18.8	18	117,000	--	--
IC	Cobalt	mg/kg	3	3	100%	--	--	5.88	6.29	6.1	23	--	--
IC	Copper	mg/kg	3	3	100%	--	--	18.3	19.6	19	3,130	--	--
IC	Iron	mg/kg	3	3	100%	--	--	14,300	14,800	14,567	54,800	--	--
IC	Lead[b]	mg/kg	3	3	100%	--	--	163	175	171	400	--	--
IC	Magnesium	mg/kg	3	3	100%	--	--	3,800	4,090	3,930	--	--	--
IC	Manganese	mg/kg	3	3	100%	--	--	429	449	438	1,830	--	--
IC	Nickel	mg/kg	3	3	100%	--	--	15	15.8	15	1,550	--	--
IC	Potassium	mg/kg	3	3	100%	--	--	2,470	2,730	2,593	--	--	--
IC	Selenium	mg/kg	3	3	100%	--	--	0.23	0.27	0.25	391	--	--
IC	Silver	mg/kg	3	3	100%	--	--	0.254	0.271	0.26	391	--	--
IC	Sodium	mg/kg	3	3	100%	--	--	105	116	111	--	--	--
IC	Thallium	mg/kg	3	3	100%	--	--	0.23	0.247	0.24	0.78	--	--
IC	Vanadium	mg/kg	3	3	100%	--	--	24.9	26.2	26	394	--	--
IC	Zinc	mg/kg	3	3	100%	--	--	241	245	243	23,500	--	--

Notes:

[a] Total arsenic values reported by the laboratory, see Table 6-19 for adjusted values

[b] Total lead values reported by the laboratory, see Table 6-19 for adjusted values

-- = no value

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-12

Summary of Adjusted Arsenic and Adjusted Lead Analytical Results and Comparison to Screening Levels - House Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
IC	Arsenic Average Adjusted	mg/kg	64	64	100%	--	--	2.2	62	13	20	12	--
IC	Lead Average Adjusted	mg/kg	64	64	100%	--	--	24	1,936	348	400	15	--
D	Arsenic Adjusted	mg/kg	285	285	100%	--	--	1.4	98	11	20	30	--
D	Lead Adjusted	mg/kg	285	285	100%	--	--	7.4	2,502	191	400	34	--

Notes:

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-13

Summary of Adjusted Arsenic and Adjusted Lead Analytical Results and Comparison to Screening Levels -Dripline Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
IC	Arsenic Average Adjusted	mg/kg	34	34	100%	--	--	2.3	20	7.5	20	--	--
IC	Lead Average Adjusted	mg/kg	34	34	100%	--	--	37	908	206	400	4	--

Notes:

-- = no value

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-14

Summary of Adjusted Arsenic and Adjusted Lead Analytical Results and Comparison to Screening Levels - Garden Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Arsenic Average Adjusted	mg/kg	38	38	100%	--	--	2.9	21	7.4	20	1	--
IC	Lead Average Adjusted	mg/kg	38	38	100%	--	--	38	692	133	400	1	--
D	Arsenic Adjusted	mg/kg	15	15	100%	--	--	4.4	54	15	20	3	--
D	Lead Adjusted	mg/kg	15	15	100%	--	--	56	1,133	325	400	3	--

Notes:

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-15

Summary of Adjusted Arsenic and Adjusted Lead Analytical Results and Comparison to Screening Levels - Beach Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
IC	Arsenic Average Adjusted	mg/kg	15	15	100%	--	--	2.8	12	6.5	20	--	--
IC	Lead Average Adjusted	mg/kg	15	15	100%	--	--	119	326	224	400	--	--
D	Arsenic Adjusted	mg/kg	5	5	100%	--	--	4.1	9.5	5.9	20	--	--
D	Lead Adjusted	mg/kg	5	5	100%	--	--	149	284	203	400	--	--

Notes:

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-16

Summary of Adjusted Arsenic and Adjusted Lead Analytical Results and Comparison to Screening Levels - Play Area Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Arsenic Average Adjusted	mg/kg	7	7	100%	--	--	2.1	58	19	20	1	--
IC	Lead Average Adjusted	mg/kg	7	7	100%	--	--	29	1,341	487	400	3	--
D	Arsenic Adjusted	mg/kg	15	15	100%	--	--	1.7	27	7.8	20	1	--
D	Lead Adjusted	mg/kg	15	15	100%	--	--	15	627	169	400	1	--

Notes:

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-17

Summary of Adjusted Arsenic and Adjusted Lead Analytical Results and Comparison to Screening Levels - Other Not Specified Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Arsenic Average Adjusted	mg/kg	58	58	100%	--	--	2.6	48	11	20	7	--
IC	Lead Average Adjusted	mg/kg	58	58	100%	--	--	35	1,102	279	400	15	--
D	Arsenic Adjusted	mg/kg	30	30	100%	--	--	4.7	36	13	20	2	--
D	Lead Adjusted	mg/kg	30	30	100%	--	--	37	753	212	400	2	--

Notes:

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-18

Summary of Adjusted Arsenic and Adjusted Lead Analytical Results and Comparison to Screening Levels - Agriculture Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
IC	Arsenic Average Adjusted	mg/kg	18	18	100%	--	--	3.0	15	6.8	20	--	--
IC	Lead Average Adjusted	mg/kg	18	18	100%	--	--	73	706	165	400	1	--

Notes:

IC = incremental composite

-- = no value

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Table 6-19

Summary of Adjusted Arsenic and Adjusted Lead Analytical Results and Comparison to Screening Levels - Animal Activity Area Decision Units

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
IC	Arsenic Average Adjusted	mg/kg	1	1	100%	--	--	6.0	6.0	6.0	20	--	--
IC	Lead Average Adjusted	mg/kg	1	1	100%	--	--	173	173	173	400	--	--

Notes:

IC = incremental composite

-- = no value

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

TABLE 6-20

Summary of Total Metals Analytical Results and Comparison to Screening Levels - All IC and Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	Analyte	Units	Number of Detects	Number of Samples	Frequency of Detection	Minimum Nondetect Value	Maximum Nondetect Value	Minimum Detected Value	Maximum Detected Value	Arithmetic Mean	Screening Level	Number of Detects > Screening Level	Number of Nondetects > Screening Level
IC	Aluminum	mg/kg	541	541	100%	--	--	3,310	31,100	13,380	77,400	--	--
IC	Antimony	mg/kg	541	541	100%	--	--	0.266	53.4	3.6	31	3	--
IC	Arsenic[a]	mg/kg	541	541	100%	--	--	3.37	110	17	20	121	--
IC	Barium	mg/kg	541	541	100%	--	--	62.5	644	218	15,300	--	--
IC	Beryllium	mg/kg	541	541	100%	--	--	0.162	1.08	0.47	156	--	--
IC	Cadmium	mg/kg	541	541	100%	--	--	0.444	28.2	4.8	70	--	--
IC	Calcium	mg/kg	541	541	100%	--	--	1,970	117,000	11,064	--	--	--
IC	Chromium	mg/kg	541	541	100%	--	--	10.4	46.9	22	117,000	--	--
IC	Cobalt	mg/kg	541	541	100%	--	--	3.44	16.3	7.1	23	--	--
IC	Copper	mg/kg	541	541	100%	--	--	10.8	488	39	3,130	--	--
IC	Iron	mg/kg	541	541	100%	--	--	9,510	41,300	18,081	54,800	--	--
IC	Lead[b]	mg/kg	541	541	100%	--	--	19.1	1,920	253	400	91	--
IC	Magnesium	mg/kg	541	541	100%	--	--	2,300	38,200	5,927	--	--	--
IC	Manganese	mg/kg	541	541	100%	--	--	165	1,860	510	1,830	1	--
IC	Nickel	mg/kg	541	541	100%	--	--	8.61	50.9	18	1,550	--	--
IC	Potassium	mg/kg	541	541	100%	--	--	656	4,840	1,747	--	--	--
IC	Selenium	mg/kg	541	541	100%	--	--	0.1	9.04	0.39	391	--	--
IC	Silver	mg/kg	541	541	100%	--	--	0.085	5.34	0.44	391	--	--
IC	Sodium	mg/kg	537	541	99%	116	145	49.3	415	140	--	--	--
IC	Thallium	mg/kg	541	541	100%	--	--	0.083	1.12	0.30	0.78	20	--
IC	Vanadium	mg/kg	541	541	100%	--	--	14.6	61.3	31	394	--	--
IC	Zinc	mg/kg	541	541	100%	--	--	69.9	3,940	436	23,500	--	--
D	Aluminum	mg/kg	402	402	100%	--	--	5,390	38,500	16,304	77,400	--	--
D	Antimony	mg/kg	402	402	100%	--	--	0.139	37	3.2	31	1	--
D	Arsenic	mg/kg	402	402	100%	--	--	2.39	164	19	20	131	--
D	Barium	mg/kg	402	402	100%	--	--	40.9	672	206	15,300	--	--
D	Beryllium	mg/kg	402	402	100%	--	--	0.221	1.16	0.54	156	--	--
D	Cadmium	mg/kg	402	402	100%	--	--	0.091	49.8	4.4	70	--	--
D	Calcium	mg/kg	402	402	100%	--	--	1,520	154,000	6,310	--	--	--
D	Chromium	mg/kg	402	402	100%	--	--	11.3	86.8	22	117,000	--	--
D	Cobalt	mg/kg	402	402	100%	--	--	3.52	23.7	7.5	23	1	--
D	Copper	mg/kg	402	402	100%	--	--	9.28	158	31	3,130	--	--
D	Iron	mg/kg	402	402	100%	--	--	10,500	51,200	17,763	54,800	--	--
D	Lead	mg/kg	402	402	100%	--	--	6.87	2,330	186	400	45	--
D	Magnesium	mg/kg	402	402	100%	--	--	1,950	28,700	4,507	--	--	--
D	Manganese	mg/kg	402	402	100%	--	--	171	3,760	568	1,830	5	--
D	Nickel	mg/kg	402	402	100%	--	--	8.53	102	18	1,550	--	--
D	Potassium	mg/kg	402	402	100%	--	--	559	6,230	1,568	--	--	--
D	Selenium	mg/kg	402	402	100%	--	--	0.08	2.45	0.38	391	--	--
D	Silver	mg/kg	402	402	100%	--	--	0.046	2.1	0.34	391	--	--

TABLE 6-20

Summary of Total Metals Analytical Results and Comparison to Screening Levels - All IC and Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
D	Sodium	mg/kg	402	402	100%	--	--	48.5	318	139	--	--	--
D	Thallium	mg/kg	402	402	100%	--	--	0.094	1.31	0.27	0.78	6	--
D	Vanadium	mg/kg	402	402	100%	--	--	16.6	142	34	394	--	--
D	Zinc	mg/kg	402	402	100%	--	--	44.4	2,230	270	23,500	--	--

Notes:

[a] Total arsenic values reported by the laboratory, see Table 6-21 for adjusted values

[b] Total lead values reported by the laboratory, see Table 6-21 for adjusted values

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

TABLE 6-21

Summary of Adjusted Arsenic and Adjusted Lead Analytical Results and Comparison to Screening Levels - All IC and Discrete Samples

UCR Residential Soil Study Field Sampling and Data Summary Report

											Comparison to Screening Levels		
Type	**Analyte**	**Units**	**Number of Detects**	**Number of Samples**	**Frequency of Detection**	**Minimum Nondetect Value**	**Maximum Nondetect Value**	**Minimum Detected Value**	**Maximum Detected Value**	**Arithmetic Mean**	**Screening Level**	**Number of Detects > Screening Level**	**Number of Nondetects > Screening Level**
IC	Arsenic Average Adjusted	mg/kg	235	235	100%	--	--	2.1	62	10	20	23	--
IC	Lead Average Adjusted	mg/kg	235	235	100%	--	--	24	1,936	268	400	39	--
D	Arsenic Adjusted	mg/kg	350	350	100%	--	--	1.4	98	11	20	36	--
D	Lead Adjusted	mg/kg	350	350	100%	--	--	7.4	2,502	198	400	40	--

Notes:

-- = no value

D = discrete

IC = incremental composite

mg/kg = milligrams per kilogram

Shade = One or more result exceeds Screening Level

Figures

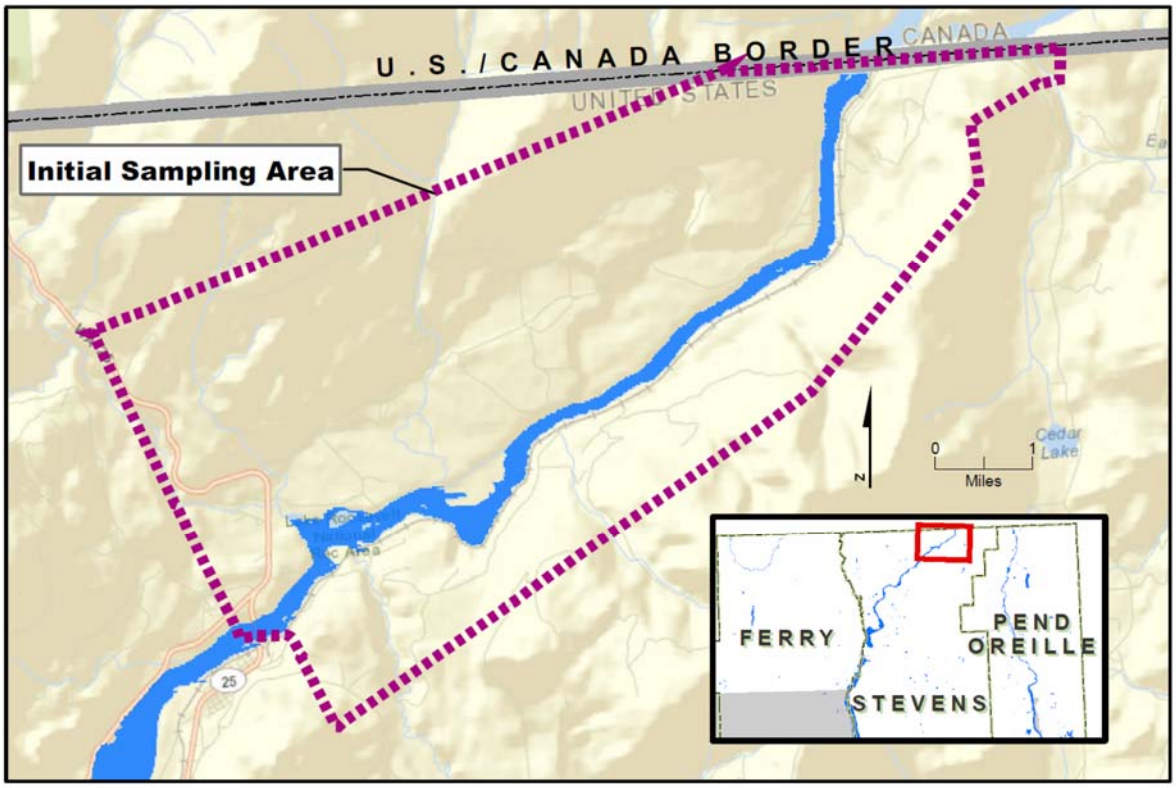
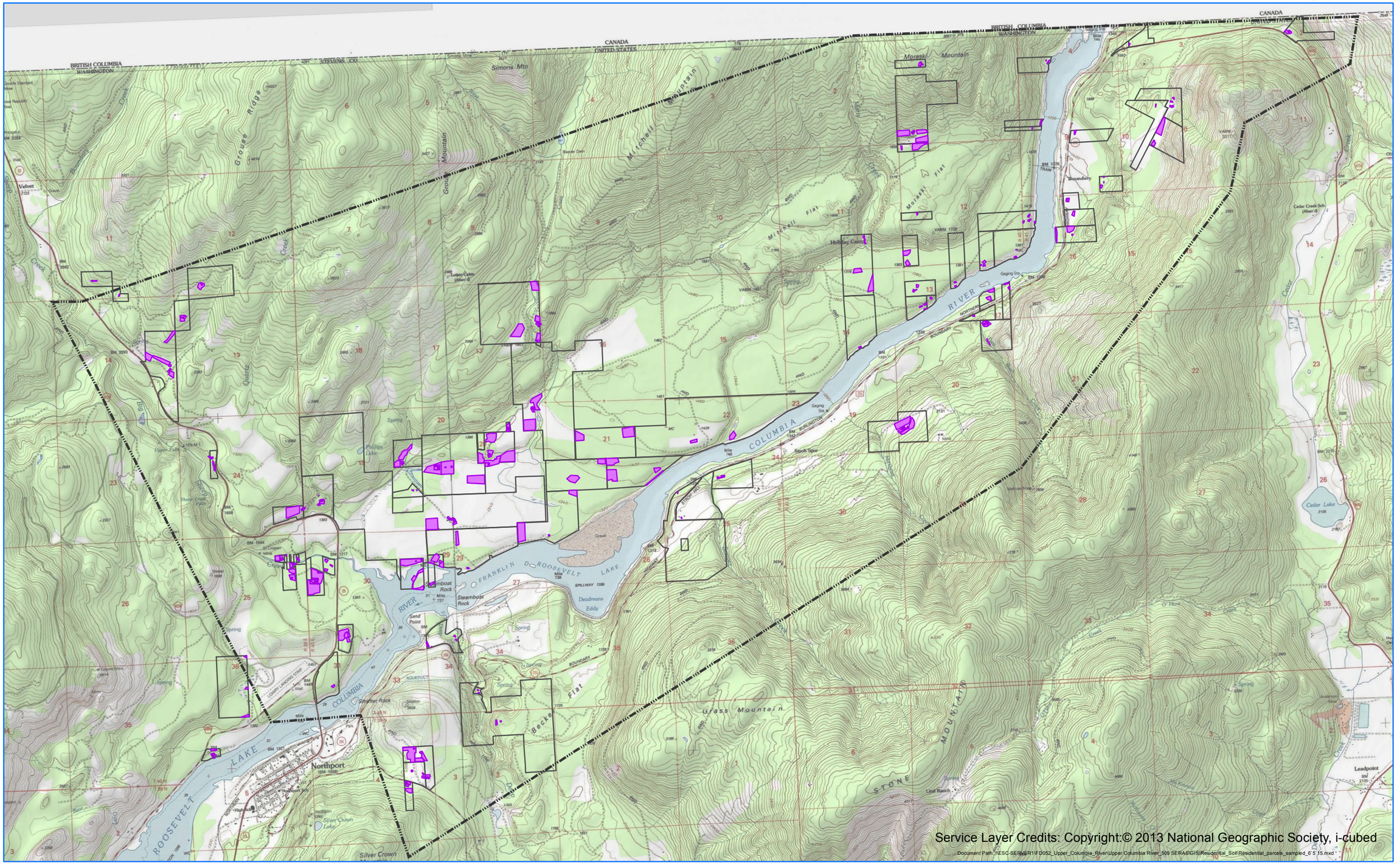


FIGURE 1-1
Residential Soil Study Area

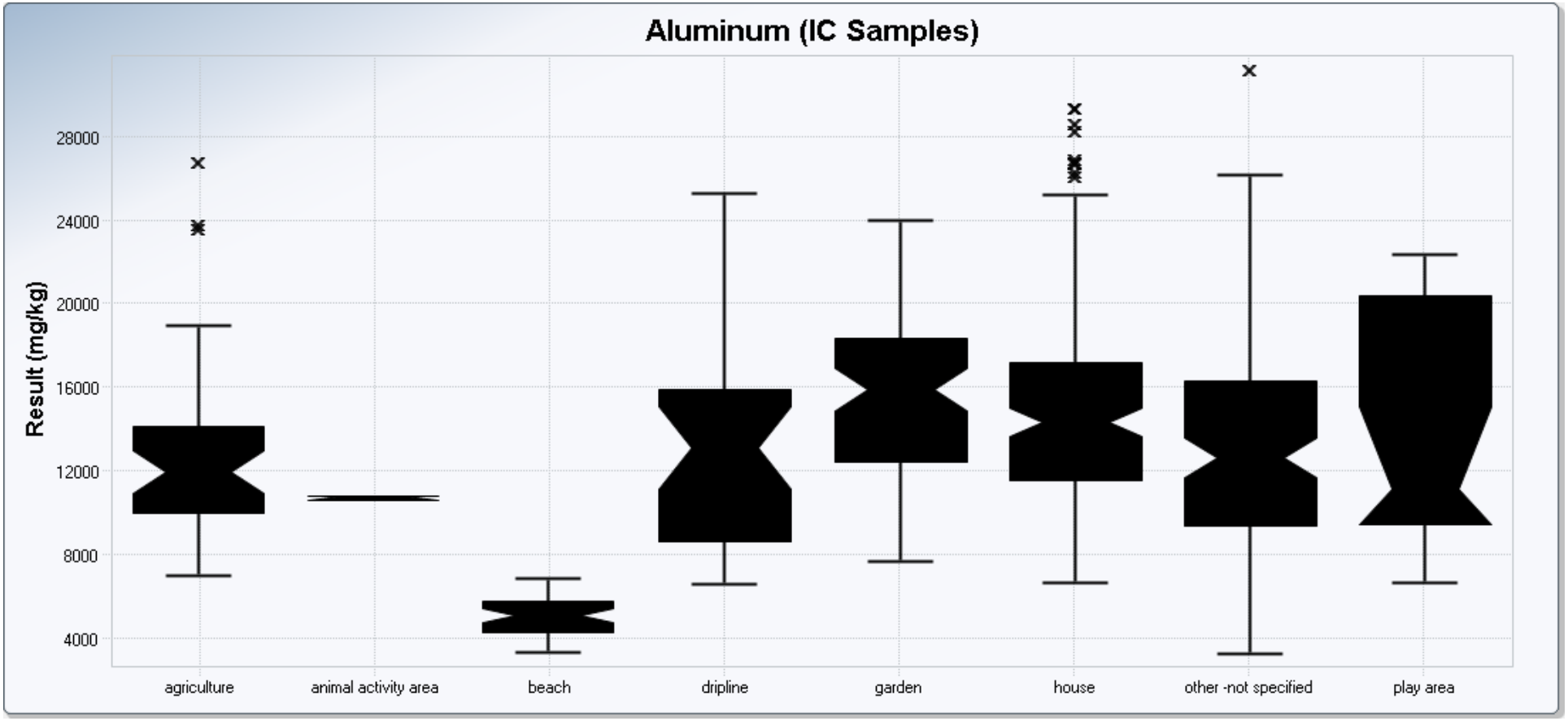
Figure 3-1 2014 UCR Residential Soil Study Sample Locations



N

0 0.4 Miles

- Residential Study Boundary
- Sampled Residential Properties
- Sampled Residential Decision Units



Screening level for aluminum (77,400 mg/kg) not shown because it is considerably above the range of detected concentrations.

