

SAMPLING AND ANALYSIS PLAN FOR THE FIRST EIGHT ROWS SUB-AREAS

BMI COMMON AREAS (EASTSIDE) CLARK COUNTY, NEVADA

Prepared for:

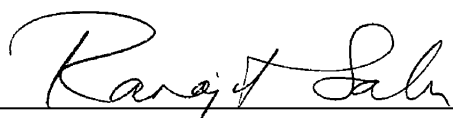
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NOVEMBER 2009

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances. I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.



November 16, 2009

Dr. Ranajit Sahu, C.E.M. (No. EM-1699, Exp. 10/07/2011)

Date

BRC Project Manager

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ACRONYMS AND ABBREVIATIONS

AOC3	Settlement Agreement and Administrative Order on Consent: BMI Common Areas, Phase 3
APA	air pathway analysis
ATSDR	Agency for Toxic Substances and Disease Registry
BCL _W	Basic Comparison Level for residential water
BCL _{RS}	Basic Comparison Level for residential soil
bgs	below ground surface
BRC	Basic Remediation Company
CAMU	Corrective Action Management Unit
CAP	Corrective Action Plan
COPC	chemical of potential concern
CSM	conceptual site model
DAF	dilution attenuation factor
DQA	data quality assessment
DQOs	data quality objectives
DVSR	Data Validation Summary Report
ECI	Environmental Conditions Investigation
ERM	ERM-West, Inc.
FSSOP	Field Sampling and Standard Operating Procedures
ft/ft	foot per foot
HSA	Hollow Stem Auger
IRMs	interim remedial measures
LBCL	Leaching-based Basic Comparison Level for protection of groundwater
LBCL _{DAF1}	LBCL for protection of groundwater (Dilution Attenuation Factor 1)
LBCL _{DAF20}	LBCL for protection of groundwater (Dilution Attenuation Factor 20)
MCL	Maximum Contaminant Level
NDEP	Nevada Division of Environmental Protection
NFAD	no further action determination
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
ppt	parts per trillion
PSQs	Principal Study Questions
QA/QC	Quality Assurance/Quality Control
Qal	Quaternary alluvium
QAPP	Quality Assurance Project Plan
RAP	Remedial Action Plan
RIBs	rapid infiltration basins
SAP	Sampling and Analysis Plan

ACRONYMS AND ABBREVIATIONS

SOP	Standard Operating Procedure
SPLP	synthetic precipitation leaching procedure
SRC	Site-related chemicals
SVOC	semi-volatile organic compound
TDS	total dissolved solids
TEQ	toxic equivalency
TPH	total petroleum hydrocarbons
UCL	upper confidence limit
UMCf	Upper Muddy Creek formation
USEPA	U.S. Environmental Protection Agency
VI SL	Vapor Intrusion Screening Level
VOC	volatile organic compound
WRF	Wastewater Reclamation Facility

1.0 INTRODUCTION

Basic Remediation Company (BRC) has prepared this Sampling and Analysis Plan (SAP) for the First Eight Rows sub-areas (Phases I and II combined). The SAP describes tasks for performance of confirmation sampling of Site soils and soil vapor flux in order to obtain a no further action determination (NFAD) for these areas. The term NFAD is defined in the *Settlement Agreement and Administrative Order on Consent: BMI Common Areas, Phase 3* (AOC3; Nevada Division of Environmental Protection [NDEP] 2006) in Section XVII.

This revision of the SAP, Revision 1, incorporates comments received from the NDEP, dated August 24, 2009, on Revision 0 of the First Eight Rows SAP, dated July 2009. The NDEP comments and BRC's response to these comments are included in Appendix A. Also included in Appendix A is a redline/strikeout version of the text showing the revisions from the July 2009 version of the SAP. An electronic version of the entire report, as well as original format files (MS Word and MS Excel) of all text and tables are included in Appendix B.

The First Eight Rows sub-areas represent two of several sub-areas of the BMI Common Areas (Eastside) located in Clark County, Nevada (Figure 1), and encompasses an area of approximately 201.5 acres¹ (Figure 2). For development purposes, it has been divided into two separate areas that will be addressed on separate schedules: the southeastern half (Phase I sub-area), which comprises approximately 77.1 acres, and the northwestern half (Phase II sub-area), which comprises approximately 124.4 acres. BRC will determine whether the two development parcels are to be evaluated for closure as a single unit or separately based on the results of the sampling that will be performed in accordance with this SAP. For the purpose of this SAP, the area associated with both Phases will hereinafter be referred to collectively as the "Site," and distinctions between the portions of the Site associated with each Phase will be made when appropriate.

The Site includes unlined wastewater effluent evaporation/infiltration ponds that were built and into which various plant wastewaters were discharged from 1942 through 1976. This SAP relies upon information provided in the *BRC Closure Plan* for the BMI Common Areas (BRC *et al.* 2007; hereinafter "Closure Plan"). The main text of the Closure Plan provides discussions of the following elements relative to the BMI Common Areas project as a whole:

¹ This acreage estimate reflects a change from that presented in the Closure Plan (208.2 acres) that has resulted from the revision of site boundaries that occurred subsequent to Closure Plan finalization.

- The project history, including cleanup goals and project objective (Closure Plan Sections 1 and 2);
- The list of Site-related chemicals (Closure Plan Section 3);
- The conceptual site model (CSM) addressing potential contaminant sources, the nature and extent of chemical of potential concern (COPC) occurrence, and potential exposure pathways (Closure Plan Section 4; a CSM discussion specific to the Site is provided in Section 2 of this SAP);
- Data verification and validation procedures (Closure Plan Section 5);
- The procedures used to evaluate the usability and adequacy of data for use in the risk assessment (Closure Plan Sections 6 and 9);
- The data quality objectives (DQOs; Closure Plan Section 7; a DQO discussion specific to the Site is provided in Section 3 of this SAP);
- The remedial alternative study process for the Site (Closure Plan Section 8);
- Risk assessment procedures that will be used for Site closure (Closure Plan Section 9 for human health and Section 10 for ecological); and
- Data quality assessment (DQA; Closure Plan Section 5).

Mass-scale remediation has recently been completed based on existing Site data, prior to conducting the confirmation sampling proposed under this SAP (see Section 2.8). Therefore, risk assessments for the Site will be conducted primarily using the data collected as part of this SAP, which has been designed to produce data representative of the conditions to which current (non-remediation workers) or future users would be exposed. The need for additional remediation will be primarily based on the data collected based on this SAP.

Validated, reliable historical data associated with areas or depth intervals not affected by the remediation will be used as appropriate to augment the dataset derived from the SAP activities.² However, the following data gaps associated with the existing Site characterization have been

² Only those historical data that are representative of the conditions to which current (non-remediation workers) or future users would be exposed (*i.e.*, excluding data associated with soils removed from the Site prior to the risk assessment) and that pass a data usability evaluation will be included in the risk assessment for the Site.

identified: many of the previous samples were composite samples; most of the previous soil samples from within the uppermost 10 feet below ground surface (bgs) were collected at least eight years ago; few of the previous samples have been analyzed for all of the major chemicals or chemical families and several analyses used different analytical methods than established in the current analytical program for the BMI Common Areas; no vapor flux samples have been collected; and spatial coverage of the Site is incomplete. Much of the historical data is associated with soil intervals that will be excavated during remediation and will not represent conditions to which future Site users would be exposed. Furthermore, the historical data represent incomplete coverage for certain constituents and will be redundant for others after implementation of this SAP. Therefore, BRC anticipates that the historical data will not generally be included in the risk assessment. However, a data usability evaluation will be conducted to determine whether any of the historical data can or should be used in the risk assessment or it will be explained why the new data supplants the old data. These historical data are useful for CSM purposes and are discussed in Section 2.0.

Sampling performed as described in this SAP relies on the statistical methodologies presented in the *Statistical Methodology Report* (NewFields 2006). The Statistical Methodology Report describes the statistical methods that will be used to confirm the final soils closure at each of the Eastside sub-areas of the BMI Common Areas.

The SAP presents sampling procedures that will be performed to assess conditions in soils and soil vapor flux at the Site after remediation has been performed. As described in the Closure Plan, this information will be used to determine potential impacts to current (non-remediation workers) or future Site users from chemicals present in Site soils and whether additional remediation is needed to achieve cleanup goals. In this SAP, as recommended in the Statistical Methodology Report, soil samples will be collected throughout the Site on a systematic sampling basis. This random sampling consists of a regular 3-acre grid overlay across the property with a randomly placed sample within each grid cell. The goal of this sampling is to provide enough samples for 1) completion of a statistically robust assessment of contaminant distribution, and subsequently; 2) to provide a robust dataset upon which to perform a human health risk assessment. Additional biased sampling locations will be selected within or near small-scale contamination points of interest, including but not limited to previous debris locations, ponds, and berm walls. Soil vapor flux samples will be collected from a subset of the soil sampling locations (that is, one sample within each grid cell).

1.1 PURPOSE OF THE SAP

The purpose of this SAP is to develop a sampling program for the Site that will provide an understanding of *pre-development* soil and soil vapor conditions (including any indirect impacts from underlying groundwater) at the Site.³ Portions of the Site are known to be impacted with chemicals as a result of historical Site operations, and without performing a formal risk assessment; BRC assumes that remediation would be required for protection of human health and the environment. As a result, mass-scale remediation has recently been completed in accordance with the *Corrective Action Plan* (CAP; BRC 2006) based on existing Site data, prior to conducting the confirmation sampling proposed under this SAP (see Section 2.8). BRC expects that risk assessments for Site closure will primarily use the data collected as part of this SAP, which has been designed to produce data representative of the conditions to which current users (*i.e.*, those existing after remediation is performed) or future (post-development) users would be exposed. Data collected under this SAP will also be used to assess the need for additional remediation beyond what has been performed in advance of the SAP sampling.

The scope of this investigation is limited to soil and soil vapor flux sampling in an effort to assess issues that might directly impact Site development potential consistent with the Closure Plan. However, the data will be used to determine any impacts to groundwater from future Site uses. That is, data will be collected to evaluate the soil-to-groundwater leaching pathway. The objective of the field investigation is to identify and characterize the distribution of Site-related chemicals (SRCs) such that the potential impacts from chemicals present in Site soils to current (non-remediation workers) and future Site users can be determined through risk assessment. Surface and subsurface samples that will be collected are depth-discrete soil matrix samples and surface vapor flux samples. Although this SAP does include data collection for evaluating groundwater as a potential source to the vapor intrusion pathway, it does not address potential groundwater issues, which are being investigated separately by BRC pursuant to AOC3 (NDEP 2006) as part of an overall evaluation of the BMI Common Areas. The investigation is designed to provide sufficient data to support risk-based decisions (including decisions to seek an NFAD) for the Site. The NFAD for the Site will contain a deed restriction precluding potable use of groundwater beneath the Site.

³ This SAP includes summaries of chemical data associated with historical sampling events at the Site. These summaries document the known nature and extent of chemical occurrence at the Site, which was used to identify the need for additional biased sampling locations to augment the sample locations proposed as part of the SAP (Section 4), such that all potential source areas are addressed. This SAP includes a process for adding sampling locations in response to the discovery of currently unknown impacted areas, if any, that may be identified during remediation.

2.0 CONCEPTUAL SITE MODEL

The following sections provide information about the Site, previous investigations that have been conducted at the Site, interim remedial measures (IRMs) that have occurred, and the existing Site dataset. An overview of the CSM for the Site is provided in the Closure Plan. Consistent with the structure of prior SAPs, this section includes a summary of the investigations performed at the Site during the following primary project phases: prior to IRM performance (Section 2.4); during or immediately following any IRMs (Section 2.6); and subsequent to IRM performance (Section 2.7).

2.1 SITE DESCRIPTION

The Site (Figure 2) is approximately 201.5 acres in size,⁴ and is gently sloping to the northeast. As noted in Section 1, it has been divided into two separate areas: the southeastern half (Phase I sub-area), which comprises approximately 77.1 acres, and the northwestern half (Phase II sub-area), which comprises approximately 124.4 acres. Both sub-areas within the Site contain unlined wastewater effluent evaporation/infiltration ponds⁵ and a portion of an associated conveyance ditch forms the western boundary of the Phase II sub-area.⁶ These features were once associated with historical conveyance and/or disposal of operations effluent and cooling water by companies operating at the BMI Complex. The former effluent ponds comprise the entirety of the Site except (1) a thin strip of land in the Phase I sub-area just south of the southernmost row (Upper Pond row UA, see Figure 1), and (2) a small plot of land immediately east of Upper Pond row UG in the Phase I sub-area (see Figure 1). The individual ponds (approximately 2 to 6 acres in size) are distinct and defined by berms along the north, east, and

⁴ This delineation of two separate Phases and the associated acreage estimate reflect a change from the Closure Plan that has resulted from the revision of site boundaries that occurred subsequent to Closure Plan finalization. The First Eight Rows combined acreage has decreased from the 208.2 acres presented in the Closure Plan

⁵ The Closure Plan and historical documents associated with the BMI Common Areas distinguish two primary sets of ponds in the Common Areas that are associated with historical conveyance and/or disposal operations: the “Upper Ponds” and the “Lower Ponds”. The pond row labels shown on Figure 1 distinguish between the two; the 18 rows of Upper Ponds are labeled with a “U” followed by a letter (A through R) and the ten rows of Lower Ponds are labeled with an “L” followed by a letter (A through J). The Upper Ponds are the basis of the name applied to the Upper Ponds sub-area; but the Upper Ponds sub-area does not encompass all of the Upper Ponds, rather only the northern half of the Upper Ponds, which had little to no historical usage (the southern portion of the Upper Ponds are within the First Eight Rows [Phases I and II], TIMET Ponds, and Spray Wheel sub-areas). The Lower Ponds are located further north on the BMI Common Areas, within the Western Hook-Development and Western Hook-Open Space sub-areas, and were previously located within the footprint of the City of Henderson WRF prior to its construction, during which they were regraded.

⁶ Note that this ditch is not included within the Site, but falls within the boundaries of the TIMET Ponds sub-area.

west sides. In general, the berms are relatively uniformly-shaped, often with angular corners showing little evidence of erosion.

As seen on Figures 1 and 2, the Utility Corridor sub-area transects the southwestern corner of the Site (both sub-areas) and then runs along the western boundary of the Site (Phase II sub-area) adjacent to the Beta Ditch before extending off-site into the Spray Wheel sub-area. There is a narrow gap between the Site boundary and the Utility Corridor sub-area further to the east. The Utility Corridor sub-area consists of a 50-foot wide ditch, which starts at the sewer alignment excavation north of Parcel 4B, and extends through the Staging, First Eight Rows, Spray Wheel, Upper Ponds, and Galleria North sub-areas until it meets up with the tie-in location at the City of Henderson Water Reclamation Facility (WRF) (see Figure 1). The Utility Corridor sub-area was defined subsequent to the final BRC Closure Plan to allow expedited characterization and remediation in order to facilitate the installation of a new 48-inch sewer line along this alignment. An NFAD was received from NDEP for the Utility Corridor sub-area on January 8, 2009, for commercial or industrial land use for site soils above 10 feet below ground. Detailed discussions and data presentation/review for the Utility Corridor sub-area are presented in the *Data Review and Human Health Risk Assessment for the Utility Corridor Sub-Area* (BRC 2009a; In Revision).

The Site was undeveloped desert land until the construction of the effluent evaporation/infiltration ponds, into which various plant wastewaters were discharged from 1942 through 1976. Evidence in later aerial photographs from 1978 and 1980 indicates that effluent was subsequently discharged into some of the former ponds at the Site from ponds located where the Southern Rapid Infiltration Basins (RIBs) were later constructed by the City of Henderson for municipal wastewater treatment. Later aerial photographs (1987 and beyond) show no evidence of continued discharges to the Site from the Southern RIBS area. It is assumed, but cannot be confirmed, that this discharge was associated with City water treatment operations. Based on the aerial photographs from 1978 and 1980, former ponds receiving effluent during that period were in the southwestern quadrant of the Site (*i.e.*, the first four rows of Ponds, locations closest to the Beta Ditch) and the Staging sub-area to the south. The effluent appears to have been discharged to the Site via a portion of the Beta Ditch.

Since the early to mid-1980s, the Site has been vacant and unused, except for temporary stockpiling of soils excavated from other Eastside areas, as discussed later in this section. The native soils are compacted, poorly-sorted, non-plastic, light brown to red silty sand with varying amounts of gravel. Within individual effluent evaporation/infiltration ponds, surficial material

consists of very fine material that grades in color from greenish-gray to light yellowish-brown; in places, the ground surface is white. This discolored material has been interpreted to be residual sediment associated with historic effluent disposal in the ponds. This material/discoloration is evident in many effluent evaporation/infiltration ponds contained within the Site. The presence of this material is consistent with the use of these former ponds for historical wastewater discharge, which is further supported by historical aerial photographs that show evidence of fluids within the ponds.

Exposures to current receptors (*i.e.*, trespassers/visitors, occasional on-site workers, and off-site residents) are being managed through Site access control. Under the prospective redevelopment plan, the Site may be used for a variety of potential purposes. Residential land use (low, medium and high density) with roads, parks and trails interspersed, is currently planned for the majority of the Site. A school land use is also planned for the southwestern corner of the Phase I sub-area. The entire Site will be enhanced by restoration and redevelopment once remediation is complete. Therefore, exposures to ecological receptors will be mitigated or removed (see Section 10 of the Closure Plan). Future receptors identified as “on-site receptors” are defined as receptors located within the current Site boundaries (Figure 2), while future “off-site receptors” are those located outside the current Site boundaries. Many potential human receptors are possible at the Site in the period during and after redevelopment. The potentially exposed populations and their potential routes of exposure are discussed in Section 9 of the Closure Plan.

The current development plan for the Site is shown on Figure 3. To construct commercial facilities, the land will be cut and/or filled, paved with roads or foundations, and nurtured with imported soils from other areas within the Common Areas⁷ as needed. Figure 4 shows the current grading plan for the Site, indicating which areas will be filled and which areas will be cut.

Because the background general water quality (*i.e.*, high salt concentrations) of the groundwater beneath the Site and in the surrounding area is poor and because BRC will place institutional controls in the form of a deed restriction to prevent future users from utilizing groundwater beneath the Site, the use of private water wells by residents, businesses, or parks for drinking water, irrigation water, or other non-potable uses (*e.g.*, washing cars, filling swimming pools) will not occur in the post-redevelopment phase.

⁷ Note: Imported soil data will not be included in risk assessment calculations. However, the chemical data for fill material from the Site may be useful for evaluating sub-areas to receive this fill (that is, imported fill that may be used at the Site will have been included in risk assessments for sub-areas where the fill was obtained).

Although direct exposures to groundwater will not occur; indirect exposures are possible. The primary indirect exposure pathway from groundwater is the infiltration of volatile organic compounds (VOCs) and radon from soil and groundwater to indoor air. In addition, residual levels of chemicals in soil may leach and impact groundwater quality beneath the Site. Collection of data to evaluate both of these migration pathways at the Site is presented in this SAP.

The Site is surrounded on all sides by Eastside sub-areas as follows:

- North • The Upper Ponds sub-area (approximately 281.6 acres⁸)
- South • The Staging sub-area (approximately 126.2 acres⁹); and
 - Parcel 4B sub-area (approximately 278.4 acres)
- East • The Mohawk sub-area (approximately 54.7 acres¹⁰)
- West • The TIMET Ponds sub-area (approximately 209.9 acres), on a portion of which TIMET constructed lined evaporation ponds, into which it flowed effluent from its titanium manufacturing process from 1983 to 2005;¹¹ and
 - The Spray Wheel sub-area (approximately 125.6 acres), which is the former site of an evaporative agricultural-type mechanism operated by TIMET for the evaporative disposal of aqueous salt waste from 1983 to 1991.

Chemicals historically detected in these sub-areas are similar to those found at the Site.

The phased remediation schedule for Eastside calls for the Mohawk, Upper Ponds, and Parcel 4B sub-areas to be remediated concurrent with or prior to the Site. The NDEP concluded in 1997 that no further characterization of the Parcel 4B sub-area was required and that development could proceed without environmental restriction. However, subsequent to this decision,

⁸ This acreage estimate reflects a change from that presented in the Closure Plan (284.5 acres) that has resulted from the revision of site boundaries that occurred subsequent to Closure Plan finalization.

⁹ Subsequent to Closure Plan finalization, the former Southern RIBs sub-area (245.1 acres as defined in the Closure Plan) was separated into a smaller Southern RIBs sub-area (84.2 acres) and the Staging sub-area (126.2 acres), and the property west of Boulder Highway was removed from this sub-area.

¹⁰ This acreage estimate reflects a change from that presented in the Closure Plan (49.2 acres) that has resulted from the revision of site boundaries that occurred subsequent to Closure Plan finalization.

¹¹ A portion of the Beta Ditch forms the border between the TIMET Ponds and First Eight Rows sub-areas. This portion of the Beta Ditch will be evaluated as part of the TIMET Ponds sub-area.

additional sampling and analysis was conducted in 2007, supplemented by additional sampling in 2008. Following the first round of sampling in 2007, surface soil was scraped and removed from several areas within the Parcel 4B sub-area followed by additional sampling. A screening-level human health risk assessment has been conducted for this sub-area, currently in review by NDEP, to determine whether re-affirmation of the NFAD for Parcel 4B is warranted. Remediation is currently on-going at the Mohawk sub-area, and is expected to be completed in Summer 2009, to be confirmed by a human health risk assessment. This process will also be conducted for the Upper Ponds sub-area after sampling is performed in accordance with the SAP for that area (BRC 2009b; approved by NDEP on May 18, 2009) to delineate locations requiring remediation.

Remediation of the other adjacent sub-areas (TIMET Ponds, Spray Wheel, and Staging sub-areas) is scheduled to be finalized after remediation of the Site. Based on historical sampling, and as will be presented in the SAPs for those sub-areas, soils in these sub-areas contain chemicals at concentrations greater than applicable comparison levels for protection of human health and groundwater protection (see Section 2.8). Remediation at those adjacent sub-areas involves major earth-moving activities and could result in a significant amount of airborne dispersion and/or overland runoff that could adversely affect Site conditions if mitigation measures were not employed. However, potential impacts from these areas to the Site are considered negligible because dust suppression/mitigation measures and storm water pollution prevention controls have been implemented at each sub-area undergoing remediation since remediation initiation and will be implemented during future remediation activities¹². These dust suppression controls are implemented to comply with applicable air quality regulations and to impede the generation of airborne dust due to intrusive on-site activities. These control measures are discussed in detail in the CAP (BRC 2006). In addition, emissions of particulate matter from the Site are being monitored by BRC as described in the *Perimeter Air Monitoring Plan* (BRC 2008) to assess the effectiveness of these dust control measures.

At the time of this SAP submittal, the contents of the lined ponds in the TIMET Ponds sub-area are being excavated and transported to the Corrective Action Management Unit (CAMU) for

¹² The possibility exists that airborne dispersion and/or overland transport of surface soils/sediments from other adjacent sub-areas could have historically resulted in contamination at the First Eight Rows sub-areas. However, if this was in fact the case, the nature and extent of associated impacts would be evident from historical surface soil data, and/or the data to be collected under this SAP. The need for remediation of the First Eight Rows sub-areas will be based on current chemical concentrations in Site soils regardless of the source of contamination, and including airborne dispersion and overland transport, if any.

disposal. For certain ponds, dewatering is being performed to reduce the moisture content to a level appropriate for placement into the CAMU. The Site has been used as a temporary staging area for these activities prior to the soils being transported to the CAMU. Some temporary stockpiles created during these staging activities are evident as darkened areas on the aerial photograph provided in Figure 2, but these stockpile locations within the Site have since been removed.

2.2 SURFACE WATER

Surface water flow occurs for brief periods of time during periodic precipitation events. The nature of the unlined wastewater effluent evaporation/infiltration ponds and their construction currently serve to reduce overland transport of surface waters collected within the former Ponds area. Under current conditions, it is unlikely that contaminants in surface waters generated within the Site will migrate via overland transport to the Las Vegas Wash from the Site due to (1) the distance to the Wash (greater than one mile); and (2) the intervening presence of the Weston Hills and Tuscany developments and northern RIBs between the Site and the Wash. However, the presence of the drainage ditch along the western boundary of the Site (Phase II sub-area) suggests the current potential for rainfall to be carried from the Site to the Wash.

After development there will continue to be a low likelihood that contaminants in surface waters generated within the Site will migrate via overland transport to the Las Vegas Wash from the Site, because of (1) the removal of the Beta Ditch during remediation; (2) the large distance to the Wash; (3) the intervening presence of other developed properties; and (4) storm water features as part of the future development of the Site.

2.3 GEOLOGY/HYDROGEOLOGY

As is common throughout the Las Vegas Valley, Site soils are primarily sand and gravel, with occasional cobbles. This is consistent with the depositional environment of an alluvial fan. The Site is located on alluvial fan sediments, with a surface that slopes to the north-northeast at a gradient of approximately 0.02 foot per foot (ft/ft) towards the Las Vegas Wash. Regional drainage is generally to the east.

The uppermost strata beneath the Site consist primarily of alluvial sands and gravels derived from the River Mountains and from the volcanic source rocks in the McCullough Range, located to the southeast and southwest of the Site, respectively. These uppermost alluvial sediments were deposited within the last two million years and are of Quaternary age, and are thus mapped and

referred to as the Quaternary alluvium (Qal; Carlsen *et al.* 1991). The Qal is typically on the order of 30 to 50 feet thick at the Site with variations due, in part, to the non-uniform contact between the Qal and the underlying Upper Muddy Creek Formation (UMCf).

The UMCf underlies the Qal. The Muddy Creek formation, of which the UMCf is the uppermost part, is a lacustrine deposition from the Tertiary Age, and it underlies much of the Las Vegas Valley. It is more than 2,000 feet thick in places. The lithology of the UMCf underlying the Site is typically fine-grained (sandy silt and clayey silt), although layers with increased sand content are sporadically encountered. These UMCf materials have typically low permeability, with hydraulic conductivities on the order of 10^{-6} to 10^{-8} centimeters per second (Weston 1993). The UMCf in the vicinity of the Site was encountered at depths ranging from 35 feet to 75 ft bgs, and extending to the maximum explored depth of 400 feet bgs. Lithologic cross sections using Site-specific stratigraphic information are shown on Figures 5 and 6.

Two distinct, laterally continuous water-bearing zones are present within the upper 400 feet of the Site subsurface: (1) an upper, unconfined water-bearing zone primarily within the Qal (referred to as the Shallow Zone¹³), and (2) a deep, confined water-bearing zone that occurs in a sandier depth interval within the silts of the deeper UMCf (referred to as the Deep Zone). Between these two distinct water-bearing zones, a series of saturated sand stringers were sporadically and unpredictably encountered during drilling (referred to as the Middle Zone).

The Shallow Zone is an unconfined, shallower, water-bearing zone that occurs across the BMI Common Areas. Within the Site boundaries, water in the Shallow Zone occurs in the Qal. The water surface in the Shallow Zone generally follows topography, with the water surface sloping towards the Las Vegas Wash. According to recent groundwater monitoring performed in April-May 2008 (BRC and MWH 2008) the depth from the surface to first groundwater at the Site is approximately 60 feet bgs. Wells completed in the Shallow Zone are not highly productive, with sustainable flows typically less than five gallons per minute. Chemical occurrence within this water-bearing zone, based on recent monitoring data associated with wells installed within and in the vicinity of the Site, is discussed in Section 2.9.¹⁴

¹³ Note: hydrogeologic and lithologic nomenclature is based on NDEP (2009a).

¹⁴ Chemical occurrence in both the shallow and deep water-bearing zones beneath the Eastside and CAMU areas is currently being characterized under a process separate from the Closure Plan process under which this SAP has been prepared, which focuses on site soils. This SAP summarizes chemical occurrence trends in the shallow water-bearing zone, which is more likely to affect potential users under current and future land uses. A more detailed presentation of chemical occurrence patterns within both zones will be provided upon completion of the on-going groundwater investigation, and the CSM for the Eastside and CAMU areas will be updated accordingly.

Groundwater seeps currently exist at various locations within the Common Areas near the Las Vegas Wash. However, an evaluation of historical aerial photos taken between 1964 and 1970 indicates that seeps have historically appeared to the north of the Site (in the Western Hook-Open Space, Galleria North, and Sunset North Commercial sub-areas), and at nearby off-site locations, but not in the Site itself. Evidence of seeps was not observed in aerial photographs after 1972. The extent to which these former seeps historically affected contaminant transport (e.g., by means of enhanced surface water transport to the Wash or upward migration into overlying soils) is unknown.