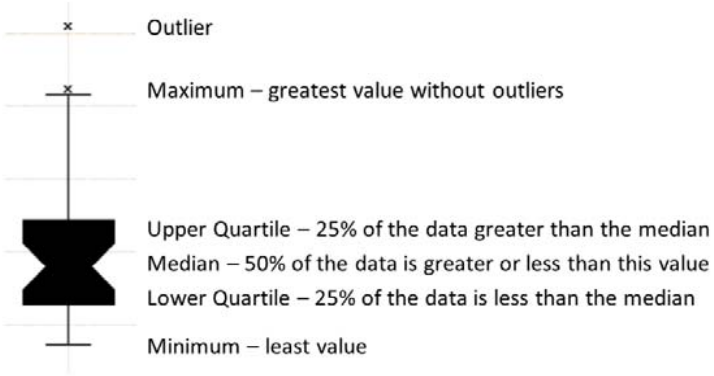
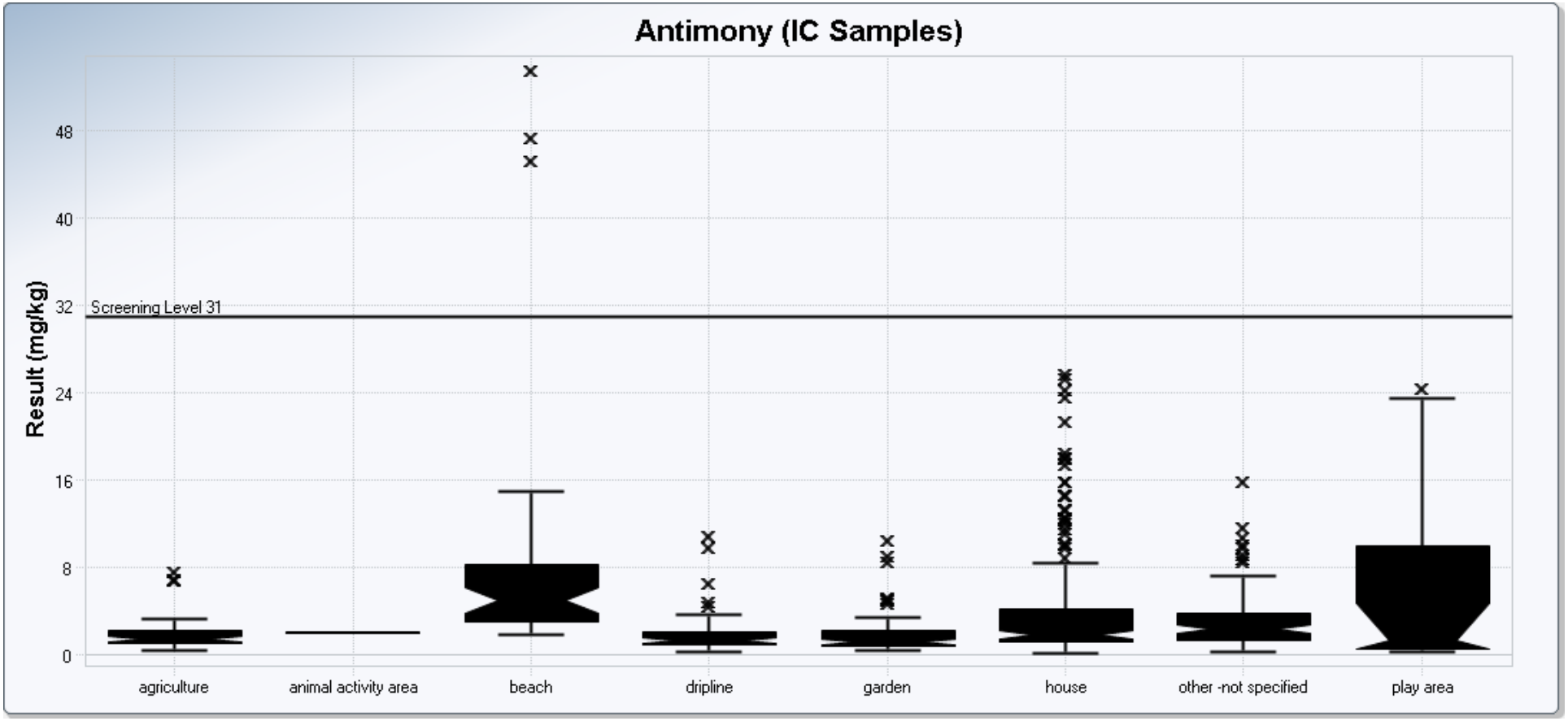


Figure 6-1
Concentrations of Aluminum by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



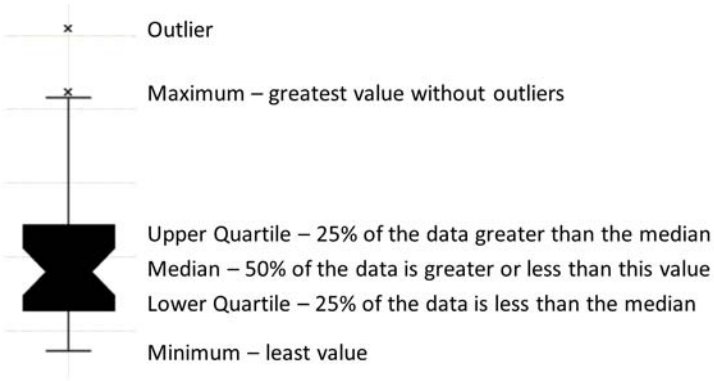
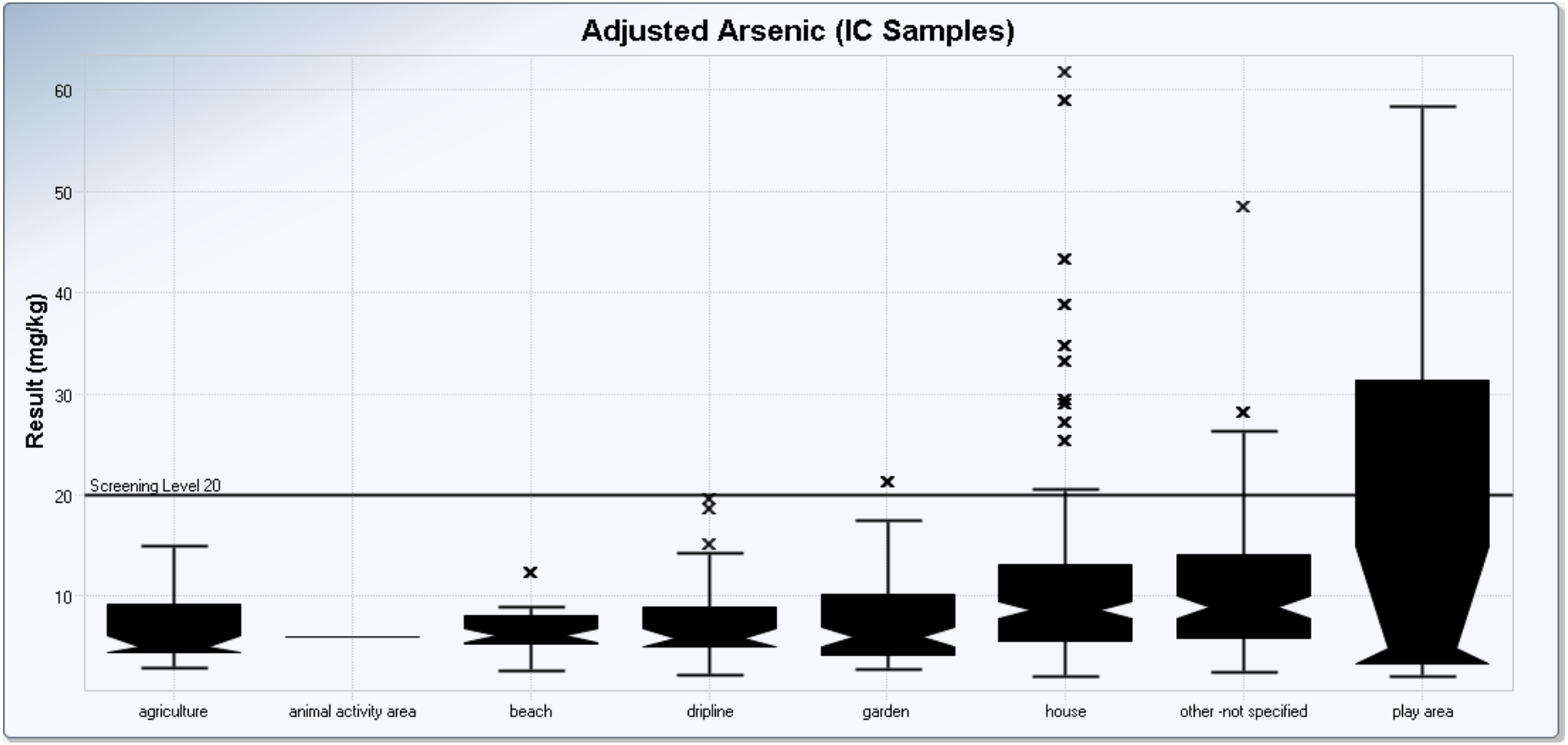


Figure 6-2
Concentrations of Antimony by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Results for arsenic adjusted by default RBA of 60%.

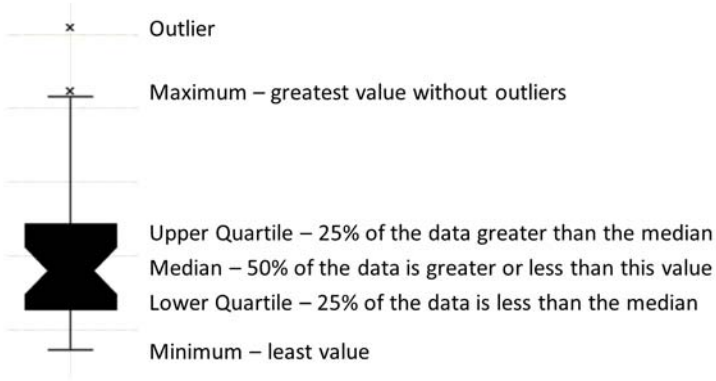
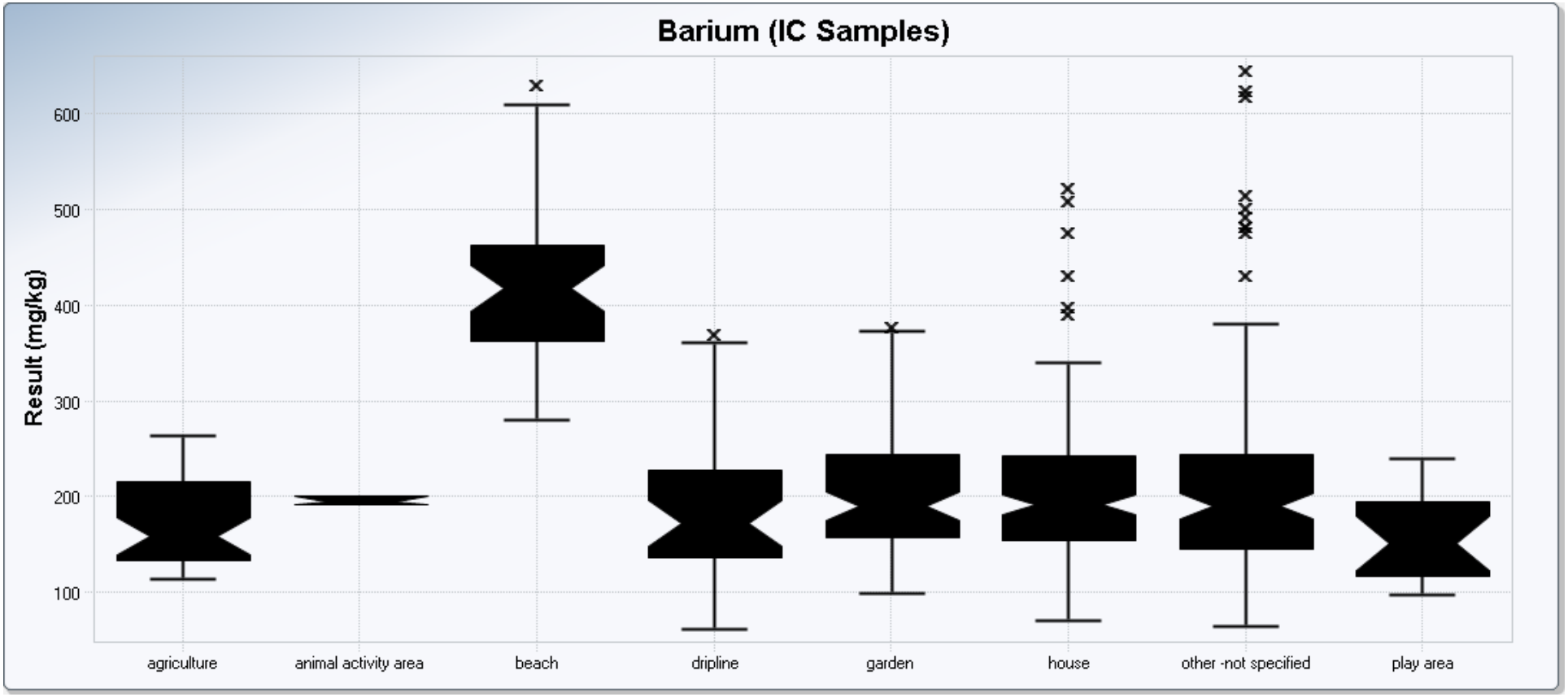


Figure 6-3
Concentrations of Arsenic by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for barium (15,300 mg/kg) not shown because it is considerably above the range of detected concentrations.

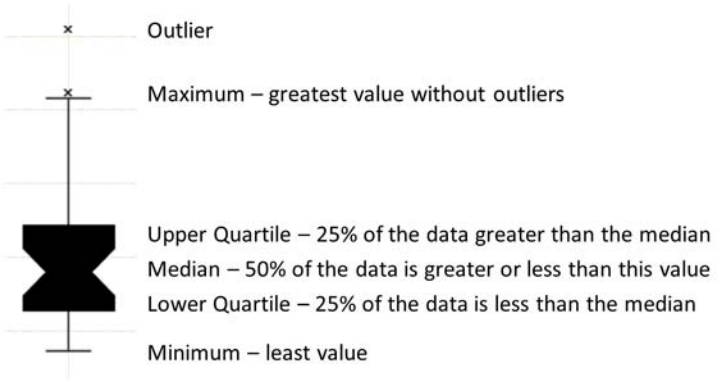
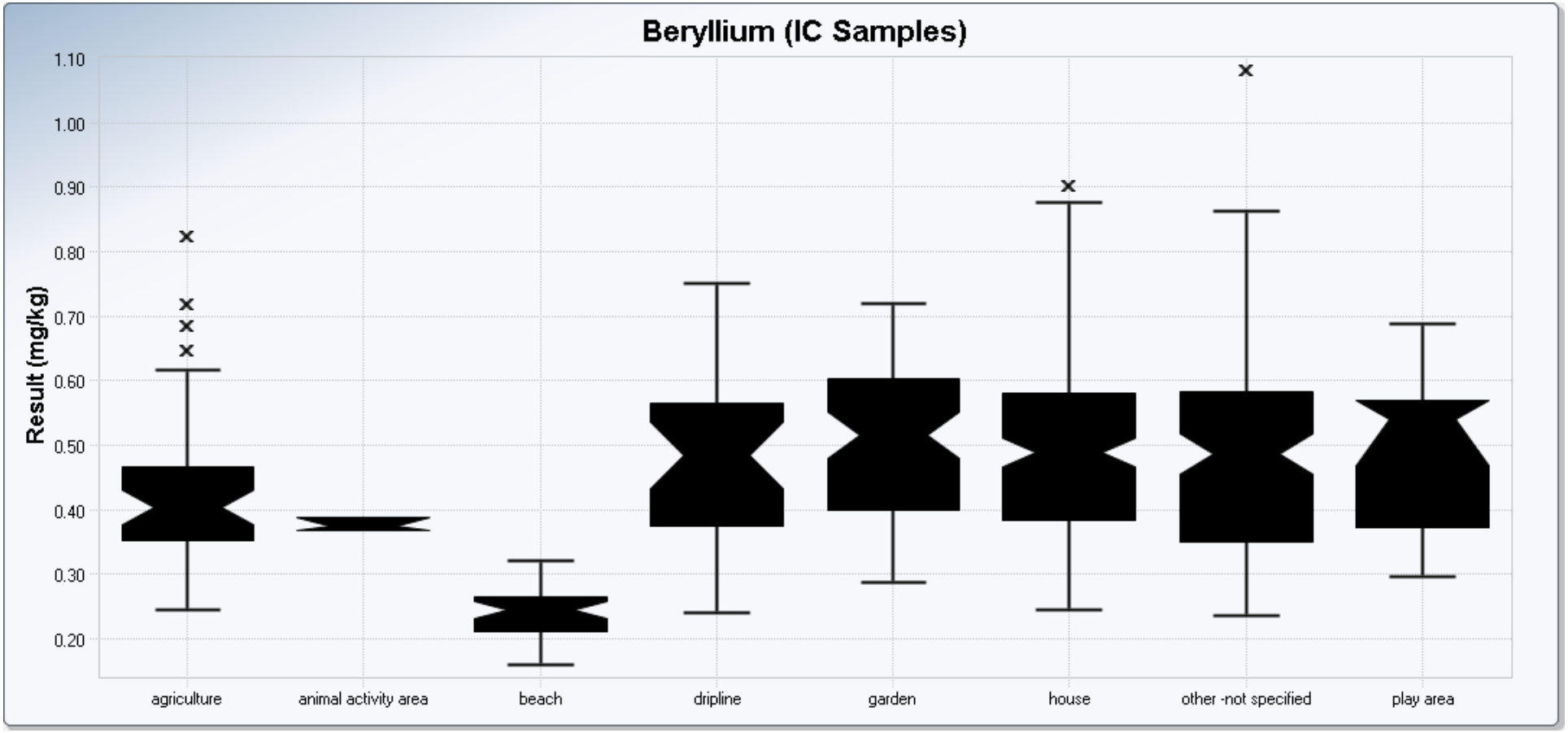


Figure 6-4
Concentrations of Barium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for beryllium (156 mg/kg) not shown because it is considerably above the range of detected concentrations.

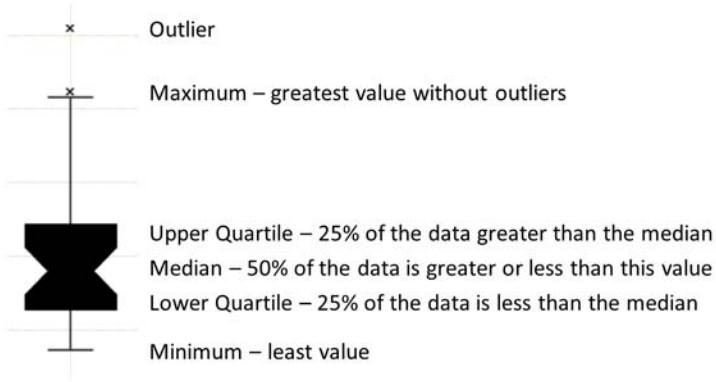
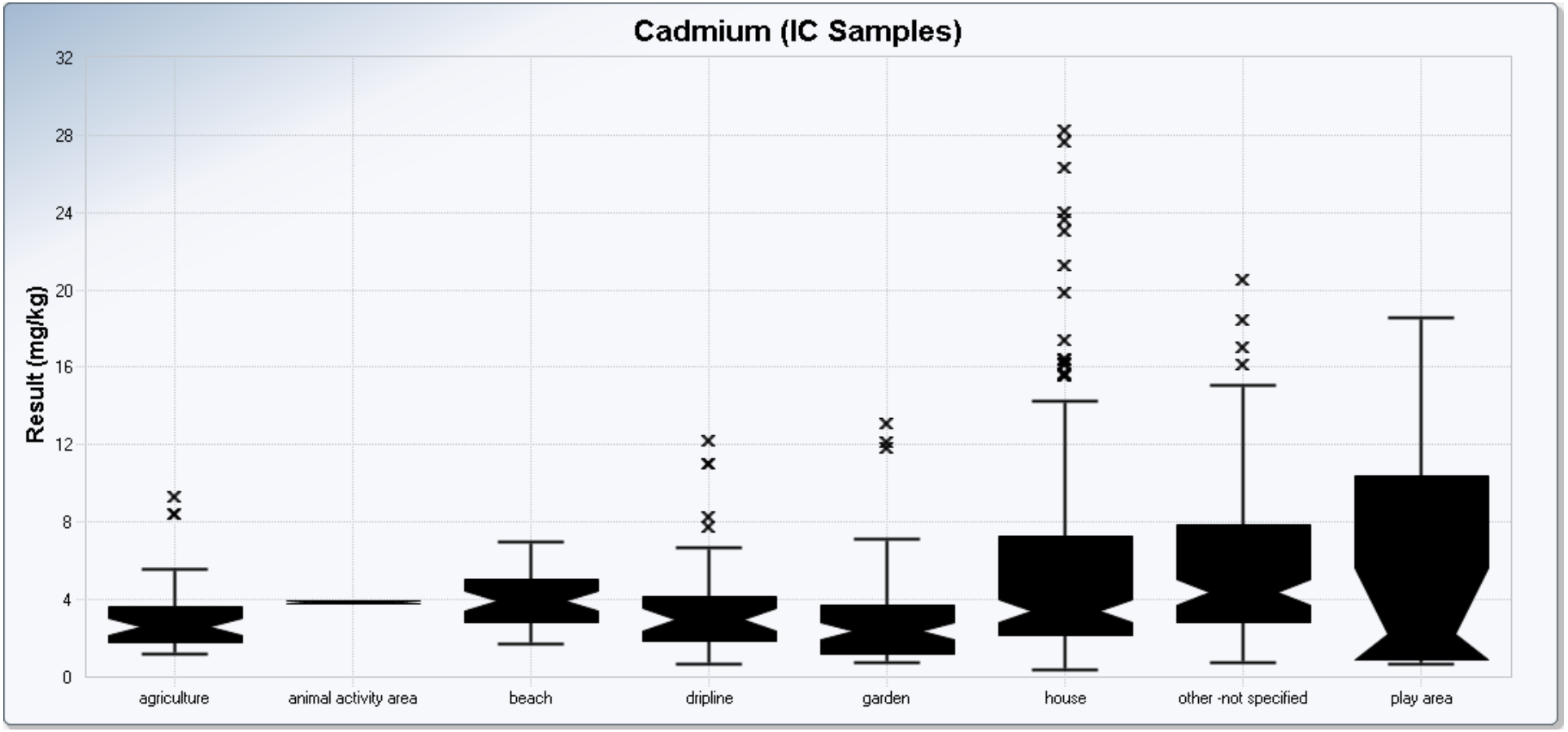


Figure 6-5
Concentrations of Beryllium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for cadmium (70 mg/kg) not shown because it is considerably above the range of detected concentrations.