2.4 HISTORICAL SITE INVESTIGATIONS PRIOR TO IRM PERFORMANCE

Shallow soil samples were collected within the Site prior to initiation of the above-referenced IRM activities during the following separate events (see Figure 2 for sample locations; the results of these field sampling events are summarized in the database excerpt provided in Appendix B):

- The BMI Common Areas Environmental Conditions Investigation (ECI) conducted during March and April 1996 (dataset 1a). The soil investigation activities were performed in accordance with a work plan approved by NDEP in February 1996 (ERM 1996a). The soil sampling results for the investigation activities were presented in the ECI report (ERM 1996b), which was approved by NDEP in March 1997. Data validation results are presented in the Data Validation Summary Report (DVSR) for dataset 1a (ERM 2006a), which was approved by NDEP on September 12, 2006; and
- Supplemental soil investigation conducted in November 1998 (dataset 6b) in the Upper Ponds. During this sampling event, soil samples were collected from three locations within the Site and analyzed for various Site-related chemicals and for pesticides and/or radionuclides by the toxicity characteristic leaching procedure (TCLP). These data were not collected under a formal NDEP-approved work plan. Data validation results are presented in the DVSR for dataset 6b (ERM 2006b), which was approved by NDEP on October 25, 2006.

During these investigations, soil samples at various depths were collected and analyzed for VOCs, semi-volatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), organochlorine pesticides, polychlorinated biphenyls (PCBs), metals, perchlorate, and/or radionuclides. As seen on Figure 2, the majority of these samples were composite samples. The results of these field sampling events are provided in the database excerpt provided in

Appendix B, and are summarized in Section 2.8. No pre-IRM samples were collected in the Site within the footprint of the Mohawk IRM (discussed on the next section).

2.5 INTERIM REMEDIAL MEASURES (IRMs)

This section describes the various on-site and off-site IRMs affecting the Site that have been performed to date by BRC as part of the overall Eastside remediation effort. Soils excavated in 1999 and 2000 during IRMs conducted within the Mohawk¹⁵ and Western Hook sub-areas were transported to the Site and placed in secured locations within the First Eight Rows sub-areas in accordance with approved IRM work plans (ERM 1999a and 1999b). At that time, those soils were treated to prevent generation of wind-blown dusts and runoff. Excavated soils associated with these IRMs were stockpiled within former effluent ponds PUA-04, PUB-04, PUB-05, PUC-03, PUC-04, PUD-03, and PUD-04. Figure 7 depicts these initial stockpile areas and additional stockpile areas established to hold soils subsequently excavated from other portions of the Common Areas. Activities associated with stockpile removal from Eastside and disposal in the CAMU are documented in daily progress reports and monthly Interim Status Reports that are regularly submitted to NDEP. As specified in the CAP, remedial activities for a given sub-area will be documented in the Closure Report prepared at the conclusion of remediation at that sub-area. As such, interim stockpile storage, removal, and disposal in the CAMU will be discussed in the sub-area-specific Closure Reports. These IRMs are described in more detail below.

2.5.1 On-Site Excavation during Mohawk IRM

To expedite restoration of the Site in response to development demands, in 1999/2000 BRC elected to perform an IRM in the Mohawk sub-area, which is adjacent to the Site to the east. The majority of the IRM was performed during October and November of 1999, with the balance completed by March 2000. As seen in Figure 7, four former effluent ponds along the shared boundary are partially contained within the Mohawk and First Eight Rows (Phase I) sub-areas: PUA-03, PUB-03, PUC-02, and PUD-02 (Figure 7). Because the Mohawk IRM extended the full length of the impacted ponds without regard for sub-area boundaries, the Mohawk IRM also addressed the portions of these shared ponds that were included within the First Eight Rows sub-areas. The IRM was performed following the procedures specified in the *Mohawk Area IRM*

¹⁵ Soils excavated during the Mohawk IRM included some from areas within the Site (eastern edge of Phase I sub-area, see Figure 7).

Workplan (ERM 1999a), which was approved by NDEP on July 23, 1999. IRM activities consisted of:

- Excavation of the impacted shallow soils (a total estimated 16,000 cubic yards from the Mohawk and First Eight Rows sub-areas),
- Transportation to a secured location within the First Eight Rows sub-areas (*i.e.*, within former effluent ponds PUA-04, PUB-04, PUC-03, and PUD-03), and
- Treatment to prevent generation of wind-blown dusts and runoff.

BRC's intent was that these soils would ultimately be placed into the off-site CAMU after its construction. Results of the IRM for the Site were presented in the IRM completion report (ERM 2000a); this report has not been approved by NDEP. The stockpiled soils associated with the Mohawk IRM were recently removed from the Site and transported to the CAMU.

2.5.2 Long-Term Stockpiling of Off-Site Mohawk IRM Soils

Excavated soils from six other ponds in the Mohawk sub-area (*i.e.*, PUA-01 and -02, PUB-01 and -02, PUC-01 and PUD-01) were also transported to the Site (Phase I sub-area) during the IRM described in the prior bullet. As discussed above, these excavated soils (a total estimated 16,000 cubic yards of soil from both sub-areas) were stockpiled on the Site within former effluent ponds PUA-04, PUB-04, PUC-03, and PUD-03 after the IRM was completed in 2000. The stockpiled soils associated with the Mohawk IRM were recently removed from the Site and transported to the CAMU.

2.5.3 Long-Term Stockpiling of Off-Site Sunset North IRM Soils

In 1999/2000 BRC also elected to perform an IRM in selected Lower Ponds within the former Sunset North Area, which has now been redesignated as multiple Eastside sub-areas. The IRM addressed portions of the Western Hook-Development, Sunset North Commercial and Upper Ponds sub-areas, and was performed between October 1999 and May 2000. The IRM was conducted following the procedures specified in the *Sunset North Area IRM Workplan* (ERM 1999b), which was approved by NDEP on August 27, 1999. IRM activities consisted of:

- Excavation of the impacted shallow soils (an estimated 130,000 cubic yards),

- Transportation to a second secured location within the First Eight Rows sub-areas (*i.e.*, within former effluent ponds PUA-04, PUB-04, PUB-05, PUC-03, PUC-04, PUD-03, and PUD-04.), and
- Treatment to prevent generation of wind-blown dusts and runoff.
- As above, BRC's intent was that these soils would ultimately be placed into the off-site CAMU after its construction. Results of the IRM were presented in the IRM completion report (ERM 2000b); this report has not been approved by NDEP.

The stockpiled soils associated with the Sunset North IRM were recently removed from the Site and transported to the CAMU.

2.5.4 Short-Term Stockpiling of TIMET Ponds Soils

In the Summer 2008, remediation activities were initiated in the TIMET Ponds sub-area in accordance with the CAP, and have involved:

- Excavation of soils from various locations within this sub-area,
- Dewatering of the contents of certain ponds, and
- Transportation of those soils to either (1) the off-site CAMU, or, (2) to the Site, where they were temporarily staged prior to their ultimate disposal in the CAMU.

Some temporary stockpiles created during these staging activities are evident as darkened areas on the aerial photograph provided in Figure 7, but stockpile locations within the Site are and have been routinely changed throughout the TIMET Pond soil staging process, and at this point have mostly been removed to the CAMU.

2.5.5 CAP Remediation Within the Site

By definition, IRMs are "interim" remedial activities conducted at a given site, performed in advance of: (1) longer-term evaluations of applicable remedial options, (2) selection of a final remedy to address conditions at that site, and (3) implementation of that remedy. As previously noted, a final remedy for the Site has been selected and the CAP has been approved by NDEP. Based on existing historical data showing the presence of elevated chemical concentrations in Site soils, BRC has completed mass-scale remediation at the Site in accordance with the CAP, in advance of conducting sampling in accordance with this SAP. Remedial activities included

excavation of impacted materials from the Site and off-site transport of these materials to the CAMU, as well as the temporary use of the Site for dewatering the contents of TIMET Ponds prior to transport to the CAMU (Section 2.5.4). Details of that remediation (including figures as appropriate) will be presented in the remediation completion report that will be submitted upon finalization of remediation.

2.6 IRM-RELATED CONFIRMATION SAMPLING

Most of the IRMs referenced in the prior section involved excavation at off-site locations, and no confirmation sampling was performed at on-site locations as part of those IRMs. However, confirmation sampling was conducted within the site boundaries during one IRM: the Mohawk IRM. Four Mohawk IRM sample locations fall within the Site boundaries (Phase I sub-area): PUA-03N, PUA-03S, PUB-03N and PUB-03S. Confirmation sampling procedures associated with that IRM are summarized below.

The confirmation samples collected from each former pond were analyzed for the following: metals, perchlorate, organochlorine pesticides, radionuclides, and asbestos. Soil sampling was conducted during October 1999 (dataset 7a). As noted above, the soil sampling activities were performed in accordance with an NDEP-approved work plan (ERM 1999a). The soil sampling results for the investigation activities were presented in the IRM completion report (ERM 2000a). All data associated with the IRM confirmation sampling have been validated. Data validation results are presented in the DVSR for dataset 7a (ERM 2006c), which was approved by NDEP on October 17, 2006. The post-IRM data are also included in the database excerpt provided in Appendix B. Because no pre-IRM samples were collected within the IRM areas that fell within the Site, it is not possible to evaluate the degree to which chemical concentrations at the Site were reduced by the IRM activities.

2.7 INVESTIGATIONS SUBSEQUENT TO IRM

Soil samples were collected within the Site after conducting the initial IRM (*i.e.*, 2000 and later) during the following separate events (see Figure 2 for sample locations; data associated with all of these sampling events are provided in Appendix B):

- Supplemental soil investigation conducted in October 1999 (dataset 6a) in the Upper Ponds. During this sampling event, soil samples were collected from the eastern and northern berms of five effluent ponds within the Site, and were analyzed for asbestos, metals, perchlorate, and/or pesticides. These data were not collected under a formal NDEP-

approved work plan. Data validation results are presented in the DVSR for dataset 6a (ERM 2006d), which was approved by NDEP on October 25, 2006.

- Supplemental soil investigation conducted in October 1999 (dataset 6d) in the Upper Ponds. These data were not collected under a formal NDEP-approved work plan. Data validation results are presented in the DVSR for dataset 6d (ERM 2006e), which was approved by NDEP on October 10, 2006.
- Discrete/composite soil investigation conducted in July 2000 (dataset 8a). The soil investigation activities were performed in accordance with ERM's work plan submitted in July 2000 and approved by NDEP on July 18, 2000. The soil sampling results for the investigation activities were presented in letters to NDEP dated August 11, 2000 (soil sampling results) and August 28, 2000 (statistical analysis of results); these letters have not been approved by NDEP. Data validation results are presented in the DVSR for dataset 8a (ERM 2006f), which was approved by NDEP on October 10, 2006.
- Deep soil characterization conducted in June/July 2004 during monitoring well installation at one on-site location (SB-16-B) as part of the overall Eastside 2004 Hydrologic Characterization Investigation (dataset 27). The soil investigation activities were performed in accordance with a work plan submitted in December 2003 (MWH 2003) and approved by NDEP in January 2004. The sampling results for the investigation activities were presented in the 2004 version of the BRC Closure Plan, which was not approved by NDEP. Data validation results are presented in the DVSR for dataset 27 (MWH 2006a), which was approved by NDEP on August 31, 2006.
- Supplemental soil investigation conducted in April 2005 (dataset 33) in the vicinity of the TIMET Spray Wheel to assess chemical occurrence at depth; the only location sampled within the Site was SWB-24, which lies adjacent to the southeastern edge of the Spray Wheel sub-area. These data were not collected under a formal NDEP-approved work plan. Data validation results are presented in the DVSR for dataset 33 (MWH 2006b), which was approved by NDEP on September 26, 2006.
- Waste characterization conducted in July and August 2006 (dataset 39). The soil investigation activities were performed in accordance with BRC's SAP submitted on June 29, 2006, and approved by NDEP in July 2006. The soil sampling results for the investigation activities were previously presented in the *Remedial Action Plan* (RAP; BRC 2007), which was approved by NDEP on September 24, 2007. Data validation results are

presented in the DVSR for dataset 39 (MWH 2006c), which was approved by NDEP on November 3, 2006.

During these investigations, soil samples at various depths were collected and analyzed for VOCs, SVOCs, organochlorine pesticides, organophosphorus pesticides, PCBs, chlorinated herbicides, dioxins/furans, aldehydes, alcohols/glycols, organic acids, PAHs, metals, general chemistry, perchlorate, and/or radionuclides. The data associated with these investigations subsequent to the IRM are also included in the database excerpt provided in Appendix B.

2.8 CHEMICAL DISTRIBUTION WITHIN SOILS

This section provides summaries of chemical data associated with historical sampling events at the Site. It should be noted that because mass-scale remediation activities have been conducted at the Site in accordance with the CAP, the summary tables and chemical distribution figures and summaries presented later in this section do not reflect current conditions (*i.e.*, conditions at the time of this SAP submittal). Because confirmation sampling associated with the mass-scale remediation has not been completed, the SAP does not include any sampling results associated with the CAP remediation process. The historical data were used to assess the need for biased sampling locations to augment the sample locations proposed as part of the SAP (Section 4), such that all potential source areas are addressed in the SAP sampling program. The historical data summaries are accordingly provided in this SAP to present the known nature of impacts at the Site (pre-CAP remediation) such that the adequacy of the sampling program in this SAP can be demonstrated. Recognizing that the historical data summaries do not reflect current conditions, this SAP includes a process for adding sampling locations in response to the discovery of currently unknown impacted areas, if any, that may be identified during remediation (Section 4).

A summary of historic, compound-specific soil chemical data for the Site from surface to 10 feet bgs is presented in Table 1 (Note: Table 1A presents data for both of the First Eight Rows sub-areas; Table 1B presents data for the Phase I sub-area only; and Table 1C presents data for the Phase II sub-area only).¹⁶ Location-specific historical sampling results associated with the Site, including depth intervals deeper than 10 feet bgs, are provided in Appendix B, Tables B-1

¹⁶ Although the Utility Corridor sub-area crosses the Site, because this is a different sub-area, with different land use considerations, and an NFAD, data associated with the Utility Corridor sub-area are not included in Table 1 or this summary of Site data. Utility Corridor sub-area data are included on the figures in Appendix C.

through B-11, and included electronically in Appendix B.¹⁷ Sample locations are shown on Figure 2. Various applicable constituent-specific comparison levels are provided on the tables for reference, specifically:

- NDEP Basic Comparison Levels (BCLs) for residential soil (NDEP 2009b), hereinafter “BCL_{RS}”,
- NDEP BCLs for protection of groundwater (LBCL), assuming dilution attenuation factors (DAF) of 1 and 20 (NDEP 2009b), hereinafter “LBCL”, and
- The maximum background concentration (for metals and radionuclides only), derived from the background soil dataset for the Common Areas presented in *Background Shallow Soil Summary Report, BMI Complex and Common Areas Vicinity* (BRC/TIMET 2007), which was approved by NDEP on July 26, 2007. Establishment of background conditions for the Common Areas project is complicated by the unique geologic conditions in the area, specifically, the Common Areas location at the confluence of alluvial fan deposits from the McCullough Range to the southwest and the River Mountains to the east. Efforts are currently underway to determine whether chemical differences exist in soils derived from the two geologic formations. The First Eight Rows sub-areas appear to be underlain by sediments that are derived from both mountain ranges, and background conditions associated with soils in this area may be slightly different from those used as comparison levels in this report, which are primarily associated with alluvial fan deposits derived from the McCullough Range. However, these maximum reported background values are considered adequate for the purposes of this SAP. BRC is currently preparing a report that will summarize the results of background investigations performed in the Common Areas vicinity, and will identify the specific background datasets appropriate for comparisons to soil data from specific sub-areas within the Common Areas. BRC plans to obtain approval of this report prior to completing the closure risk assessment activities for the Site, which will be based on the results of soil sampling in accordance with this SAP and will include comparisons to applicable background soil data.

¹⁷ In most cases, the sample nomenclature for samples collected within the Upper Ponds is consistent with the pond IDs – for example, a sample collected from Upper Pond row H, the first pond to the east, at 1 foot bgs was historically assigned a sample ID of “PUH-01-1”. The pond rows and individual ponds within them are labeled on Figure 2. In cases where this nomenclature convention was not followed (*i.e.*, SB-16-B), the boring location can be seen on Figure 2; when such borings are noted in the text, the Pond locations are provided for ease of reference.

Figures showing the assumed post-IRM distribution of various representative chemicals at the Site are presented in Appendix C. SRCs were generally selected for graphical depictions if (1) a sufficient number of analyses for that constituent were performed; (2) multiple BCL_{RS} exceedances were observed for that constituent at concentrations in excess of background concentrations; and/or (3) an appreciable number of LBCL exceedances (DAF1) were observed for that constituent at concentrations in excess of background concentrations. For organochlorine pesticides and radionuclides, a single representative constituent was selected for graphical displays. Using these criteria, chemical occurrence figures were prepared for the following constituents, which are discussed in greater detail below along with all constituents reported at concentrations in excess of their BCL_{RS} or LBCL_{DAF1}:

Constituent	Soil Depth	Figure No.	Constituent	Soil Depth	Figure No.
Antimony	0 to 2 feet bgs	Figure C-1	Silver	0 to 2 feet bgs	Figure C-23
	3 to 10 feet bgs	Figure C-2		3 to 10 feet bgs	Figure C-24
Arsenic	0 to 2 feet bgs	Figure C-3	Thallium	0 to 2 feet bgs	Figure C-25
	3 to 10 feet bgs	Figure C-4		3 to 10 feet bgs	Figure C-26
Barium	0 to 2 feet bgs	Figure C-5	Vanadium	0 to 2 feet bgs	Figure C-27
	3 to 10 feet bgs	Figure C-6		3 to 10 feet bgs	Figure C-28
Beryllium	0 to 2 feet bgs	Figure C-7	Cyanide	0 to 2 feet bgs	Figure C-29
	3 to 10 feet bgs	Figure C-8		3 to 10 feet bgs	Figure C-30
Cadmium	0 to 2 feet bgs	Figure C-9	Perchlorate	0 to 2 feet bgs	Figure C-31
	3 to 10 feet bgs	Figure C-10		3 to 10 feet bgs	Figure C-32
Chromium	0 to 2 feet bgs	Figure C-11	4,4-DDE	0 to 2 feet bgs	Figure C-33
	3 to 10 feet bgs	Figure C-12		3 to 10 feet bgs	Figure C-34
Lead	0 to 2 feet bgs	Figure C-13	1,2,4-Trichloro- benzene	0 to 2 feet bgs	Figure C-35
	3 to 10 feet bgs	Figure C-14		3 to 10 feet bgs	Figure C-36
Manganese	0 to 2 feet bgs	Figure C-15	Benzo(a) anthracene	0 to 2 feet bgs	Figure C-37
	3 to 10 feet bgs	Figure C-16		3 to 10 feet bgs	Figure C-38
Mercury	0 to 2 feet bgs	Figure C-17	Hexachloro- benzene	0 to 2 feet bgs	Figure C-39
	3 to 10 feet bgs	Figure C-18		3 to 10 feet bgs	Figure C-40
Nickel	0 to 2 feet bgs	Figure C-19	Dioxins/Furans	0 to 2 feet bgs	Figure C-41
	3 to 10 feet bgs	Figure C-20			
Selenium	0 to 2 feet bgs	Figure C-21	Radium-226	0 to 2 feet bgs	Figure C-42
	3 to 10 feet bgs	Figure C-22		3 to 10 feet bgs	Figure C-43

These figures also include samples within the Utility Corridor sub-area, as well as all results within 1,000 feet of the Site from the adjacent sub-areas to provide information on the current upgradient, downgradient, and cross-gradient conditions.

Unless otherwise noted, to assess the potential threat to human health, chemical detections were compared to the BCL_{RS}. In addition, to assess the potential for impacts to groundwater quality,

chemical detections at the Site were also compared to the LBCL (DAF 1; LBCL_{DAF1}) established for each chemical. However, it should be noted that the maximum reported background concentrations¹⁸ for several metals (for example, arsenic) are appreciably higher than the comparison levels. In these cases, the evaluations focused on those BCL_{RS} and LBCL_{DAF1} exceedances that were higher than the maximum background concentrations. Chemical occurrence patterns for the chemicals detected at concentrations in excess of comparison levels, in samples collected from surface to 10 feet bgs, are provided below.

2.8.1 Aluminum

Aluminum was detected in all four of the soil samples in which it was analyzed (one surface¹⁹ and three subsurface samples; Table B-1). None of these detections were higher than the 77,200 mg/kg BCL_{RS}. However, all four exceeded the 75 mg/kg LBCL_{DAF1} (maximum detection 12,000 mg/kg at PUB-10, 10 feet bgs). These four LBCL_{DAF1} exceedances were lower than the 15,300 mg/kg maximum background detection.

2.8.2 Antimony

Of the 97 Site soil samples in which antimony was analyzed (63 surface and 34 subsurface samples; Table B-1), antimony was detected in approximately 88 percent. Sixteen of these detections were higher than the 31 mg/kg BCL_{RS}; these samples were associated with the following locations:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-08	0	41.2
PUA-10	0	49.9
PUB-06	0	49.9
PUD-09	0	51.9
PUE-07	0	70.5
PUB-09	0	91.9
PUA-09	0	92.3
PUC-07	0	107.2

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-09	10	120
PUB-10	5	151.2
PUB-10	0	174.7
PUE-07	0	240
PUB-10	10	290
PUB-08	0	302.4
PUC-07	0	390
PUB-10	0	490

Seventy-nine samples (including those listed above) exceeded the 0.3 mg/kg LBCL_{DAF1}. These exceedances are associated with the following samples:

¹⁸ Values used are the maximum from the shallow soils background dataset presented in the *Background Shallow Soil Summary Report, BMI Complex and Common Area Vicinity (BRC/TIMET 2007)*.

¹⁹ Surface samples are defined as those collected from the surface to 2 feet bgs; subsurface samples are defined as those collected from depths great than 2 feet bgs.

Sample ID	Depth (ft bgs)	Sample ID	Depth (ft bgs)	Sample ID	Depth (ft bgs)
BDB-15	0	PUC-03	0	PUE-06	0
PUA-05	0	PUC-05	0	PUE-07	0
PUA-07	0	PUC-05	5	PUE-07	0
PUA-07	5	PUC-07	0	PUE-07	5
PUA-07-N-D	0	PUC-07	0	PUE-07	5
PUA-07-N-S	0	PUC-07	5	PUE-07	10
PUA-09	0	PUC-07	5	PUE-07-E-D	0
PUA-09	5	PUC-07	10	PUE-07-E-S	0
PUA-10	0	PUC-07-E-D	0	PUE-07-N-D	0
PUB-03N	0	PUC-07-E-S	0	PUE-07-N-S	0
PUB-03S	0	PUC-07-N-D	0	PUF-01	0
PUB-05	0	PUC-07-N-S	0	PUF-01	5
PUB-06	0	PUC-08	0	PUF-02	0
PUB-06	5	PUC-08	5	PUF-03	0
PUB-08	0	PUD-06	0	PUF-03	0
PUB-08	5	PUD-06	5	PUF-03	5
PUB-09	0	PUD-06-E-D	0	PUF-05	0
PUB-09	5	PUD-06-N-S	0	PUG-02	0
PUB-09	10	PUD-08	0	PUG-03	0
PUB-10	0	PUD-08	5	PUG-04	0
PUB-10	0	PUD-09	0	PUG-04	0
PUB-10	5	PUD-09	5	PUG-05	0
PUB-10	10	PUE-02	0	PUG-06	0
PUB-10	10	PUE-03	0	PUG-06	0
PUB-10-E-D	0	PUE-03	5	PUG-07	0
PUB-10-E-S	0	PUE-05	0		
PUB-10-N-S	0	PUE-05	5		

All but one of the antimony $LBCL_{DAF1}$ exceedances were higher than the 0.5 mg/kg maximum background concentration. It should be noted that the standard reporting limits employed during the historical sampling events are often higher than the $LBCL_{DAF1}$, and it is unknown whether antimony is also present in those samples at concentrations in excess of the $LBCL_{DAF1}$. The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS} , if present, would have been reported. The distribution of antimony for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-1 and C-2, respectively.

2.8.3 Arsenic

Of the 112 Site soil samples in which arsenic was analyzed (81 surface and 31 subsurface samples; Table B-1), arsenic was detected in approximately 95 percent. All of the detections were higher than the 0.39 mg/kg BCL_{RS} and the 1 mg/kg $LBCL_{DAF1}$. Sixty-six samples had reported arsenic concentrations in excess of the maximum shallow soil background level (7.2 mg/kg; from BRC/TIMET 2007). These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)	Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-06-N-S	0	7.3	PUA-09SCD	0	60
PUF-05	0	7.3	PUE-07	5	62.2
PUF-01	0	7.5	PUA-09NED	0	65
PUE-07-N-S	0	7.5	PUC-08	0	75.7
PUC-07-E-D	0	8	PUA-09SCOM	0	77
PUE-07-N-D	0	8.5	PUA-09SWD	0	78
PUG-02	0	9.1	PUA-09SED	0	79
PUC-07-E-S	0	10	PUA-09NCOM	0	84
BDB-15	0	10	PUA-10	0	94.2
PUA-07	0	10.5	PUB-06	0	112
PUB-04	0	11	PUB-09	0	119
PUC-08	5	12.6	PUA-09NWD	0	120
PUG-06	0	12.6	PUB-09	10	130
PUD-09	5	12.8	PUB-10	10	140
PUE-03	0	12.9	PUB-10NED	0	150
PUB-10-N-S	0	14	PUC-07	0	162.41
PUE-05	0	14.7	PUE-07NCD	0	180
PUE-02	0	15	PUE-07SWD	0	180
PUC-03	5	15	PUB-10NCD	0	190
PUD-08	0	15.9	PUB-10NWD	0	190
PUB-10SWD	0	16	PUE-07NED	0	190
PUC-05	0	16.7	PUE-07SCOM	0	190
PUB-08	5	21.7	PUB-10	0	193
PUB-05	0	22	PUE-07NCOM	0	200
PUE-06	0	27.5	PUE-07SED	0	200
PUD-06	0	29	PUE-07NWD	0	210
PUG-07	0	35.3	PUB-10	5	211
PUB-10SCOM	0	44	PUA-09	0	218
PUC-03	0	45	PUB-10SCD	0	220
PUA-09NCD	0	53	PUE-07SCD	0	220
PUC-07	5	53.1	PUE-07	0	233
PUD-09	0	55.5	PUB-10NCOM	0	240
PUB-09	5	57.6	PUB-08	0	280

The reporting limits for the six non-detections were sufficiently low such that detections greater than background, if present, would have been reported. The distribution of arsenic for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-3 and C-4, respectively.

2.8.4 Barium

Barium was detected in all of the 87 Site soil samples in which barium was analyzed (58 surface and 29 subsurface samples; Table B-1). Six of the detections were higher than the 15,300 mg/kg BCL_{RS}; these exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-09	0	16,600
PUA-09	0	16,800
PUC-07	0	17,500

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-10	0	17,600
PUB-08	0	18,100
PUD-09	0	18,900

All of the barium detections exceeded the 82 mg/kg LBCL_{DAF1}. However, more than half of the detections (46 detections) were lower than the maximum background concentration of 836 mg/kg. The 41 samples with barium detections greater than background, including those listed above) were as follows:

Sample ID	Depth (ft bgs)
BDB-15	0
PUA-07	0
PUA-09	0
PUA-10	0
PUB-04	0
PUB-05	0
PUB-06	0
PUB-06	5
PUB-08	0
PUB-08	5
PUB-09	0
PUB-09	5
PUB-10	0
PUB-10	5

Sample ID	Depth (ft bgs)
PUB-10-N-S	0
PUC-03	0
PUC-03	5
PUC-05	0
PUC-07	0
PUC-07	5
PUC-07-E-S	0
PUC-08	0
PUC-08	5
PUD-06	0
PUD-08	0
PUD-08	5
PUD-09	0
PUD-09	5

Sample ID	Depth (ft bgs)
PUE-02	0
PUE-03	0
PUE-05	0
PUE-06	0
PUE-07	0
PUE-07	5
PUE-07-E-S	0
PUE-07-N-S	0
PUF-03	0
PUF-05	0
PUG-02	0
PUG-06	0
PUG-07	0

The distribution of barium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-5 and C-6, respectively.

2.8.5 Beryllium

Of the 57 Site soil samples in which beryllium was analyzed (31 surface and 26 subsurface samples; Table B-1), it was detected in all but one sample. None of the detections were higher than the 160 mg/kg BCL_{RS}, but twelve results exceeded the 3 mg/kg LBCL_{DAF1}. These twelve results are also higher than the maximum background concentration of 0.89 mg/kg, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-10	0	3.4
PUB-09	5	3.6
PUC-07	0	4.1
PUA-09	0	4.8
PUB-06	0	5.3
PUC-08	0	5.6

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-10	0	6.9
PUD-09	0	7.1
PUE-07	5	9.6
PUB-08	0	10.3
PUB-10	5	11.1
PUE-07	0	13.5

The distribution of beryllium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-7 and C-8, respectively.

2.8.6 Cadmium

Of the 46 Site soil samples in which cadmium was analyzed (22 surface and 24 subsurface samples; Table B-1), it was detected in approximately 20 percent. None of the detections were higher than the 39 mg/kg BCL_{RS}, but five results exceeded the 0.4 mg/kg LBCL_{DAFI}. These five cadmium results are also higher than the 0.16 mg/kg maximum background concentration, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-04	0	0.49
PUB-04	5	0.52
PUD-06	0	3.1
PUE-07	0	4.9
PUA-09	0	8.7

It should be noted that many of the reporting limits employed during the historical sampling events are higher than the LBCL_{DAFI} and maximum background concentration, and it is unknown whether cadmium is also present in those samples at concentrations in excess of the LBCL_{DAFI}/maximum background concentration. The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS}, if present, would have been reported. The distribution of cadmium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-9 and C-10, respectively.

2.8.7 Chromium

Chromium was detected in all of the 89 Site soil samples in which it was analyzed (58 surface and 31 subsurface samples; Table B-1). Thirty-six of the detections were higher than the 240 mg/kg BCL_{RS}; these detections are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-03N	0	270
PUC-03	5	310
PUB-05	0	320
PUE-05	5	368
PUB-09	5	432
PUC-03	0	440
PUF-03	0	460
PUG-05	0	480

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-07	5	1,290
PUC-08	0	1,610
PUB-09	0	1,700
PUG-06	0	1,710
PUD-08	0	1,720
PUC-05	0	1,850
PUE-07	0	1,990
PUE-06	0	2,020

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-07	5	544
PUB-09	10	570
PUG-04	0	623
PUE-03	0	641
PUG-07	0	745
PUA-05	0	826
PUB-06	0	1,050
PUE-02	0	1,100
PUA-10	0	1,170
PUB-10	10	1,200

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUF-05	0	2,020
PUE-05	0	2,040
PUB-10	5	2,080
PUC-07	0	2,294
PUD-06	0	2,380
PUB-10	0	2,420
PUD-09	0	2,420
PUA-07	0	3,070
PUA-09	0	3,200
PUB-08	0	3,830

In addition, all of the chromium detections were higher than the 2 mg/kg LBCL_{DAF1}. Nearly all of these detections (80 detections) were higher than the 16.7 mg/kg maximum background detection. These eighty chromium exceedances higher than background, including those listed above, are associated with the following locations:

Sample ID	Depth (ft bgs)
BDB-15	0
PUA-03N	0
PUA-03S	0
PUA-05	0
PUA-05	5
PUA-07	0
PUA-07	5
PUA-07-E-D	0
PUA-07-N-D	0
PUA-07-N-S	0
PUA-09	0
PUA-09	5
PUA-10	0
PUB-03N	0
PUB-03S	0
PUB-04	0
PUB-04	5
PUB-05	0
PUB-06	0
PUB-06	5
PUB-08	0
PUB-08	5
PUB-09	0
PUB-09	5
PUB-09	10
PUB-10	0
PUB-10	5

Sample ID	Depth (ft bgs)
PUB-10	10
PUB-10-E-D	0
PUB-10-E-S	0
PUB-10-N-D	0
PUB-10-N-S	0
PUC-03	0
PUC-03	5
PUC-05	0
PUC-05	5
PUC-07	0
PUC-07	5
PUC-07-E-D	0
PUC-07-E-S	0
PUC-07-N-D	0
PUC-07-N-S	0
PUC-08	0
PUC-08	5
PUD-06	0
PUD-06	5
PUD-06-E-D	0
PUD-06-E-S	0
PUD-06-N-D	0
PUD-06-N-S	0
PUD-08	0
PUD-08	5
PUD-09	0

Sample ID	Depth (ft bgs)
PUD-09	5
PUE-02	0
PUE-03	0
PUE-03	5
PUE-05	0
PUE-05	5
PUE-06	0
PUE-06	5
PUE-07	0
PUE-07	5
PUE-07-E-D	0
PUE-07-E-S	0
PUE-07-N-D	0
PUE-07-N-S	0
PUF-01	0
PUF-01	5
PUF-02	0
PUF-03	0
PUF-03	5
PUF-05	0
PUG-02	0
PUG-03	0
PUG-04	0
PUG-05	0
PUG-06	0
PUG-07	0
SB-16-B	7

The distribution of chromium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-11 and C-12, respectively.

2.8.8 Chromium (VI)

Hexavalent chromium was detected in all four of the Site soil samples in which it was analyzed (one surface and three subsurface samples; Table B-1). None of the detections were higher than the 230 mg/kg BCL_{RS}. However, two detections were higher than the 2 mg/kg LBCL_{DAFI}. These two exceedances are associated with samples collected from 10 ft bgs at locations PUB-09 and PUB-10 (29 mg/kg and 3.7 mg/kg, respectively). These two detections were also higher than the 0.251 mg/kg maximum background detection.

2.8.9 Cobalt

Cobalt was detected in all 4 of the Site soil samples in which it was analyzed (one surface and three subsurface samples; Table B-1). Exceedances of the 23 mg/kg BCL_{RS} and the 33 mg/kg LBCL_{DAFI} were reported for two samples (samples collected from 10 feet bgs in former ponds PUB-09 and PUB-10, 68 mg/kg and 230 mg/kg, respectively). These two detections were also higher than the 16.3 mg/kg maximum background detection.

2.8.10 Copper

Copper was detected in all 59 of the Site soil samples in which it was analyzed (Table B-1). None of the detections were higher than the 2,910 mg/kg BCL_{RS}. However, 37 detections were higher than the 35 mg/kg LBCL_{DAFI}. These 37 LBCL_{DAFI} exceedances were also higher than the 30.5 mg/kg maximum background detection, and are as follows:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-05	5	35.2
PUA-09	5	36.8
PUA-03N	0	41
PUE-05	5	44.3
BDB-15	0	52.5
PUF-03	5	57.9
PUF-01	0	65.4
PUE-03	0	67.8
PUC-07	5	68.4
PUA-07	5	74.4
PUG-04	0	88.9
PUB-08	5	113.4
PUB-06	0	127
PUB-09	5	141.9
PUB-09	10	220
PUC-08	0	307.7
PUC-07	0	311.6
PUD-06	0	345.9
PUE-07	5	349.7

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-05	0	359
PUA-07	0	369.3
PUB-10	10	370
PUA-10	0	374.3
PUB-09	0	385.9
PUE-07	0	406.7
PUE-05	0	412.5
PUB-10	0	415.6
PUG-06	0	439.3
PUC-05	0	493.9
PUB-10	5	508.9
PUB-08	0	525.5
PUA-09	0	536.4
PUF-05	0	638.4
PUD-08	0	640.5
PUE-06	0	641
PUD-09	0	687
PUG-07	0	730.2

2.8.11 Iron

Iron was detected in both of the Site soil samples in which it was analyzed (one surface and one subsurface sample; Table B-1). Neither of the detections were higher than the 54,800 mg/kg BCL_{RS}. However, both detections were higher than the 7.5 mg/kg LBCL_{DAFI} (samples collected from 0 and 7 feet bgs at SB-16-B, 7,840 mg/kg and 11,100 mg/kg, respectively). These two detections were lower than the 19,700 mg/kg maximum background detection.

2.8.12 Lead

Lead was detected in all 111 of the Site soil samples in which it was analyzed (80 surface and 31 subsurface samples; Table B-1). Fifty-five of these detections were higher than the 400 mg/kg BCL_{RS}; a LBCL_{DAFI} has not been established for this constituent. These 55 exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUG-02	0	470
PUA-05	0	482
PUE-03	0	495
PUG-05	0	510
PUE-02	0	630
PUG-04	0	868
PUC-03	0	970
PUB-09	5	983
PUC-07	5	1,030
PUF-05	0	1,040
PUE-07SWD	0	1,100
PUB-10SWD	0	1,300
PUE-07SCD	0	1,300
PUG-07	0	1,390
PUA-07	0	1,670
PUB-09	10	1,700
PUE-07SCOM	0	1,700
PUE-07	0	1,740
PUE-07	5	1,920
PUA-09SCOM	0	2,100
PUB-06	0	2,100
PUE-07NWD	0	2,200
PUC-05	0	2,230
PUA-09SED	0	2,300
PUE-07NCOM	0	2,300
PUB-10SCOM	0	2,600
PUD-06	0	2,690
PUA-09NED	0	2,700

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-07NCD	0	2,900
PUD-08	0	2,950
PUA-09SCD	0	3,000
PUE-05	0	3,070
PUG-06	0	3,270
PUC-08	0	3,280
PUA-09SWD	0	3,300
PUA-09NCD	0	3,400
PUE-07NED	0	3,400
PUB-10	10	3,800
PUE-06	0	3,940
PUA-09NCOM	0	4,500
PUA-10	0	4,640
PUA-09	0	5,130
PUD-09	0	6,150
PUE-07SED	0	6,500
PUA-09NWD	0	7,700
PUB-10	5	8,320
PUC-07	0	9,011
PUB-09	0	9,290
PUB-10NCD	0	11,000
PUB-10	0	11,200
PUB-10NED	0	12,000
PUB-10SCD	0	12,000
PUB-10NCOM	0	13,000
PUB-08	0	15,400
PUB-10NWD	0	20,000

All of the above exceedances were higher than the maximum background concentration for lead (35.1 mg/kg). The distribution of lead for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-13 and C-14, respectively.

2.8.13 Magnesium

Magnesium was detected in all four of the Site soil samples in which it was analyzed (one surface and three subsurface samples; Table B-1). None of the detections were higher than the 100,000 mg/kg BCL_{RS}. However, two detections were higher than the 649 mg/kg LBCL_{DAFI} (samples collected from 0 and 7 feet bgs at SB-16-B, 5,060 mg/kg and 7,260 mg/kg, respectively). These two detections were lower than the 17,500 mg/kg maximum background detection.

2.8.14 Manganese

Manganese was detected in all 121 of the Site soil samples in which it was analyzed (87 surface and 34 subsurface samples; Table B-1). Of these detections, 75 were higher than the 1,080 mg/kg BCL_{RS}. These detections, which are also higher than the maximum background concentration for manganese (1,090 mg/kg), are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-07-E-S	0	1100
PUE-07-E-D	0	1200
PUB-10-N-D	0	1300
PUB-10-N-S	0	1400
PUG-04	0	1400
PUD-09	5	1469.4
PUB-08	5	1638.9
PUD-08	5	1726.4
PUE-02	0	1800
PUC-07	5	1800
PUC-08	5	1951.8
PUF-03	0	2389.3
PUF-01	0	2499
PUG-05	0	2500
PUE-03	0	2512.2
PUF-03	0	2600
PUC-07	10	2700
PUG-04	0	2720
PUC-07	5	2842.3
PUB-10	10	3500
PUC-07-E-D	0	3900
PUE-03	0	4000

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-10	5	14225.1
PUB-10NCOM	0	15000
PUC-07	0	15342.2
PUC-08	0	15900
PUA-09NED	0	16000
PUE-07	0	16000
PUE-07NCD	0	16000
PUE-07SCOM	0	16000
PUD-06	0	16400.9
PUE-07SCD	0	17000
PUA-09SCD	0	18000
PUC-07	0	18000
PUG-06	0	18444.6
PUA-09SED	0	20000
PUA-09	0	20493.5
PUA-09NCD	0	21000
PUE-07NCOM	0	22000
PUE-07	0	22668.1
PUE-07NWD	0	23000
PUB-10	0	24000
PUB-10SCOM	0	24000
PUE-07NED	0	24000

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-10-E-D	0	4100
PUB-06	0	4154.3
PUC-07-N-D	0	4200
PUB-09	5	4662.6
PUB-09	10	6900
PUA-07	0	6905.2
PUB-10NCD	0	11000
PUE-07	5	11965.2
PUE-07SED	0	12000
PUE-07SWD	0	12000
PUB-08	0	12427.5
PUA-09SWD	0	13000
PUB-10NED	0	13000
PUB-10SCD	0	13000
PUA-09SCOM	0	14000
PUB-10NWD	0	14000

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-10	0	24269.2
PUA-10	0	24922
PUB-10	10	25000
PUF-05	0	25458.4
PUA-09NWD	0	28000
PUG-06	0	28000
PUB-10SWD	0	30000
PUD-09	0	30587
PUB-09	0	32626.7
PUA-09NCOM	0	34000
PUE-05	0	34783.9
PUD-08	0	38423.8
PUC-05	0	40202
PUE-06	0	43926.6
PUG-07	0	45523.8

All of the detections (an additional 46 manganese detections beyond those listed above) were higher than the 3.3 mg/kg LBCL_{DAF1}. However, these additional 46 detections were lower than the 1,090 mg/kg maximum background detection. The distribution of manganese for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-15 and C-16, respectively.

2.8.15 Mercury

Of the 56 Site soil samples in which mercury was analyzed (28 surface and 28 subsurface samples; Table B-1), it was detected in approximately 54 percent. None of the detections were higher than the 13 mg/kg BCL_{RS}, but 27 results exceeded the 0.1 mg/kg LBCL_{DAF1}. These 27 mercury exceedances are also higher than the 0.11 mg/kg maximum background concentration, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-09	5	0.12
PUC-08	5	0.13
PUC-03	5	0.14
PUC-03	0	0.15
PUB-09	5	0.21
PUC-07	5	0.33
PUB-06	0	0.34
PUA-05	0	0.66
PUG-06	0	0.86
PUA-07	0	0.88
PUC-08	0	0.91
PUG-07	0	1.2
PUB-10	5	1.3
PUE-07	5	1.3

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-10	0	1.5
PUB-10	0	1.5
PUA-09	0	1.6
PUC-05	0	1.6
PUE-05	0	1.7
PUE-07	0	1.8
PUB-09	0	1.9
PUB-08	0	2.4
PUD-09	0	2.5
PUF-05	0	2.7
PUD-08	0	3.1
PUD-06	0	3.4
PUE-06	0	4.4

The reporting limits for non-detections were all lower than BCL_{RS} , and most were sufficiently low such that concentrations in excess of the $LBCL_{DAFI}$, if present, would have been reported. The distribution of mercury for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-17 and C-18, respectively.

2.8.16 Molybdenum

Molybdenum was detected in all four of the Site soil samples in which it was analyzed (one surface and three subsurface samples; Table B-1). None of the detections were higher than the 390 mg/kg BCL_{RS} . However, two detections were higher than the 3.6 mg/kg $LBCL_{DAFI}$ (samples collected from 10 feet bgs from former ponds PUB-09 and PUB-10, 29 mg/kg and 110 mg/kg, respectively). These two detections were also higher than the 2 mg/kg maximum background detection; the other two detections were lower than the maximum background concentration.

2.8.17 Nickel

Nickel was detected in all 59 of the Site soil samples in which it was analyzed (31 surface and 28 subsurface samples; Table B-1). None of these detections exceeded the 1,540 mg/kg BCL_{RS} , however, all were higher than the 7 mg/kg $LBCL_{DAFI}$. Several of these detections (26 detections) were lower than the maximum background concentration for nickel (30 mg/kg). The 33 detections higher than background are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-08	5	32
PUF-03	0	32.8
PUF-03	5	33.7
PUA-03N	0	37
PUF-01	0	47.1
PUE-03	0	51.7
PUC-07	5	52.8
PUB-06	0	53.9
PUB-09	10	58
PUB-09	5	64.9
PUG-04	0	75.6
PUB-10	5	110.2
PUA-05	0	118.8
PUA-09	0	128.5
PUB-08	0	129
PUB-10	10	140
PUC-07	0	151.5

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-07	5	164.3
PUC-08	0	188
PUB-10	0	196.8
PUA-10	0	199.5
PUE-07	0	272.2
PUB-09	0	336.2
PUG-06	0	344.4
PUG-07	0	353.9
PUD-06	0	355.2
PUF-05	0	355.2
PUA-07	0	459.3
PUD-09	0	483.8
PUD-08	0	508.4
PUE-05	0	513.7
PUC-05	0	532.5
PUE-06	0	916.7

The distribution of nickel for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-19 and C-20, respectively.

2.8.18 Selenium

Of the 58 Site soil samples in which it was analyzed (28 surface and 30 subsurface samples; Table B-1), selenium was reported in only seven samples (approximately 12 percent). None of the detections were higher than the 390 mg/kg BCL_{RS} ; however, all but one of the detections were higher than the 0.3 mg/kg $LBCL_{DAF1}$. These six exceedances were also higher than the 0.6 mg/kg maximum background concentration for selenium, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-03	0	0.66
PUB-08	5	0.85
PUC-03	5	0.88
PUA-09	0	3.2
PUB-10	0	5.6
PUB-08	0	5.9

The standard reporting limits employed during the historical sampling events are higher than the $LBCL_{DAF1}$ (and the background range in most cases), and it is unknown whether selenium is also present in those samples at concentrations in excess of the $LBCL_{DAF1}$ (or background). The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS} , if present, would have been reported. The distribution of selenium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-21 and C-22, respectively.

2.8.19 Silver

Of the 58 Site soil samples in which it was analyzed (28 surface and 30 subsurface samples; Table B-1), silver was reported in approximately 59 percent. None of the detections were higher than the 390 mg/kg BCL_{RS} ; however, the majority of the detections (28) were higher than the 2 mg/kg $LBCL_{DAF1}$. These 28 exceedances were also higher than the 0.2609 mg/kg maximum background concentration for silver, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUF-03	5	2.2
PUE-03	0	2.7
PUF-03	0	3
PUC-07	5	3.4
PUB-06	0	3.6
PUC-03	0	3.9
PUE-07	5	5.2
PUC-08	0	5.5
PUB-09	5	6
PUA-05	0	7.5
PUB-10	10	7.6
PUA-09	0	9.5
PUG-06	0	11.5
PUE-07	0	14.5

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-08	0	16.8
PUD-09	0	20.8
PUG-07	0	20.8
PUE-05	0	22.4
PUC-07	0	23.39
PUF-05	0	28.4
PUB-09	0	29.2
PUA-07	0	29.4
PUE-06	0	30.1
PUB-10	0	30.2
PUB-10	5	30.6
PUA-10	0	34
PUC-05	0	38.9
PUB-08	0	42.9

The reporting limits for non-detections were all lower than BCL_{RS} , and most were sufficiently low such that concentrations in excess of the $LBCL_{DAF1}$, if present, would have been reported. The distribution of silver for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-23 and C-24, respectively.

2.8.20 Thallium

Of the 98 Site soil samples in which it was analyzed (64 surface and 34 subsurface samples; Table B-1), thallium was reported in approximately 63 percent. Twenty-four of these detections were higher than the 5.5 mg/kg BCL_{RS} ; these exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-06	0	6.9
PUF-01	0	9.3
PUC-07-E-D	0	9.6
PUA-07	0	10.8
PUB-05	0	13
PUB-09	5	14.7
PUE-07	5	18.5
PUE-06	0	19.2
PUB-09	0	25.2
PUB-06	0	25.6
PUC-07	0	28.6
PUC-08	0	29.4

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-10	0	29.6
PUD-09	0	31.8
PUA-09	0	32
PUC-07	0	32
PUE-07	0	44
PUE-07	0	44.7
PUB-10	0	59.1
PUB-10	5	74.9
PUB-08	0	75
PUB-10	0	110
PUB-09	10	180
PUB-10	10	330

In addition, all but three of the detections were higher than the 0.4 mg/kg $LBCL_{DAF1}$. Some of these detections were lower than the 1.8 mg/kg maximum background detection; however, 40

were higher than background. The forty thallium LBCL_{DAFI} exceedances higher than background, including those listed above, are associated with the following locations:

Sample ID	Depth (ft bgs)	Sample ID	Depth (ft bgs)	Sample ID	Depth (ft bgs)
PUA-05	0	PUB-10	10	PUE-02	0
PUA-07	0	PUC-03	0	PUE-03	0
PUA-09	0	PUC-05	0	PUE-03	5
PUA-10	0	PUC-07	0	PUE-05	5
PUB-05	0	PUC-07	0	PUE-06	0
PUB-06	0	PUC-07	5	PUE-07	0
PUB-08	0	PUC-07	5	PUE-07	0
PUB-09	0	PUC-07-E-D	0	PUE-07	5
PUB-09	5	PUC-08	0	PUF-01	0
PUB-09	10	PUD-06	0	PUF-01	5
PUB-10	0	PUD-06-N-D	0	PUF-03	0
PUB-10	0	PUD-09	0	PUG-06	0
PUB-10	5	PUD-09	5	PUG-07	0
PUB-10	10				

The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS} or background, if present, would have been reported. The distribution of thallium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-25 and C-26, respectively.

2.8.21 Vanadium

Vanadium was detected in all 89 of the Site soil samples in which it was analyzed (58 surface and 31 subsurface samples; Table B-1). Thirty-five of these detections were higher than the 390 mg/kg BCL_{RS}; these exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)	Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-03	5	420	PUB-10	10	2,700
PUA-03N	0	480	PUE-07	0	2,740
PUA-07	5	490	PUG-06	0	2,780
PUG-05	0	610	PUC-08	0	2,840
PUG-04	0	708	PUG-07	0	2,910
PUB-09	5	727	PUF-05	0	2,940
PUE-03	0	883	PUD-08	0	3,100
PUE-07	5	936	PUC-05	0	3,550
PUB-09	10	1,100	PUD-06	0	3,930
PUC-07	5	1,270	PUB-10	5	4,100
PUC-03	0	1,300	PUA-10	0	4,170
PUE-02	0	1,300	PUB-09	0	4,590
PUF-03	0	1,420	PUC-07	0	4,881
PUB-06	0	1,590	PUB-10	0	5,200
PUA-05	0	1,870	PUA-09	0	6,370
PUE-05	0	2,060	PUA-07	0	7,770
PUE-06	0	2,200	PUB-08	0	7,780
PUD-09	0	2,320			

Thirty-eight vanadium detections were higher than the 300 mg/kg LBCL_{DAFI}. In addition to the samples listed above, vanadium LBCL_{DAFI} exceedances are associated with three surface soil samples, collected from former ponds PUB-05, PUG-02, and PUG-03. All comparison level exceedances were higher than the 59.1 mg/kg maximum background detection. The distribution of vanadium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-27 and C-28, respectively.

2.8.22 Cyanide

Of the 70 Site soil samples in which it was analyzed (43 surface and 27 subsurface samples; Table B-6), cyanide was reported in approximately 40 percent. All of these detections were lower than the 1,220 mg/kg BCL_{RS}; however, six detections were higher than the 2 mg/kg LBCL_{DAFI}. These six LBCL_{DAFI} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-07	0	2.1
PUD-09	0	2.1
PUB-10	5	2.5
PUA-09	0	2.9
PUF-05	0	2.9
PUA-10	0	3

The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS} or LBCL_{DAFI}, if present, would have been reported. The distribution of cyanide for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-29 and C-30, respectively.

2.8.23 Other Inorganics

As seen in Table 1A and Tables B-1 and B-6 in Appendix B, several inorganic constituents in addition to those listed above were routinely detected in soil samples. None of these additional inorganic constituents were detected at concentrations in excess of either the BCL_{RS} or the LBCL_{DAFI}. The reporting limits for these additional inorganic constituents were sufficiently low such that concentrations in excess of the BCL_{RS} or LBCL_{DAFI}, if present, would have been reported.

Because perchlorate is a key compound of concern at the Common Areas, even though the detections do not meet the general criteria for graphic presentations in this SAP, the distribution

of perchlorate for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-31 and C-32, respectively.

2.8.24 Organochlorine Pesticides

A total of 127 Site soil samples were analyzed for organochlorine pesticides (96 surface and 31 subsurface samples; Table B-2). Most of these analytes were detected in at least one sample. 2,4-DDD, 2,4-DDE, 4,4-DDE, and 4,4-DDT were the most commonly detected; these four constituents were detected in more than 50 percent of the samples in which they were analyzed. Several detections exceeded the BCL_{RS}; and/or LBCL_{DAFI} comparison levels as discussed below.

- 4,4-DDD was not detected in any samples at concentrations in excess of the 2.4 mg/kg BCL_{RS}; however, three detections were higher than the 0.8 mg/kg LBCL_{DAFI}. These exceedances were associated with three surface samples (WC-IM01, -02, and -06) collected from temporary IRM stockpiles in the Phase II sub-area. The maximum detection was 1.6 mg/kg (WC-IM01, surface sample).
- 4,4-DDE was detected in 66 soil samples at concentrations in excess of the 1.7 mg/kg BCL_{RS}; in addition, 59 of these detections were higher than the 3 mg/kg LBCL_{DAFI}. The 66 BCL_{RS} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-07	0	1.8
PUG-05	0	1.9
PUG-04	0	2.2
PUB-10NWD	0	2.4
PUA-05	0	2.5
WC-IM07	0	2.6
PUA-09SCD	0	2.7
PUE-07SCD	0	3.2
PUE-03	0	3.3
PUB-09	10	3.5
PUE-07NWD	0	3.5
PUF-03	0	3.8
WC-IM03	0	4.2
PUE-07SCOM	0	5
WC-UP05	0	5.4
PUE-02	0	5.4
PUE-07NCOM	0	6.1
WC-UP01	0	6.3
WC-IM04	0	6.3
PUB-09	5	6.4
WC-IM02	0	6.5

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
WC-UP03	0	12
PUC-08	0	12
PUA-09NED	0	14
PUB-08	0	17
PUA-09NCOM	0	18
PUB-10NED	0	18
PUA-09NCD	0	19
PUE-07NED	0	19
PUA-09SWD	0	20
PUG-06	0	25
PUB-10	5	29
PUA-07	0	32
PUE-07SED	0	36
PUC-07	5	38
PUC-07	0	41
PUD-09	0	46
PUB-10NCD	0	48
PUA-09	0	55
PUB-10NCOM	0	60
PUE-05	0	63
PUB-10	0	69

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
WC-UP07	0	6.7
WC-UP02	0	6.9
PUE-07	5	7.8
WC-UP04	0	8.3
WC-UP06	0	8.5
WC-IM06	0	8.8
PUE-07SWD	0	9
PUA-09SED	0	9.1
PUA-09NWD	0	9.2
WC-IM01	0	9.2
PUA-09SCOM	0	10
PUE-07NCD	0	11

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-06	0	70
PUB-10SCOM	0	71
PUB-10	10	74
PUB-10SCD	0	76
PUE-06	0	78
PUD-08	0	97
PUC-05	0	110
PUB-10SWD	0	140
PUG-07	0	140
PUB-09	0	180
PUA-10	0	190
PUF-05	0	190

- 4,4-DDT was detected in 40 soil samples at concentrations in excess of the 1.7 mg/kg BCL_{RS}; in addition, 33 of these detections were higher than the 2 mg/kg LBCL_{DAFI}. The 40 BCL_{RS} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
WC-IM03	0	1.8
PUE-07NCOM	0	1.8
WC-IM04	0	1.9
WC-UP02	0	1.9
PUE-07SWD	0	1.9
PUA-09NWD	0	2
PUA-09SCOM	0	2
PUA-09NED	0	2.1
PUA-09SWD	0	2.2
PUB-09	5	2.3
WC-UP03	0	2.3
WC-UP04	0	2.4
WC-IM02	0	2.6
PUA-09NCOM	0	2.7
PUA-09NCD	0	2.7
WC-UP07	0	2.8
WC-IM01	0	3.4
PUE-07NCD	0	3.5
PUG-06	0	3.8
PUE-07NED	0	4.3

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
WC-IM06	0	6.4
PUA-09	0	7
PUF-05	0	7.5
PUC-07	0	7.7
PUB-10	5	11
PUE-07SED	0	11
PUC-07	5	11
PUD-08	0	12
PUB-10SCD	0	13
PUE-06	0	16
PUD-09	0	17
PUB-10	0	19
PUB-10NCD	0	20
PUB-10NCOM	0	20
PUB-10	10	21
PUB-09	0	36
PUA-10	0	39
PUB-10SCOM	0	40
PUG-07	0	62
PUB-10SWD	0	67

- alpha-BHC was detected in nine soil samples at concentrations in excess of the 0.09 mg/kg BCL_{RS}. These nine BCL_{RS} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-07SWD	0	0.12
WC-IM02	0	0.4
PUC-07	0	0.42
WC-IM06	0	0.6
PUE-06	0	1.1
PUB-10	0	1.7

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-10	5	2.1
PUA-10	0	2.1
PUB-10SCOM	0	4.4

In addition to the samples listed above, exceedances of the 0.00003 mg/kg alpha-BHC $LBCL_{DAF1}$ were observed for seven more soil samples, collected at the following locations/depths: PUC-03 (surface sample); PUE-06 (5 ft bgs); PUF-03 (5 ft bgs); SB-16-B (surface and 7 ft bgs); WC-UP06 (surface sample); and WC-UP07 (surface sample).