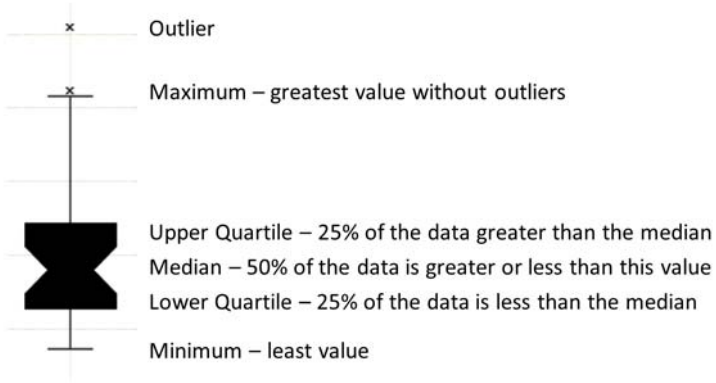
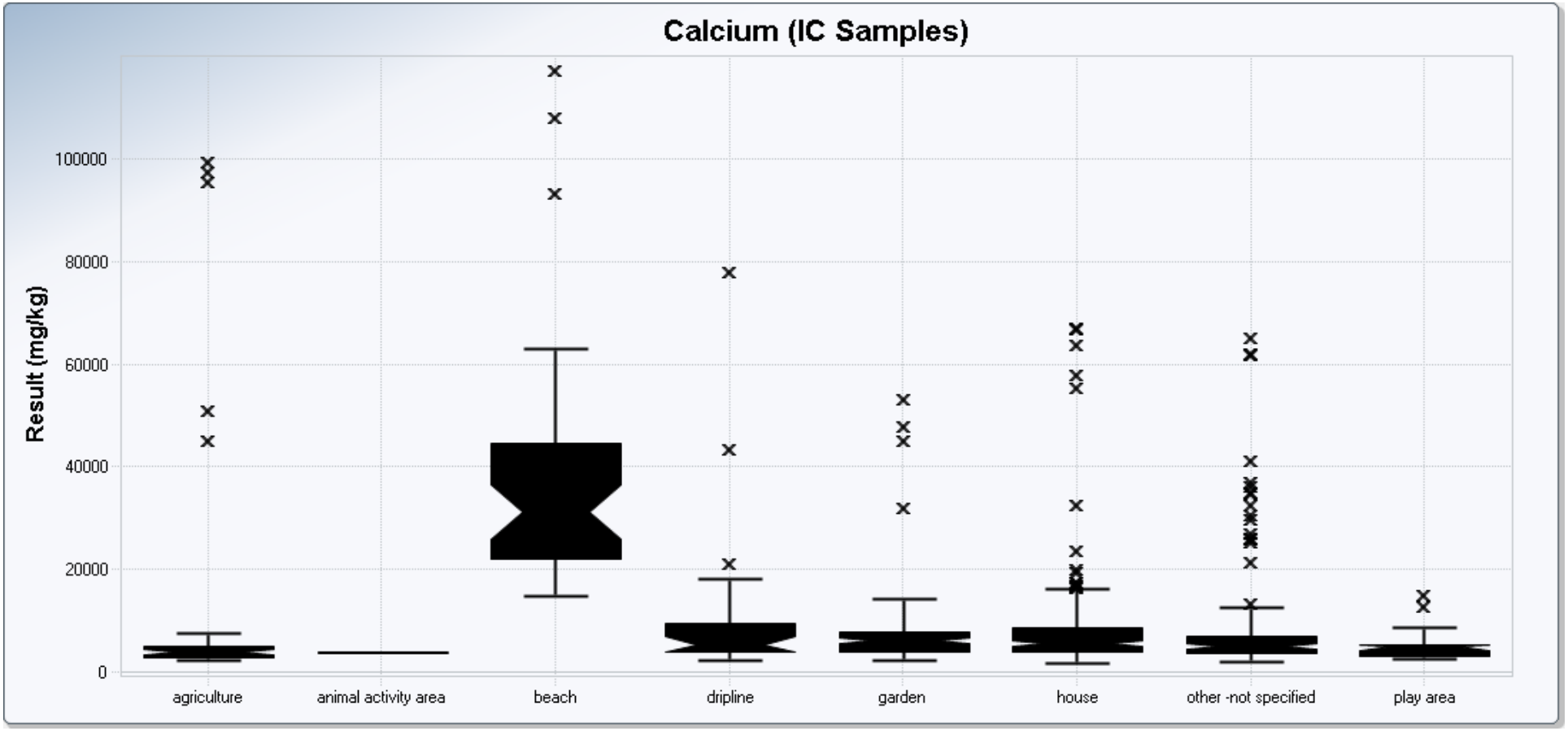


Figure 6-6
Concentrations of Cadmium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



There is no screening level for calcium because it is considered an essential nutrient.

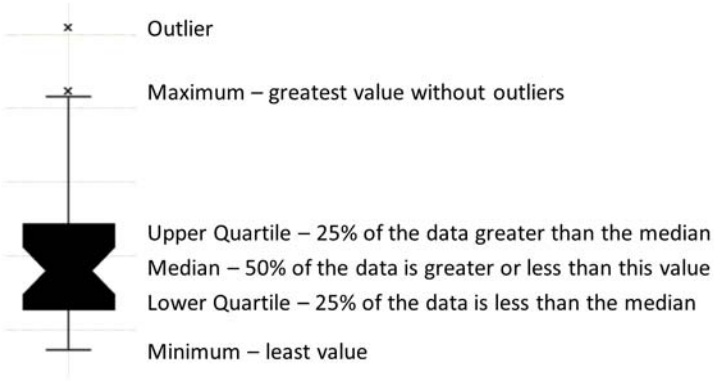
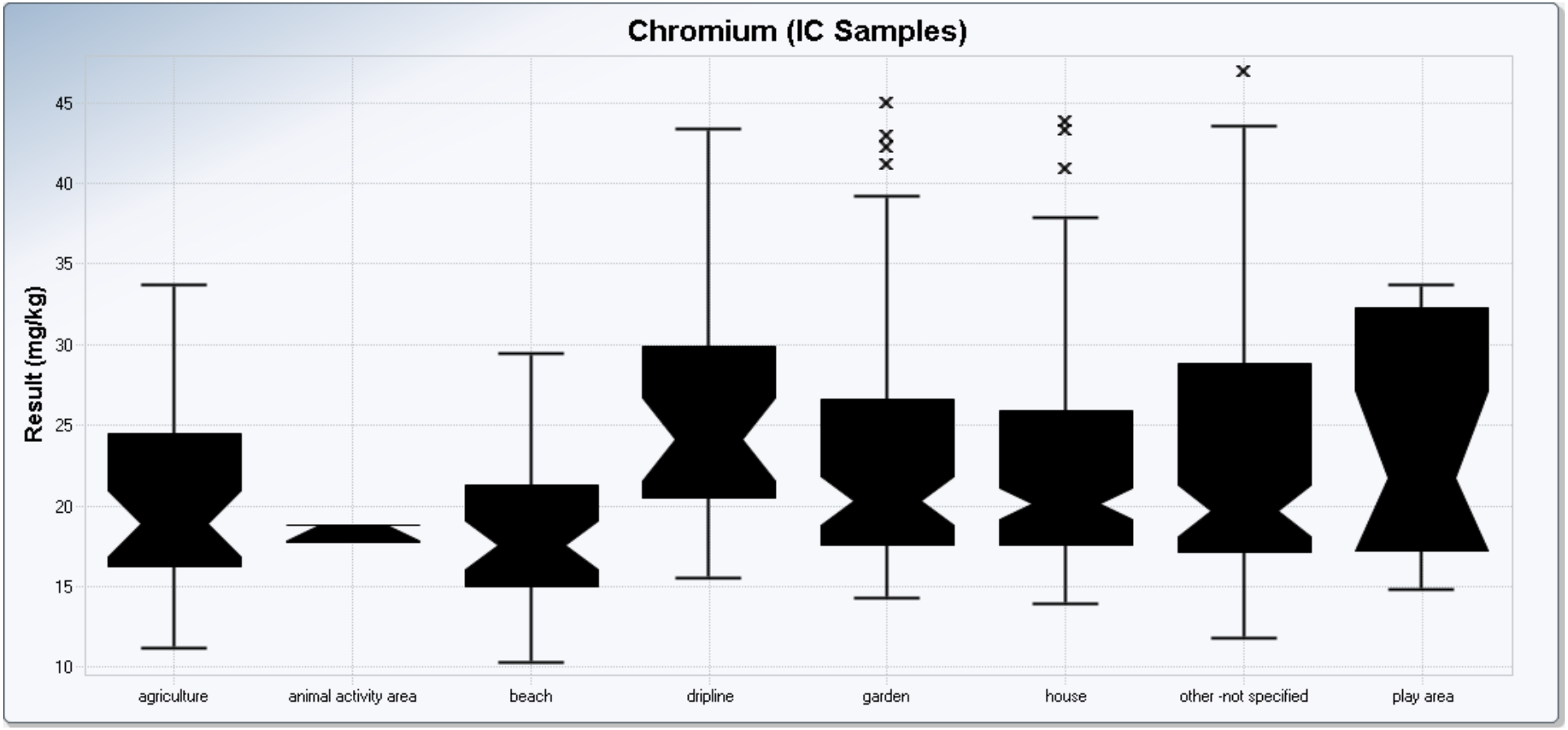


Figure 6-7
Concentrations of Calcium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for chromium (117,000 mg/kg) not shown because it is considerably above the range of detected concentrations.

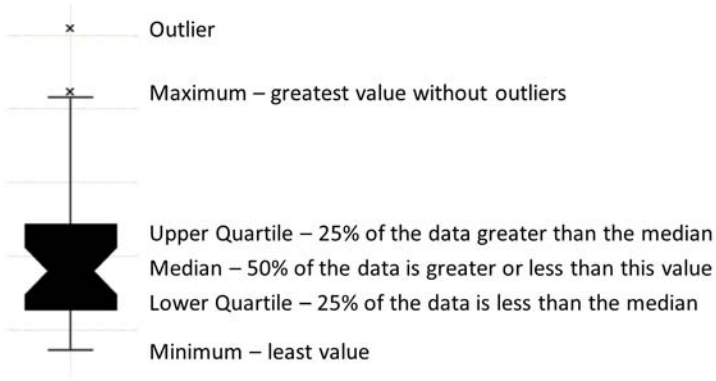
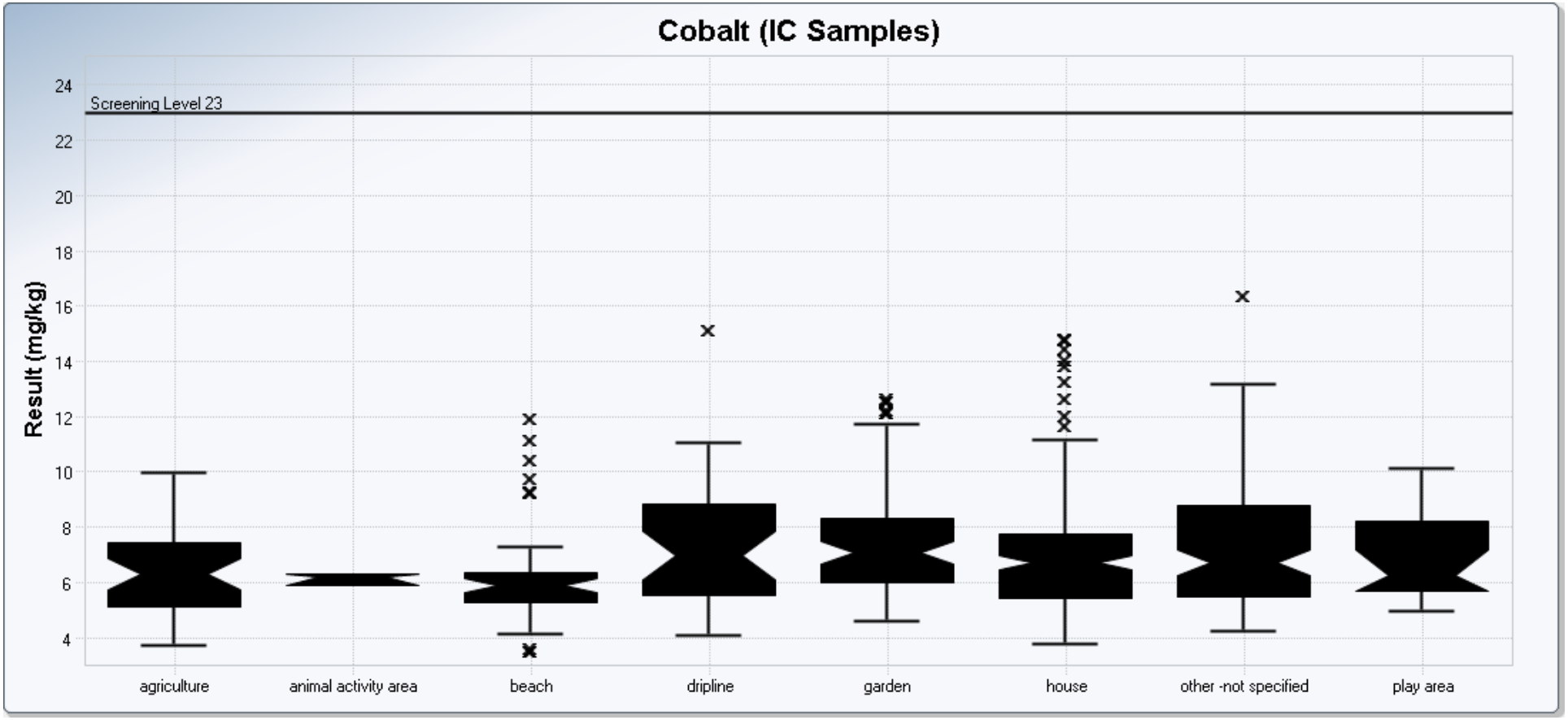


Figure 6-8
Concentrations of Chromium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



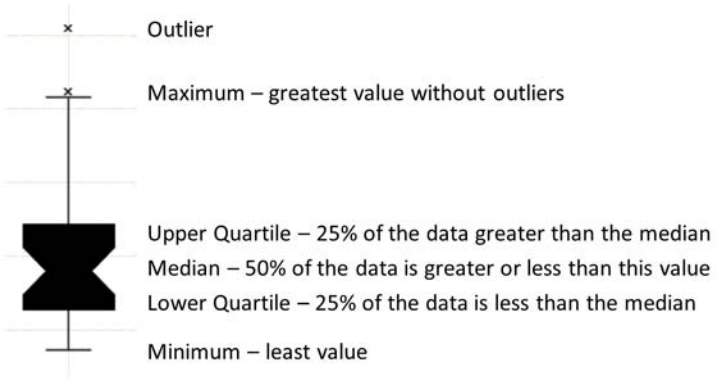
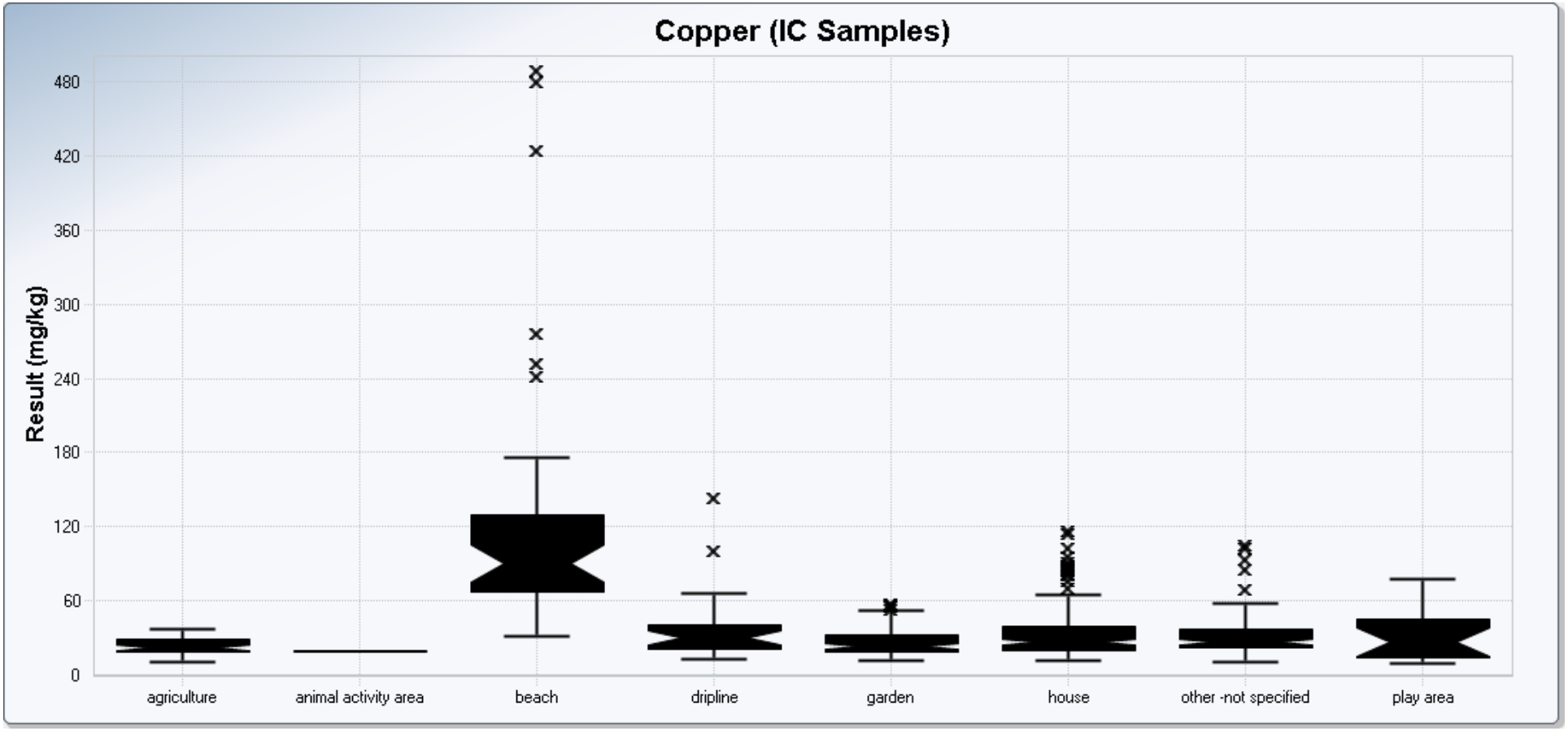


Figure 6-9
Concentrations of Cobalt by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for copper (3,130 mg/kg) not shown because it is considerably above the range of detected concentrations.

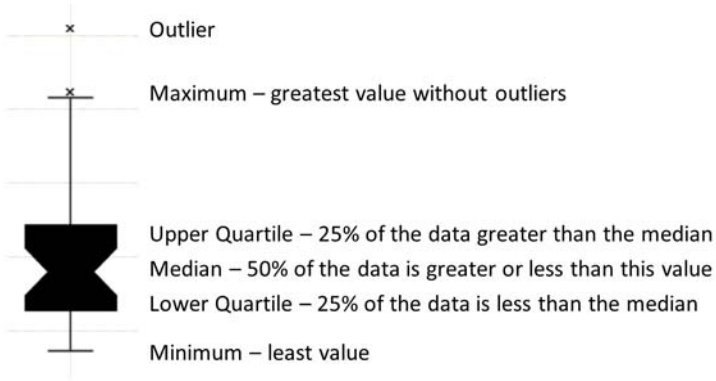
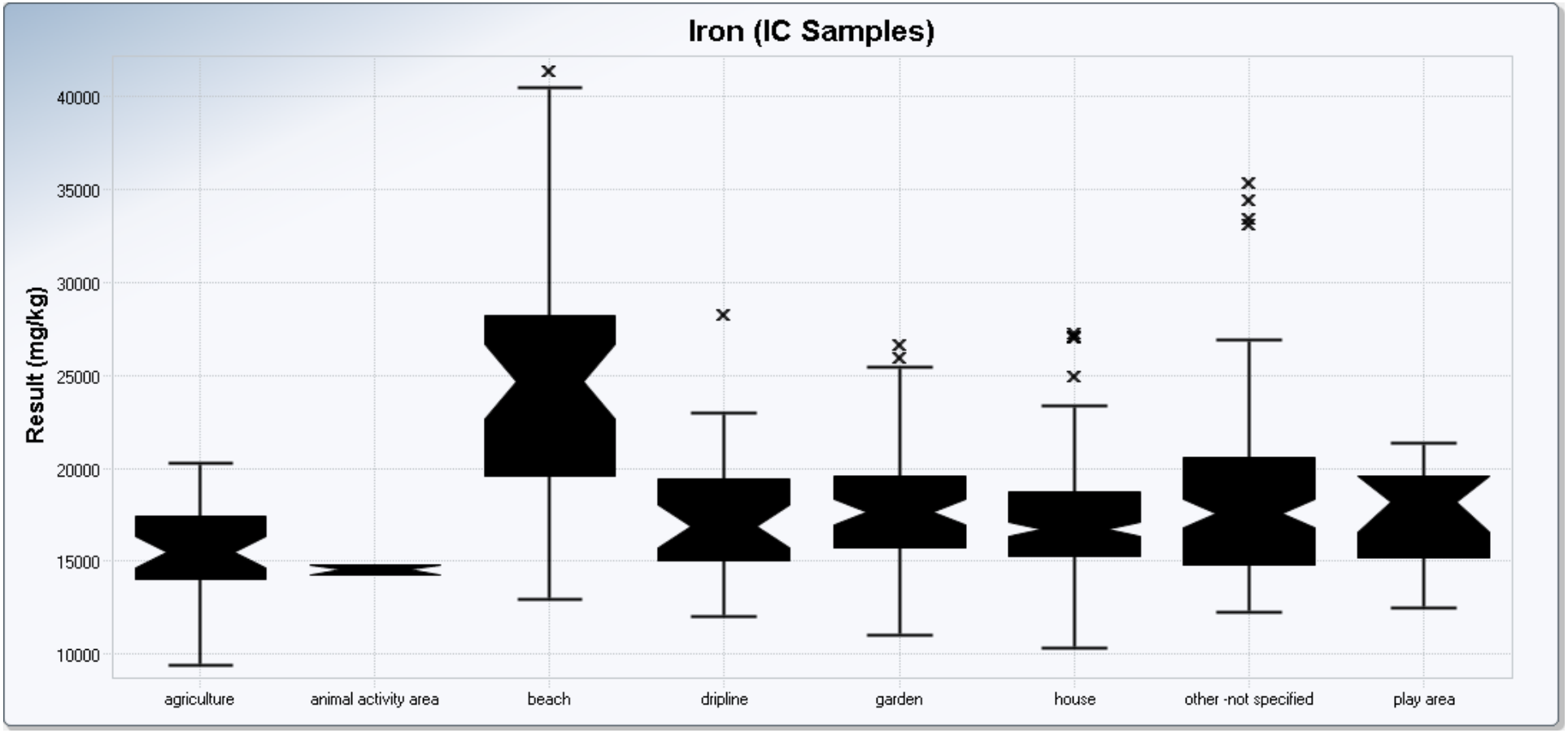


Figure 6-10
Concentrations of Copper by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for iron (54,800 mg/kg) not shown because it is considerably above the range of detected concentrations.

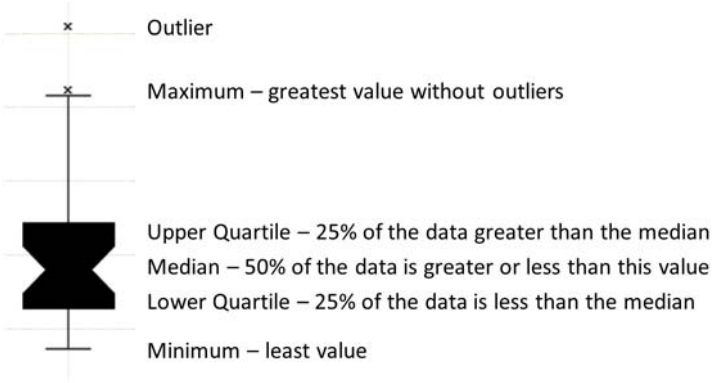
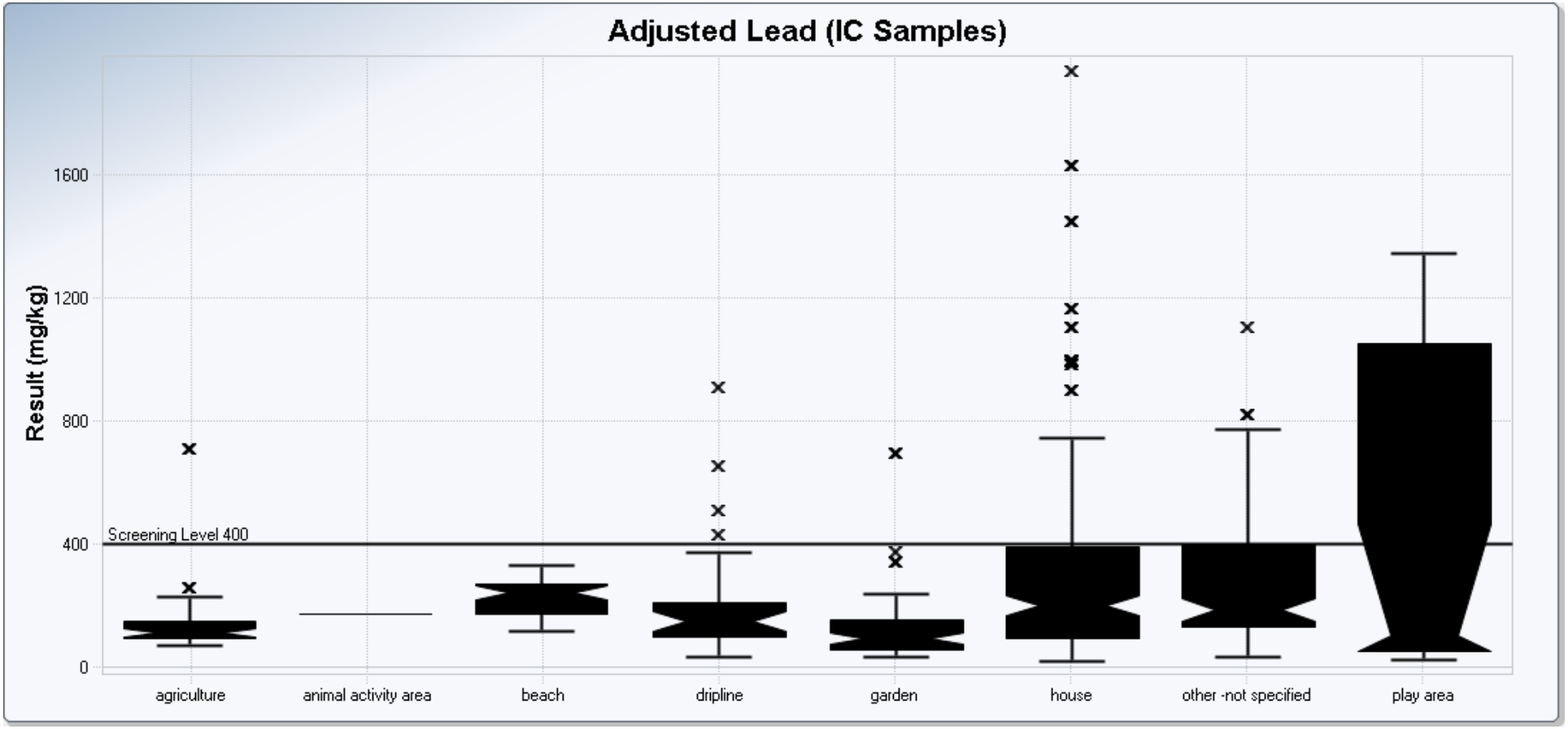


Figure 6-11
Concentrations of Iron by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Results for lead adjusted by DU-specify RBAs.

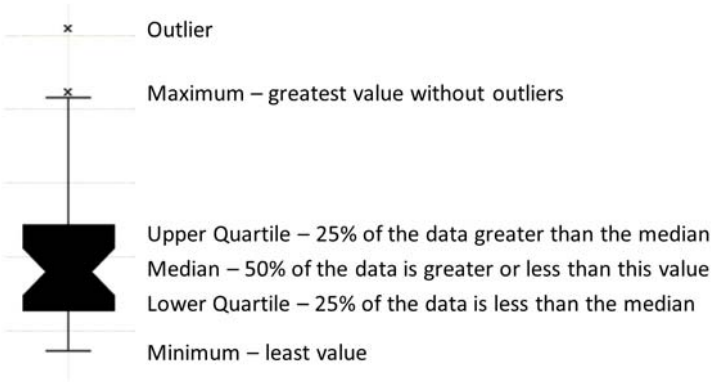
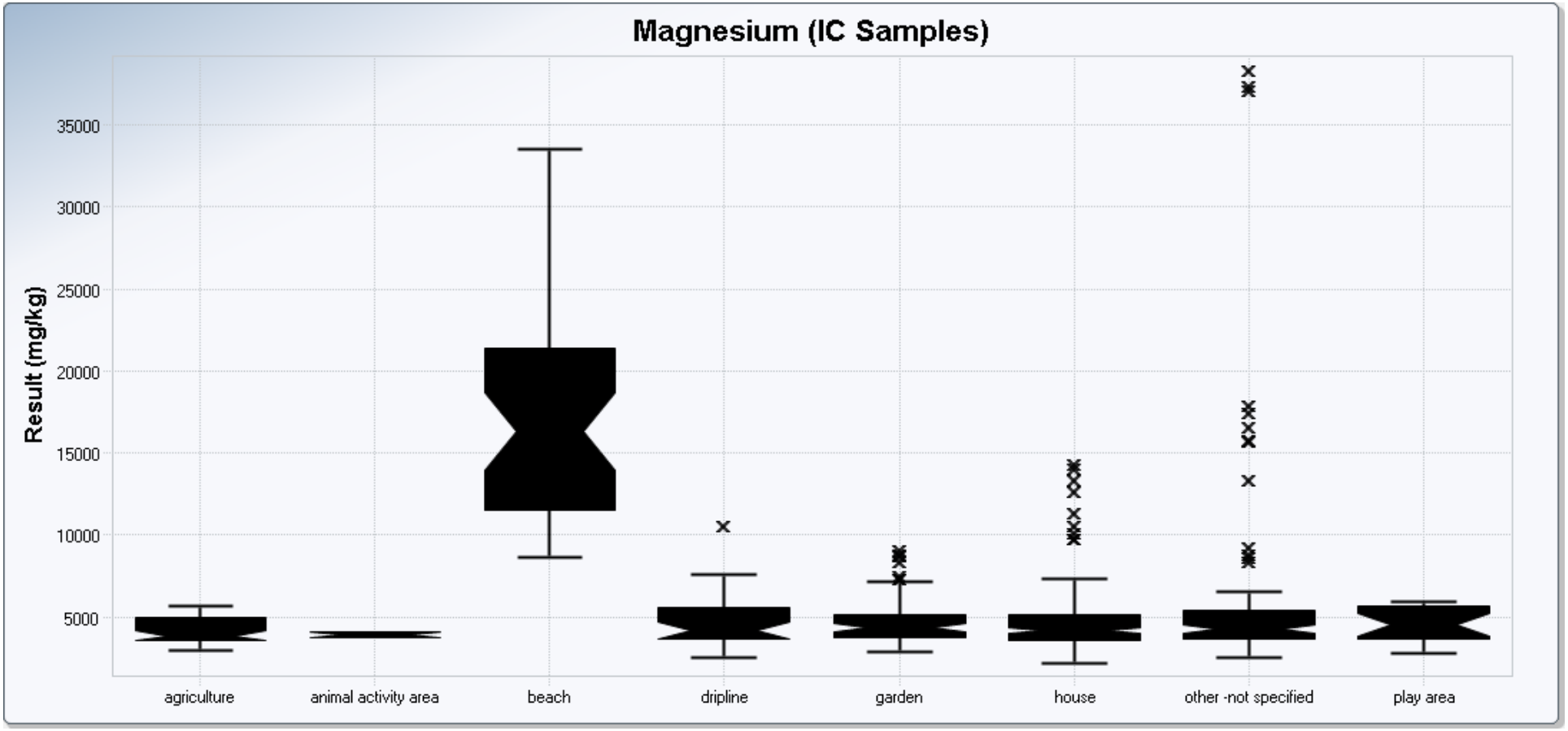


Figure 6-12
Concentrations of Lead by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



There is no screening level for magnesium because it is considered an essential nutrient.

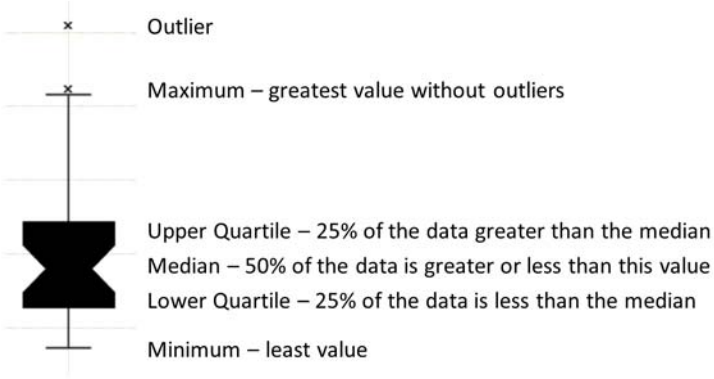
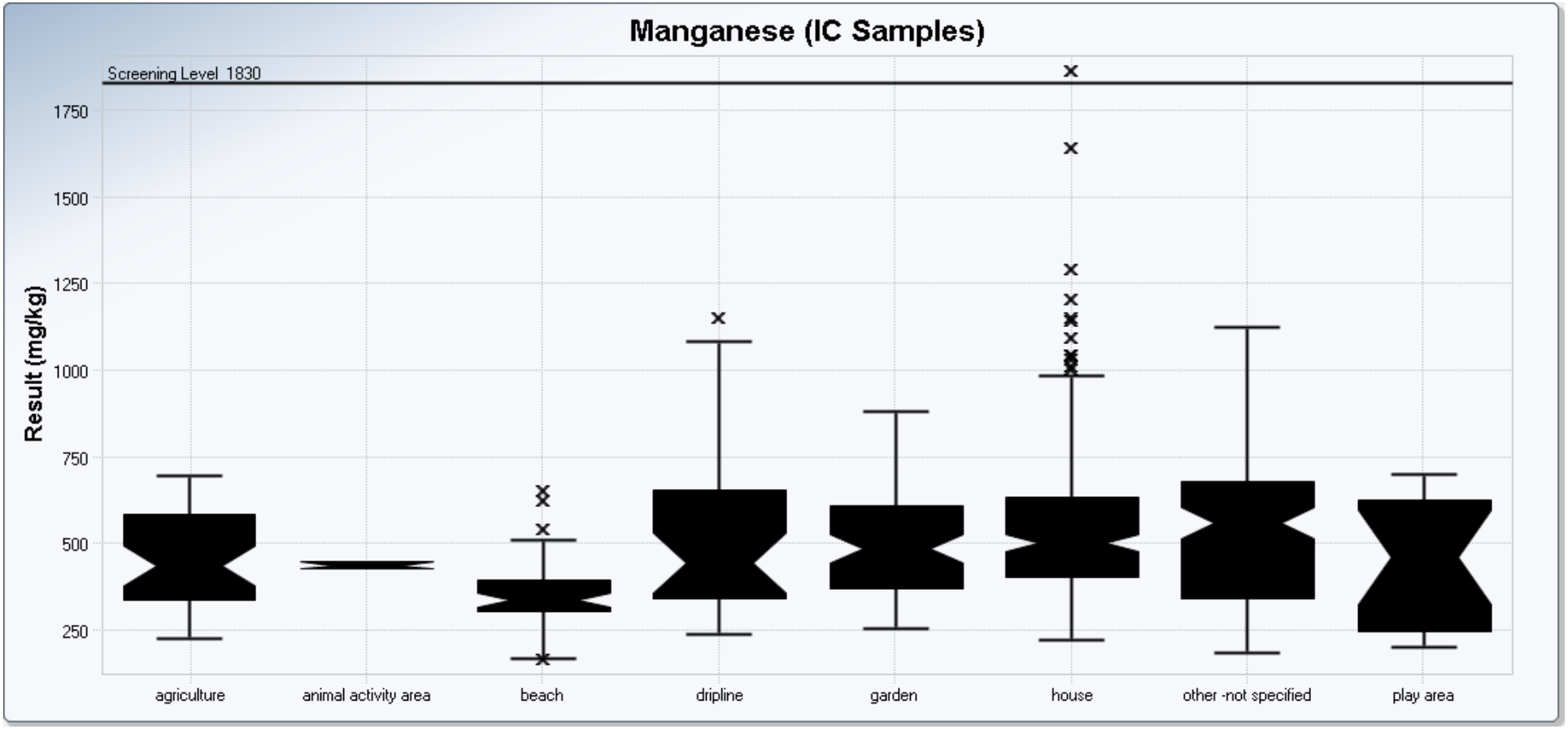


Figure 6-13
Concentrations of Magnesium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



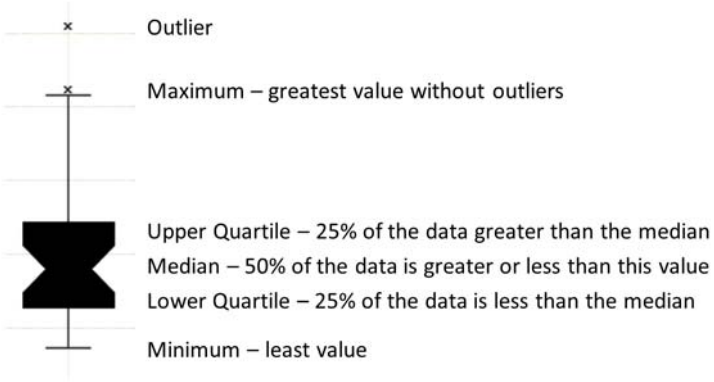
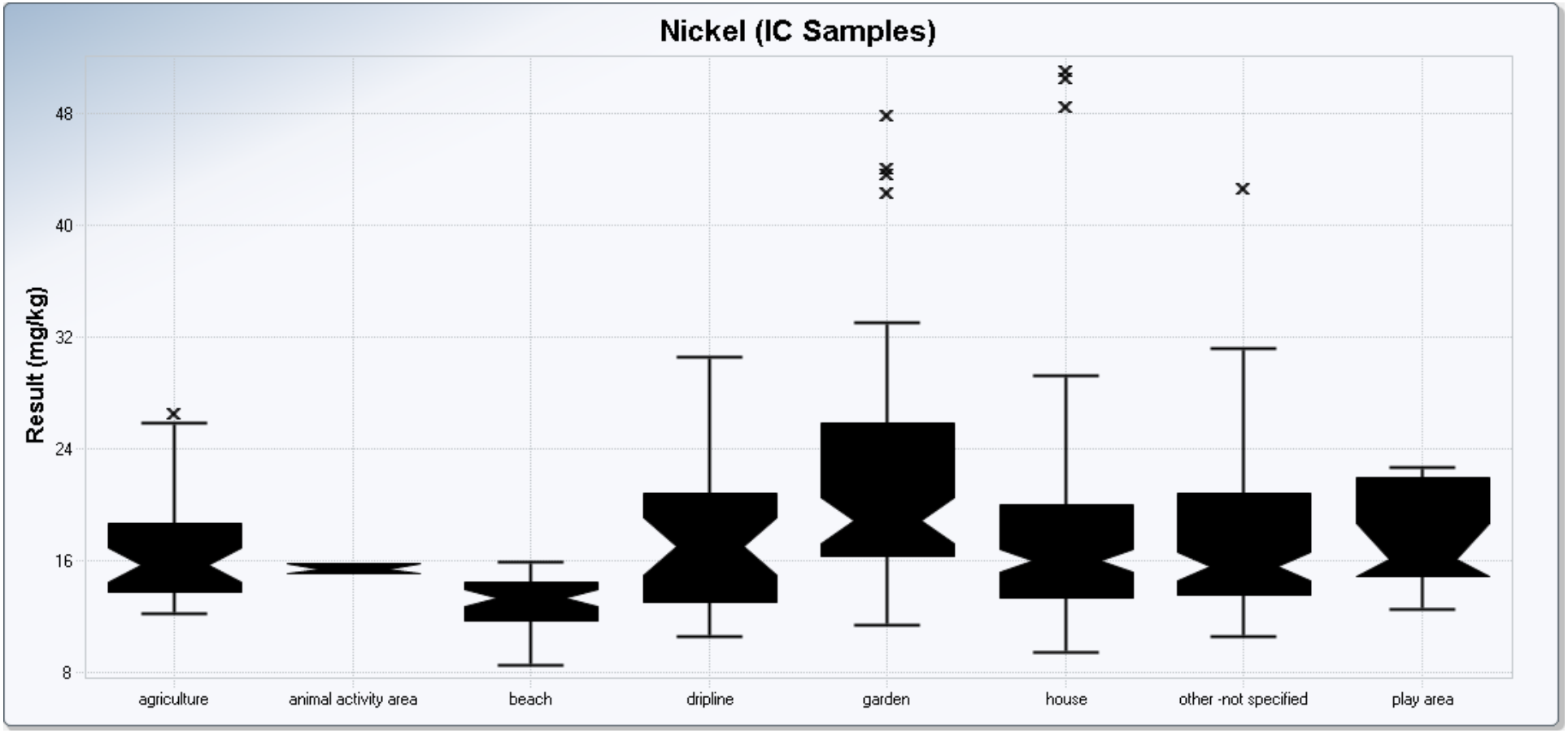


Figure 6-14
Concentrations of Manganese by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for nickel (1,550 mg/kg) not shown because it is considerably above the range of detected concentrations.