- beta-BHC was detected in two soil samples at concentrations in excess of the 0.32 mg/kg BCL_{RS} ; those exceedances were associated with samples collected from PUA-09SCD (surface sample, 0.45 mg/kg) and WC-IM04 (IRM stockpile, 1.1 mg/kg). In addition to these two samples, 26 more detections were higher than the 0.0001 mg/kg $LBCL_{DAF1}$. Those 26 additional $LBCL_{DAF1}$ exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)
PUA-07-N-D	0
PUB-10-N-S	0
PUC-07-E-S	0
PUC-07-N-S	0
PUC-08	5
PUD-06-N-S	0
PUE-07-E-S	0
PUE-07NCD	0
PUE-07NCOM	0

Sample ID	Depth (ft bgs)
PUE-07-N-S	0
PUE-07NWD	0
PUE-07SCD	0
PUE-07SWD	0
PUF-01	5
PUF-05	5
SB-16-B	0
SB-16-B	7
WC-BD02	0

Sample ID	Depth (ft bgs)
WC-IM02	0
WC-IM06	0
WC-IM07	0
WC-UP01	0
WC-UP04	0
WC-UP05	0
WC-UP06	0
WC-UP07	0

- Chlordane was detected in three soil samples. All three detections were in excess of the 1.6 mg/kg BCL_{RS} and the 0.5 mg/kg $LBCL_{DAF1}$, and were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-05	0	4.4
PUC-08	0	6
PUD-09	0	80

- Dieldrin was detected in one soil sample (5 ft bgs sample at PUC-08), at a concentration of 0.0043 mg/kg. This detection is lower than the 0.03 mg/kg BCL_{RS} , but is higher than the 0.0002 mg/kg $LBCL_{DAF1}$.
- Endrin was detected in one soil sample (5 ft bgs sample at PUB-09), at a concentration of 0.72 mg/kg. This detection is lower than the 18 mg/kg BCL_{RS} , but is higher than the 0.05 mg/kg $LBCL_{DAF1}$.

- Heptachlor was detected in three soil samples; one of these detections was in excess of the 0.11 mg/kg BCL_{RS} and the 1 mg/kg LBCL_{DAFI} (PUB-10 at 5 ft bgs, 3.1 mg/kg).
- Lindane was detected in five soil samples. Two of these detections were in excess of the 0.44 mg/kg BCL_{RS} and all five were higher than the 0.0005 mg/kg LBCL_{DAFI}. These exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
SB-16-B	0	0.002
SB-16-B	7	0.0044
WC-IM06	0	0.39
PUB-10SCOM	0	10
PUB-10SWD	0	19

- Methoxychlor was detected in eight soil samples. None of these detections were in excess of the 310 mg/kg BCL_{RS}, but three were higher than the 8 mg/kg LBCL_{DAFI}. These exceedances were associated with surface soils collected from PUA-09 and PUA-10, and with a 5 ft bgs sample collected from PUC-07. The maximum detection was 110 mg/kg (PUA-10).

With the exception of alpha-BHC, beta-BHC, dieldrin, and lindane, the reporting limits for organochlorine pesticides were generally sufficiently low such that concentrations in excess of the comparison levels, if present, would be reported. For these four exceptions, the reporting limits were routinely higher than the LBCL_{DAFI} and often higher than the BCL_{RS}, and it is unknown whether these constituents are also present in additional Site samples at concentrations in excess of those comparison levels. The distribution of 4,4-DDE for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-33 and C-34, respectively.

2.8.25 Volatile Organic Compounds

Seventy-one Site soil samples were analyzed for VOCs (43 surface and 28 subsurface samples; Table B-3). As seen in Table 1A and Table B-3, fourteen VOCs were detected in at least one sample; 1,2-dichlorobenzene and 1,4-dichlorobenzene were detected the most frequently, in 20 percent and 23 percent of the samples, respectively. None of the detections were above the BCL_{RS}; the standard reporting limits were lower than the BCL_{RS}, and concentrations in excess of the BCL_{RS}, if present, would have been reported.

Five VOCs were reported at concentrations higher than the LBCL_{DAFI}; these exceedances are summarized below.

- 1,2,4-Trichlorobenzene was detected in 12 soil samples; the maximum detection was 2.7 mg/kg (PUA-10, surface sample). None of these detections were in excess of the 140 mg/kg BCL_{RS}, but the following nine sample exhibited detections higher than the 0.3 mg/kg LBCL_{DAFI}:

Sample ID	Depth (ft bgs)
PUA-09	0
PUA-10	0
PUB-08	0
PUB-09	0
PUB-10	0

Sample ID	Depth (ft bgs)
PUC-05	0
PUD-08	0
PUD-09	0
PUE-06	0

- 1,4-Dichlorobenzene was detected in 16 soil samples; the maximum detection was 0.42 mg/kg (PUC-07, surface sample). None of these detections were in excess of the 2.6 mg/kg BCL_{RS}, and only one detection was higher than the 0.1 mg/kg LBCL_{DAFI} (PUC-07).
- Dichloromethane was detected in eight soil samples; the maximum detection was 0.0045 mg/kg (PUB-10, surface sample). None of these detections were in excess of the 11 mg/kg BCL_{RS}, but all eight detections were higher than the 0.001 mg/kg LBCL_{DAFI}. These detections were associated with the following samples:

Sample ID	Depth (ft bgs)
PUA-09	0
PUA-10	0
PUB-09	0
PUB-10	0

Sample ID	Depth (ft bgs)
PUC-08	0
PUD-06	0
PUD-08	0
WC-UP04	0

- Tetrachloroethylene was detected in five soil samples; the maximum detection was 0.0049 mg/kg (PUA-09, surface sample). None of these detections were in excess of the 0.62 mg/kg BCL_{RS}, but two detections were higher than the 0.003 mg/kg LBCL_{DAFI}. These detections were associated with surface soil samples collected in former ponds PUA-09 and PUB-10.
- Trichloroethylene was detected in 11 soil samples; the maximum detection was 0.016 mg/kg (sample ID WC-IM04). None of these detections were in excess of the 1.1 mg/kg BCL_{RS}, but three detections were higher than the 0.003 mg/kg LBCL_{DAFI}. These detections were associated with samples WC-IM04, WC-UP04 and WC-UP07 (stockpiled soils associated with the Sunset North and Mohawk IRMs).

However, in some cases the reporting limits employed during the historical sampling events are higher than the $LBCL_{DAF1}$, and it is unknown whether these constituents are present in samples at concentrations in excess of the $LBCL_{DAF1}$. These analytes with reporting limits routinely higher than the $LBCL_{DAF1}$ are as follows:

- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,2,4-Trichlorobenzene
- 1,2-Dichloroethane
- 1,2-Dichloropropane
- Benzene
- Carbon tetrachloride
- Dichloromethane
- Tetrachloroethylene
- Trichloroethylene
- Vinyl chloride

Otherwise, the reporting limits for VOCs were sufficiently low such that concentrations in excess of the $LBCL_{DAF1}$, if present, would be reported.

As an example of VOC occurrence patterns at the Site, the distribution of 1,2,4-trichlorobenzene for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-35 and C-36, respectively.

2.8.26 Semi-Volatile Organic Compounds

Sixty-six Site soil samples were analyzed for SVOCs (43 surface and 23 subsurface samples; Table B-4). As seen in Table 1A and Table B-4, sixteen SVOCs were detected in at least one sample. Hexachlorobenzene was detected the most frequently, in 65 percent of the samples; pentachlorobenzene was also detected at a high detection frequency (76 percent), but was only included as an analyte in 17 samples (13 detections). With the exception of hexachlorobenzene and 2,4-dinitrotoluene, all the SVOC detections were lower than the BCL_{RS} ; six SVOCs were detected at concentrations in excess of the $LBCL_{DAF1}$. These comparison level exceedances are discussed below.

- 2,4,6-Trichlorophenol was detected in one sample; that detection (0.087 mg/kg, from WC-IM04, a Mohawk IRM stockpile sample) was lower than the 44 mg/kg BCL_{RS} , but exceeded the 0.008 mg/kg $LBCL_{DAF1}$.
- 2,4-Dinitrotoluene was detected in one sample; that detection (6.5 mg/kg, from a surface soil sample in former pond PUC-03) was higher than the 1.6 mg/kg BCL_{RS} , and exceeded the 0.00004 mg/kg $LBCL_{DAF1}$.

- 2-Chlorophenol was detected in one sample; that detection (7.8 mg/kg, from a surface soil sample in former pond PUC-03) was lower than the 390 mg/kg BCL_{RS}, but exceeded the 0.2 mg/kg LBCL_{DAF1}.
- Hexachloro-1,3-butadiene was detected in one sample; that detection (1.4 mg/kg, from a surface soil sample in former pond PUA-10) was lower than the 6.2 mg/kg BCL_{RS}, but exceeded the 0.1 mg/kg LBCL_{DAF1}.
- Hexachlorobenzene was detected in 43 samples; all but two of the hexachlorobenzene detections exceeded the 0.3 mg/kg BCL_{RS}. These 41 hexachlorobenzene BCL_{RS} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-06	0	0.35
WC-UP06	0	0.35
WC-UP07	0	0.37
PUA-05	0	0.39
PUD-09	5	0.44
WC-IM07	0	0.47
WC-UP05	0	0.56
PUA-10	5	0.57
PUB-09	5	0.67
PUA-07	5	0.69
WC-IM03	0	1
PUG-06	0	1.1
WC-UP01	0	1.1
WC-UP03	0	1.1
WC-UP04	0	1.1
WC-IM01	0	1.2
WC-IM06	0	1.2
WC-IM02	0	1.5
PUD-06	0	1.6
PUE-07	5	1.6
PUC-08	0	1.8

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
WC-UP02	0	1.8
PUE-07	0	1.9
PUF-05	0	2.5
PUA-09	0	3
PUC-07	0	3
PUA-07	0	3.2
PUA-09	5	3.4
PUE-05	0	3.7
PUC-05	0	3.8
PUG-07	0	4.3
PUD-09	0	4.4
PUC-07	5	4.4
PUA-10	0	6.6
PUB-08	0	6.6
PUD-08	0	8.4
PUB-09	0	8.6
PUE-06	0	16
PUB-10	0	18
WC-IM04	0	20
PUB-10	5	230

In addition to the samples listed above, hexachlorobenzene was also detected at a concentration above the 0.1 mg/kg LBCL_{DAF1} in one more sample: the WC-BD02 surface sample.

- Pentachlorophenol was detected in surface soil samples from the following 4 former ponds: PUB-09, PUB-10, PUE-06, and PUG-07. The maximum detection was 1.5 mg/kg (PUB-09

surface sample), and all 4 detections were lower than the 3 mg/kg BCL_{RS}. However, all of the detections exceeded the 0.001 mg/kg LBCL_{DAFI}.

For SVOC non-detects, the standard reporting limits were lower than the BCL_{RS} in all cases except for 3,3-dichlorobenzidine, bis(2-chloroethyl)ether, hexachlorobenzene, n-nitrosodi-n-propylamine and pentachlorophenol, which routinely had reporting limits higher than the BCL_{RS}. With the exception of these five compounds, concentrations in excess of the BCL_{RS}, if present, would have been reported for SVOCs. For these and several other SVOCs the reporting limits employed during the historical sampling events are higher than the LBCL_{DAFI}, and it is unknown whether these constituents are present in those samples at concentrations in excess of the LBCL_{DAFI}. The additional analytes with reporting limits routinely higher than the LBCL_{DAFI} are as follows:

- | | |
|-------------------------|----------------------------|
| • 2,4,6-Trichlorophenol | • Carbazole |
| • 2,4-Dichlorophenol | • Hexachloro-1,3-butadiene |
| • 2,4-Dimethylphenol | • Hexachloroethane |
| • 2,4-Dinitrophenol | • Isophorone |
| • 2,4-Dinitrotoluene | • Nitrobenzene |
| • 2,6-Dinitrotoluene | • n-Nitrosodiphenylamine |
| • 2-Chlorophenol | • p-Chloroaniline |

The distribution of hexachlorobenzene for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site is shown on Figures C-39 and C-40, respectively.

2.8.27 Dioxins and Furans

Seventeen Site soil samples were analyzed for dioxins and furans (16 surface and one subsurface samples; Table B-5). At least one of the individual dioxins and furans congeners analyzed were reported as detections in each sample. Comparison levels have not been established for individual congeners. To assess the potential threat to human health, dioxins/furans toxic equivalency (TEQ) concentrations for each sample were compared to the Agency for Toxic Substances and Disease Registry (ATSDR) comparison value of 50 parts per trillion (ppt). Seven of the samples analyzed had calculated TEQ values in excess of this comparison level; these exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	TEQ Value (mg/kg)
WC-UP07	0	57
WC-UP04	0	71
WC-IM02	0	72
WC-UP02	0	165
WC-UP03	0	170
WC-UP01	0	502.7
WC-IM04	0	6658

LBCL_{DAFI} values have not been established for dioxin/furans; thus the potential for impacts to groundwater quality due to their presence could not be assessed by comparisons to these levels. The distribution of dioxins/furans for soil samples collected in the intervals from 0 to 2 feet bgs at the Site is shown on Figure C-41.

2.8.28 Polychlorinated Biphenyls

Fifty-four Site soil samples were analyzed for PCBs (Aroclors only) (27 surface, 27 subsurface; Table B-8). PCBs were not detected in any of these samples. The reporting limits for PCBs analyzed were higher than the BCL_{RS} in some cases; thus it is unknown whether these constituents are present in those samples at concentrations in excess of the BCL_{RS}. LBCL_{DAFI} values have not been established for these compounds. It is noted that lack of PCB congener data is a data gap for the Site; congener analysis will be performed as part of this SAP to fill this data gap.

2.8.29 Organophosphorus Pesticides

Seventeen Site soil samples were analyzed for organophosphorus pesticides (16 surface, one subsurface; Table B-7). Organophosphorus pesticides were not detected in any of these samples. The reporting limits were lower than the BCL_{RS}; thus concentrations in excess of the BCL_{RS}, if present, would have been reported. LBCL_{DAFI} values have not been established for these compounds.

2.8.30 Chlorinated Herbicides

Seventeen Site surface soil samples were analyzed for chlorinated herbicides (16 surface, one subsurface; Table B-10); there were no detections reported in these samples. The standard reporting limits were lower than the BCL_{RS}; thus concentrations in excess of the BCL_{RS}, if present, would have been reported. LBCL_{DAFI} values have not been established for these compounds.

2.8.31 Polynuclear Aromatic Hydrocarbons

Sixty-six Site soil samples were analyzed for PAHs (43 surface, 23 subsurface; Table B-11); chrysene was detected the most frequently (in 45 percent of the samples). In addition to chrysene, the other six PAHs detected were: acenaphthene (in one sample), benzo(a)anthracene (in 18 samples), benzo(b)fluoranthene (in two samples), indeno(1,2,3-dc)pyrene (in one sample), and phenanthrene and pyrene (both detected in 26 samples). The maximum detection was 6 mg/kg of acenaphthene (PUC-03). None of the PAH detections exceeded the BCL_{RS} . Detections of two PAHs exceeded the $LBCL_{DAFI}$: benzo(a)anthracene and benzo(b)fluoranthene as summarized below:

- Benzo(a)anthracene was detected in 18 samples at concentrations lower than the 0.62 mg/kg BCL_{RS} ; of these, 12 detections exceeded the 0.08 mg/kg $LBCL_{DAFI}$ (maximum detection 0.31 mg/kg, in the surface soil sample collected in former pond PUB-09). These 12 detections are associated with the following samples:

Sample ID	Depth (ft bgs)
PUA-09	0
PUB-08	0
PUB-09	0
PUB-10	0
PUC-05	0
PUC-07	0

Sample ID	Depth (ft bgs)
PUD-08	0
PUE-05	0
PUE-06	0
PUE-07	0
PUE-07	5
PUG-07	0

- Benzo(b)fluoranthene was detected in two samples, at concentrations lower than the 0.62 mg/kg BCL_{RS} ; however, both detections exceeded the 0.2 mg/kg $LBCL_{DAFI}$. These detections are both associated with samples collected from former pond PUE-07 (0.31 mg/kg in the surface soil sample, and 0.24 mg/kg in the 5 ft bgs sample).

The standard PAH reporting limits were generally, but not always, lower than the BCL_{RS} and the $LBCL_{DAFI}$; thus concentrations in excess of these comparison levels, if present, would have been reported. In several cases the standard reporting limits employed during the older sampling events are higher than the BCL_{RS} and/or $LBCL_{DAFI}$, and it is unknown whether these constituents are present in those samples at concentrations in excess of these comparison levels. These analytes with reporting limits frequently higher than the BCL_{RS} and $LBCL_{DAFI}$ are as follows:

- Benzo(a)anthracene
- Dibenzo(a,h)anthracene

- Benzo(a)pyrene
- Indeno(1,2,3-c,d)pyrene
- Benzo(b)fluoranthene

2.8.32 Aldehydes

Two Site soil samples (surface and subsurface samples from SB-16-B; Table B-6) were analyzed for aldehydes. Neither acetaldehyde nor formaldehyde were detected in either sample. The reporting limits were lower than the BCL_{RS} ; thus concentrations in excess of the BCL_{RS} , if present, would have been reported. $LBCL_{DAFI}$ values have not been established for these compounds.

2.8.33 Organic Acids and Glycol/Alcohols

Two Site soil samples (surface and subsurface samples from SB-16-B; Table B-10) were analyzed for organic acids and glycols/alcohols; there were no detections reported in the samples. The standard reporting limits were lower than the BCL_{RS} ; thus concentrations in excess of the BCL_{RS} , if present, would have been reported. The reporting limit for 4-chlorobenzene sulfonic acid (the only analyte in these analyses with an established $LBCL_{DAFI}$) was higher than the $LBCL_{DAFI}$, and it is unknown whether this constituent is present at a concentration in excess of the $LBCL_{DAFI}$.

2.8.34 Radionuclides

Radionuclides were detected in all 30 of the Site soil samples analyzed (16 surface and 14 subsurface soil samples; Table B-9). Exceedances of comparison levels for radionuclides are only shown in Table 1A for the eight radionuclides currently included in the project analyte list (radium-226, radium-228, thorium-228, thorium-230, thorium-232, uranium-233/234, uranium-235/236, and uranium-238). Of those detections greater than comparison levels, several are lower than the maximum background activity, as shown in Table 1A. Detections higher than comparison levels and background are summarized below for each radionuclide:

- Radium-226 was detected in all but three of the samples in which it was analyzed (27 detections); all of these detections were higher than the BCL_{RS} and $LBCL_{DAFI}$ (0.0071 pCi/g and 0.016 pCi/g, respectively). However, only 13 of those detections were higher than the 2.36 pCi/g maximum background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUC-07	5	4.94
PUB-10	10	5
PUB-06	0	5.19
PUG-05	0	5.42
PUB-09	10	6.06
PUC-03	0	7
PUE-05	0	11.3

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-07	0	15.7
PUD-06	0	18.9
PUD-08	0	20.9
PUC-07	0	27.7
PUC-05	0	31.5
PUB-08	0	36.5

- Radium-228 was detected in all samples in which it was analyzed (30 samples); all of these detections were higher than the BCL_{RS} and $LBCL_{DAF1}$ (0.013 pCi/g and 0.016 pCi/g, respectively). However, only seven of those detections were higher than the 2.94 pCi/g maximum background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-03N	0	3.13
PUC-03	0	3.32
PUC-07	0	3.69
PUD-08	0	3.87
PUE-05	0	3.91
PUC-05	0	5.65
PUA-07	0	8.44

- Thorium-228 was detected in all samples in which it was analyzed (30 samples); all of these detections were higher than the 0.0078 pCi/g BCL_{RS} and the 0.0023 pCi/g, $LBCL_{DAF1}$). Eight detections were higher than the 2.28 pCi/g maximum background activity. These detections are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-07	5	2.46
PUE-05	0	2.86
PUB-08	0	2.99
PUD-06	0	3.11

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUC-07	0	3.4
PUD-08	0	5.21
PUC-05	0	5.9
PUA-07	0	9.58

- Thorium-230 was detected in all samples in which it was analyzed (30 samples); 13 of these detections were higher than the 3.2 pCi/g BCL_{RS} and all of them were higher than the 0.00084 pCi/g $LBCL_{DAF1}$. Thirteen detections (corresponding to those samples with BCL_{RS} exceedances) were higher than the 3.01 pCi/g maximum background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUB-06	0	4.3
PUA-07	5	5.84
PUB-09	10	6.93
PUC-03	0	6.97
PUC-07	5	7.43
PUD-06	0	18.5
PUE-05	0	21.6

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUB-10	10	23.9
PUB-08	0	31.7
PUA-07	0	35.7
PUC-07	0	36.8
PUD-08	0	37.4
PUC-05	0	46.7

- Thorium-232 was detected in all samples in which it was analyzed (28 samples); 5 of these detections were higher than the 2.8 pCi/g BCL_{RS} and all of them were higher than the 0.0029 pCi/g LBCL_{DAFI}. However, only seven of those detections were higher than the 2.23 pCi/g maximum background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUE-05	0	2.7
PUB-08	0	2.72
PUD-06	0	3.55
PUC-07	0	4.1
PUD-08	0	5.08
PUC-05	0	6.26
PUA-07	0	10.81

- Uranium-233/234 was detected in all samples in which it was analyzed (30 samples); 12 of these detections were higher than the 4.2 pCi/g BCL_{RS}. An LBCL_{DAFI} has not been established for this constituent. The twelve BCL_{RS} exceedances were higher than the 2.84 pCi/g maximum background activity. These BCL_{RS}/background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-07	5	4.9
PUC-07	5	6.81
PUB-06	0	7.6
PUB-09	10	8.58
PUE-05	0	15.33
PUB-10	10	17.3

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUD-06	0	20.5
PUB-08	0	23.6
PUA-07	0	27.3
PUD-08	0	29
PUC-07	0	30.7
PUC-05	0	33.3

- Uranium-235/236 was detected in all but two of the samples in which it was analyzed (28 detections); 19 of these detections were higher than the 0.11 pCi/g BCL_{RS}. An LBCL_{DAFI} has not been established for this constituent. Fourteen detections were higher than the 0.21 pCi/g maximum background activity. These BCL_{RS}/background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-07	5	0.243
PUG-05	0	0.26
PUC-03	0	0.268
PUB-06	0	0.392
PUC-07	5	0.501
PUB-09	10	0.51
PUE-05	0	0.93

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUB-10	10	1.06
PUD-06	0	1.08
PUB-08	0	1.13
PUA-07	0	1.34
PUC-07	0	1.51
PUD-08	0	1.56
PUC-05	0	1.76

- Uranium-238 was detected in all 30 of the samples in which it was analyzed; all of these detections were higher than the 0.46 pCi/g BCL_{RS}. An LBCL_{DAFI} has not been established for this constituent. Of these, fifteen detections were higher than the 2.37 pCi/g maximum

background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUE-05	5	2.8
PUG-05	0	3.29
PUC-03	0	3.63
PUA-07	5	5.01
PUC-07	5	6.84
PUB-06	0	7.33
PUB-09	10	8.93
PUE-05	0	15.28

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUB-10	10	16.3
PUD-06	0	19
PUB-08	0	23
PUA-07	0	25.5
PUD-08	0	26.7
PUC-07	0	30.3
PUC-05	0	33.5

As presented in NDEP guidance (NDEP 2009c), as part of the process used to evaluate radionuclide data for the Common Areas, BRC will assess whether secular equilibrium has been attained (as an indication that steady-state conditions have been reached). Given the limited amount of radionuclide data for this Site and the differences in sample collection procedures (*i.e.*, a mix of composite and discrete) and historical analytical methods, and without conducting statistical equivalence testing, the data indicate that secular equilibrium has been broadly attained at the Site for the thorium decay chain. Specifically, the mean radioactivities for thorium-232, radium-228, and thorium-228 are comparable (2.4 pCi/g, 2.6 pCi/g, and 2.4 pCi/g, respectively), and are close to the maximum background radioactivity levels. However, the mean values for the uranium chain are more variable, and are appreciably higher than the maximum background activities. A more thorough evaluation of secular equilibrium status will be performed after collecting radionuclide data in accordance with this SAP.

The distribution of radium-226, representative of radionuclides, for samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-42 and C-43, respectively.

2.8.35 Summary of Soil Exceedances

As summarized above and in the associated data tables (Tables 1A, 1B, 1C and Appendix B), sampling of Site soils has been limited, and the analyte list is incomplete. Based on the limited historical data, the BCL_{RS} and $LBCL_{DAFI}$ exceedances noted below were observed.

The following constituents were reported at concentrations higher than the BCL_{RS} and the maximum background concentration (where applicable):

- | | | |
|-------------|-------------|----------------------|
| • Antimony | • Thallium | • Chlordane |
| • Arsenic | • Vanadium | • Heptachlor |
| • Barium | • TCDD | • Lindane |
| • Chromium | • 4,4-DDE | • 2,4-Dinitrotoluene |
| • Cobalt | • 4,4-DDT | • Hexachlorobenzene |
| • Lead | • alpha-BHC | • Radionuclides |
| • Manganese | • beta-BHC | |

The following constituents were reported at concentrations higher than the LBCL_{DAF1} and the maximum background concentration (where applicable):

- | | | |
|--------------------|----------------|----------------------------|
| • Aluminum | • Silver | • Benzo(a)anthracene |
| • Antimony | • Thallium | • Benzo(b)fluoranthene |
| • Arsenic | • Vanadium | • 2,4,6-Trichlorophenol |
| • Barium | • Cyanide | • 2,4-Dinitrotoluene |
| • Beryllium | • 4,4-DDD | • 2-Chlorophenol |
| • Cadmium | • 4,4-DDE | • Hexachloro-1,3-butadiene |
| • Chromium (Total) | • 4,4-DDT | • Hexachlorobenzene |
| • Chromium (VI) | • alpha-BHC | • Pentachlorophenol |
| • Cobalt | • beta-BHC | • 1,2,4-Trichlorobenzene |
| • Copper | • Chlordane | • 1,4-Dichlorobenzene |
| • Manganese | • Dieldrin | • Dichloromethane |
| • Mercury | • Endrin | • Tetrachloroethylene |
| • Molybdenum | • Heptachlor | • Trichloroethylene |
| • Nickel | • Lindane | • Radionuclides |
| • Selenium | • Methoxychlor | |

Reported values above these comparison levels were observed across the Site; however, the highest reported values were often associated with samples collected from within the southwestern quadrant (*i.e.*, first three rows, former pond cells closest to the Beta Ditch).

2.8.36 On-Going Remedial Actions

Due to the large number of comparison level exceedances currently observed in Site soils and the magnitude of those exceedances, BRC is currently conducting remediation of Site soils in accordance with the approved CAP (BRC 2006) prior to implementing this SAP. This remedial action consists of excavating soils with visual or other evidence of impacts from the former effluent ponds, and transporting those soils to the off-site CAMU for disposal. The soils targeted for excavation include discolored sediments/soils and sediments/soils associated with historical sampling locations with elevated reported values, but not necessarily corresponding to exceedances of the BCL_{RS} and/or $LBCL_{DAFI}$ for a given analyte.

2.9 CHEMICAL DISTRIBUTION WITHIN GROUNDWATER

For evaluating Shallow Zone groundwater quality at the Site, the following wells in the immediate Site vicinity were used: on-site well MCF-16C, and off-site wells AA-18, AA-UW6, and POD8. Wells MCF-16C and AA-UW6 are depicted on Figure 2; wells AA-18 and POD8 are outside the figure boundaries, north and west of the Site, respectively. The data associated with these wells from the most recent groundwater monitoring event (May through June 2008) are presented in Table 2. Data validation results are presented in the DVSR for dataset 51 (ERM 2008), which was approved by NDEP on November 1, 2008. Chemical occurrence patterns for the chemicals detected in groundwater from these wells are provided below. For data evaluation purposes, the detections were compared to the following, where established:

- U.S. Environmental Protection Agency (USEPA) Maximum Contaminant Levels (MCLs);
- Human health screening levels for indoor air intrusion (USEPA generic groundwater to indoor air screening level; “Vapor Intrusion Screening Level,” hereinafter “VI SL”); and
- The NDEP residential water BCL (BCL_W).

Organic Compounds. The few organic compounds detected during the 5th groundwater monitoring event are as follows:

- alpha-BHC was detected in samples collected from wells MCF-16 and POD8 at relatively low concentrations (maximum detection 0.12 $\mu\text{g/L}$ at MCF-16). MCLs have not been established for this constituent. The detections (0.1 $\mu\text{g/L}$ and 0.12 $\mu\text{g/L}$) were well below the 3.1 $\mu\text{g/L}$ VI SL, but exceed the 0.011 $\mu\text{g/L}$ BCL_W .