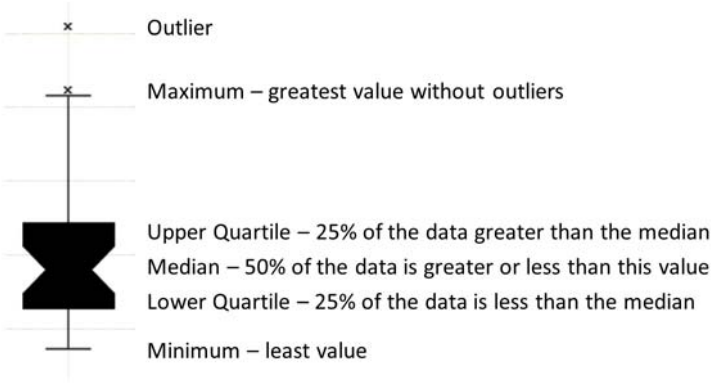
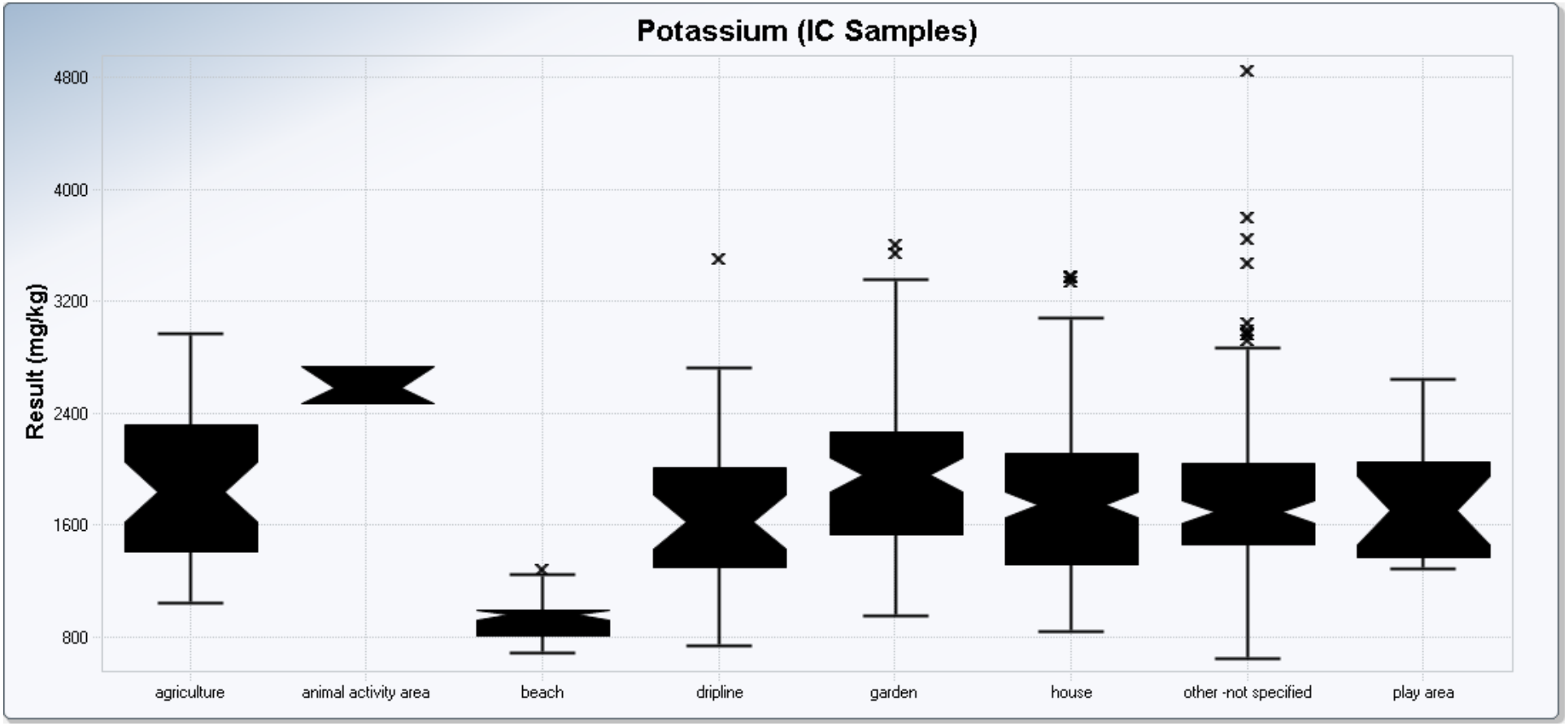


Figure 6-15
Concentrations of Nickel by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



There is no screening level for potassium because it is considered an essential nutrient.

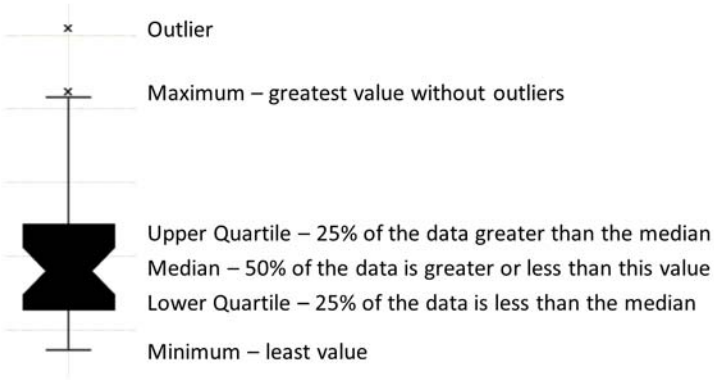
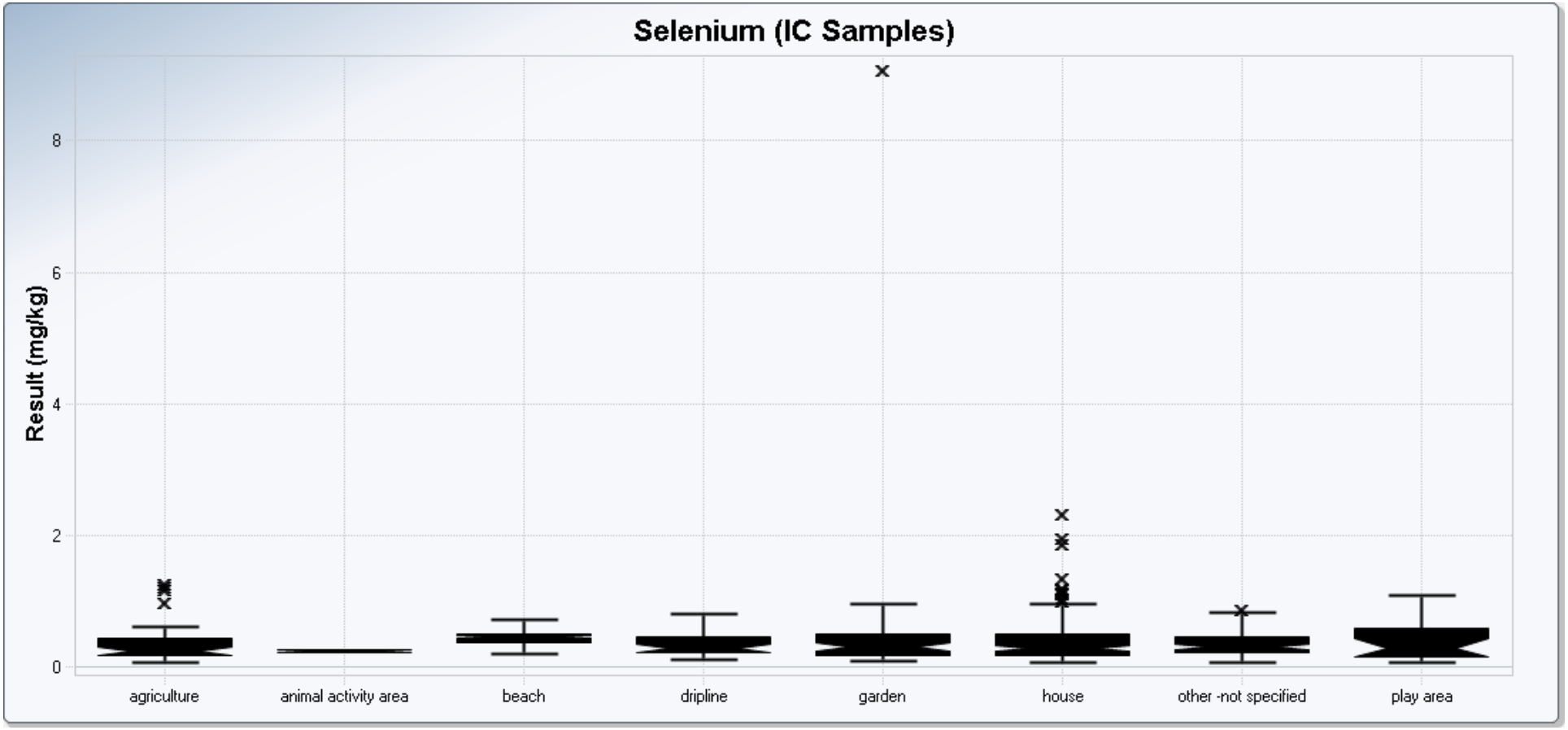


Figure 6-16
Concentrations of Potassium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for selenium (391 mg/kg) not shown because it is considerably above the range of detected concentrations.

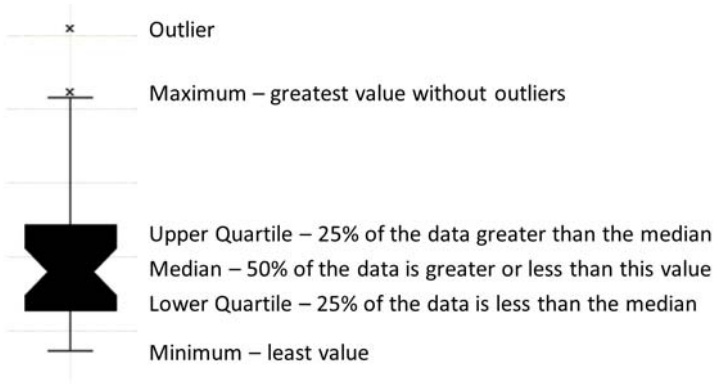
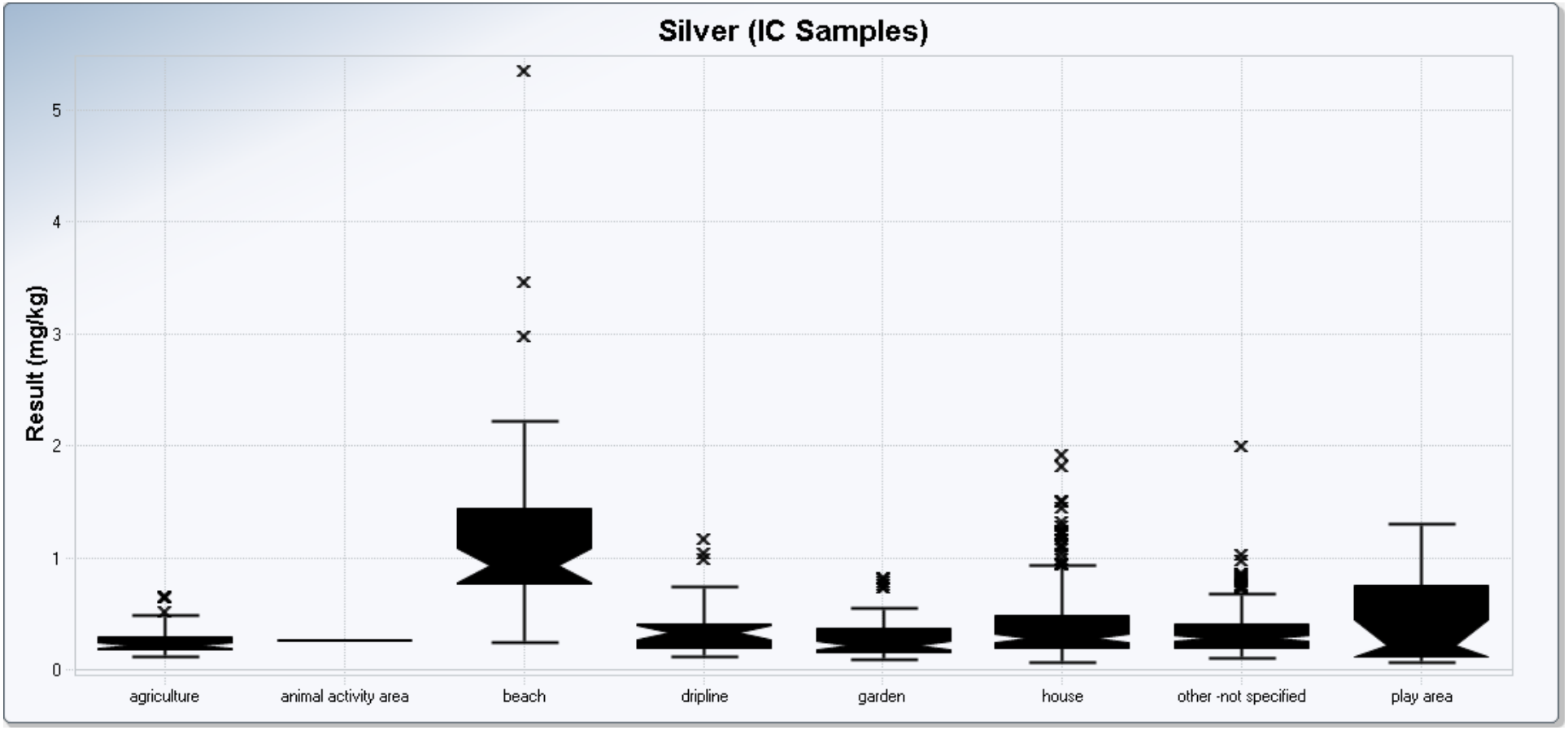


Figure 6-17
Concentrations of Selenium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for silver (391 mg/kg) not shown because it is considerably above the range of detected concentrations.

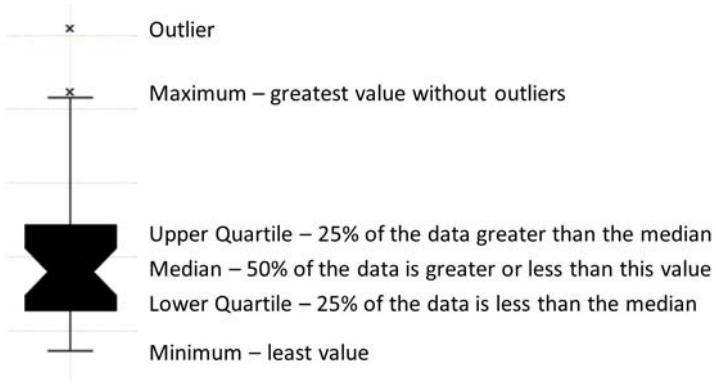
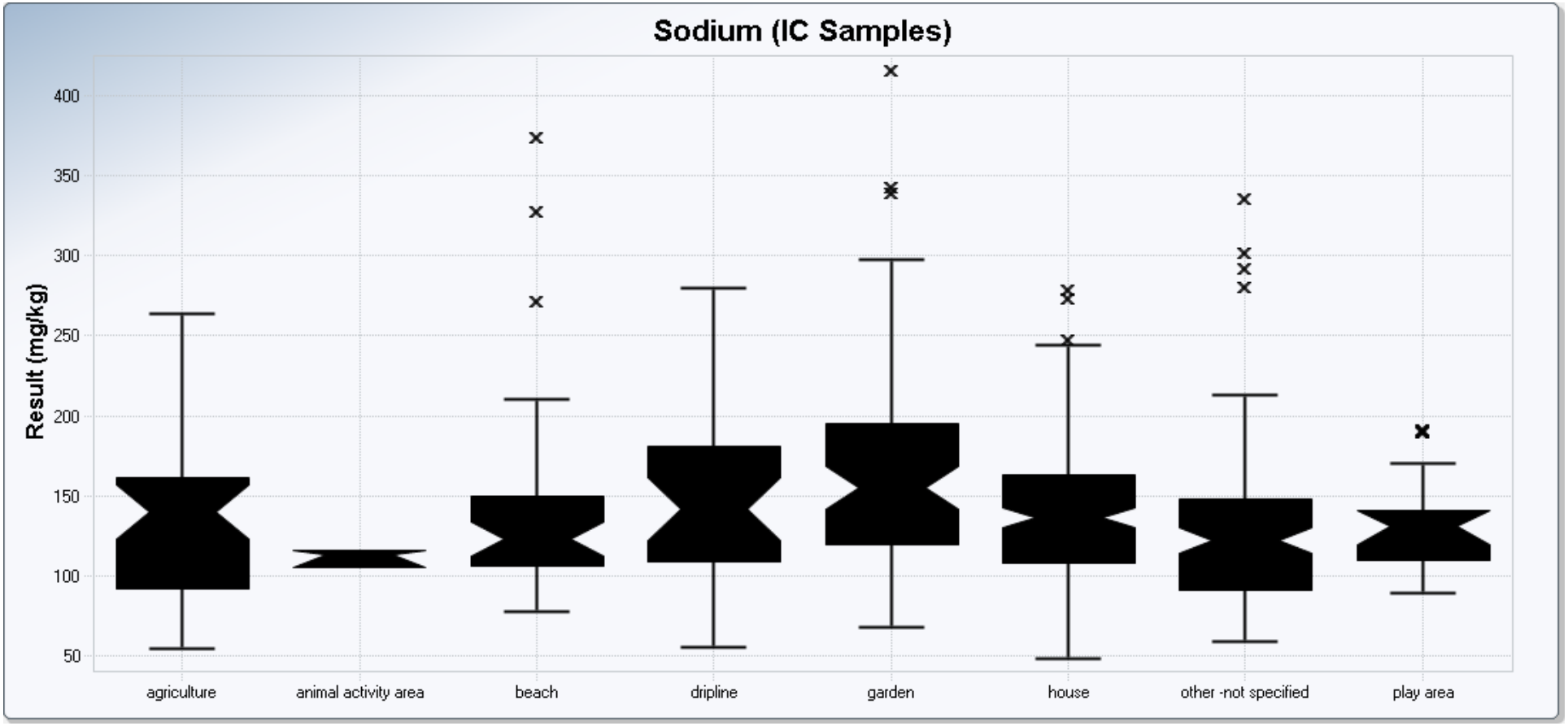


Figure 6-18
Concentrations of Silver by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



There is no screening level for sodium because it is considered an essential nutrient.

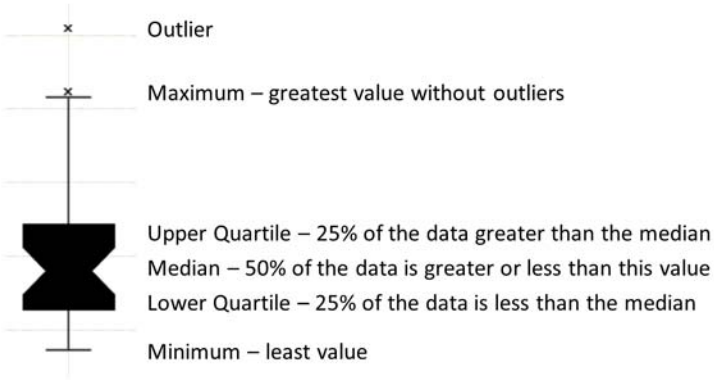
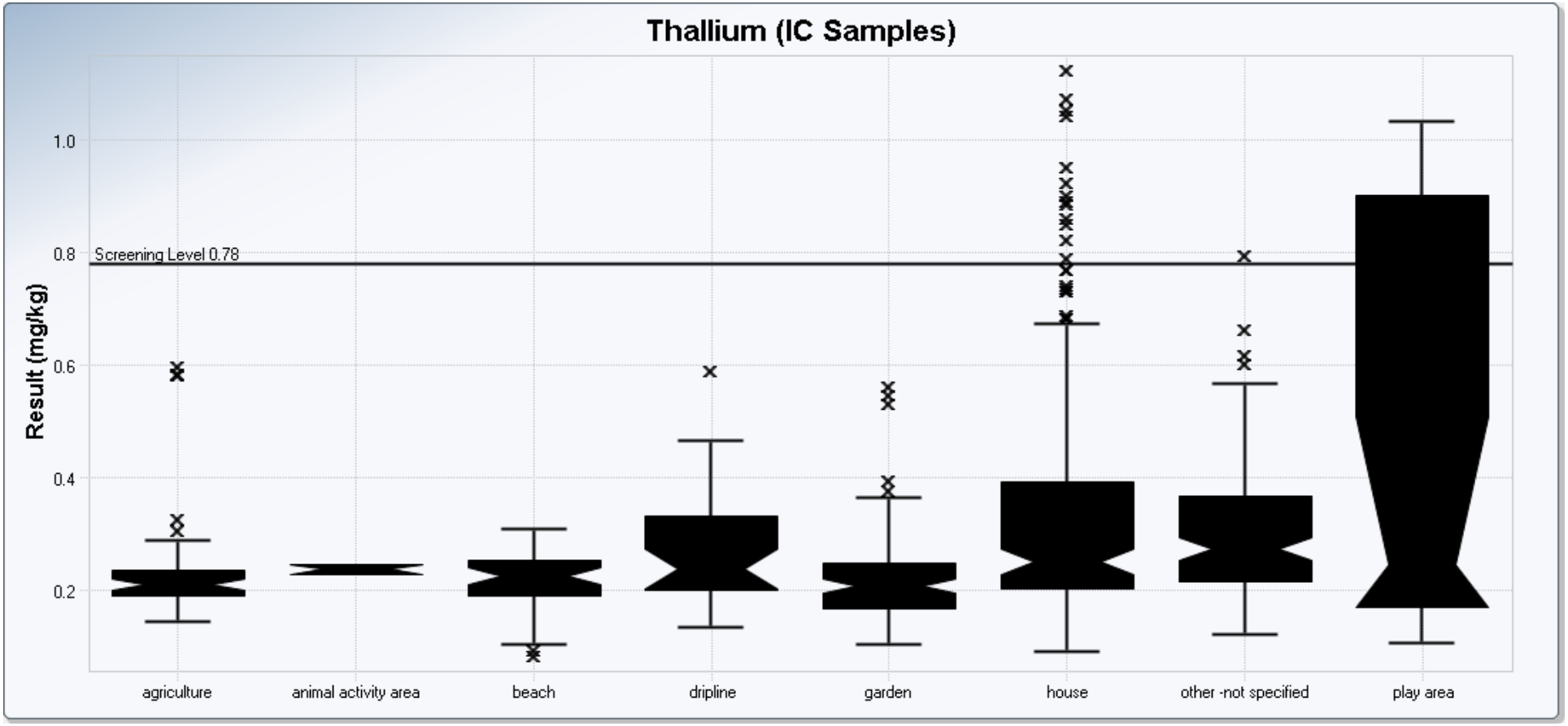