- beta-BHC was detected in the sample collected from well POD8 at a concentration of 0.069 µg/L. An MCL and VI SL have not been established for this constituent. The detection was higher than the 0.037 µg/L BCL_w.
- Endrin was detected in the sample collected from well AA-UW6 at a concentration of 0.047 µg/L. A VI SL has not been established for this constituent. The detection was lower than the MCL and the BCL_w (2 µg/L for both).
- gamma-Chlordane was detected in the sample collected from well MCF-16C at a concentration of 0.053 µg/L. A VI SL and BCL_w have not been established for this constituent. The detection was lower than the 2 µg/L MCL.
- 1,2-Dichlorobenzene was detected in the sample collected from well AA-UW6 at a concentration of 0.17 µg/L. The detection was lower than the BCL_w and the MCL (600 µg/L for both), and the 2,600 µg/L VI SL.
- 1,4-Dichlorobenzene was detected in the sample collected from well AA-UW6 at a concentration of 0.29 µg/L. The detection was lower than the BCL_w and the MCL (75 µg/L for both) and the 8,200 µg/L VI SL.
- Acetone was detected in the sample from AA-UW6 at a reported concentration of 4.3 µg/L. An MCL has not been established for this compound. The detection was well below the 220,000 µg/L VI SL and the 32,600 µg/L BCL_w.
- Bromodichloromethane was detected in the sample from MCF-16C at a reported concentration of 0.56 µg/L. The detection was below the 80 µg/L MCL the 2.1 µg/L VI SL, and the 1.1 µg/L BCL_w.
- Carbon disulfide was detected in the sample from MCF-16C at a reported concentration of 0.78 µg/L. An MCL has not been established for this compound. The detection was well below the 560 µg/L VI SL and the 3,520 µg/L BCL_w.
- Carbon tetrachloride was detected in the sample from MCF-16C at a reported concentration of 1.9 µg/L. The detection was below the VI SL, MCL, and BCL_w (5 µg/L for all three comparison levels).

- Chloroform was detected in samples from all of the wells. The highest detection was 210 µg/L (MCF-16C); this was the only detection higher than the MCL and VI SL (80 µg/L each). The MCF-16C and AA-18 (7.2 µg/L) detections were higher than the 1.6 µg/L BCL_w.
- Toluene was detected in a sample from AA-UW6 at a reported concentration of 0.22 µg/L. The detection was well below the MCL and BCL_w (1,000 µg/L for both), the 1,500 µg/L VI SL.

No other organic chemicals were detected in these monitoring wells. The standard reporting limits for most of the analytes in these samples were sufficiently low such that concentrations in excess of the comparison levels, if present, would be detected. The exceptions are as follows:

Constituent	Reporting Limit	Comparison Level of Concern ²⁰
Formaldehyde	60 µg/L	1.5 µg/L BCL _w no VI SL; no MCL
1,2-Diphenylhydrazine	1 µg/L	0.084 µg/L BCL _w no VI SL; no MCL
2,4-Dinitrotoluene	1.1 µg/L	0.22 µg/L BCL _w no VI SL; no MCL
3,3-Dichlorobenzidine	1 µg/	0.15 µg/L BCL _w no VI SL; no MCL
Azobenzene	1 µg/L	0.54 µg/L BCL _w no VI SL; no MCL
Benzo(a)anthracene	1 µg/L	0.092 µg/L BCL _w no VI SL; no MCL
Benzo(a)pyrene	1 µg/L	0.2 µg/L MCL; 0.2 µg/L BCL _w no VI SL
Benzo(b)fluoranthene	1 µg/L	0.092 µg/L BCL _w no VI SL; no MCL
Benzo(k)fluoranthene	1 µg/L	0.92 µg/L BCL _w no VI SL; no MCL
bis(2-Chloroethoxy)methane	1 µg/L	0.0045 µg/L VI SL no MCL; no BCL _w
bis(2-Chloroethyl)ether	1 µg/L	0.054 µg/L BCL _w adequately low for VI SL; no MCL
bis(2-Chloroisopropyl)ether	1 µg/L	0.9 µg/L BCL _w adequately low for VI SL; no MCL
Dibenzo(a,h)anthracene	1 µg/L	0.0092 µg/L BCL _w no VI SL; no MCL
Hexachloro-1,3-butadiene	1 µg/L	0.33 µg/L VI SL; 0.86 µg/L BCL _w no MCL
Hexachlorobenzene	1 µg/L	0.042 µg/L BCL _w adequately low for VI SL and MCL
Indeno(1,2,3-cd)pyrene	1 µg/L	0.092 µg/L BCL _w no VI SL; no MCL

²⁰ This table lists only those comparison levels that are lower than the standard reporting limit.

Constituent	Reporting Limit	Comparison Level of Concern ²⁰
n-Nitrosodi-n-propylamine	1 µg/L	0.0096 µg/L BCL _w no VI SL; no MCL
Pentachlorophenol	2 µg/L	1 µg/L MCL; 1 µg/L BCL _w no VI SL
1,2,3-Trichloropropane	0.22 µg/L	0.034 µg/L BCL _w adequately low for VI SL; no MCL
1,2-Dibromo-3-chloropropane	0.48 µg/L	0.2 µg/L MCL; 0.2 µg/L BCL _w adequately low for VI SL
2-Nitropropane	0.034 µg/L	0.0063 µg/L BCL _w adequately low for VI SL; no MCL
Tribromomethane	0.27 µg/L	0.0083 µg/L VI SL adequately low for BCL _w and MCL

For these constituents it cannot be determined whether they are present in Site groundwater at concentrations greater than the comparison levels noted above.

Inorganic Compounds. Inorganic compounds were routinely detected in the groundwater samples. It should be noted that many of these constituents are naturally-occurring in groundwater, and the extent to which the detections represent background conditions was not evaluated for this SAP. The following constituents were detected at concentrations above their respective MCLs and BCL_w²¹ as summarized below:

- Chloride is higher than the 250 mg/L MCL in samples collected from wells MCF-16C and POD8 at reported concentrations of 1,230 mg/L (both wells).
- Chlorine is higher than the 4 mg/L BCL_w in samples collected from all of the wells. The maximum reported concentration was 2,460 mg/L (MCF-16C and POD8).
- Nitrate is higher than the 10,000 mg/L MCL and BCL_w in samples collected from all of the wells except AA-UW6, which had a lower reported concentration. The maximum reported concentration was 41,600 mg/L (POD8).
- Perchlorate is higher than the USEPA Drinking Water Equivalent Level and BCL_w²² (24.5 µg/L and 18 µg/L, respectively) in samples collected from all of the wells; the maximum detection was 11,100 µg/L (MCF-16C).
- Sulfate is higher than the 250 mg/L MCL in samples collected from all of the wells; the maximum reported concentration was 5,570 mg/L (MCF-16C).

²¹ VI SLs have not been established for inorganic constituents.

²² An MCL has not been established for this constituent.

- Aluminum is higher than the 50 µg/L MCL in samples collected from wells AA-18 and POD8 (maximum detection 250 µg/L at POD8). The reporting limits for the other samples were elevated above the MCL, and it is unknown whether aluminum is also present at these locations at concentrations above the MCL.
- Arsenic is higher than the MCL and BCL_W (10 µg/L for both) in samples collected from wells AA-18 and AA-UW6; the highest concentration is associated with AA-UW6 (102 µg/L). The reporting limits for the other two samples were elevated above the MCL and BCL_W, and it is unknown whether arsenic is also present at these locations at elevated concentrations.
- Chromium is higher than the 100 µg/L MCL in the sample collected from well MCF-16C (155 µg/L).
- Lithium is higher than the 73 µg/L BCL_W in the samples collected from wells MCF-16C, AA-18 and AA-UW6; the highest concentration is associated with MCF-16C (732 µg/L). The reporting limit for the sample from POD8 was elevated above the BCL_W, and it is unknown whether lithium is also present at that location at elevated concentrations.
- Magnesium is higher than the 207,000 µg/L BCL_W in samples collected from wells MCF-16C and POD8; the highest concentration is associated with MCF-16C (671,000 µg/L).
- Molybdenum is higher than the 180 µg/L BCL_W in the sample collected from well MCF-16C (223 µg/L).
- Uranium is higher than the 30 µg/L MCL in the sample collected from well POD8 (50.4 µg/L).
- Thorium-228 is higher than the 0.11 pCi/L BCL_W in the sample collected from well MCF-16C (0.407 pCi /L). The reporting limits for the samples from wells AA-18 and AA-UW6 were elevated above the BCL_W, and it is unknown whether thorium-228 is also present at those locations at elevated activity levels.
- Total Dissolved Solids (TDS) is higher than the 500 mg/L MCL in samples collected from all of the wells; the maximum reported concentration was 16,000 mg/L (MCF-16C).

It should be noted that reporting limits for several analytes in addition to those noted above were routinely higher than the MCLs or BCL_W (*i.e.*, antimony, iron, and thallium), and it cannot be

ascertained if these constituents are present in Site groundwater at concentrations greater than those comparison levels. Chemical occurrence in both the shallow and deep water-bearing zones beneath the Eastside and CAMU areas is currently being characterized under a process separate from the Closure Plan process under which this SAP has been prepared, which focuses on site soils. A more detailed presentation of chemical occurrence patterns within these water-bearing zones (including comparisons to background conditions) and an assessment of the potential health risks will be provided upon completion of the on-going groundwater investigation, and the CSM for the Eastside and CAMU areas will be updated accordingly.

3.0 DATA QUALITY OBJECTIVES

The DQO process is a seven-step iterative planning approach used to prepare plans for environmental data collection activities. It provides a systematic approach for defining the criteria that a data collection design should satisfy, and covers: problem definition; when, where, and how to collect samples or measurements; determination of tolerable decision error rates; and the number of samples or measurements that should be collected. DQOs define the purpose of the data collection effort, clarify what the data should represent to satisfy this purpose, and specify the performance requirements for the quality of the data to be obtained. The DQO process, as defined by USEPA's *Guidance on Systematic Planning Using the Data Quality Objectives Process, EPA QA/G-4* (USEPA 2006), consists of 7 steps:

Step 1 - State the Problem;

Step 2 - Identify the Goal of the Study;

Step 3 - Identify Information Inputs;

Step 4 - Define the Boundaries of the Study;

Step 5 - Develop the Analytical Approach;

Step 6 - Specify Performance or Acceptance Criteria; and

Step 7 - Develop the Plan for Obtaining Data.

A general overview of USEPA and NDEP's 7-step DQO process is provided in the Closure Plan. The key decision inputs to the DQO process, namely the Step 2 Principal Study Questions (PSQs), are also provided in the Closure Plan. The PSQs are the central Eastside Area-wide questions that provide a basis for the overall closure effort. Per discussions with the NDEP, the other steps of the DQO process are to be addressed, on an Eastside Area sub-area basis (for soils), in the respective sub-area SAPs. Steps 1 through 5 of the DQO process are described below for this Site. Implementation of DQO Steps 6 and 7 is described in the Statistical Methodology Report, which presents the statistical approach to sample design for the Eastside Area sub-areas soils investigations.

3.1 STATE THE PROBLEM (STEP 1)

The first step in the DQO process is to define the problem that initiated the study in such a way that the focus of the study is unambiguous. This section provides the following information: a summarization of the problem being addressed; identification of the assessment team; identification of the key decision-makers and stakeholders; and a presentation of the schedule.

3.1.1 Problem Statement

As presented in the Closure Plan, the Site includes open land that has been modified to accept wastewater discharges from the BMI Complex through various trenches and evaporation ponds from 1942 through 1976. Currently, the approximately 201.5 acre Site includes former unlined disposal ponds associated with historical BMI Complex operations. The industrial activity on this Site may have resulted in concentrations of chemicals that drive unacceptable human health risk. Residual contamination remains at the Site as a consequence of these discharges. The goal of this work is to remediate the Site such that chemical concentrations in all relevant media do not pose an unacceptable risk to human health and the environment under current and future land use scenarios. The problem that needs to be addressed is one of returning at least the upper 10 feet of soils at the Site to conditions that pass a human health risk assessment, with restrictions on access to deeper soils and on the use of groundwater. Risk assessment at the Site includes exposure to soils, but also exposure to VOCs and radon, which might emanate from the vadose zone or from groundwater. A further consideration is the potential for leaching contaminants into groundwater.

The Site is currently vacant. The potential on-site and off-site receptors are currently trespassers/visitors, occasional on-site workers, and off-site residents. Risks to current receptors are being managed through Site access control. Under the current, prospective redevelopment plan, the Site will be used for residential land use (low, medium, and high density) with roads, parks and trails interspersed, with a school land use in the southwestern corner of the Phase I sub-area (Figure 3). Consequently, receptors that are considered for this problem include construction workers, residents (adult and child), maintenance workers, and trespassers. The potentially exposed populations for the Site and their potential routes of exposure are presented on Figure 8 and are summarized in Section 9 of the Closure Plan.

As described in the Closure Plan and in the Statistical Methodology Report, remediation for all media will be to risk-based levels protective of human health and the environment under current and future land use scenarios. The problem will be addressed through iterative remediation until

sufficient remediation (removal of soil) has been performed that acceptable human health risks have been attained. Mass-scale remediation has been completed based on existing Site data, prior to conducting the confirmation sampling proposed under this SAP (see Section 2.8). The risk assessments performed for Site closure will primarily use the data collected as part of this SAP, which has been designed to produce data representative of the conditions to which current (non-remediation workers) or future users would be exposed. The need for additional remediation will be primarily based on the SAP sampling results. The final site conditions will include regrading of on-site soils, so that the future surface will not consist of the same soil as the current surface. Imported fill material may or may not be needed, including fill from other Sites. The grading plan for this Site is presented on Figure 4.

Although the primary focus is human health risk assessment for residential and commercial use scenarios, secondary issues that will be addressed include contamination of deeper soils and groundwater beneath the Site. BRC will also discuss the issue of off-Site transport of contaminants with the NDEP should the NDEP determine that this is necessary, maintaining consistency with the AOC3. However, because remediation of the Site will be to on-site residential standards, risks to off-site receptors are expected to be minimal.

3.1.2 Proposed Assessment Team

A multi-disciplinary approach is being and will be followed with participation by qualified geologists, chemists, radiochemists, hydrogeologists, biologists, ecologists, engineers, remediation specialists, toxicologists, risk assessors (human health and ecological), statisticians, field sampling personnel, community relations personnel, risk communications specialists, project developers, and project managers. BRC maintains an active roster of key team members, which will be periodically updated as appropriate throughout the project term. Key team members are identified in Section 1.4 of the Closure Plan.

3.1.3 Key Decision Makers and Stakeholders

The NDEP is the primary and the ultimate decision-maker for the project. Stakeholders include BRC, the City of Henderson, Clark County, the State of Nevada, the United States Government, the local public, site developers, and other interested persons.

3.1.4 Schedule

BRC has established a phased schedule for the Eastside Area such that the various sub-areas are addressed sequentially. The timing of the phased closures is closely spaced to avoid potential complications associated with the presence of contaminated soils near areas that have been successfully remediated and closed and to mitigate potential impacts on adjacent residential housing developments.

As noted in Section 3.1.1, mass-scale remediation has been completed based on existing Site data prior to conducting SAP sampling activities, and risk assessments performed for Site closure will primarily use data collected as part of this SAP (*i.e.*, after remediation has been substantively performed). For the purposes of Site closure, it is these post-remediation/pre-development conditions that are most appropriate to evaluate in terms of potential exposures and risks to then-current (non-remediation workers) or future users.

Surface and shallow soil data will be used to evaluate both the current (post-remediation, pre-development) and future (post-development) exposures and risks. Once these data have been collected and preliminary risk calculations have been completed, BRC will determine whether the acceptable chemical concentrations and/or risk levels defined for the Site have been attained and will discuss this determination with the NDEP. If it is determined that acceptable risk levels have not been attained, BRC will perform additional remediation activities consistent with the CAP (BRC 2006), and will repeat the assessment process until risk-based goals are achieved. Each iterative remediation and data collection process is expected to take place over a one to two month period, but may extend into a slightly longer period.

3.2 IDENTIFY THE GOAL OF THE STUDY (STEP 2)

The purpose of this step is to define the Site-specific PSQs that need to be resolved in order to address the problem identified in Step 1, and to identify alternative actions that may be taken, depending on the answers to the PSQs. As noted above, the project PSQs are presented in the Closure Plan. The primary PSQ associated with this SAP is:

Are the current (post-remediation, pre-development) and future (post-development) incremental risks to human health or the environment from exposure to Site soil and soil vapor flux sufficiently low that they are acceptable?

If the incremental risks are not sufficiently low, then reasonable further action will be taken;

otherwise, no further action will be taken and a risk assessment report will be prepared. Secondary PSQs deal with groundwater quality in the context of the overall site, and on the impact of site contamination on off-site human receptors. Ecological risk assessment issues will be discussed with the NDEP should NDEP determine that an ecological risk assessment is warranted.

The following fundamental assumptions apply:

1. The PSQs will be assessed only after BRC has determined that achievement of Site cleanup goals is expected for Site soils.²³ Cleanup goals for the project are defined in Sections 1.1 and 9.1.1 of the Closure Plan and in the Statistical Methodology Report. The data pool employed in the risk assessment will comprise only those data collected in accordance with this SAP,²⁴ after remediation activities have been performed during the closure process, if such remediation occurs.
2. The data used in PSQ assessment will undergo a rigorous Quality Assurance/Quality Control (QA/QC) review prior to that assessment, in accordance with the procedures described in the *BRC Quality Assurance Project Plan* (QAPP; BRC and ERM 2009). Based on this QA/QC review, only those data determined to be suitable for use will be included in the closure data pool. Furthermore, the adequacy of the data pool will be evaluated following the procedures provided in Section 9.3 of the Closure Plan. If found to be inadequate, additional sampling and analysis may be performed.

Stated another way, the decision is to determine whether or not Site conditions²⁵ result in acceptable human health risks and environmental risks for future land uses. This will be determined through human health risk assessment for potential future on-site receptors. Potential alternative actions (from the Closure Plan) that may be taken include: (1) No Action (in this context No Action means no additional action beyond removal of contaminated soils presently located on Site), (2) institutional controls/limited action, (3) importation and use of clean fill (on-

²³ The existing historical data suggest that some remediation is needed to attain cleanup goals and BRC has initiated remediation in accordance with the CAP; the need for further remediation will be properly evaluated on the basis of data collected under this SAP, in accordance with the approved risk assessment methodology in the Closure Plan.

²⁴ Data collected prior to SAP approval that might also be representative of Site conditions will not be included in the risk assessment; however, a data usability evaluation will be conducted to determine whether any of the historical data can be used in Site risk assessment, or it will be explained why the new data supplants the old data. However, the historical data may be used to help develop the CSM for both this Site and the overall Eastside.

²⁵ "Site conditions" in the context of this sentence refers to those conditions assessed after performing any excavation of impacted soils and disposing of them outside the Site.

site capping of soils), and (4) excavation of soils and on-site landfill disposal at the project CAMU.

How the study decisions will be determined for the Site, including how the risk assessment will be performed, is presented in the Closure Plan.

3.3 IDENTIFY INFORMATION INPUTS (STEP 3)

The purpose of this step is to identify the information needed to resolve the PSQs identified in Step 2. The data inputs for the primary PSQ are listed below. Risk assessment will be the primary means of answering the PSQs, and will incorporate the various data inputs listed below. These data inputs either 1) are already established, as presented in this SAP or the Closure Plan, 2) will be obtained during the soil and soil vapor flux sampling programs specified in this SAP, or, 3) currently exist as data gaps that will be resolved prior to performing risk assessment. A comprehensive list of the necessary data inputs for addressing the primary PSQ is provided below.

- Input parameters for human health risk assessment and assessment of impacts to groundwater considering relevant exposure pathways associated with potential future land uses.
- Toxicity inputs parameters consistent with current NDEP guidance (BCL_{RS}, NDEP 2009b).
- Input parameters for all fate and transport models (see Closure Plan and data to be collected as determined by this SAP).
- Site soil and soil vapor flux characterization data²⁶ collected according to this SAP.
- Identified locations/depth intervals, including elevations to adjust for use of fill material and regrading.
- Characterization data for imported fill if such fill is considered for use at the Site. At this point, it is not known whether imported fill materials will be used on Site.
- To address the secondary PSQs, soil data from depths greater than 10 feet bgs, and groundwater data will be used to address issues related to further understanding of vadose zone and groundwater contamination beneath the Site.

3.4 DEFINE THE BOUNDARIES OF THE STUDY (STEP 4)

The purpose of this step is to define the aspects of the project that affect the decision making process, including:

- The populations to be sampled;
- The geographical area applicable for decision making;
- Temporal boundaries for decision making;
- Any practical constraints that may interfere with data collection; and
- The scale for decision-making purposes.

Each of these portions of this step is presented below.

3.4.1 Sample Populations

Several target populations will be sampled for this project, including: surface and near-surface soils (*i.e.*, less than 10 feet bgs); subsurface soils (*i.e.*, greater than 10 feet bgs); groundwater; and, soil vapor flux. These populations were segregated based on their differences in media type and pathways for potential human residential exposure following redevelopment. For this project, samples will be collected for surface and near-surface soils and soil vapor flux to address the primary PSQ via human health assessment, and for cumulative risk across these media types and associated pathways. Samples will be collected for subsurface soils and groundwater to address the secondary PSQs.

3.4.2 Spatial Boundaries

The spatial boundaries of interest for the risk assessment are the spatial extent of the Site boundary to a depth of 10 feet bgs or deeper if construction activities are below this level. However, impacts to receptors exposed to these soils can also occur from vapor intrusion from the deeper vadose zone and groundwater. Consequently, the vertical extent of the Site that

²⁶ To be collected as determined by this SAP in accordance with the most recent NDEP-approved version of Standard Operating Procedure 16 (BRC, ERM and MWH, 2008)

encompasses vadose zone and groundwater is of interest. Based on expected land use, construction activities are not expected to occur at depths greater than 10 feet bgs.

Note that more than one set of surface spatial boundaries could ultimately be identified. For example, data may need to be grouped for sub-areas within the Site in order to appropriately address the decision units (*e.g.*, exposure areas). These spatial boundaries might be important if residual contamination varies across the Site either in the surface soils or by depth.

Because sub-areas within the Eastside are adjacent to each other, to assess or avoid potential impacts from other Site sources, risk assessment could be performed across Site boundaries, and/or adjacent Sites will be remediated in the same general time frame. To some extent this will depend on the spatial homogeneity of concentrations once remediation has been performed. Future remediation at adjacent Sites will involve dust suppression and storm water pollution prevention activities, mitigating potential impacts from cross-contamination.

3.4.3 Temporal Boundaries

The temporal boundaries of interest for this project are defined by the timeframe associated with decision making for each spatially distinct region of interest. Specifically, for each different land-use scenario, within each decision or exposure unit, both current and potential future risk needs to be considered and quantified. The time frame over which future risks will be evaluated can be regarded as indefinite, implying that future land uses must satisfy institutional constraints placed on the site now, or a new risk assessment will need to be performed. Specific issues for each medium are described below.

Surface Soil

The surface soil concentrations used in the risk assessment will be derived from then-existing soil conditions (that is, established during the characterization activities performed in accordance with this SAP). BRC assumes that these will reflect the concentration distribution for the project lifetime, and those data will be relied upon throughout the redevelopment process and for assessing risks under current and future land use scenarios. The timeframe for data collection, assessment, and decision-making will be from one to three months for surface soils. These soil data will be used to evaluate both current (post-remediation, pre-development) and future (post-development) exposures and risks.

Subsurface Soil and Groundwater

As noted, BRC does not expect that subsurface soils (generally greater than 10 feet bgs) will be an issue from a human exposure standpoint. However, subsurface soils will be sampled in order to determine potential impacts to groundwater in accordance with the secondary PSQ relating to the deeper vadose zone and groundwater in the context of the entire Site. These subsurface soil data will be used to evaluate both current (post-remediation, pre-development) and future (post-development) impacts to groundwater. Data to support the evaluation of potential impacts to groundwater will be collected. These data will be collected to support the migration to groundwater calculations included in the Closure Plan, as well as more refined modeling tools (such as, VLEACH, SESOIL, and PESTAN). Any indirect impacts from underlying groundwater will be addressed via the proposed surface flux measurements.

Soil Vapor Flux

The soil vapor fluxes used in the risk assessment will be derived from soil vapor flux data associated with existing soil and groundwater conditions (that is, data collected during the characterization activities performed in accordance with this SAP). BRC assumes that these will reflect the soil vapor flux distribution for the project lifetime, and those data will be relied upon throughout the redevelopment process and for assessing risks under current and future land use scenarios. The timeframe for data collection, assessment, and decision-making will be from one to three months for soil vapor flux. These soil vapor flux data will be used to evaluate both current (post-remediation, pre-development) and future (post-development) exposures and risks.

3.4.4 Practical Constraints for Data Collection

Since the Site is currently unoccupied, there are no access constraints for collecting soil or soil vapor flux samples from BRC's property as specified in this SAP. For groundwater (which is not part of this SAP), additional and/or routine sampling activities (such as groundwater sampling from monitoring wells) may be required following redevelopment. However, these constraints do not apply to the situation associated with this SAP and will be dealt with at a later time.

3.4.5 Scale of Decision-Making

The scale for decision-making regarding the primary PSQ varies based on the target sample population of interest. Redevelopment of the Site following remediation includes significant changes in land uses, including residential housing. Other potential development interests in

addition to residential housing include a school, roads, and trails (see Figure 3). However, the final redevelopment plans for the Site have not been completed and may change depending upon the results of post-remediation sampling. To facilitate the redevelopment of the Site with the fewest practical constraints due to residual contamination, the nominal scale for decision-making for the proposed residential exposure scenario, the most protective scenario, will be consistent with a typical residential lot size, which is 1/8th acre. However, if, as expected, the concentration distribution across the Site is statistically homogeneous representing a single population of concentrations for each chemical, then the decision unit will be the entire Site. Smaller decision units will only be defined if the spatial distribution of concentrations suggests the need to break the Site into smaller areas for risk-based decision-making. The same approach will be used for soil vapor flux, subsurface soils and groundwater as they feed into the human health risk assessment.

3.5 DEVELOP THE ANALYTICAL APPROACH (STEP 5)

The purpose of this DQO step, as described in USEPA guidance, is to define the population parameter (*e.g.*, mean risk) of interest for each population (surface soil, etc.), identify the appropriate action level (target risk level) for each population, and select measurement and analysis methods that can be used to properly evaluate the parameters against the action levels (*i.e.*, ensure detection limits do not exceed action levels, etc.). Once these actions are completed, decision rules (if-then statements) are developed for each population that state the alternative actions that would be taken depending upon the true value of the parameter relative to the specified action levels.

The PSQ-specific decision rules for the Site are presented below.

- If, after confirmation sampling conducted per the Closure Plan and this SAP, and subsequent risk assessment following procedures per the Closure Plan, it is deemed that the risk goals for the project (as discussed in Section 1 of the Closure Plan) are not met, then remediation per Alternative (4) (excavation of soils and on-site landfill disposal at the project CAMU) listed in Section 3.2 will be conducted to satisfy the risk goals. The risk assessment methodology for the project is presented in Section 9 of the Closure Plan.
- If, after implementation of the Decision Rule above it is determined that there are specific locations at the Site for which additional and continued remediation will not be practical or effective, then other alternatives such as Alternative (2) and Alternative (3) (institutional controls/limited action, and importation and use of clean fill) identified in Section 3.2 will be

evaluated considering overall protection, effectiveness, permanence, implementability, cost, regulatory acceptance, and community acceptance.

- If, after implementation of the Decision rule above it is determined that no further action needs to be taken in the top 10 feet of soils, a proposal for an NFAD will be made. This proposal will be made only after consultation with NDEP.

Data for the secondary PSQs (deeper soils and groundwater) will be evaluated for obvious issues that might require immediate action, and will be included in analysis of objectives related to the groundwater program for the entire Site.

4.0 SCOPE OF WORK

As noted above, based on existing historical analytical results, BRC has initiated remediation at the Site in accordance with the CAP (BRC 2006) prior to the sampling activities specified in this SAP. Decisions regarding the need for further remediation will be based on the initial data to be collected in accordance with this SAP as discussed in this section.

The risks posed to human health and the environment by chemicals remaining in Site soils will be assessed in accordance with the Risk Assessment Methodology provided in the Closure Plan. If this assessment indicates that risk-based cleanup goals established for the Site have not been met, additional phases of remediation, sampling/analysis and assessment will be performed as discussed in the CAP and the Closure Plan. Development may only proceed after attainment of acceptable risk levels under the future planned land uses – *i.e.*, after obtaining the NFAD from the NDEP.

The following is the proposed scope of work for investigating the Site and meeting the SAP objectives. This scope includes soil sampling (final and interim), soil vapor flux sampling,²⁷ and laboratory analyses of those samples. Much of the discussion below regarding confirmation soil sampling is taken from the Statistical Methodology Report.