Figure 6-19
Concentrations of Sodium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



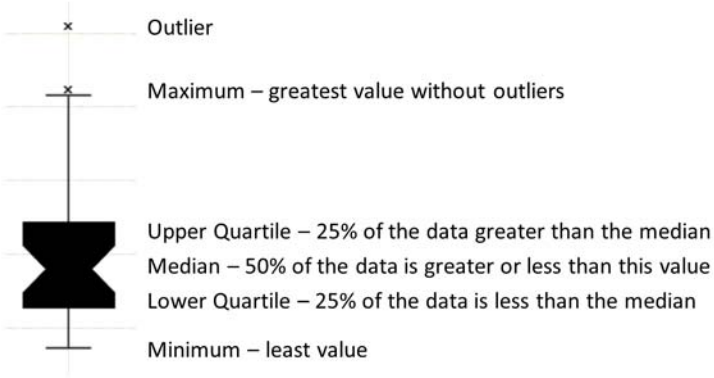
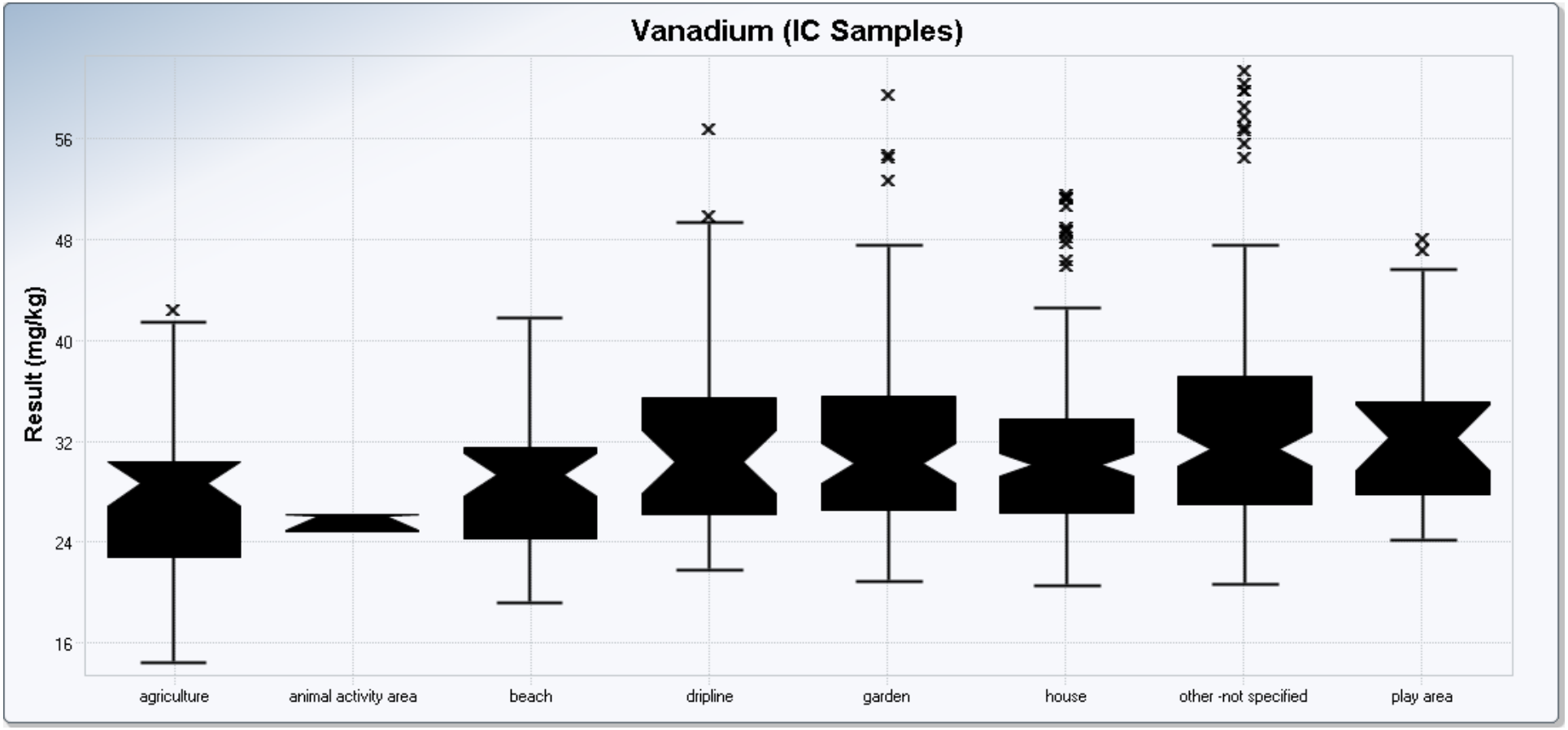


Figure 6-20
Concentrations of Thallium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for vanadium (394 mg/kg) not shown because it is considerably above the range of detected concentrations.

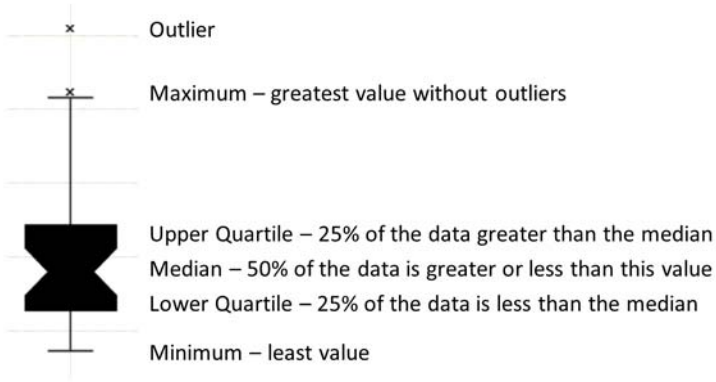
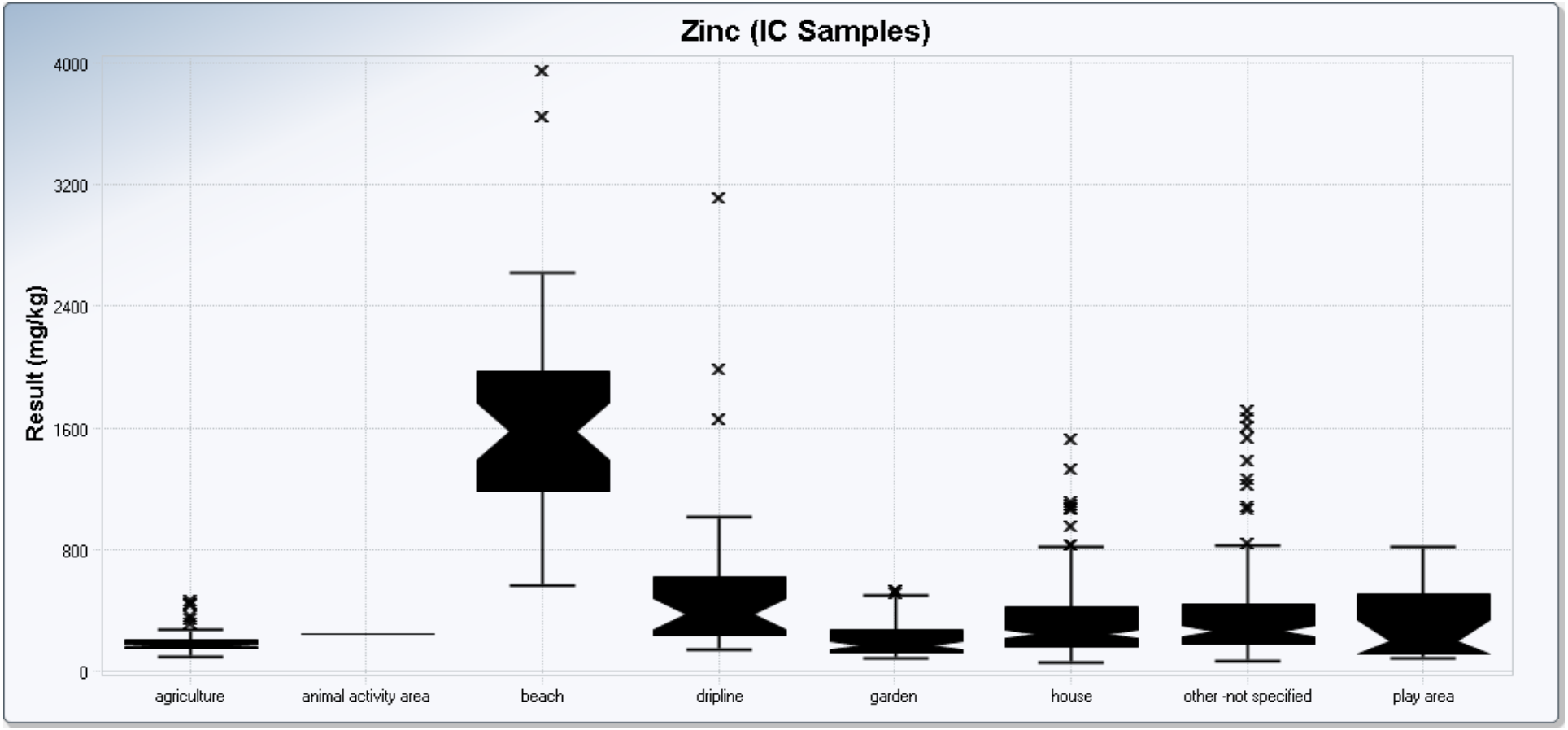


Figure 6-21
Concentrations of Vanadium by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



Screening level for zinc (23,500 mg/kg) not shown because it is considerably above the range of detected concentrations.

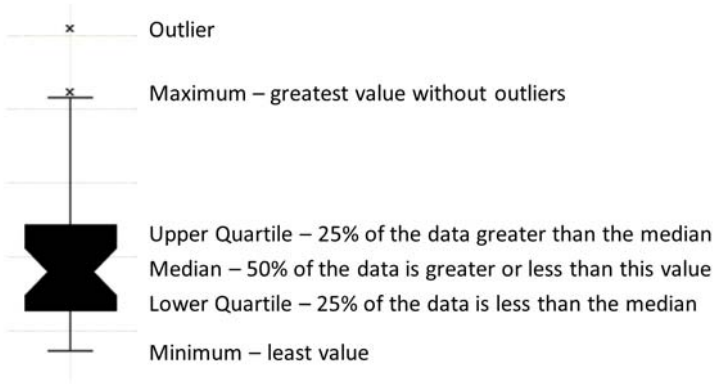
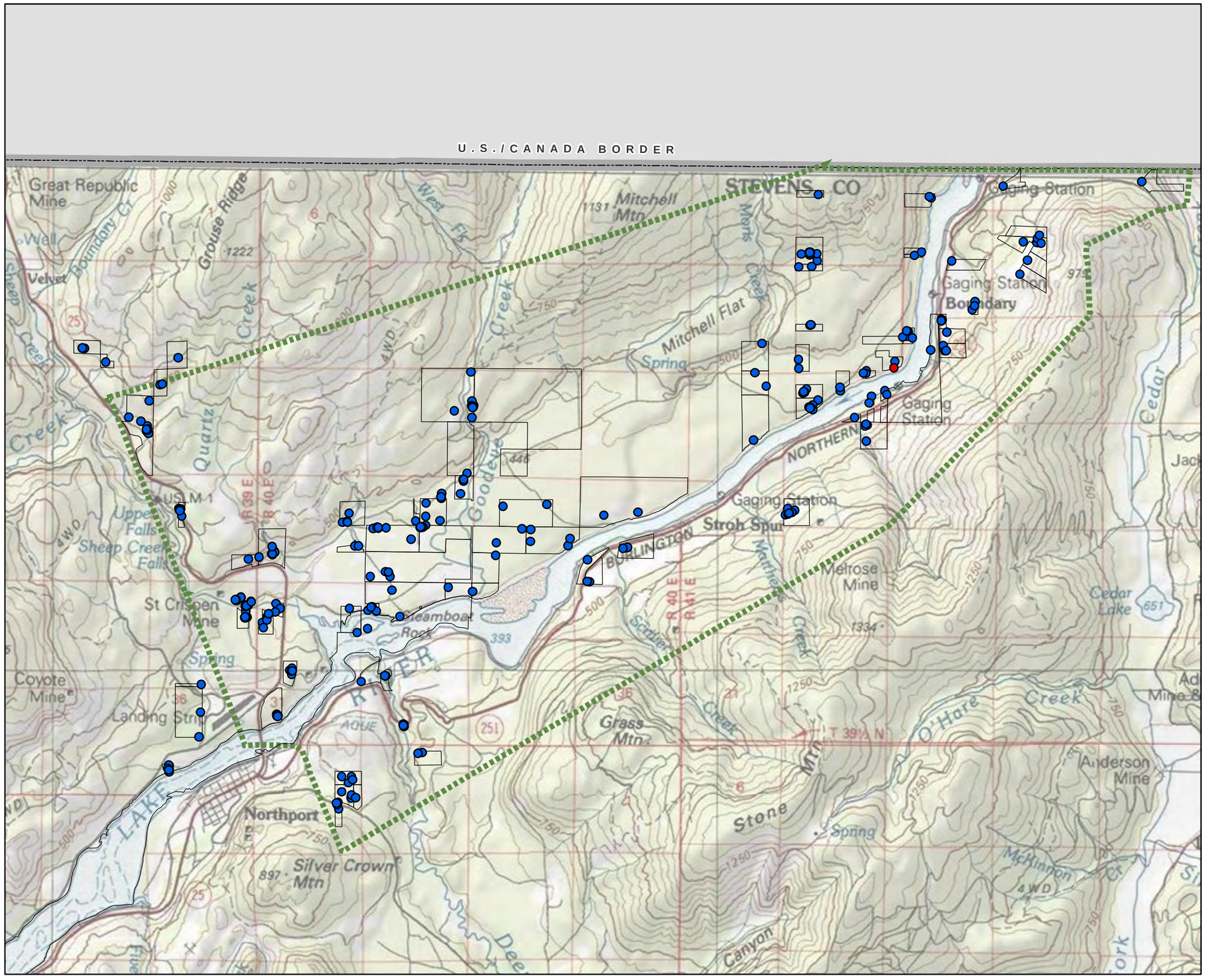
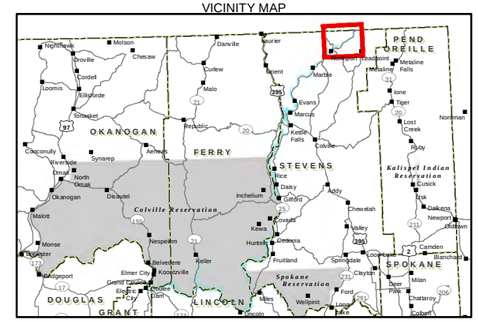


Figure 6-22
Concentrations of Zinc by Decision Unit Category
UCR Residential Soil Study Field Sampling and Data Summary Report



VICINITY MAP



LEGEND

Antimony

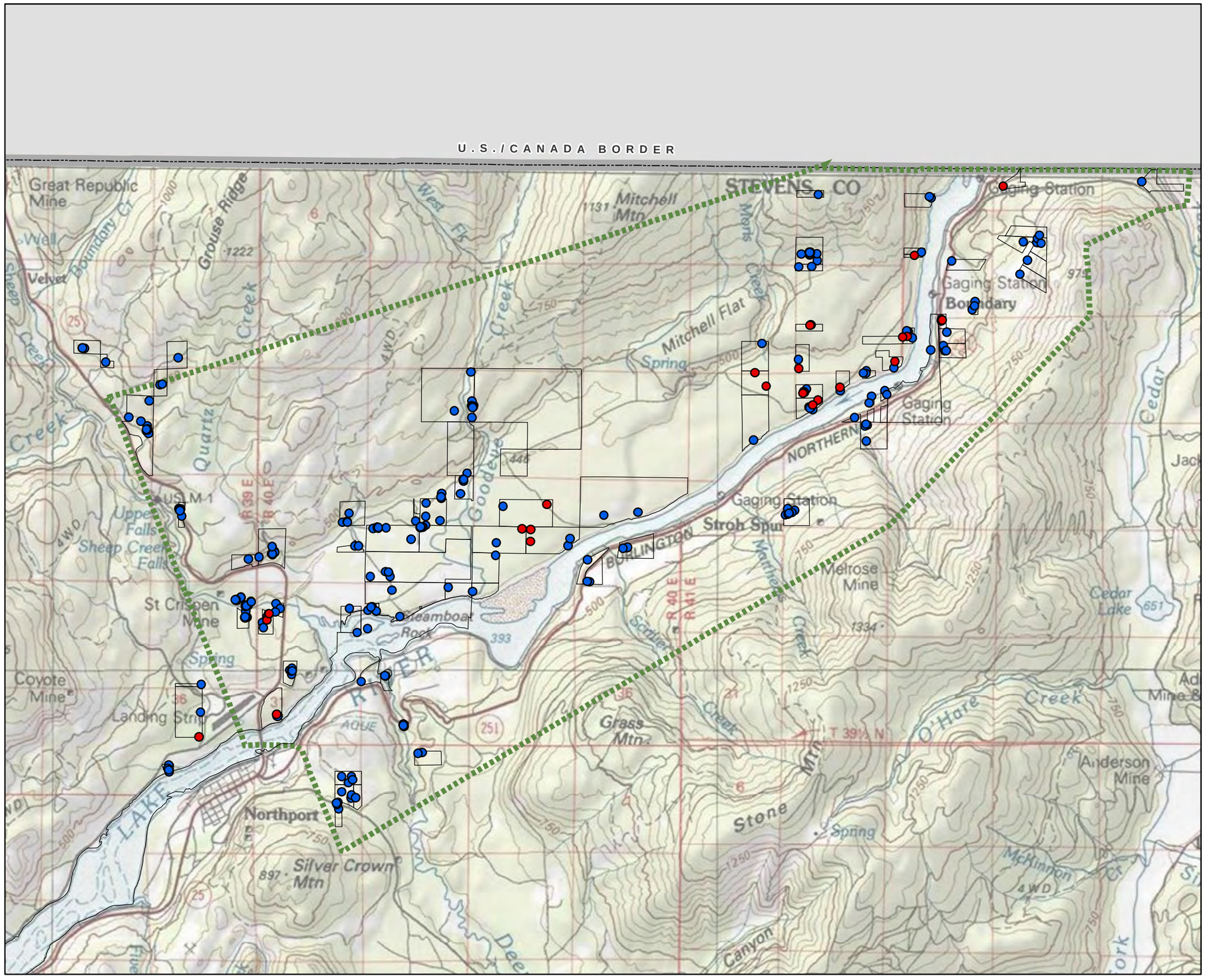
- < 31 mg/kg
- >= 31 mg\kg
- Sampled Parcels
- Residential Soil Sampling Area
- U.S. \ Canada Border

Note:
1. Concentrations reported as mg/kg (dry weight) Maximum detected concentration shown (one result per DU).

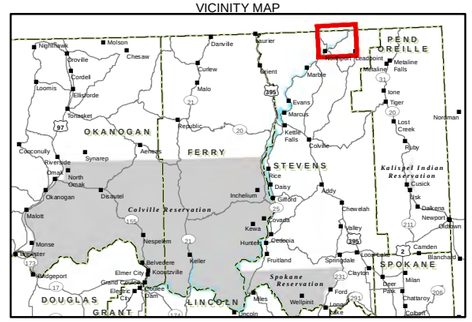
N

0 5,000
Feet

Figure 6-23
Distribution of Antimony Concentrations in 2014 Study Area DUs (IC Samples)
UCR Residential Soil Study Field Sampling and Data Summary Report



VICINITY MAP



LEGEND

Arsenic

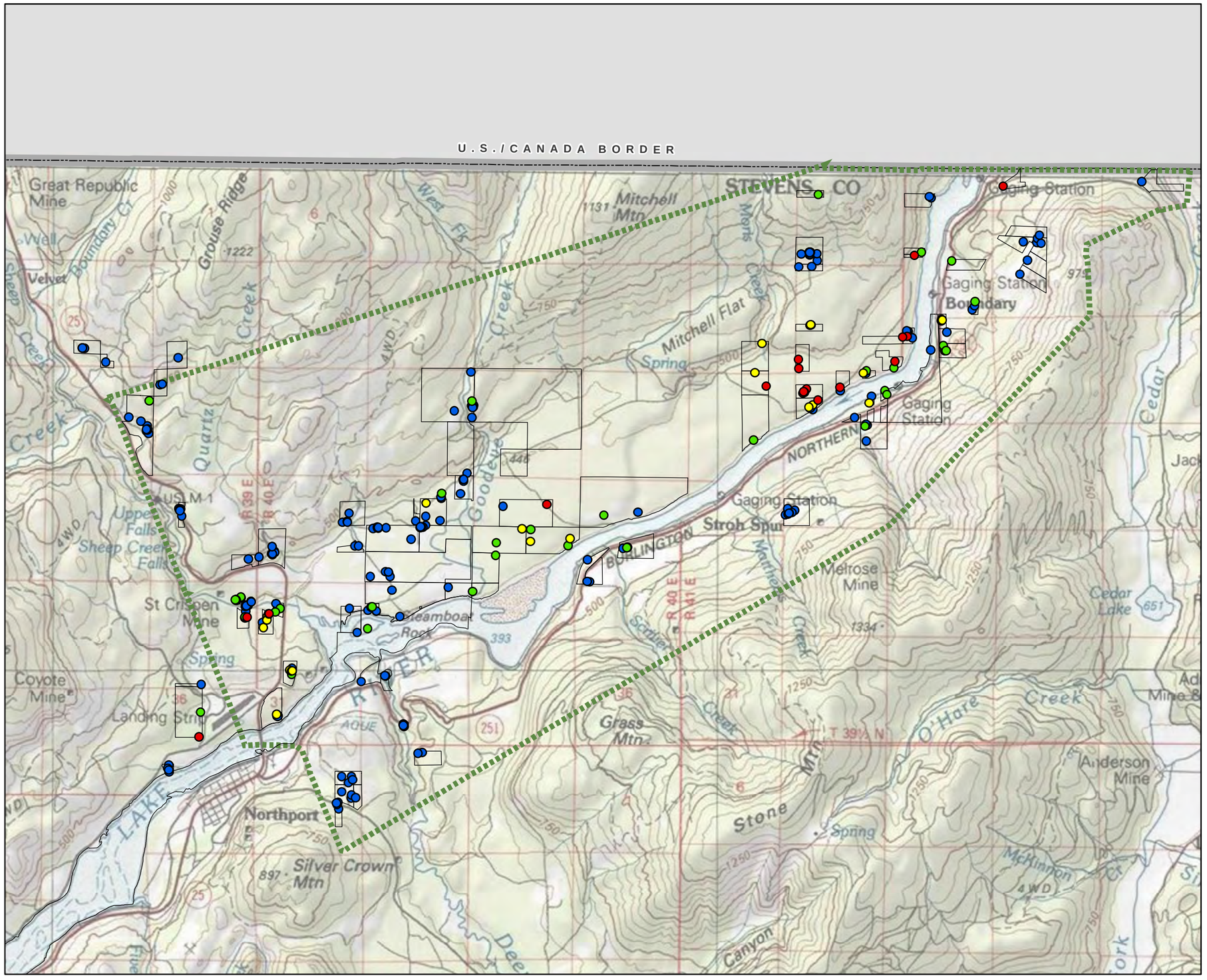
- < = 20 mg/kg (Washington Cleanup Level)
- > 20 and < 90 mg/kg (TCRA Action Level)
- Sampled Parcels
- Residential Soil Sampling Area
- U.S. \ Canada Border

Note:
1. Concentrations reported as mg/kg (dry weight) Average adjusted concentration for DU shown (one result per DU).