4.1 INITIAL CONFIRMATION SOIL SAMPLING

As per the Statistical Methodology Report, the initial confirmation sampling in the Site will be conducted on the basis of combined random and biased (judgmental) sampling, as follows:

- **Stratified Random Locations:** For this purpose, the Site is covered by a 3-acre cell grid network. Within each 3-acre cell, a sampling location is randomly selected. Sampling locations are randomly selected within both full and partial grid cells if they are greater than 50 percent of the total grid cell area (based on the project-wide grid cell network and the Site boundaries; those partial grid cells that contain less than 50 percent of their area within the Site will be included in the adjacent sub-area SAPs). The main objective of this stratified random sampling is to provide uniform coverage of the Site.

²⁷ A study comparing soil gas sampling and surface flux sampling is planned for the project. The outcome of that study will determine whether soil flux data will continue to be collected for the project, or whether this data will be supplemented and/or replaced by soil gas data. The sampling for the Site will be revised accordingly. The sampling method does not affect the sample locations, number of samples, or the laboratory analysis in this SAP.

- **Biased Locations:** Additional sampling locations are selected within or near small-scale contamination points of interests, including but not limited to previous debris locations, ponds, and berms. For this purpose, the randomly selected location within a corresponding 3-acre cell may also be adjusted in order to cover a nearby point of interest.

Additional biased sampling locations were placed so that each pond had at least one sample located within it, and that the pond berms also had an adequate number of samples. In all, the proposed sampling locations address each of the current land uses as follows:

<u>Land Use</u>	<u>Number of Samples</u>
Former Pond	51
Pond Berm	48
Debris/Other/Unused Land	7

Figure 9 and accompanying Table 3 show the random and biased discrete sampling locations that are proposed to be collected within the Site. In addition to the biased sampling locations noted above and on Figure 9, if currently unknown impacted areas are identified during on-going remediation, BRC will: 1) inform NDEP regarding the presence of these areas; 2) evaluate the need for additional biased sampling points to address those areas; and 3) modify the sampling program as needed, with NDEP concurrence.

At each selected location, multi-depth soil samples will be collected and analyzed for the project SRC list as follows. Proposed sample depths are 0 (surface) and 10 ft bgs at each sampling location. In addition, sample locations with grading greater than two ft bgs will also be sampled at the anticipated post-grading soil surface. Additionally, at three sample locations, within remediated ponds in the most heavily impacted portions of the Site, soil physical parameter data will be collected at 20 feet and every subsequent 10 feet within unsaturated soils above the capillary fringe until groundwater is reached or 50 feet deep, whichever is shallower.

Samples will be collected at:

1. Existing surface (0 ft bgs) and 10 ft bgs for sample locations in relatively flat (un-graded) locations;

2. Existing surface (0 ft bgs), post-grading surface, and post-grade 10 ft bgs for sample locations with substantial grading (that is, cut depths greater than two feet²⁸) and the uppermost sampled soil is expected to be used as surface fill;
3. Existing surface (0 ft bgs) and 10 ft bgs for sample locations with minimal grading (that is, cut depths less than two feet) and the uppermost sampled soil is expected to be used as surface fill; and
4. Existing surface (0 ft bgs) and 10 ft bgs for sample locations in an area expected to be covered by fill material.

The analytical sample results will then be divided into surface (0-2 ft depth), subsurface (2 ft -10 ft depth), and deep (>10 ft depth) layers, according to the following rules:

- **Rule 1:** **IF** the sample is collected in a relatively flat (un-graded) part of the Site (*i.e.*, an area not targeted for substantial grading), **THEN** the depth of the collected soil sample will be used to designate its soil layer grouping.
- **Rule 2:** **IF** the sample is collected in a part of the Site targeted for substantial grading, **AND** the sampled soil is located in an area expected to be covered by fill material (*e.g.*, exposed excavated surfaces of ponds), **THEN** the current surface soil sample will be classified as a surface (0-2 ft depth) sample, and the soil layer grouping of the remaining deeper sampled soil will be determined based on the difference between its elevation and the final (post-graded) surface elevation in that part of the Site.
- **Rule 3:** **IF** the sample is collected in a part of the Site targeted for substantial grading, **AND** the sampled soil is expected to be used as surface fill (*e.g.*, soil within a berm) **AND** the cut depth is expected to be greater than two feet, **THEN** the current surface soil sample will be classified as a fill material sample, a final (post-graded) surface sample will be classified as a surface (0-2 ft depth) sample, and the soil layer grouping of the remaining deeper sampled soil will be determined based on the difference between its elevation and the final (post-graded) surface elevation in that part of the Site.
- **Rule 4:** **IF** the sample is collected in a part of the Site targeted for substantial grading, **AND** the sampled soil is expected to be used as surface fill (*e.g.*, soil within a berm) **AND** the cut

²⁸ Because sample collection will be over a two to three foot depth interval, sample locations with an anticipated cut depth less than three feet will only be sampled at the surface and one post-grade subsurface depth.

depth is expected to be less than two feet, **THEN** the current surface soil sample will be classified as both a fill material sample and as a surface (0-2 ft depth) sample, and the soil layer grouping of the remaining deeper sampled soil will be determined based on the difference between its elevation and the final (post-graded) surface elevation in that part of the Site.

A schematic example of these rules is shown on Figure 10. The current site grading plan is shown on Figure 4. It should be noted that this is the most current plan available, but not necessarily the final grading plan. The sample-specific collection depths are presented in Table 3.

All soil samples will be tagged in the database with numeric designations of their corresponding assigned soil layer grouping based on these rules. Initially, 271 soil samples will be collected from 106 soil boring locations (not including deep samples to be collected for soil physical parameter data). This includes 69 random and 37 biased sample locations; with the following number of samples representing each post-grade type of soil:

<u>Post-Grade Sample Type</u>	<u>Number of Samples²⁹</u>
Fill material	79
Surface soil	163
Subsurface soil	108

It should be noted that, as discussed with NDEP, once a particular sub-area receives an NFAD from the NDEP, the cut material that is slated to be used as fill material elsewhere would not require additional testing. However, the chemical data for this fill material may be useful for evaluating sub-areas to receive fill (for example, if there is deeper contamination).

4.2 INTERMEDIATE SAMPLING AND CLEANUP

Upon layer-designation of confirmation soil samples, a series of tests will be conducted to determine whether sampled locations within a given layer include “exceeding” samples. An

²⁹ Note that in some cases a soil sample may be considered both a fill sample and a surface sample (as indicated in Table 3). Therefore, the sum of the number of samples indicated for each post-grade sample type does not necessarily equal the total number of samples collected.

exceeding sample is one that warrants further investigation, which may include localized soil removal. Exceeding samples will be defined consistent with the following rules:

- **Chemicals without background concentrations:** For chemicals without corresponding background distributions, the distribution of its reported concentrations in each layer will be constructed. The 95 percent upper confidence limit (UCL) of these distributions will also be computed. **IF** the constructed distribution indicates the presence of anomalous concentrations (*e.g.*, high values at the end of an elongated tail of a uni-modal distribution, or values forming an elevated sub-population of a multi-modal distribution), **AND** the inclusion of these anomalous values causes the computed UCL to exceed 1/10 of the risk-based screening level of the chemical, **THEN** samples associated with anomalous values will be considered as potential exceeding samples. **IF** the constructed distribution indicates no presence of anomalous concentrations and the computed UCL exceeds 1/10 of the risk-based screening level of the chemical, **THEN** all samples associated with the layer will be considered as potential exceeding samples.
- **Chemicals with background concentrations:** For chemicals with corresponding background distributions, the distribution of its reported concentrations in each layer will be constructed. These concentration distributions will then be statistically compared to the background concentration distributions applicable to the Site [*Note: Establishment of background datasets applicable to specific portions of the Common Areas is currently in progress but will be determined prior to performing the risk assessment referenced in this section*]. Appropriate two-sample tests, including Quantile test, Slippage test, *t*-Test and the Wilcoxon rank sum test with Gehan modification, will be used to identify exceeding samples through comparison of Site and background distributions. **IF** inclusion of elevated measured values in a given layer causes the rejection of the appropriate two-sample test, **THEN** samples associated with such elevated values will be considered as potential exceeding samples.

Areas with potential exceeding samples may be subjected to re-sampling prior to the confirmation of the location as an exceeding sample. After any such re-sampling, the above process will be repeated to confirm the exceeding status of the targeted sample location. It should be noted that if the data indicate a more widespread or Site-wide contamination, then it might be important to look at the effect on a sub-area basis rather than a sample basis. That is, additional alternatives, such as, changing the future land use, further division into smaller sub-areas, or more extensive remediation, would need to be considered and evaluated.

Upon confirmation of an exceeding sample, additional neighboring delineation sampling will be conducted based on a “step-out” approach. Step sizes and directions will be dependent on the location of the exceeding sample and perhaps the magnitude of the exceedance. Additional biased step-out or step-in sampling may be conducted to further refine the extent of the required removal. Each removal will be followed by confirmatory sampling. More detail on this approach is provided in the Statistical Methodology Report.

After the above intermediate removals, results associated with removed exceeding samples will be marked as excluded from the dataset, while non-exceeding delineation and confirmation data will be included in the dataset. The revised dataset will then be subjected to the above exceeding sample determination process, which will be repeated until all exceeding samples are adequately addressed.

4.3 FINAL CONFIRMATION DATASET

At this stage, the final confirmation soil dataset for the Site, consisting of: 1) the original non-exceeding confirmation data collected in accordance with this SAP³⁰ for the Site; 2) the non-exceeding data generated after intermediate sampling and cleanup, and 3) additional biased and random samples collected for confirmation, will be subjected to a series of statistical analyses in order to determine representative exposure concentrations for that sub-area, as described in the Statistical Methodology Report.

4.4 SOIL VAPOR FLUX SAMPLING

Concurrent with the confirmation soil sampling, BRC will implement soil vapor flux sampling across the Site. This SAP refers to and relies on the most recent NDEP-approved version of Standard Operating Procedure (SOP) 16 for technical description of sampling and analytical methodology, QA/QC protocols, and project procedural description. The sampling procedure for the effort includes the USEPA surface emission isolation flux chamber (flux chamber) and static chamber sampling to perform an air pathway analysis (APA) for the Site. A description of the history, background, and operation of the USEPA-recommended flux chamber and radon flux approach is provided in SOP-16.

³⁰ As distinguished from the historical “confirmation” sampling data collected as part of or immediately after the IRM, which will not be included in the risk assessment dataset.

The flux chamber sample collection rationale is based on the project goal of obtaining a representative dataset of air emissions per sub-area. Flux chamber samples will be collected from each of the 3-acre grid cells. Soil vapor flux sampling locations have been preferentially selected to coincide with a biased sampling location in a given cell. In cases where a given cell contains no biased samples, the soil vapor flux sampling coincides with the grid-specific random sampling location. This approach results in 69 soil vapor flux sampling locations, indicated on Figure 9, providing full spatial coverage of the Site. All of the flux chamber samples will be tested for both VOC flux and radon flux, and this density of sample collection should be adequate for sub-area characterization given: the random nature of the sample locations, the size of the sub-area, and the number of sample locations suggested by the USEPA (1986) in the flux chamber User's Guide for assessing zones of homogeneous site properties. A higher density of sample collection for VOCs is not warranted given the general lack of VOC detections in soils and groundwater.

4.5 CHEMICALS SELECTED FOR ANALYSIS

The proposed analyte list for soil samples is comprised of the BRC project SRC list, as presented in the Closure Plan³¹ and Table 4, with the following exceptions for this Site:

- Asbestos, dioxins/furans and PCBs will only be analyzed for in surface soil samples;
- Only acetaldehyde and formaldehyde will be analyzed for by USEPA Method 8315A (chloroacetaldehyde, dichloroacetaldehyde, and trichloroacetaldehyde removed based on the *Revisions to the Analyte List Technical Memorandum* approved by NDEP on October 16, 2008);
- The following metals will not be analyzed for: niobium, palladium, platinum, silicon, sulfur, and zirconium (removed based on the *Revisions to the Analyte List Technical Memorandum* approved by NDEP on October 16, 2008);
- Aroclors will be analyzed by USEPA Method 8082 only if the results of the analysis of total PCB congeners are greater than 33 ppb, which coincides with the standard reporting limit for this analysis;

³¹ Specific analytes and analyte-specific reporting limits for each analysis are listed in Table 4 of the QAPP.

- USEPA Method 8141A for organophosphorus pesticides will not be conducted. There have been only 47 detections of these compounds in over 10,000 soil sample records (<0.5 percent) from throughout the Eastside, and no detections in any of the seventeen soil samples collected within the Site that were analyzed for these compounds;
- USEPA Method 8151A for chlorinated herbicides will not be conducted. There have been no detections of these compounds in over 1,400 soil sample records from throughout the Eastside, including those associated with seventeen soil samples collected within the Site. Detection limits are below the BCL_{RS} ;
- HPLC Method for organic acids (historically conducted using a proprietary method developed by Alpha Analytical) will not be conducted. There have been only three detections of these compounds in 567 soil sample records (<0.5 percent) from throughout the Eastside, including those associated with two soil samples collected within the Site. Detection limits are below the BCL_{RS} ;
- USEPA Method 8015B for nonhalogenated organics will not be conducted. There have been only five detections of these compounds in 420 soil sample records (one percent) from throughout the Eastside. Of these, two samples were collected within the Site; nonhalogenated organics were not detected in the Site samples. Detection limits and the few detections have been well below the BCL_{RS} ;
- USEPA Method 8015 for total petroleum hydrocarbons (TPH) will not be conducted. There have been only three detections of these compounds in over 299 soil sample records (one percent) from throughout the Eastside. The few detections have been below 100 mg/kg, which is the typical low-end aesthetic threshold used for these compounds. While TPH is not proposed for analysis, its components are via other methods. In addition, TPH cannot be included in a risk assessment while its components can; and
- Consistent with the current project analyte list, the following radionuclides will be analyzed for: radium-226, radium-228, thorium-228, thorium-230, thorium-232, uranium-233/234, uranium-235/236, and uranium-238. Activities for other radionuclides on the project SRC list may be back-quantitated; however, the main radionuclides listed above will likely provide information sufficient to perform a risk assessment. In addition, if the radionuclide activities are similar to background, then back-quantitation will be unnecessary and will not be performed.

The analyte list, as proposed in this SAP for the Site, consists of 307 of the 418 compounds (including water only parameters) on the project SRC list as well as physical parameters (Section 5.2.3) to support the evaluation of potential impacts to groundwater from migration of chemicals from soil. The analytical and preparatory methods used in accordance with this SAP adhere to the most recent version of the QAPP (BRC and ERM 2009), which has been revised to ensure appropriate comparisons to the background dataset. The proposed analyte list for soil vapor flux samples is comprised of the list provided in the most recent NDEP-approved version of SOP-16 (see the *BRC Field Sampling and Standard Operating Procedures* [FSSOP]; BRC, ERM and MWH 2008), including radon. This analyte list is provided in Table 5.

5.0 FIELD AND LABORATORY METHODS

5.1 FIELD METHODS

All Site work will be performed under the responsible control and direction of a Nevada State Certified Environmental Manager. All sampling and sample handling procedures will be consistent with the NDEP-approved BRC FSSOP (BRC, ERM and MWH 2008). In accordance with applicable federal regulation (Title 29, Code of Federal Regulations [CFR] Section 1910.120) all field activities will be performed in compliance with the *BRC Health and Safety Plan* (BRC and MWH 2005).

Pre-field and field activities will be conducted in accordance with the most recent NDEP-approved versions of applicable SOPs (BRC, ERM and MWH 2008). These SOPs include SOP-1 (Drilling Methods), SOP-6 (Sample Management and Shipping), SOP-7 (Soil Sampling), SOP-10 (Surveying), SOP-12 (Asbestos Soil Sampling), SOP-13 (Field Equipment Calibration Procedures), SOP-14 (Field Documentation), SOP-15 (Field Logbook), SOP-16 (Flux Chamber Source Testing), SOP-17, (Soil Logging), SOP-23 (Split Spoon Sampling), SOP-26 (Soil Grab Sampling), and SOP-39 (Photoionization Detector Screening).

The BRC QAPP (BRC and ERM 2009) and Health and Safety Plan (BRC and MWH 2005) prepared for the BMI Common Areas will be used for this proposed scope of work. The selected driller will notify the Underground Services Alert one-call notification system at least 48 hours before implementing any subsurface activities. BRC will also notify the NDEP at least one week prior to commencing field activities. Once the data are collected, BRC will subject the data to validation per procedures agreed to previously with the NDEP and consistent with the BRC QAPP (BRC and ERM 2009) and SOP-40.

Soil cuttings generated during soil sampling and Hollow Stem Auger (HSA) drilling activities will be collected and stored with the other remediation waste and sent to the CAMU.

5.2 LABORATORY METHODS

Samples submitted for laboratory analysis will be analyzed in accordance with approved methodologies by a State of Nevada-certified analytical laboratory. Samples not specified for analysis will be placed on hold pending the results of the initial analysis.

5.2.1 Soil Chemical Analyses

BRC's current analyte list as approved by the NDEP is presented in Table 4 of the QAPP. Table 4 of this SAP identifies the complete list of analytes proposed for analysis of soil samples along with the appropriate analytical methods. An explanation for the sampling depth-specific exclusion of a chemical for analysis is provided in Table 4 of this SAP. Section 4.5 contains the rationale for exclusion of various chemical analyses from the SAP program for the Site.

5.2.2 Soil Vapor Flux Analyses

As indicated in Table 5, all flux chamber samples will be analyzed by USEPA Method TO-15 full scan, and selective ion mode analyses on a sub-set of VOCs to achieve the lowest attainable method detection limits for the target list of study compounds (see most recent version of SOP-16). In addition, the samples will be collected and analyzed for radon. All samples will be analyzed for the target list with optimum method detection limits so that these data can be used to satisfy the sensitivity requirements of the human health risk assessment.

5.2.3 Soil Physical Parameters

In addition to chemical data, to support the evaluation of potential impacts to groundwater, soil physical properties will also be measured. These parameters will be collected to support the migration to groundwater calculations included in the Closure Plan, consistent with the USEPA Soil Screening Guidance (1996; 2000; 2002), as well as more refined modeling tools (such as, VLEACH, SESOIL, and PESTAN). Site-specific soil physical parameters to be measured include pH (USEPA Method 9045C), cation exchange capacity, dry bulk density, Soil permeability/saturated hydraulic conductivity, specific gravity, total porosity, volumetric water content, grain size analysis by sieve and hydrometer, and fractional organic carbon content (see Table 4). These soil physical parameters will be measured from each of the subsurface samples collected from the three deep sample locations at the Site (see Figure 9). This will ensure that soil physical parameters will be measured at various depths from across the Site so that all sample depths are represented. In addition, samples will be collected from three subsurface sample locations (see Figure 9 and Table 3) for conducting the synthetic precipitation leaching procedure (SPLP; USEPA Method 1312) with the extract analyzed for metals, organochlorine pesticides, SVOCs, radium-226, radium-228, and perchlorate. These analytes are considered those of greatest concern for potential migration and impacts to groundwater. These SPLP sample locations will be within remediated ponds in the most heavily impacted portions of the Site.

6.0 REPORTING AND SCHEDULING

After approval of the SAP by NDEP, BRC is prepared to promptly initiate field activities. BRC will be directly in charge of sampling with oversight conducted by NDEP. As discussed in Section 3.4.3 sampling activities are anticipated to be completed over a one to three month period, and laboratory analyses to be completed within a five to six-week period following field work completion. Once the data are collected, BRC will subject the data to validation per procedures agreed to previously with the NDEP and consistent with the BRC QAPP (BRC and ERM 2009) and SOP-40 (BRC, ERM and MWH 2008). Only those data determined by the QA/QC review to be suitable for use will be considered for the site dataset. A separate DVSR will be prepared and submitted to NDEP.

Upon receipt of laboratory analytical results and following data validation, a risk assessment will be conducted by BRC (in consultation with NDEP) to evaluate the risks posed to human health and the environment by chemicals remaining in Site soils. The risk assessment will be conducted in accordance with the Risk Assessment Methodology provided in the Closure Plan. As stated in the Closure Plan:

...risk assessment will not be initiated unless proper data sufficiency, representativeness, and adequacy analysis is first achieved. If necessary, additional data will be gathered or analyzed to meet the goals of data quality required for risk assessment. The risk assessment will, in turn, help to assure that these data characteristics are properly evaluated. Once risk assessment is completed, the assessment will be made as to whether the remediation conducted meets cleanup goals. If cleanup goals are not achieved, additional remediation, associated confirmation sampling, and assessment cycles will be conducted until a decision end point is reached – namely that the cleanup goals are either met (and the NFAD is issued or Site Closure is achieved, as the case may be) or proven infeasible because it is technically impractical or too costly, in which case changes in land use or institutional controls may be considered.

BRC will perform risk assessment calculations to justify additional remediation or sampling; however, these interim risk assessments will not be submitted to the NDEP. It is expected that the interim decisions (to support additional sampling or remediation) will be discussed with the NDEP on an informal but regular basis. Any additional sampling and remediation will be addressed as an addendum to this SAP.

The risk assessment report will be an inclusive report that will also contain the following items:

- A summary of the sampling procedures conducted;
- Sampling location map;
- Soil boring logs;
- An evaluation and summary of the collected data;
- Tables(s) summarizing soil results; and
- If appropriate, plan view maps indicating the locations of detected constituents in soil.

As noted above, completion of the risk assessment will be an iterative process. Once the risk assessment passes internal BRC review, with NDEP consultation, and meets the risk goals stated in the Closure Plan, the risk assessment report will be submitted to the NDEP, along with an NFAD request for the Site, in accordance with AOC3. That is, the risk assessment report will be prepared and submitted to the NDEP only when BRC is comfortable that acceptable human health risks have been attained.

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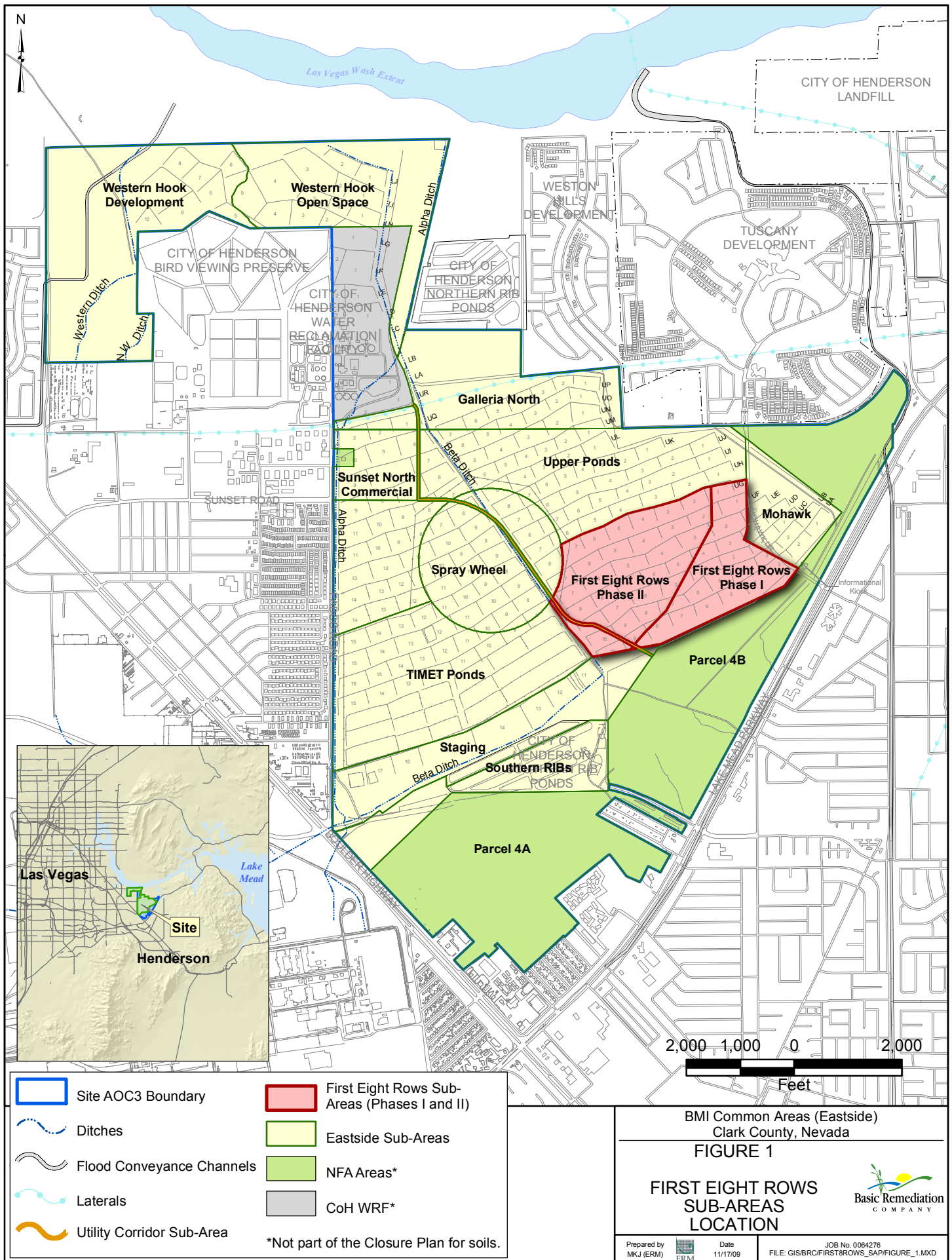
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FIGURES



BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 1

FIRST EIGHT ROWS SUB-AREAS LOCATION

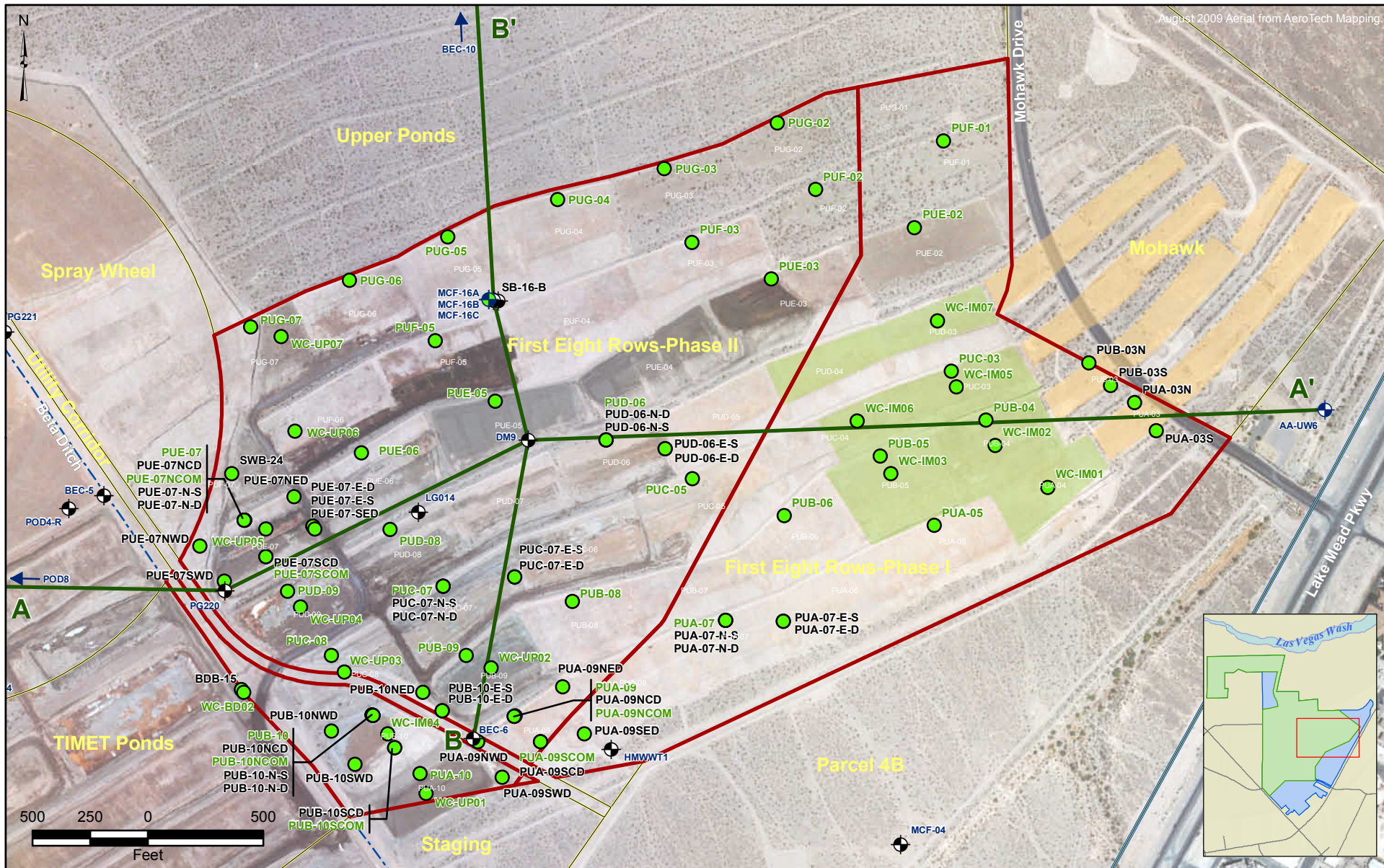


Prepared by
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Date
11/17/09

JOB No. 0064276
FILE: GIS\BRC\FIRST8ROWS_SAP\FIGURE_1.MXD



- | | |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Historical Soil Sample Locations |
| Site AOC3 Boundary | — Cross-Section Location |
| Eastside Soil Sub-Areas | Monitoring Wells |
| Interim Remedial Measure Areas | ⊕ Alluvial Wells with Groundwater Data |
| Excavated Soil Holding Areas | ⊕ Other Monitoring Wells |

BDB-15 - Discrete Sample
PUE-07 - Composite Sample

Note: This figure shows only historical soil removal and holding areas. Recent (2008/09) soil removal and placement areas are not shown, other than as visible in the underlying aerial photo.