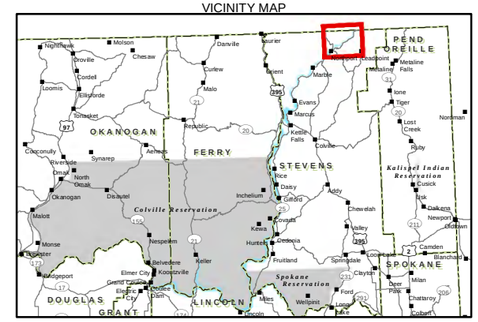
N

0 5,000
Feet

Figure 6-24
Distribution of RBA-adjusted Arsenic Concentrations in 2014 Study Area DUs (IC Samples)
UCR Residential Soil Study Field Sampling and Data Summary Report



VICINITY MAP



LEGEND

Lead

- < = 250 mg/kg (Washington Cleanup Level)
- > 250 and < 400 mg/kg (EPA Screening Level)
- > = 400 and < 700 mg/kg
- > = 700 mg/kg (TCRA action level)

Sampled Parcels

Residential Soil Sampling Area

U.S. \ Canada Border

Note:
1. Concentrations reported as mg/kg (dry weight) Average adjusted concentration for DU shown (one result per DU).

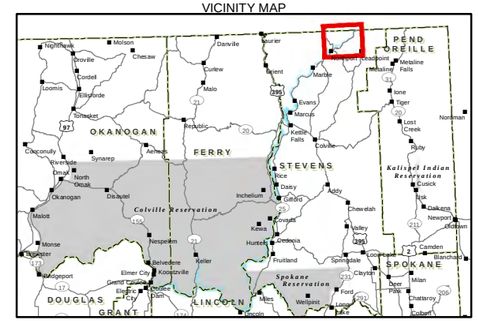
N

0 5,000
Feet

Figure 6-25
Distribution of RBA-adjusted Lead Concentrations in 2014 Study Area DUs (IC Samples)
UCR Residential Soil Study Field Sampling and Data Summary Report

U.S./CANADA BORDER

VICINITY MAP



LEGEND

Manganese

- < 1830 mg/kg
- >= 1830 mg\kg
- Sampled Parcels
- Residential Soil Sampling Area
- U.S. \ Canada Border

Note:
1. Concentrations reported as mg/kg (dry weight) Maximum detected concentration shown (one result per DU).

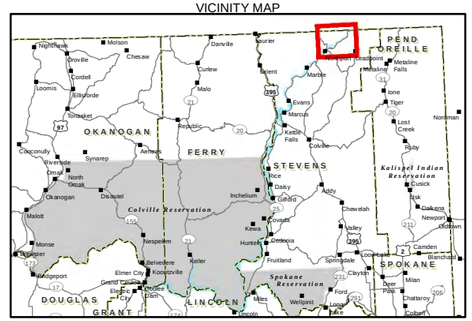
N

0 5,000
Feet

Figure 6-26
Distribution of Manganese Concentrations in 2014 Study Area DUs (IC Samples)
UCR Residential Soil Study Field Sampling and Data Summary Report

U.S./CANADA BORDER

VICINITY MAP



LEGEND

Thallium

- < 0.78 mg/kg
- >= 0.78 mg/kg
- Sampled Parcels
- Residential Soil Sampling Area
- U.S. \ Canada Border

Note:
1. Concentrations reported as mg/kg (dry weight) Maximum detected concentration shown (one result per DU).

N

0 5,000
Feet

Figure 6-27
Distribution of Thallium Concentrations in 2014 Study Area DUs (IC Samples)
UCR Residential Soil Study Field Sampling and Data Summary Report

Appendix A
Residential Reconnaissance Report

Upper Columbia River Residential Soil Study Phase 1 Reconnaissance Report

PREPARED FOR: Laura Buelow/EPA
Matt Wilkening/EPA
Marc Stifelman/EPA

PREPARED BY: Reuben Greer/CH2MHILL
Marilyn Gauthier/CH2MHILL

DATE: June 19, 2014

PROJECT NUMBER: 350521

This technical memorandum provides a summary of the field reconnaissance and data collection efforts for Phase 1 of the Residential Soil Study that is being conducted by the United States Environmental Protection Agency (EPA) in the northern portion of the Upper Columbia River (UCR) site. The objective of the Residential Soil Study is to collect representative surface soil data from properties in the study area to assess whether residents are potentially exposed to metals in soil. The overall field effort for this study consists of a reconnaissance phase (Phase 1) and a sampling phase (Phase 2). Phase 1 reconnaissance consisted of visiting each property where sampling is planned in order to observe property features and to interview the landowner or resident to determine where sampling decision units (DUs) will be located. Phase 2 sampling will occur in the summer of 2014 and consist of collecting soil samples at the DUs established for each property.

Pre-Reconnaissance Activities

Prior to the reconnaissance effort, EPA distributed project information and access requests to all property owners within the study area boundary to identify residential properties for sampling. A list of potential properties to be sampled was then developed based on responses from the property owners. The EPA's human health risk assessment subcontractor, SRC Incorporated (SRC) used tax parcel information and recent aerial photographs to develop maps showing the locations and extent of preliminary sampling DUs at each of the identified residential properties. At the same time, CH2M HILL prepared the *Phase 1 Field Reconnaissance Plan Upper Columbia River Site Residential Soil Study,* which detailed the methods and procedures for conducting the reconnaissance effort.

Just prior to the field effort, EPA contacted the property owners to set up a date and time to visit each property and CH2M Hill prepared a packet of information for each property for the field team to carry with them during the reconnaissance. Each packet contained a copy of the signed access agreement, maps depicting the DU boundaries, blank interview forms, geographic positioning system (GPS) coordinate forms, and directions to the property (if available). Geographic information system (GIS) files depicting the preliminary DU boundaries were also uploaded to the GPS units to be used in the field.

Reconnaissance Activities

Field reconnaissance activities were conducted during the weeks of April 28 through May 2, 2014 and May 12 through May 16, 2014. Two 3-person teams consisting representatives from CH2M HILL, EPA, and SRC were in the field during each reconnaissance period. The responsibilities of each field team member are summarized below:

- The EPA representative coordinated the reconnaissance schedule and interviewed the property owners.
- The SRC representative identified and delineated the actual DU sampling boundaries based on property-specific conditions and land use information provided by the property owner.

- The CH2M HILL representative took notes and used GPS equipment and hand-marked maps to record any changes to the locations and boundaries of the final DUs selected for sampling at each property.

Table 1 provides a listing of personnel who participated in the reconnaissance effort.

TABLE 1
Field Personnel – Residential Soil Study Reconnaissance

Week	EPA	SRC	CH2M HILL
April 28 – May 2, 2014	Marc Stifelman Kay Morrison	Bill Thayer Mark Follansbee	Reuben Greer Nathan Williams
May 12 – 16, 2014	Dennis Faulk Monica Tonel	Bill Thayer Mark Follansbee	Reuben Greer Mark Endo

Property Owner Interview

In order to delineate the DUs for soil sampling it was important to understand how each property is currently used and how it may be used in the future. During each site visit, the EPA representative interviewed the property owner or other knowledgeable person designated by the owner (e.g., renter or neighbor) using the questions on the interview form. If a property owner or knowledgeable person was not present during the site visit, the EPA representative attempted to conduct the interview by telephone. If the owner could not be reached, the team relied on observed property conditions and features to infer land use and identify DUs.

Decision Unit Identification and Delineation

Following the interview, the field team evaluated the property to determine the number and type of DUs to be sampled. The evaluation was conducted by reviewing the locations of the preliminary DUs identified for the property, reviewing the completed interview form, and visiting the areas where the preliminary DUs were located to observe site features and areas of interest. The EPA and SRC representatives then identified which of the preliminary DUs would be sampled and modified the DU boundaries, as necessary to accommodate conditions encountered in the field and owner responses to interview questions. At some of the larger properties, the interview and site walk resulted in elimination of several preliminary DUs because the areas were not used by residents despite appearing maintained on aerial photographs. DUs were also added to certain properties based on the interview and site walk.

Each DU identified for sampling was photographed and notes describing the DU and rationale for inclusion in the sampling program were recorded in the SRC field book. In cases where the preliminary DU boundaries were changed or a DU was added, the approximate location of the DU boundaries were marked on a map and GPS coordinates for the boundary were recorded.

Field Reconnaissance Records

Field reconnaissance records for each property consisted of completed interview and GPS forms, marked-up maps, and field notes, as well as digital photographs and GPS data files. These records were compiled into property-specific folders that were transmitted electronically to SRC for use in development of the sampling program for each property.

Deviations from the Field Reconnaissance Plan

Phase 1 reconnaissance was conducted in general accordance with the Phase 1 Field Reconnaissance Plan (FRP). However, a few deviations occurred during the course of the field effort, as described below:

1. GPS coordinates for some DUs that were unchanged from preliminary maps were not recorded.

   For some DUs, the size and location of the DU was unchanged after the property owner interview and the site walk from the original estimated DU shape on the SRC provided field maps. Field notes were updated

to indicate that GPS coordinates were not collected for the DU and that the size and location of the DU wasn't altered, and was representative based on field observations.

Potential Impact - None expected.

2. GPS coordinates for some DUs that were difficult to access were not recorded and instead drawn on the field map for the property.

   Some DUs were not readily accessible during the field reconnaissance effort and therefore GPS coordinates were not collected. These areas include animal pens, areas with charged electric fences, or other impediments to adequately or safely access the area. For areas that weren't accessed, if the size and location of the DU was expected to be unchanged from the map, it was noted the site wasn't accessed and the DU was not altered. For locations that required revision, the DU was hand drawn on the field map and noted.

   Potential Impact - None expected.

3. Not all GPS coordinates/notes included the "M" or "U" designation for the DU that indicates land use.

   According to the FRP, the field team was to categorize the primary land use types for each identified DU as maintained (M), Unmaintained (U), and Garden (G) to determine the soil sampling depth interval. However, because of ongoing discussions regarding sample depths between the EPA and participating parities and the possibility of different land uses in the future, the field team decided not to assign land use designations for the DUs in the field.

   Potential Impact - None expected.

4. Drip line DUs were not depicted on preliminary DU maps.

   Just prior to the field reconnaissance effort the EPA added a drip line DU category to any property with pre-1980 structures. The preliminary DU maps prepared by SRC did not include these drip line DUs so the field teams had to establish the drip line DU boundaries based on conditions observed in the field. For the most part, the drip line DU boundaries were drawn directly on the map showing the structure and described in field notes because it was not feasible to obtain reasonably accurate GPS readings in close proximity to structures.

   Potential Impact - None expected.

5. The GPS-enabled camera was unable to tag most site photos with coordinates due to poor GPS reception caused by topography and canopy interferences and the long calibration/startup process. Instead of GPS tags, dry-erase boards with DU-specific information were used in photographs of the DUs.

   Potential Impact - None expected.

Appendix B
Field Sampling Records

Appendix B content is provided electronically.

Appendix C
Laboratory Oversight Memo

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

October 30, 2014

MEMORANDUM

SUBJECT: Oversight of Laboratory Soil Processing for Upper Columbia River samples

TO: Laura Buelow, UCR RPM
Matt Wilkening, UCR RPM
Office of Environmental Cleanup

FROM: Jennifer Crawford, Chemist
Office of Environmental Assessment
Environmental Services Unit - QA

CC: David Dobb, Chemist
EPA R10 Laboratory - ESAT Team Manager

Marilyn Gauthier
Project Manager, CH2M Hill

Introduction

This memorandum documents observations of soil processing methods employed by the Teck American Incorporated contract laboratory (ALS Kelso) on Upper Columbia River (UCR) samples. This oversight was conducted by EPA QA staff and EPA support contractors during an onsite visit at the ALS Kelso lab on October 16, 2014. The EPA oversight reviewers consisted of Jennifer Crawford (EPA), David Dobb (ESAT Chemist) and Marilyn Gauthier (CH2M Hill Project Manager). ALS Kelso staff processed the UCR soils and generated split samples for EPA in accordance with the following QAPPs and SOPs:

- Upper Columbia River Residential Soil Study QAPP, SRC Inc. for US EPA R10 - August 2014
- Upper Columbia River Soil Study QAPP (Final), Exponent/HDR for Teck American Incorporated – August 2014
- Upper Columbia River Residential Soil Study Split Sample Analysis, CH2M Hill for US EPA R10 – September, 2014
- Upper Columbia River Upland Soil Study Split Sample Analysis, CH2M Hill for US EPA R10 – October, 2014
- Subsampling and Compositing of Samples, ALS Kelso SOP GEN-SUBS Rev 5 - June 30, 2013.

The goal of the EPA oversight was to independently verify that the QAPPs and SOP for this site were being followed and to ensure the creation of representative soil fractions for the analysis of metals. The total duration of time spent onsite at the laboratory was approximately 2.5 hours. In general, we found that the laboratory had well documented procedures and that the project lab staff were all well trained and organized. They exhibited great deal of professionalism and proficiency. The lab had proper equipment, good supervision, and were doing quality work.

The observations and suggestions for improvement compiled by the EPA review team are provided below.

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Observations

1. While observing the sieving operation, an issue was noticed that could cause sample splits to have different concentrations. Recommend modifying the procedure slightly to assure splits are the same.

   Observations: Raw samples were first air dried in aluminum baking pans that are placed on high shelving within a designated drying area of the lab. The entire dried samples are then placed into plastic bags and transferred to a ventilation hood for sieving. During this process we observed the chemist remove several scoops of material from the bag, place it onto a 2 mm sieve and work the material through the sieve. The material retained on the sieve was then placed into a mortar and a pestle was used to lightly break up any soil clumps before returning the material to the sieve for additional screening. Once the screening was complete, the material retained on the sieve was rejected and all the material that passed the sieve was poured into a primary pan. A second set of scoops of raw dried sample was then removed from the bag and the process repeated with the contents being placed into a separate, secondary pan. The process was repeated with alternate batches being placed into each separate pan until the entire original sample was consumed. The contents of each separate pan were considered to be split samples.

   Potential problem: The raw sample in the bag is dried, but not thoroughly blended prior to sub-sampling. The unblended raw material in the bag could have distinctive high and low concentration zones relative to the analytes of concern. The entire contents of the bag is not sieved all at once and there is a possibility that the individually processed batches could be different from one another, depending on where the scoops were taken from the bag and the degree of stratification or settling of the bulk sample that may have occurred after having been placed in the bag. Consequently, the sieved materials placed into the individual pans could be significantly different from one another due to sub-sampling without the use of blending and as such they are not considered true splits.

   Suggested Remedy: Because soil clumps, roots, and grass are present in the dried bulk materials prior to sieving, thorough blending of the bulk sample cannot occur. Instead, all the sieved material from the individually processed batches should be combined into a single container (such as another bag), thoroughly mixed (which would now be effective since lumps are broken up and grass and roots are removed), then the blended material passed through a riffle splitter to create true split samples.

2. While observing the laboratory ISM sampling operation, several issues were noticed that could cause segregation and delimitation errors during sampling. Recommend modifying the procedure slightly to assure segregation and delimitation errors are minimized and that all portions of the bulk sample have a chance at being subsampled.

   Observations: Sieved samples were spread into a slab no more than a cm thick on a baking sheet using a cement trowel. Grid lines were then graded into the slab down to the metal with the trowel such that the slab was broken down into 30 squares. Material outside the equally tessellated square boundary area was graded aside. Subsamples were taken from each grid square by using a rounded spatula to scoop material from the upper right corner of the square. During this process, the spatula tip was placed against the metal tray, slid under the material to a desired distance and then lifted straight up to remove the subsample. This subsample was then placed into the sample container on a balance to ensure the desired amount of sample for analysis was collected. The amount of each increment is adjusted based on the distance the spatula is slid under the material.

   Potential problems:

   (1) When the grids are made, sample portions that fall outside the grid area are graded away with the trowel. This graded away material is not sampled.

   (2) Another problem to consider is segregation that can occur at the gradation lines produced by the trowel. Lighter or larger particles can roll down the slope created by the trowel,

causing potential segregation. These slopes are the areas being sampled when subsamples are being taken with a spatula from the upper right corner of each square.

(3) A third problem is that the rounded spatula does not uniformly remove the same amount of material from the lower portions of the slab as it does from the upper portions. The material at the lower part of the slab is disproportionately represented from that of the upper part. This causes the kind of increment delimitation error that is cited in the Pierre Gy's Sampling Theory and Sampling Practice text by Francis Pitard, Volume II, Page 38, as a reason for rejection of the 2D Japanese slab-cake method.

(4) A fourth problem is the small increment size. If too small of an increment is taken, even 30 increments will not be correct sampling. For example the ALS SOP for ISM for mercury is to collect a 0.5 gram analytical sample. From 30 increments, this amounts to 17 mg of material per increment. For 2 mm sieved material, a single cubic particle 2 mm on a side would be expected to weigh 20 mg which in turn corresponds to removing less than one particle for an increment. Clearly removing a single soil particle or even 10 or 20 particles for each increment under represents the bulk material and introduces greater variability due to sampling error.

Suggested Remedies:

(1) Adjust the square sizes within each grid such that all the material falls within the grid boundary. Don't grade away any material.

(2) To address segregation along trowel lines, don't collect increments where the slab has been disturbed. Take the subsample from the center of the square, therefore, you only need lightly marked grid lines. The subsample needs to be a clean "cookie cut" plug right down to the metal tray. Fine material or slightly damp material can be removed as plugs with drinking straws of various diameters (cover the end of the straw with your thumb before lifting) or thin-walled channel shaped sampling tools that are pushed down to the bottom of the tray and the walls squeezed slightly to lift a plug of material from the slab. If more control of the increment size is required, then a spatula can be used, but a rounded spatula should not be used.

(3) A flat-bottomed spatula with thin metal sides should be used rather than a rounded spatula. The spatula tip can be inserted vertically into the center of the square and pushed to the bottom of the slab, then tilted almost flat and pushed forward into the undisturbed material while keeping the flat bottom scraping the tray. When the required increment size is scooped, lift the spatula straight up, removing a clean plug of material. Clean plugs down to the metal tray minimize the delimitation errors that are the main source of sampling error of this method.

(4) Regarding small increment size, we do not recommend ISM subsampling to anything less than 2 g for an analytical sample. Without a minimal scaled up analysis to accommodate the larger sample size, the benefits of representative subsampling by ISM is lost. In the event that a scaled up sample size is not possible, then the use of smaller increments from finer grain sized material (e.g., 100 mesh or finer) should be considered. Subsampling of increments can also be done in stages. For example, incrementally sample 50 grams of material from the slab, then create a new smaller slab from that 50 grams, and do "microsurgery" on the 50 gram slab to get the smaller increments.

3. Observation: While observing the sample handling operations, there was no representative solid blank that had been taken through the sample handling process.

Suggested Remedy: In order to demonstrate adequate control of contamination, at least one sand blank should be taken through all sample handling operations. We would recommend acid washing and DI water rinsing and drying some Ottawa sand and carry an aliquot through the drying tray in the drying room for the same amount of time as samples, bagging in the plastic bag for transport, lightly grind in the mortar and pestle, sieve through the sieves, split, make a slab on the ISM sampling tray, collect the ISM sample for analysis, then analyze the sand for analytes of concern, paying particular attention to the wear metals that might come from the trays and trowel. The analytical results of this blank should be compared to an analysis of the acid washed sand that was not carried through the operation, to demonstrate adequate contamination control in all operations.

4. Observation: While observing the sample drying procedure, it was noted that the aluminum pans used to dry the samples are stored on a shallow shelf high approximately 6-7 feet above the laboratory floor. This requires that the lab staff carry the aluminum baking pan up a foot stool/ladder and lift the pan above head level to reach the shelf on which pans are stored during sample drying.

   Potential Problem: There is a possibility that a pan could be dropped or fall during raising and lowering from the shelf. The pans contain an entire sample for some locations, and any potentially dropped sample would be a loss for the project.

   Suggested Remedy: Recommended that alternative storage procedures be identified and used, if space allows. At the EPA R10 Manchester lab we have found the use of baking racks and associated pans to be an efficient utilization of floor space while also allowing for easy transport to other laboratory rooms in the facility. If this is not possible, storing the samples on a lower shelf that does not require the use of a step stool and a reach above head level would be an improvement. It was noted that the lab staff have not had any accidents or lost any samples due to the current storage / drying process; this is entirely a preventative measure recommendation.