BMI Common Areas (Eastside)
 Clark County, Nevada

FIGURE 2

SITE PLAN WITH HISTORIC
 SOIL SAMPLE LOCATIONS
 AND MONITORING WELLS

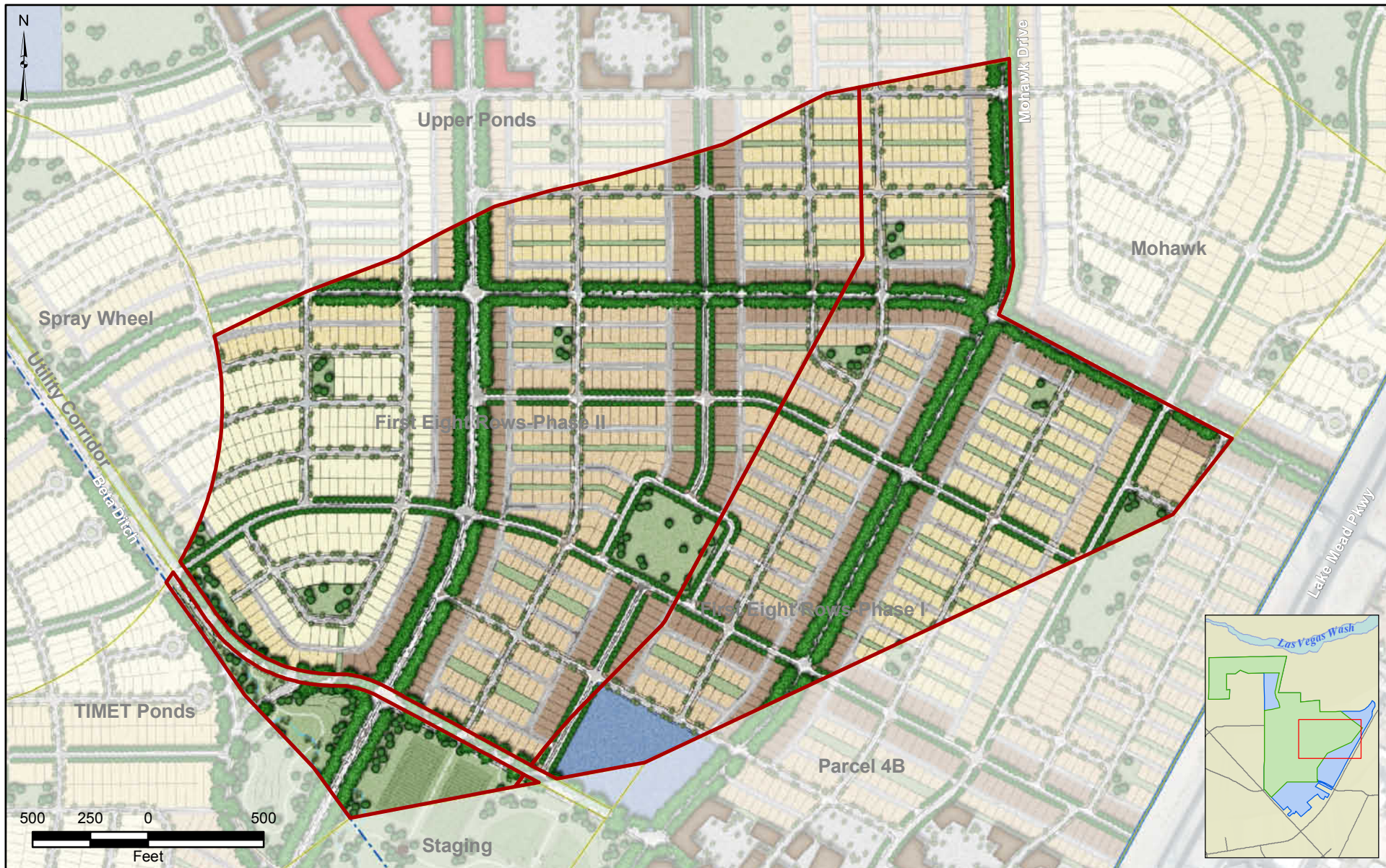


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 FILE: GIS\BRC\FIRST8ROWS_SAP\FIGURE_2.MXD



- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas

Current Development Plan

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| High Density Residential | Schools |
| Medium Density Residential | Parks & Trails |
| Low Density Residential | Roads/Parking |

BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 3

CURRENT DEVELOPMENT PLAN

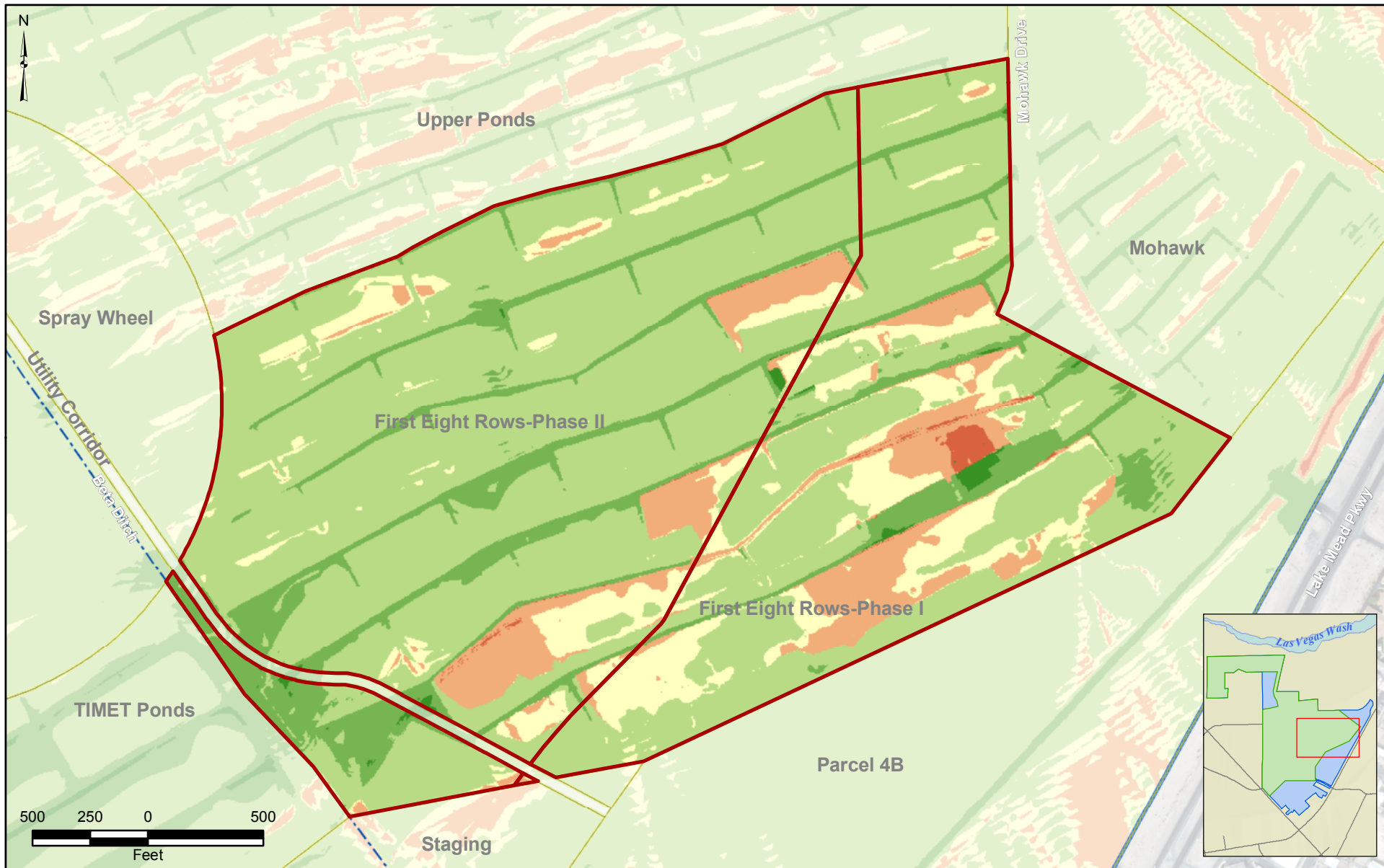


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- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas

Development Cut/Fill Areas

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| > 10 Ft Fill | 0 to 5 Ft Cut |
| 5 to 10 Ft Fill | 5 to 10 Ft Cut |
| 0 to 5 Ft Fill | > 10 Ft Cut |
| No Change | |

BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 4

**CURRENT
GRADING
PLAN**



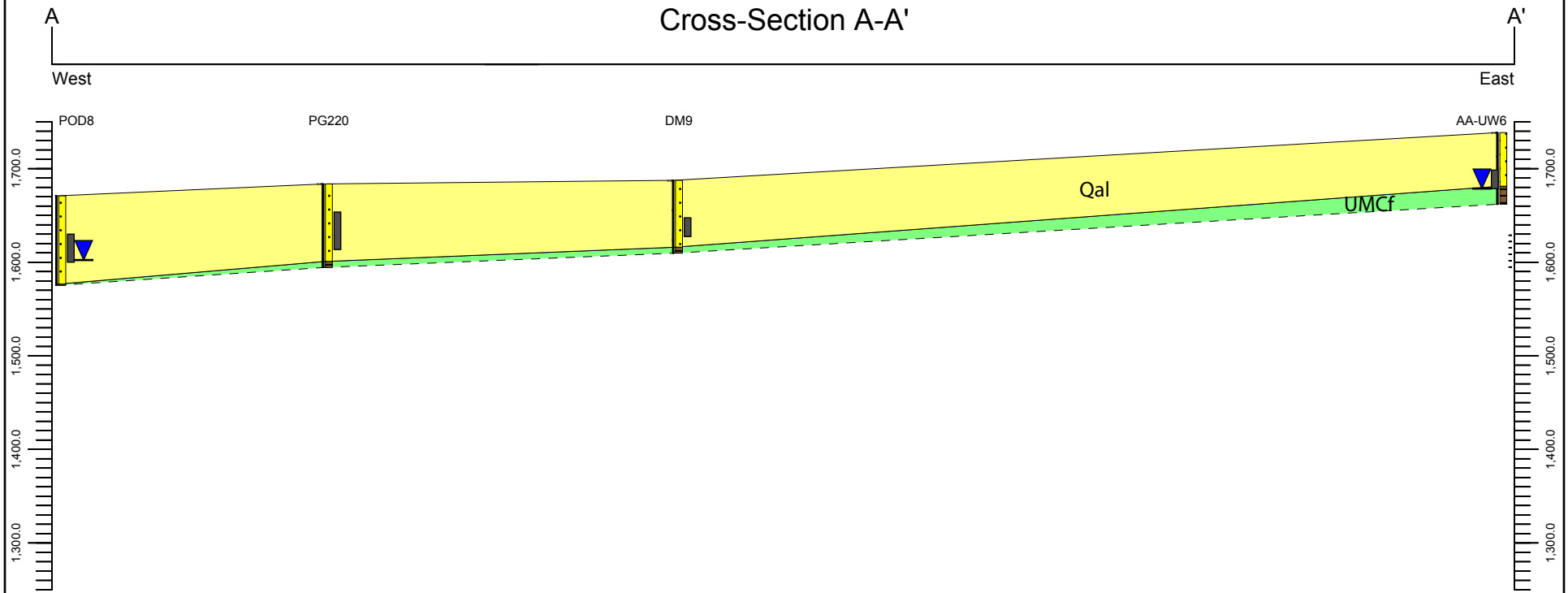
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MKJ (ERM)



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11/17/09

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Cross-Section A-A'



■ = Screen Interval

▼ = Shallow Zone Water Level (Apr-May 2008)

■ = Qal = Quaternary alluvium

■ = UMCf = Upper Muddy Creek formation

Vertical Scale = 5x Horizontal Scale

For soil lithology details, please see the individual boring logs.

See Figure 2 for cross-section location.

BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 5

FIRST EIGHT ROWS
SUB-AREAS
CROSS-SECTION A-A'

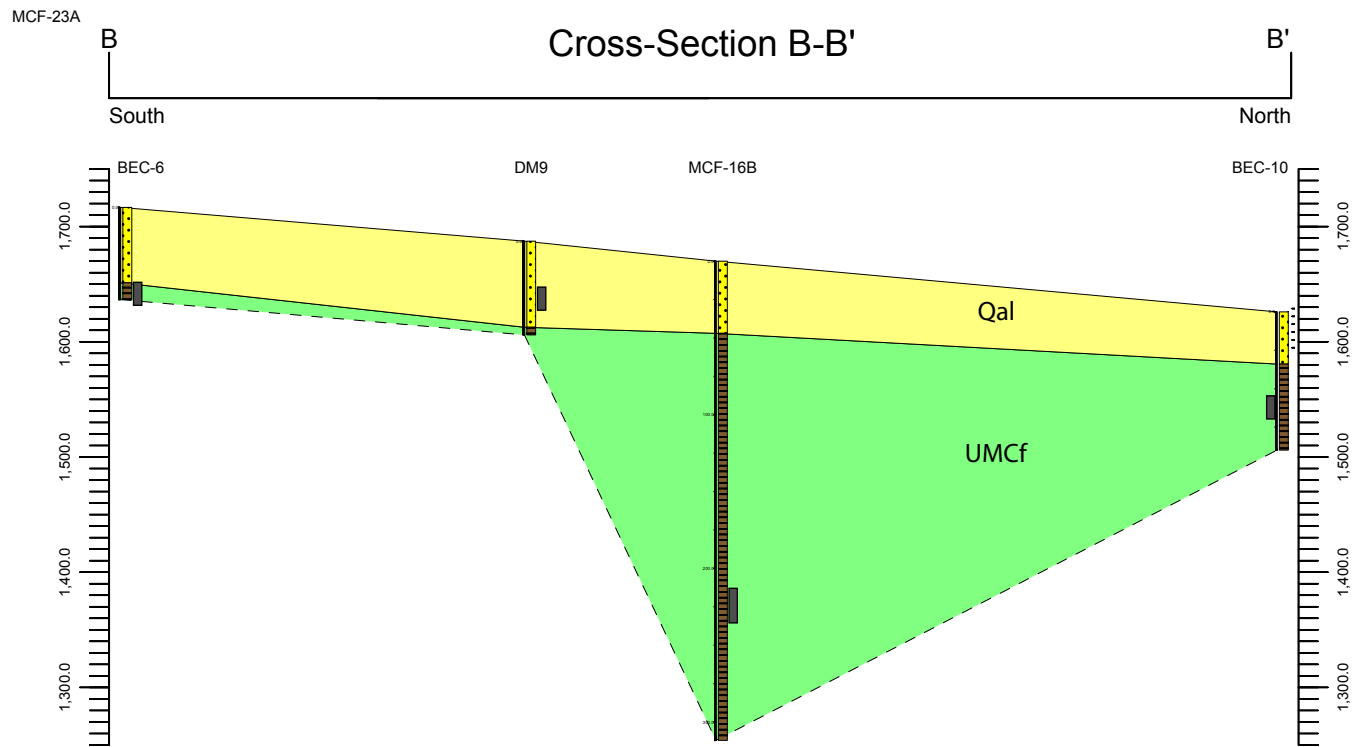


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■ = Screen Interval

▼ = Shallow Zone Water Level (Apr-May 2008)

■ = Qal = Quaternary alluvium

■ = UMCf = Upper Muddy Creek formation

Vertical Scale = 5x Horizontal Scale

For soil lithology details, please see the individual boring logs.

See Figure 2 for cross-section location.

BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 6

FIRST EIGHT ROWS
SUB-AREAS
CROSS-SECTION B-B'



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Date
11/17/09

JOB No. 0064276
FILE: GIS/BRC/FIRST8ROWS_SAP/FIGURE_6.AI



- | | |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| First Eight Rows Sub-Areas | Interim Remedial Measure Areas |
| Site AOC3 Boundary | Excavated Soil Holding Areas |
| Eastside Soil Sub-Areas | X X X X May 2008 Soil Removal Area |

Note: This figure shows only historical soil removal and holding areas. Recent (2008/09) soil removal and placement areas are not shown, other than as visible in the underlying aerial photo.

BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 7

HISTORICAL SOIL REMOVAL AND HOLDING AREAS

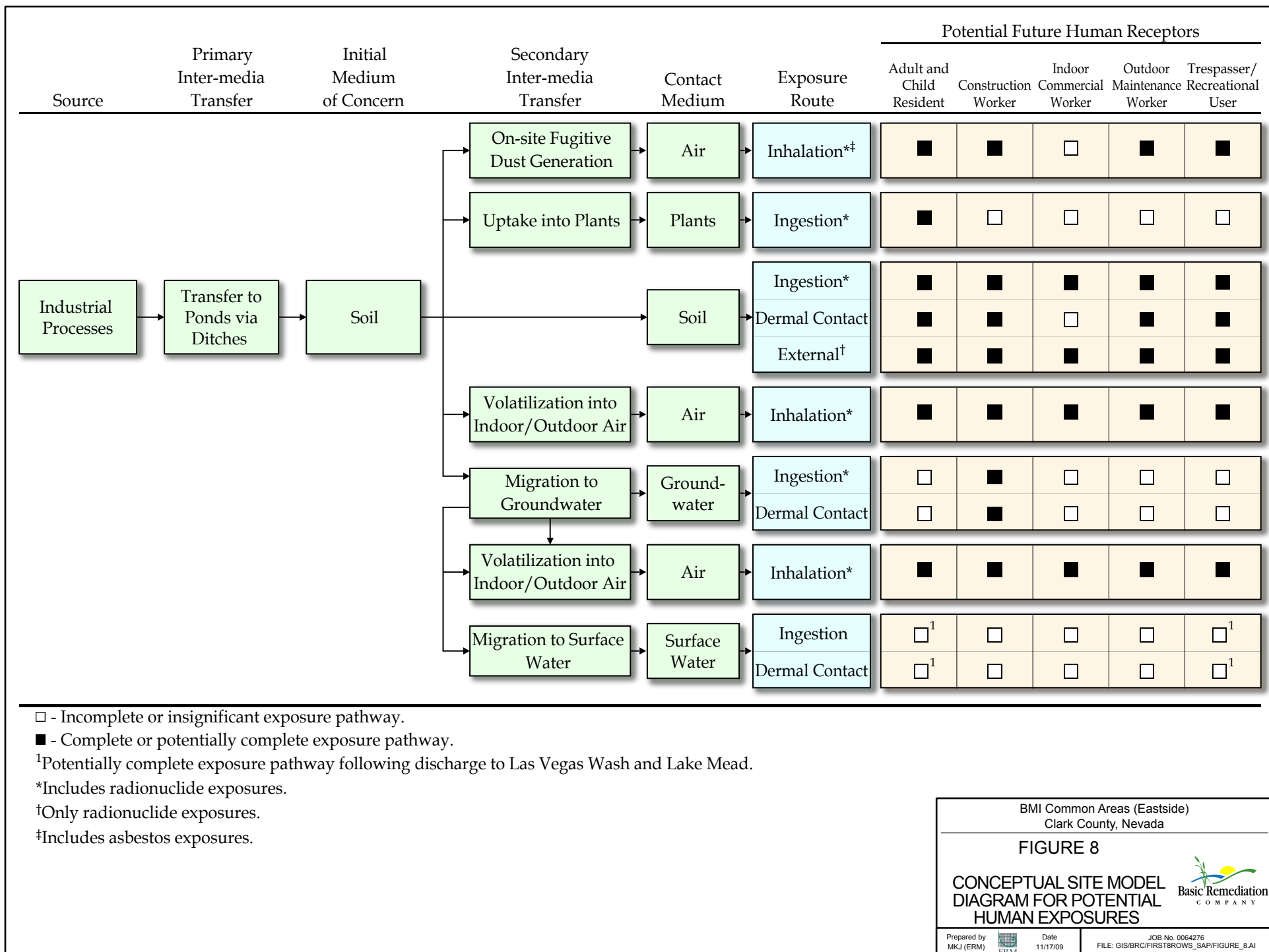


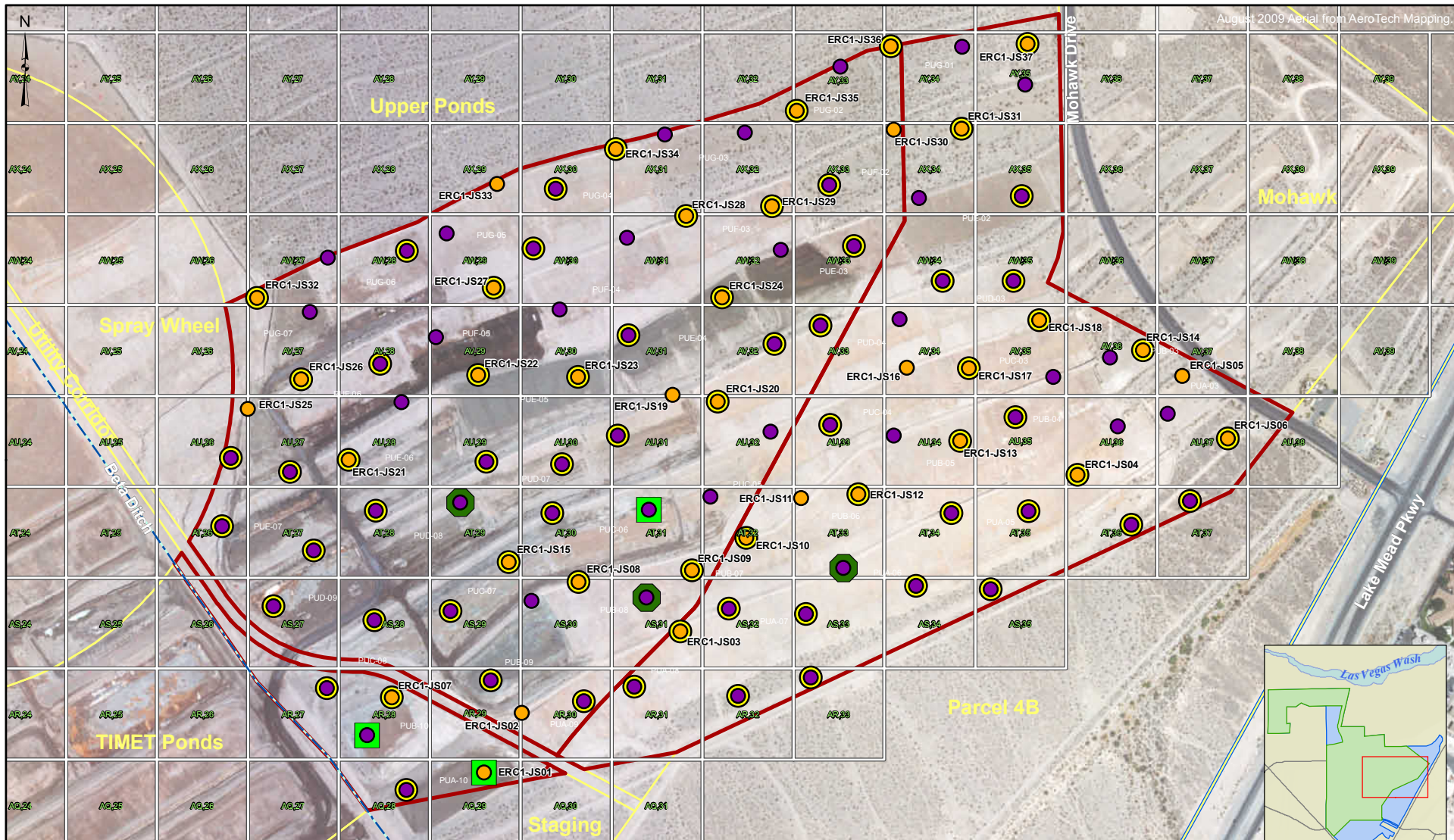
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11/17/09

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FILE: GIS\BRC\FIRST8ROWS_SAP\FIGURE_7.MXD





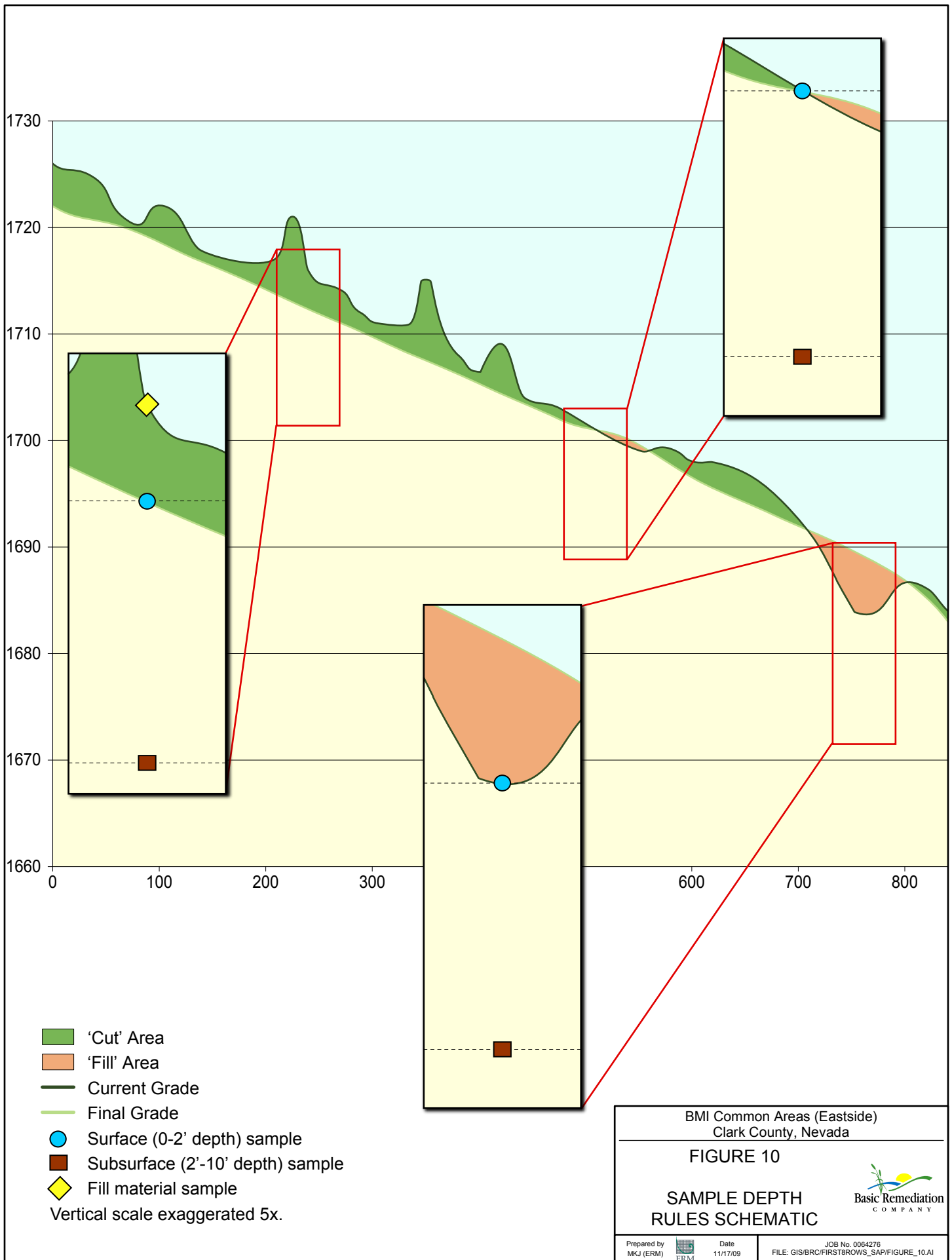
- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> Eastside 3-Acre Random Sampling Grid (Grid ID = "XX,##") First Eight Rows Sub-Areas Site AOC3 Boundary Eastside Soil Sub-Areas Beta Ditch | <p>First Eight Rows Sub-Areas Soil Samples</p> <ul style="list-style-type: none"> Random Sample Location (69) Ditch Sample Location (0) Other Biased Sample Locations (Ponds/Berms) (37) Surface Flux Sample Location (69) Deep Sample Location (3; to GW). Deep sample locations will be analyzed for soil physical parameters (see Table 4). SPLP Sample Location (3; subsurface) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Note: Sample ID's are shown for ditch, berm, and pond sample locations. Sample ID's for random samples correspond to the grid cell ID.