5. Observation: While observing the sample drying procedure, it was noted that samples are air dried for approximately 2 days until they are assessed for dryness by laboratory staff. The ALS SOP GEN-SUBS Rev.5 (6/13/2013) indicates in section 11.9.2 that "the sample is considered air dried when the dried sample weight loss is less than 1 percent in a 4 hour period of air dying". It is assumed that this process would entail weighing over time until constant weight is reached (<1% change/4 hours) prior to proceeding with sieving. However, the laboratory noted that constant weight is not documented because the lab is not having any issues with sieving (which could indicate a moisture issue) and they are performing a % solids determination on a separate air-dried aliquot to correct for any moisture in the analytical results.

   Potential Problem: Soils not entirely dry may form clumps that are not sieved properly. The ALS mortar and pestle check on material left on top of the sieve should breakdown these clumps. The EPA R10 split samples are being sent to the laboratory with an assumed 0% moisture; a separate analysis and aliquot for percent moisture determination and correction was not requested as 100% solid was assumed from the ALS SOP. Furthermore the ISM split sample aliquots do not allow for any subsampling, so percent solids is not possible at the R10 lab.

   Suggested Remedies: It is recommended that the laboratory update the ALS SOP to accurately capture the process for drying ISM samples, including high temperature protocols at night and the observational tools used to determine if the sample is dry without constant weight. It is requested that the ALS percent solids results be provided to EPA (with EPA ID indicated) so that any correction of analytical results will also be performed on the split samples as is being done with the ALS analyzed samples.

Please contact me (Crawford.Jennifer@epa.gov) if you have any questions or concerns.

Appendix D
IVBA Decision Memo

Memorandum

Via email

To: Laura Buelow, David Charters, Marc Stifelman, Monica Tonel, Matt Wilkening (EPA)

From: Bill Thayer (SRC)

CC: Gary Diamond, Mark Follansbee, Karen Kracko (SRC)

Date: 12/18/14

Re: Selection of UCR Residential Study Soil Samples for IVBA

This memorandum presents the list of soil samples that have been selected for IVBA analysis for the UCR Residential Soil Study. The approach that was taken to select the soil samples ('max random') is also described, including the changes to the approach that was described in the Residential Soil Study QAPP (EPA, 2014).

Consistent with the QAPP (EPA, 2014), IVBA analysis would be done for a selected subset of the non-dripline IC samples. The samples were selected in a two steps process:

Step 1: determine decision units (DUs) that were eligible for IVBA
Step 2: select one incremental composite (IC) sample from eligible DUs.

Step 1 followed the process described in the QAPP. Decision units with a maximum lead concentration ≥ 100 ppm or a maximum arsenic concentration ≥ 20 ppm were considered potentially eligible for IVBA sampling. If more than one DU of the same type (e.g., garden) on a given property were considered potentially eligible, the DU with the maximum lead concentration was selected as the eligible DU. There were 114 DUs considered eligible by Step 1.

Step 2: One IC sample was selected for IVBA analysis from each of the 114 eligible DUs. For DUs with more than one IC sample, the soil sample was randomly selected from the IC samples collected from the DU; this produced a total of 114 IC samples for IVBA.

In addition to the IC samples selected in Step 2, all IC samples that were collected from DUs with relative percent differences (RPDs) for lead or arsenic concentration (IC samples) that exceeded 30% were selected for IVBA. This added 8 IC samples to the 114 selected above, for a total of 122 IC samples from a total of 114 DUs. The RPD criterion did not add any additional DUs to the eligible DU list that was produced by Step 1.

The final list of samples that were selected for IVBA analysis is provided in Attachment A.

Note that the approach described above for selecting IC samples for IVBA analysis by the *max random* method produced the same set of eligible DUs that were produced by the method that is described in the QAPP. There are two differences between the *max random* method that was used and the method that is described in the QAPP:

1. For DUs with more than one IC sample, the QAPP method would have selected the IC sample with the highest lead concentration rather than randomly selecting a sample as was done with the *max random* method.
2. The *max random* above method added two IC samples for the four DUs with RPDs > 30%.

References

U.S. EPA, Inc. (2014). Upper Columbia River Residential Soil Study QAPP. August 13.

Attachment A: samples selected for IVBA by the *max random* method

Property Owner	Decision Unit	Decision Unit Type	Scribe Comment	Sample ID	Lab Code
		House	2014R-SS-22-IC-03	14396892	K1411081-004
		House	2014R-SS-201-IC-03	14376492	K1410292-017
		Garden	2014R-SS-201G-IC-02	14376495	K1410292-020
		Beach	2014R-SS-202-IC-03	14376521	K1410297-015
		Other -Not Specified	2014R-SS-16-IC-01	14336010	K1409213-006
		House	2014R-SS-59A-IC-01	14356261	K1409765-020
		House	2014R-SS-35-IC-01	14376545	K1410293-016
		Play Area	2014R-SS-35PA-IC-01	14376601	K1410296-018
		Agriculture	2014R-SS-39-IC-01	14376598	K1410296-015
		House	2014R-SS-216-IC-02	14366433	K1410344-002
		Other -Not Specified	2014R-SS-1030-IC-03	14376583	K1410296-007
		House	2014R-SS-170-IC-03	14376586	K1410296-010
		House	2014R-SS-168-IC-01	14386840	K1411096-019
		Other -Not Specified	2014R-SS-169A-IC-02	14386870	K1411074-005
		House	2014R-SS-49-IC-02	14366429	K1410291-019
		House	2014R-SS-231-IC-03	14396956	K1411085-016
		Other -Not Specified	2014R-SS-231Lower-IC-01	14396964	K1411085-018

	House	2014R-SS-186-IC-02	14336042	K1409214-007
	Beach	2014R-SS-800B-IC-03	14376535	K1410297-018
	Other -Not Specified	2014R-SS-801-IC-01	14376542	K1410293-013
	House	2014R-SS-203-IC-03	14366453	K1410292-004
	Beach	2014R-SS-204-IC-03	14366462	K1410297-009
	Beach	2014R-SS-251B-IC-01	14346155	K1409762-007
	House	2014R-SS-253-IC-01	14346144	K1409220-013
	Beach	2014R-SS-255-IC-03	14366443	K1410297-006
	House	2014R-SS-116M-IC-03	14346198	K1409764-007
	House	2014R-SS-123-IC-03	14366317	K1409777-003
	Other -Not Specified	2014R-SS-135-IC-03	14366314	K1409772-017
	House	2014R-SS-192-IC-01	14336036	K1409214-002
	Garden	2014R-SS-176G-IC-01	14386769	K1411095-010
	House	2014R-SS-176M-IC-01	14386766	K1411095-007
	Agriculture	2014R-SS-177-IC-01	14386763	K1411095-004
	Play Area	2014R-SS-345-IC-01	14386826	K1411096-012
	Garden	2014R-SS-346-IC-01	14386818	K1411096-009
	Other -Not Specified	2014R-SS-347-IC-03	14386853	K1411077-005
	Play Area	2014R-SS-7-IC-01	14376481	K1410292-012
	Garden	2014R-SS-3001-IC-01	14396949	K1411085-010
	Other -Not Specified	2014R-SS-3003-IC-01	14396950	K1411085-011
	House	2014R-SS-1021-IC-01	14376497	K1410293-001
	Beach	2014R-SS-195-IC-02	14376568	K1410299-002
	House	2014R-SS-109-IC-03	14376524	K1410344-004

	House	2014R-SS-62-IC-01	14376664	K1411084-013
	House	2014R-SS-1005-IC-01	14396977	K1411087-010
	Agriculture	2014R-SS-1011-IC-02	14396980	K1411087-012
	House	2014R-SS-196-IC-01	14376570	K1410344-005
	Beach	2014R-SS-197-IC-01	14376477	K1410297-010
	House	2014R-SS-121-IC-02	14376648	K1411084-004
	Beach	2014R-SS-324-IC-01	14386712	K1411074-001
	Other -Not Specified	2014R-SS-280-IC-03	14336040	K1409214-005
	House	2014R-SS-280yard-IC-02	14336018	K1409213-012
	Beach	2014R-SS-224-IC-01	14376578	K1410299-004
	Agriculture	2014R-SS-86-IC-01	14346112	K1409217-016
	Garden	2014R-SS-1035-IC-01	14396913	K1411081-011
	House	2014R-SS-189-IC-03	14396930	K1411085-003
	House	2014R-SS-75-IC-01	14386810	K1411096-006
	House	2014R-SS-18-IC-03	14386809	K1411096-005
	House	2014R-SS-33-IC-02	14386832	K1411096-017
	Other -Not Specified	2014R-SS-319-IC-02	14346115	K1409217-018
	House	2014R-SS-319M-IC-03	14346137	K1409220-012
	Other -Not Specified	2014R-SS-175-IC-03	14386736	K1411094-010
	Other -Not Specified	2014R-SS-31-IC-01	14386691	K1411091-008
	House	2014R-SS-40-IC-03	14336030	K1409213-017
	Beach	2014R-SS-226A-IC-02	14346159	K1409762-011
	House	2014R-SS-226C-IC-01	14346177	K1409764-001
	House	2014R-SS-151-IC-02	14336065	K1409214-016

	Other -Not Specified	2014R-SS-152-IC-01	14336067	K1409214-018
	House	2014R-SS-206-IC-01	14356248	K1409765-014
	Animal Activity Area	2014R-SS-208AA-IC-03	14366307	K1409772-011
	Garden	2014R-SS-208G-IC-01	14366301	K1409772-005
	Agriculture	2014R-SS-209A-IC-02	14356298	K1409772-003
	Other -Not Specified	2014R-SS-213-IC-01	14366304	K1409772-008
	Other -Not Specified	2014R-SS-115SP-IC-01	14376476	K1410292-011
	House	2014R-SS-21-IC-01	14376467	K1410292-008
	Garden	2014R-SS-21G-IC-03	14376466	K1410292-007
	House	2014R-SS-163-IC-01	14386693	K1411091-009
	Garden	2014R-SS-163G-IC-01	14386702	K1411091-013
	Agriculture	2014R-SS-164-IC-01	14386696	K1411091-012
	Beach	2014R-SS-303-IC-03	14356243	K1409773-005
	Other -Not Specified	2014R-SS-316-IC-02	14356239	K1409765-009
	Other -Not Specified	2014R-SS-999M3-IC-03	14346214	K1409764-016
	House	2014R-SS-284M-IC-02	14346217	K1409764-019
	Other -Not Specified	2014R-SS-285M-IC-03	14356228	K1409765-004
	Agriculture	2014R-SS-287-IC-01	14356229	K1409765-005
	House	2014R-SS-250-IC-01	14366415	K1410291-011
	Other -Not Specified	2014R-SS-66-IC-02	14396901	K1411081-006
	Garden	2014R-SS-67-IC-03	14396905	K1411081-010
	House	2014R-SS-218-IC-01	14396879	K1411077-017
	Other -Not Specified	2014R-SS-56-IC-01	14356280	K1409771-010
	House	2014R-SS-61-IC-01	14386776	K1411095-011

	Other -Not Specified	2014R-SS-320new-IC-01	14336053	K1409214-011
	Other -Not Specified	2014R-SS-258-IC-03	14366391	K1410290-017
	Other -Not Specified	2014R-SS-401-IC-01	14376594	K1410296-011
	Beach	2014R-SS-411-IC-03	14366403	K1410297-003
	Other -Not Specified	2014R-SS-412-IC-03	14366373	K1410290-006
	Other -Not Specified	2014R-SS-420-IC-01	14366357	K1410290-002
	Other -Not Specified	2014R-SS-432-IC-01	14366411	K1410291-007
	Other -Not Specified	2014R-SS-441-IC-01	14366421	K1410291-016
	House	2014R-SS-112-IC-02	14366379	K1410290-011
	Garden	2014R-SS-112G-IC-03	14366342	K1409777-015
	Other -Not Specified	2014R-SS-113up-IC-03	14366377	K1410290-009
	House	2014R-SS-106-IC-02	14386864	K1411077-010
	Garden	2014R-SS-108-IC-01	14386854	K1411077-006
	Other -Not Specified	2014R-SS-172U-IC-01	14386872	K1411077-014
	Beach	2014R-SS-173-IC-01	14396876	K1411074-007
	Garden	2014R-SS-1017-IC-02	14376609	K1411083-005
	House	2014R-SS-42-IC-01	14376617	K1411083-012
	Other -Not Specified	2014R-SS-46-IC-02	14376606	K1411083-002
	Agriculture	2014R-SS-47-IC-01	14376629	K1411083-018
	Beach	2014R-SS-1000-IC-03	14397009	K1411074-012
	Other -Not Specified	2014R-SS-1001-IC-02	14397011	K1411090-008
	House	2014R-SS-70-IC-03	14396996	K1411090-003
	Garden	2014R-SS-71-IC-01	14397003	K1411090-004

	Garden	2014R-SS-72-IC-02	14396975	K1411087-008
	Agriculture	2014R-SS-72M-IC-02	14396986	K1411087-018
Additional 8 samples missing from the original version of this memo (Dated 12/15/14)				
	House	2014R-SS-49-IC-01	14366428	K1410291-018
	House	2014R-SS-49-IC-03	14366430	K1410291-020
	House	2014R-SS-151-IC-01	14336064	K1409214-015
	House	2014R-SS-151-IC-03	14336066	K1409214-017
	Other-Not Specified	2014R-SS-999M3-IC-01	14346212	K1409764-014
	Other-Not Specified	2014R-SS-999M3-IC-02	14346213	K1409764-015
	Beach	2014R-SS-1000-IC-01	14397007	K1411074-010
	Beach	2014R-SS-1000-IC-02	14397008	K1411074-011

Appendix E
DV Reports

Appendix E content is provided electronically.

Appendix F
EPA Memos

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

January 6, 2015

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1411085, K1411091, K1411094, K1411095, K1411096, K1411665, & K1412654 Metals Analysis

FROM: Don Matheny, Chemist
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation reports for these SDGs were all based on a review of Stage 2B (QC Summaries only) laboratory deliverables. The samples in SDG K1411665 & K1412654 are experimental blanks (laboratory water passed through the soil sieves and reported in soil measurement units). These reports were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and applied in accordance with the technical guidance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

January 28, 2015

MEMORANDUM

SUBJECT: Review of Data Validation Reports for In Vitro Bioaccessibility analyses for the Upper Columbia Basin Residential Soil Study, SDGs: K1414212, K1414213, K1414217, K1414220, K1414228, K1414234, & K1414256 Inorganic Analysis

FROM: Don Matheny, Chemist DM
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation report for SDG K1414212 was based on a review of Stage 4 (full data package) deliverable whereas the remaining SDGs underwent a Stage 2B (QC Summaries only) review.

It should be noted that the performance of the IVBA leaching procedure (EPA 9200.2-86) was through the use of a Solid Standard Reference Material (SRM - NIST 2711a - Montana II Soil) as outlined in the method. Because it was only developed for lead, the method contains SRM leaching performance criteria for lead but not arsenic. As such, percent recoveries of the NIST SRM was limited to only the lead data though these recoveries were found to be acceptable.

Overall, the validation report was complete and contained sufficient documentation to verify the reviewer's findings. The report showed no QC excursions which was confirmed upon reviewing the equivalent EPA Superfund Contract Lab Program (CLP) QC Summary Forms that were attached. The reviewer's conclusions were technically sound and applied in accordance with the technical guidance and QAPP requirements.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

October 30, 2014

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1409212, K1409213, K1409214, K1409217, K1409220, K1409228, K1409229, & K1409230, Metals Analysis

FROM: Don Matheny, Chemist
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

In general, the data validations were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and had been applied in accordance with the technical guidance.

One item that was not discussed in the reviews concerned the matrix spike/spike duplicates performed on sample 14346118 in SDG K1409220. For this QC sample, the native lead concentration (~500 mg/Kg) effectively overwhelmed the matrix spike (~45 mg/Kg). As a result, the spike recoveries could not be evaluated. While this does not affect data usability, it suggests that the lead spiking levels may be too low and should be raised to a concentration that is more commensurate with the project evaluation criteria of 400 mg/Kg. This would also lessen the probability of the matrix spike being overwhelmed by higher concentration samples in future analysis.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

November 4, 2014

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1409762, K1409764, K1409765, K1409771, K1409772 & K1409773, Metals Analysis

FROM: Don Matheny, Chemist DM
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

In general, the data validation reports were based on the review of all Stage 2B laboratory deliverables (QC Summaries only). These reports were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and applied in accordance with the technical guidance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
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OFFICE OF
ENVIRONMENTAL ASSESSMENT

November 7, 2014

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1409777, K1409787, K1409790, K1409793, K1409795, & K1409796, Metals Analysis

FROM: Don Matheny, Chemist
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation reports for K1409777 & K1409787 were based on a review of Stage 4 laboratory deliverables while the remaining sample delivery groups were reviewed against Stage 2B laboratory deliverables (QC Summaries only). These reports were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and applied in accordance with the technical guidance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
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OFFICE OF
ENVIRONMENTAL ASSESSMENT

November 12, 2014

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1410290, K1410292, K1410297 & K1410311, Metals Analysis

FROM: Don Matheny, Chemist
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation reports for these SDGs were based on a review of Stage 2B laboratory deliverables (QC Summaries only). The water samples in SDG K1410311 are equipment rinsate blanks. These reports were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and applied in accordance with the technical guidance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

November 19, 2014

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1410291, K1410293, K1410296, K1410299, K1410317, K1410319, K1410321, K1410323, K1410325, K1410327, & K1410344, Metals Analysis

FROM: Don Matheny, Chemist
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation reports for these SDGs were all based on a review of Stage 2B laboratory deliverables (QC Summaries only). These reports were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and applied in accordance with the technical guidance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

December 11, 2014

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1411017, K1411019, K1411020, K1411022, K1411037, K1411038, K1411074, & K1411077 Metals Analysis

FROM: Don Matheny, Chemist
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation reports for these SDGs were all based on a review of Stage 2B laboratory deliverables (QC Summaries only). The water samples in SDG K1411038 are equipment rinsate blanks. These reports were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and applied in accordance with the technical guidance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

December 30, 2014

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1409576, K1411025, K1411026, K1411028, K1411030, K1411087, K1411090, K1411081, K1411083 & K1411084 Metals Analysis

FROM: Don Matheny, Chemist
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation reports for these SDGs were all based on a review of Stage 4 (full data package) and Stage 2B (QC Summaries only) laboratory deliverables. The samples in SDG K1409576 are experimental blanks (laboratory water passed through the soil sieves and reported in soil measurement units). These reports were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and applied in accordance with the technical guidance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

January 28, 2015

MEMORANDUM

SUBJECT: Review of Data Validation Reports for In Vitro Bioaccessibility analyses for the Upper Columbia Basin Residential Soil Study, SDGs: K1414212, K1414213, K1414217, K1414220, K1414228, K1414234, & K1414256 Inorganic Analysis

FROM: Don Matheny, Chemist DM
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

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- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation report for SDG K1414212 was based on a review of Stage 4 (full data package) deliverable whereas the remaining SDGs underwent a Stage 2B (QC Summaries only) review.

It should be noted that the performance of the IVBA leaching procedure (EPA 9200.2-86) was through the use of a Solid Standard Reference Material (SRM - NIST 2711a - Montana II Soil) as outlined in the method. Because it was only developed for lead, the method contains SRM leaching performance criteria for lead but not arsenic. As such, percent recoveries of the NIST SRM was limited to only the lead data though these recoveries were found to be acceptable.

Overall, the validation report was complete and contained sufficient documentation to verify the reviewer's findings. The report showed no QC excursions which was confirmed upon reviewing the equivalent EPA Superfund Contract Lab Program (CLP) QC Summary Forms that were attached. The reviewer's conclusions were technically sound and applied in accordance with the technical guidance and QAPP requirements.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

January 6, 2015

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1411085, K1411091, K1411094, K1411095, K1411096, K1411665, & K1412654 Metals Analysis

FROM: Don Matheny, Chemist
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation reports for these SDGs were all based on a review of Stage 2B (QC Summaries only) laboratory deliverables. The samples in SDG K1411665 & K1412654 are experimental blanks (laboratory water passed through the soil sieves and reported in soil measurement units). These reports were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and applied in accordance with the technical guidance.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL ASSESSMENT

December 30, 2014

MEMORANDUM

SUBJECT: Review of Data Validation Reports for Upper Columbia Basin Residential Soil Study, SDGs: K1409576, K1411025, K1411026, K1411028, K1411030, K1411087, K1411090, K1411081, K1411083 & K1411084 Metals Analysis

FROM: Don Matheny, Chemist
Environmental Services Unit, OEA

TO: Laura Buelow, Remedial Project Manager
Matt Wilkening, Remedial Project Manager
Office of Environmental Cleanup

A review of the data validation reports and associated spreadsheet deliverables for the above Sample Delivery Groups (SDGs) has been completed. These reports were produced by *Environmental Standards, Inc.,* on total metals data generated by the ALS Group USA, Corp. located in Kelso, WA.

These data validation reviews were conducted according to the analytical methods and quality control (QC) specifications outlined in:

- QAPP for the Upper Columbia River Residential Soil Study, Washington State, (August, 2014)
- National Functional Guidelines for Inorganic Superfund Data Review (EPA-540-R-10-011)
- Guidance for Labeling Externally Validated Laboratory Analytical Data (EPA-540-R08-005)

The data validation reports for these SDGs were all based on a review of Stage 4 (full data package) and Stage 2B (QC Summaries only) laboratory deliverables. The samples in SDG K1409576 are experimental blanks (laboratory water passed through the soil sieves and reported in soil measurement units). These reports were complete and contained sufficient documentation to verify the reviewer's findings. While the report narratives only discussed QC excursions, the attachments contained the equivalent EPA Superfund Contract Lab Program (CLP) QC Forms that had been marked up by the reviewer. The QC excursions which resulted in data qualification were minor in nature and should not negatively impact data use for this study. There were no QC excursions for the arsenic and lead data. The reviewer's data qualifications were technically sound and applied in accordance with the technical guidance.

Appendix G
Results

Appendix G content is provided electronically.