These sub-areas are currently undergoing extensive remediation, therefore, the aerial photo is not representative of current site conditions, and debris locations have not been identified.

BMI Common Areas (Eastside) Clark County, Nevada	
FIGURE 9	
PROPOSED SOIL AND SOIL VAPOR FLUX SAMPLING LOCATIONS	
Prepared by MKJ (ERM)	Date 11/17/09
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TABLES

TABLE 1A
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (ALL DATA)
(Page 1 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	LBCL (DAF 1)	Count of Detects > DAF 1	LBCL (DAF 20)	Count of Detects > DAF 20	Max. Bkgrnd ^b	Count of Detects > Bkgrnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Alcohols/Glycols	Ethanol	mg/kg	2	0%	2	1.8	--	1.8	1.8	--	1.8	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Ethylene glycol	mg/kg	2	0%	2	2.6	--	2.6	2.6	--	2.6	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	--
	Methanol	mg/kg	2	0%	2	1.3	--	1.3	1.3	--	1.3	0	--	--	--	--	--	--	30600	--	--	--	--	--	--	--
	Propylene glycol	mg/kg	2	0%	2	51	--	51	51	--	51	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	--
Aldehydes	Acetaldehyde	mg/kg	2	0%	2	0.2	--	0.21	0.21	--	0.22	0	--	--	--	--	--	--	14	--	--	--	--	--	--	--
	Formaldehyde	mg/kg	2	0%	2	0.1	--	0.11	0.11	--	0.11	0	--	--	--	--	--	--	11	--	--	--	--	--	--	--
Dioxins/Furans	1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	17	94%	1	1.4	--	1.4	1.4	--	1.4	16	19	690	1400	30000	6400	420000	--	--	--	--	--	--	--	--
	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	17	94%	1	1	--	1	1	--	1	16	45	200	340	5700	3700	68000	--	--	--	--	--	--	--	--
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	17	94%	1	0.62	--	0.62	0.62	--	0.62	16	8.4	220	590	12000	2900	160000	--	--	--	--	--	--	--	--
	1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	2	50%	1	1.1	--	1.1	1.1	--	1.1	1	11	--	11	11	--	11	--	--	--	--	--	--	--	--
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	2	0%	2	0.097	--	0.95	0.95	--	1.8	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	2	50%	1	0.57	--	0.57	0.57	--	0.57	1	6.4	--	6.4	6.4	--	6.4	--	--	--	--	--	--	--	--
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	2	50%	1	0.12	--	0.12	0.12	--	0.12	1	4.4	--	4.4	4.4	--	4.4	--	--	--	--	--	--	--	
	1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	2	0%	2	0.087	--	0.94	0.94	--	1.8	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	2	0%	2	0.14	--	0.97	0.97	--	1.8	0	--	--	--	--	--	--	0.000078	--	--	--	--	--	--	--
	1,2,3,7,8-Pentachlorodibenzofuran	pg/g	2	50%	1	0.51	--	0.51	0.51	--	0.51	1	6.2	--	6.2	6.2	--	6.2	--	--	--	--	--	--	--	--
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	2	0%	2	0.1	--	1	1	--	1.9	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	2	0%	2	0.16	--	1	1	--	1.9	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2,3,4,7,8-Pentachlorodibenzofuran	pg/g	2	50%	1	0.31	--	0.31	0.31	--	0.31	1	4.4	--	4.4	4.4	--	4.4	--	--	--	--	--	--	--	--
	2,3,7,8-Tetrachlorodibenzofuran	pg/g	2	50%	1	0.68	--	0.68	0.68	--	0.68	1	3.2	--	3.2	3.2	--	3.2	--	--	--	--	--	--	--	--
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	2	0%	2	0.056	--	0.53	0.53	--	1	0	--	--	--	--	--	--	3.9E-06	--	--	--	--	--	--	--
	Octachlorodibenzodioxin	pg/g	17	94%	1	2.3	--	2.3	2.3	--	2.3	16	89	350	920	8300	7500	77000	--	--	--	--	--	--	--	--
	Octachlorodibenzofuran	pg/g	17	100%	0	--	--	--	--	--	--	17	9.5	3000	9700	130000	49000	1700000	--	--	--	--	--	--	--	--
	TCDD TEQ	pg/g	17	-- ^c	0	--	--	--	--	--	--	17	0.33	11	30	460	120	6657.7	50	7	--	--	--	--	--	--
General Chemistry	Ammonia	mg/kg	2	0%	2	0.22	--	0.22	0.22	--	0.22	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	--
	Bicarbonate alkalinity	mg/kg	2	100%	0	--	--	--	--	--	--	2	360	--	400	400	--	430	--	--	--	--	--	--	--	--
	Bromide	mg/kg	2	0%	200%	0.21	--	0.21	0.21	--	0.21	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Carbonate alkalinity	mg/kg	2	0%	2	25	--	25	25	--	25	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Chlorate	mg/kg	53	34%	35	0.05	0.051	0.052	0.19	0.054	1	18	0.011	0.029	0.11	0.61	0.5	6.4	--	--	--	--	--	--	--	--
	Chloride	mg/kg	18	100%	0	--	--	--	--	--	--	18	3.8	8.8	17	270	210	2700	--	--	--	--	--	--	1110	1
	Cyanide (Total)	mg/kg	70	40%	42	0.12	0.25	1	0.82	1.1	1.2	28	0.27	0.69	1.4	1.5	2	3	1220	0	2	6	40	0	--	--
	Fluoride	mg/kg	2	100%	0	--	--	--	--	--	--	2	0.69	--	0.95	0.95	--	1.2	3670	0	--	--	--	--	2.5	0
	Iodide	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Nitrate (as N)	mg/kg	2	100%	0	--	--	--	--	--	--	2	0.4	--	1.2	1.2	--	2	--	--	--	--	--	--	102	0
	Nitrite (as N)	mg/kg	2	0%	2	0.03	--	0.03	0.03	--	0.03	0	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--
	Orthophosphate as P	mg/kg	2	50%	1	0.24	--	0.24	0.24	--	0.24	1	2.8	--	2.8	2.8	--	2.8	--	--	--	--	--	--	--	--
	Perchlorate	mg/kg	68	91%	6	0.04	0.04	0.04	1.4	2.1	8.32	62	0.043	0.18	0.7	4.3	5.3	26	55	0	--	--	--	--	--	--
	Sulfate	mg/kg	2	100%	0	--	--	--	--	--	--	2	81.7	--	120	120	--	155	--	--	--	--	--	--	4130	0
	Sulfide	mg/kg	2	0%	2	7.2	--	7.2	7.2	--	7.2	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Kjeldahl Nitrogen (TKN)	mg/kg	2	0%	2	1.6	--	1.6	1.6	--	1.6	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Chlorinated Herbicides	2,2-Dichloropropionic acid	mg/kg	2	0%	2	0.022	--	0.022	0.022	--	0.022	0	--	--	--	--	--	--	1830	--	--	--	--	--	--	--
	2,4,5-T	mg/kg	17	0%	17	0.0027	0.0051	0.0052	0.0049	0.0053	0.0055	0	--	--	--	--	--	--	610	--	--	--	--	--	--	--
	2,4,5-TP	mg/kg	17	0%	17	0.0012	0.0033	0.0034	0.0031	0.0035	0.0036	0	--	--	--	--	--	--	490	--	--	--	--	--	--	--
	2,4-D	mg/kg	17	0%	17	0.012	0.03	0.031	0.029	0.031	0.032	0	--	--	--	--	--	--	690	--	--	--	--	--	--	--
	4-(2,4-Dichlorophenoxy)butyric acid	mg/kg	2	0%	2	0.022	--	0.022	0.022	--	0.022	0	--	--	--											

TABLE 1A
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (ALL DATA)
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Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	LBCL (DAF 1)	Count of Detects > DAF 1	LBCL (DAF 20)	Count of Detects > DAF 20	Max. Bkgnd ^b	Count of Detects > Bkgnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Metals	Lead	mg/kg	111	100%	0	--	--	--	--	--	--	111	6.7	43	360	2100	2700	20000	400	55	--	--	--	--	35.1	86
	Lithium	mg/kg	2	100%	0	--	--	--	--	--	--	2	9.6	--	11	11	--	11.6	160	0	--	--	--	--	26.5	0
	Magnesium	mg/kg	4	100%	0	--	--	--	--	--	--	4	79	94	2600	3100	6700	7260	100000	0	649	2	12970	0	17500	0
	Manganese	mg/kg	121	100%	0	--	--	--	--	--	--	121	200	710	2500	9400	16000	45523.8	1080	75	3.3	121	66	121	1090	75
	Mercury	mg/kg	56	54%	26	0.09	0.1	0.1	0.1	0.1	0.12	30	0.019	0.2	1.3	1.3	1.8	4.4	13	0	0.1	27	2	6	0.11	27
	Molybdenum	mg/kg	4	100%	0	--	--	--	--	--	--	4	0.89	0.94	15	35	90	110	390	0	3.6	2	72	1	2	2
	Nickel	mg/kg	59	100%	0	--	--	--	--	--	--	59	9.8	19	37	140	190	916.7	1540	0	7	59	140	17	30	33
	Niobium	mg/kg	2	50%	1	0.224	--	0.22	0.22	--	0.224	1	18.6	--	19	19	--	18.6	--	--	--	--	--	--	2.8	1
	Palladium	mg/kg	2	100%	0	--	--	--	--	--	--	2	0.42	--	0.54	0.54	--	0.66	--	--	--	--	--	--	1.5	0
	Phosphorus (as P)	mg/kg	2	100%	0	--	--	--	--	--	--	2	739	--	970	970	--	1200	--	--	--	--	--	--	--	--
	Platinum	mg/kg	2	50%	1	0.0108	--	0.011	0.011	--	0.0108	1	0.039	--	0.039	0.039	--	0.039	--	--	--	--	--	--	0.099	0
	Potassium	mg/kg	4	100%	0	--	--	--	--	--	--	4	21.1	22	700	750	1500	1570	--	--	--	--	--	--	3890	0
	Selenium	mg/kg	58	12%	51	0.301	0.62	3	3.7	6.2	15.2	7	0.28	0.66	0.88	2.5	5.6	5.9	390	0	0.3	6	6	0	0.6	6
	Silicon	mg/kg	2	100%	0	--	--	--	--	--	--	2	604	--	720	720	--	837	--	--	--	--	--	--	4150	0
	Silver	mg/kg	58	59%	24	0.2	0.21	0.21	1	2.1	5	34	0.44	2.9	8.6	14	29	42.9	390	0	2	28	40	1	0.2609	34
	Sodium	mg/kg	4	100%	0	--	--	--	--	--	--	4	141	150	170	180	210	227	--	--	--	--	--	--	1320	0
	Strontium	mg/kg	2	100%	0	--	--	--	--	--	--	2	146	--	150	150	--	155	46900	0	--	--	--	--	808	0
	Thallium	mg/kg	98	63%	36	0.1	0.1	0.5	0.35	0.51	0.53	62	0.1	1.2	3.1	21	25	330	5.5	24	0.4	59	8	23	1.8	40
	Tin	mg/kg	2	100%	0	--	--	--	--	--	--	2	2.1	--	3.1	3.1	--	4	46900	0	--	--	--	--	0.8	2
	Titanium	mg/kg	2	100%	0	--	--	--	--	--	--	2	207	--	500	500	--	786	100000	0	150030	0	3000600	0	1010	0
	Tungsten	mg/kg	2	50%	1	0.0175	--	0.018	0.018	--	0.0175	1	5.4	--	5.4	5.4	--	5.4	590	0	41	0	820	0	2.5	1
	Uranium	mg/kg	2	100%	0	--	--	--	--	--	--	2	0.53	--	0.97	0.97	--	1.4	230	0	13.5	0	270	0	2.7	0
	Vanadium	mg/kg	89	100%	0	--	--	--	--	--	--	89	19.9	79	180	1100	1500	7780	390	35	300	38	6000	3	59.1	75
	Z																									

TABLE 1A
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (ALL DATA)
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Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	LBCL (DAF 1)	Count of Detects > DAF 1	LBCL (DAF 20)	Count of Detects > DAF 20	Max. Bkgnd ^b	Count of Detects > Bkgnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Organo-phosphorus Pesticides	Famphur	mg/kg	17	0%	17	0.0023	0.0033	0.0034	0.0033	0.0035	0.0036	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fenthion	mg/kg	2	0%	2	0.0013	--	0.0013	0.0013	--	0.0013	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Malathion	mg/kg	2	0%	2	0.001	--	0.001	0.001	--	0.001	0	--	--	--	--	--	--	1220	--	--	--	--	--	--	--
	Methyl parathion	mg/kg	17	0%	17	0.001	0.0065	0.0067	0.006	0.0068	0.007	0	--	--	--	--	--	--	15	--	--	--	--	--	--	--
	Mevinphos	mg/kg	2	0%	2	0.0044	--	0.0044	0.0044	--	0.0044	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Naled	mg/kg	2	0%	2	0.0027	--	0.0027	0.0027	--	0.0027	0	--	--	--	--	--	--	120	--	--	--	--	--	--	--
	O,O,O-Triethyl phosphorothioate	mg/kg	2	0%	2	0.0017	--	0.0017	0.0017	--	0.0017	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Parathion	mg/kg	17	0%	17	0.0027	0.0054	0.0055	0.0052	0.0057	0.0058	0	--	--	--	--	--	--	370	--	--	--	--	--	--	--
	Phorate	mg/kg	17	0%	17	0.0019	0.0059	0.006	0.0055	0.0061	0.0063	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Phosmet	mg/kg	2	0%	2	0.015	--	0.015	0.015	--	0.015	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Ronnel	mg/kg	2	0%	2	0.0018	--	0.0018	0.0018	--	0.0018	0	--	--	--	--	--	--	3060	--	--	--	--	--	--	--
	Sulfotep	mg/kg	2	0%	2	0.0011	--	0.0011	0.0011	--	0.0011	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Organic Acids	Tetrachlorvinphos (Stiropfos)	mg/kg	2	0%	2	0.0018	--	0.0018	0.0018	--	0.0018	0	--	--	--	--	--	--	20	--	--	--	--	--	--	--
	4-Chlorobenzenesulfonic acid	mg/kg	2	0%	2	1	--	1	1	--	1	0	--	--	--	--	--	--	78200	--	0.07	--	1.4	--	--	--
	Benzenesulfonic acid	mg/kg	2	0%	2	1	--	1	1	--	1	0	--	--	--	--	--	--	39100	--	--	--	--	--	--	--
	Diethyl phosphorodithioic acid	mg/kg	2	0%	2	1	--	1	1	--	1	0	--	--	--	--	--	--	6260	--	--	--	--	--	--	--
	Dimethyl phosphorodithioic acid	mg/kg	2	0%	2	1	--	1	1	--	1	0	--	--	--	--	--	--	7820	--	--	--	--	--	--	--
Polynuclear Aromatic Hydrocarbons	Acenaphthene	mg/kg	65	2%	64	0.034	0.041	0.68	0.54	0.69	2.6	1	6	--	6	6	--	6	4690	0	29	0	580	0	--	--
	Acenaphthylene	mg/kg	65	0%	65	0.034	0.092	0.67	0.55	0.69	2.6	0	--	--	--	--	--	--	150	--	--	--	--	--	--	--
	Anthracene	mg/kg	65	0%	65	0.0044	0.037	0.67	0.54	0.69	2.6	0	--	--	--	--	--	--	23500	--	590	--	11800	--	--	--
	Benzo(a)anthracene	mg/kg	66	27%	48	0.0056	0.64	0.67	1.1	0.69	26	18	0.036	0.051	0.18	0.15	0.22	0.31	0.62	0	0.08	12	1.6	0	--	--
	Benzo(a)pyrene	mg/kg	66	0%	66	0.0048	0.037	0.68	0.9	0.69	26	0	--	--	--	--	--	--	0.062	--	0.4	--	8	--	--	--
	Benzo(b)fluoranthene	mg/kg	66	3%	64	0.011	0.036	0.67	0.91	0.69	26	2	0.24	--	0.28	0.28	--	0.31	0.62	0	0.2	2	4	0	--	--
	Benzo(g,h,i)perylene	mg/kg	65	0%	65	0.012	0.																			

TABLE 1A
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Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	LBCL (DAF 1)	Count of Detects > DAF 1	LBCL (DAF 20)	Count of Detects > DAF 20	Max. Bkgnd ^b	Count of Detects > Bkgnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Radionuclides ^d	Protactinium-234	pCi/g	2	0%	2	--	--	--	--	--	--	0	-0.12	--	-0.1	-0.1	--	-0.08	--	--	--	--	--	--	0.13	0
	Radium-223	pCi/g	2	50%	1	--	--	--	--	--	--	1	0.46	--	0.66	0.66	--	0.86	--	--	--	--	--	--	0.4	2
	Radium-224	pCi/g	2	100%	0	--	--	--	--	--	--	2	3.1	--	3.2	3.2	--	3.2	--	--	--	--	--	--	2.11	2
	Thallium-208	pCi/g	22	100%	0	--	--	--	--	--	--	22	0.37	0.45	0.57	0.88	1	3.93	--	--	--	--	--	--	0.72	7
	Thorium-234	pCi/g	22	95%	1	--	--	--	--	--	--	21	0.13	1.7	3.2	9.8	18	39	--	--	--	--	--	--	2.5	13
Semi-Volatile Organic Compounds	1,2,4,5-Tetrachlorobenzene	mg/kg	17	35%	11	0.011	0.034	0.034	0.03	0.035	0.036	6	0.039	0.04	0.053	0.086	0.12	0.26	18	0	--	--	--	--	--	--
	1,2-Diphenylhydrazine	mg/kg	9	0%	9	0.034	0.034	0.034	0.034	0.035	0.036	0	--	--	--	--	--	--	0.61	--	--	--	--	--	--	--
	1,4-Dioxane	mg/kg	15	0%	15	0.034	0.034	0.035	0.035	0.036	0.037	0	--	--	--	--	--	--	44	--	--	--	--	--	--	--
	2,4,5-Trichlorophenol	mg/kg	65	0%	65	0.031	0.037	0.67	0.54	0.69	2.6	0	--	--	--	--	--	--	6110	--	14	--	280	--	--	--
	2,4,6-Trichlorophenol	mg/kg	65	2%	64	0.032	0.12	0.68	0.55	0.69	2.6	1	0.087	--	0.087	0.087	--	0.087	44	0	0.008	1	0.16	0	--	--
	2,4-Dichlorophenol	mg/kg	65	0%	65	0.026	0.037	0.67	0.54	0.69	2.6	0	--	--	--	--	--	--	180	--	0.05	--	1	--	--	--
	2,4-Dimethylphenol	mg/kg	65	0%	65	0.029	0.037	0.67	0.54	0.69	2.6	0	--	--	--	--	--	--	1220	--	0.4	--	8	--	--	--
	2,4-Dinitrophenol	mg/kg	65	0%	65	0.066	0.36	3.4	2.8	3.5	13	0	--	--	--	--	--	--	120	--	0.01	--	0.2	--	--	--
	2,4-Dinitrotoluene	mg/kg	65	2%	64	0.018	0.036	0.68	0.54	0.69	2.6	1	6.5	--	6.5	6.5	--	6.5	1.6	1	0.00004	1	0.0008	1	--	--
	2,6-Dinitrotoluene	mg/kg	65	0%	65	0.021	0.037	0.67	0.54	0.69	2.6	0	--	--	--	--	--	--	61	--	0.00003	--	0.0006	--	--	--
	2-Chloronaphthalene	mg/kg	65	0%	65	0.016	0.037	0.67	0.54	0.69	2.6	0	--	--	--	--	--	--	6260	--	--	--	--	--	--	--
	2-Chlorophenol	mg/kg	65	2%	64	0.014	0.036	0.68	0.54	0.69	2.6	1	7.8	--	7.8	7.8	--	7.8	390	0	0.2	1	4	1	--	--
	2-Methylnaphthalene	mg/kg	50	0%	50	0.015	0.67	0.69	0.69	0.69	2.6	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2-Nitroaniline	mg/kg	65	0%	65	0.034	0.039	3.4	2.7	3.5	13	0	--	--	--	--	--	--	180	--	--	--	--	--	--	--
	2-Nitrophenol	mg/kg	65	0%	65	0.02	0.037	0.67	0.54	0.69	2.6	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3,3'-Dichlorobenzidine	mg/kg	50	0%	50	0.024	1.3	1.4	1.4	1.4	5.2	0	--	--	--	--	--	--	1.1	--	0.0003	--	0.006	--	--	--
	3-Methylphenol & 4-Methylphenol	mg/kg	17	0%	17	0.04	0.068	0.07	0.067	0.071	0.073	0	--	--	--	--	--	--	310	--	--	--	--	--	--	--
	3-Nitroaniline	mg/kg	50	0%	50	0.026	3.3	3.4	3.5	3.5	13	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4,6-Dinitro-o-cresol	mg/kg	48	0%	48	3.2	3.3	3.4	3.6	3.5	13	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4-Bromophenyl phenyl ether	mg/kg	66	0%	66	0.023	0.037	0.68	0.9	0.69	26	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4-Chloro-3-Methylphenol	mg/kg	65	2%	64	0.027	0.036	1.3	1.1	1.4	5.2	1	9	--	9	9	--	9	--	--	--	--	--	--	--	--

TABLE 1A
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (ALL DATA)
(Page 5 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects	LBCL (DAF 1)	Count of Detects	LBCL (DAF 20)	Count of Detects	Max. Bkgnd ^b	Count of Detects
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max		> BCL	> DAF 1	> DAF 1	> DAF 20	> DAF 20	> Bkgnd ^b	> Bkgnd ^b
Semi-Volatile Organic Compounds	p-Cresol	mg/kg	48	0%	48	0.64	0.67	0.69	0.72	0.7	2.6	0	--	--	--	--	--	--	310	--	--	--	--	--	--	--
	Pentachlorobenzene	mg/kg	17	76%	4	0.022	0.022	0.028	0.028	0.035	0.035	13	0.052	0.088	0.2	0.64	1.3	2.1	49	0	--	--	--	--	--	--
	Pentachlorophenol	mg/kg	66	6%	62	0.12	0.36	3.4	4.6	3.5	130	4	0.48	0.69	1.3	1.1	1.5	1.5	3	0	0.001	4	0.02	4	--	--
	Phenol	mg/kg	66	0%	66	0.034	0.09	0.68	0.9	0.69	26	0	--	--	--	--	--	--	18300	--	5	--	100	--	--	--
	Phenyl Disulfide	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Phenyl Sulfide	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Phthalic acid	mg/kg	17	0%	17	0.26	0.27	0.34	0.84	1.6	1.7	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	--
	p-Nitroaniline	mg/kg	65	0%	65	0.022	0.36	3.4	2.7	3.5	13	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Pyridine	mg/kg	17	0%	17	0.035	0.036	0.34	0.2	0.34	0.35	0	--	--	--	--	--	--	61	--	--	--	--	--	--	--
Volatile Organic Compounds	1,1,1,2-Tetrachloroethane	mg/kg	17	0%	17	0.00015	0.00023	0.00023	0.00023	0.00024	0.00025	0	--	--	--	--	--	--	3.7	--	--	--	--	--	--	--
	1,1,1-Trichloroethane	mg/kg	70	6%	66	0.00011	0.001	0.001	0.00089	0.0011	0.0015	4	0.00054	0.00055	0.00059	0.00068	0.0009	0.001	1390	0	0.1	0	2	0	--	--
	1,1,2,2-Tetrachloroethane	mg/kg	70	0%	70	0.00014	0.00094	0.001	0.00086	0.0011	0.0015	0	--	--	--	--	--	--	0.47	--	0.0002	--	0.004	--	--	--
	1,1,2-Trichloroethane	mg/kg	70	0%	70	0.00029	0.0017	0.0021	0.0017	0.0021	0.0029	0	--	--	--	--	--	--	1	--	0.0009	--	0.018	--	--	--
	1,1-Dichloroethane	mg/kg	70	0%	70	0.00022	0.001	0.001	0.001	0.0011	0.0015	0	--	--	--	--	--	--	4.2	--	1	--	20	--	--	--
	1,1-Dichloroethylene	mg/kg	70	0%	70	0.00056	0.00093	0.001	0.00095	0.0011	0.0015	0	--	--	--	--	--	--	280	--	0.003	--	0.06	--	--	--
	1,1-Dichloropropene	mg/kg	2	0%	2	0.00018	--	0.00018	0.00018	--	0.00018	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3-Trichlorobenzene	mg/kg	2	0%	2	0.0018	--	0.0018	0.0018	--	0.0018	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3-Trichloropropane	mg/kg	17	0%	17	0.00057	0.00057	0.00058	0.00062	0.00061	0.00091	0	--	--	--	--	--	--	0.32	--	--	--	--	--	--	--
	1,2,4-Trichlorobenzene	mg/kg	66	18%	54	0.00075	0.00082	0.67	0.97	0.69	26	12	0.0029	0.14	0.68	0.75	1	2.7	140	0	0.3	9	6	0	--	--
	1,2,4-Trimethylbenzene	mg/kg	2	0%	2	0.00056	--	0.00056	0.00056	--	0.00056	0	--	--	--	--	--	--	140	--	--	--	--	--	--	--
	1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	17	0%	17	0.00091	0.00092	0.00093	0.00094	0.00097	0.00099	0	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--
	1,2-Dichlorobenzene	mg/kg	71	20%	57	0.00015	0.001	0.00051	0.015	0.0052	0.66	14	0.00033	0.00071	0.0021	0.0028	0.0031	0.015	370	0	0.9	0	18	0	--	--
	1,2-Dichloroethane	mg/kg	70	0%	70	0.00014	0.00087	0.001	0.00091	0.0011	0.0015	0	--	--	--	--	--	--	0.43	--	0.001	--	0.02	--	--	--
	1,2-Dichloroethylene	mg/kg	2	0%	2	0.00063	--	0.00063	0.00063	--	0.00063	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2-Dichloropropane	mg/kg	70	0%	70	0.0001	0.00085	0.001	0.0009	0.0011	0.0015	0	--	--	--	--	--									

TABLE 1A
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (ALL DATA)
(Page 6 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident	Count of Detects	LBCL	Count of Detects	LBCL	Count of Detects	Max.	Count of Detects
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max	Soil BCL	> BCL	(DAF 1)	> DAF 1	(DAF 20)	> DAF 20	Bkgrnd ^b	> Bkgrnd
Volatile Organic Compounds	Methyl isobutyl ketone	mg/kg	70	0%	70	0.00092	0.0043	0.0052	0.0045	0.0053	0.0074	0	--	--	--	--	--	--	5800	--	--	--	--	--	--	--
	Methyl n-butyl ketone	mg/kg	53	0%	53	0.003	0.0031	0.0031	0.0032	0.0032	0.0044	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MTBE (Methyl tert-butyl ether)	mg/kg	2	0%	2	0.00028	--	0.00028	0.00028	--	0.00028	0	--	--	--	--	--	--	39	--	--	--	--	--	--	--
	n-Butyl benzene	mg/kg	2	0%	2	0.00077	--	0.00077	0.00077	--	0.00077	0	--	--	--	--	--	--	240	--	--	--	--	--	--	--
	n-Propyl benzene	mg/kg	2	0%	2	0.00053	--	0.00053	0.00053	--	0.00053	0	--	--	--	--	--	--	240	--	--	--	--	--	--	--
	o-Xylene	mg/kg	55	0%	55	0.00022	0.001	0.001	0.001	0.0011	0.0015	0	--	--	--	--	--	--	280	--	9	--	180	--	--	--
	Styrene (monomer)	mg/kg	55	0%	55	0.00021	0.001	0.001	0.001	0.0011	0.0015	0	--	--	--	--	--	--	1730	--	0.2	--	4	--	--	--
	tert-Butyl benzene	mg/kg	2	0%	2	0.00056	--	0.00056	0.00056	--	0.00056	0	--	--	--	--	--	--	390	--	--	--	--	--	--	--
	Tetrachloroethylene	mg/kg	70	7%	65	0.00021	0.00065	0.0012	0.0028	0.0052	0.0064	5	0.00039	0.0016	0.0028	0.003	0.0046	0.0049	0.62	0	0.003	2	0.06	0	--	--
	Toluene	mg/kg	70	1%	69	0.00013	0.002	0.0024	0.0033	0.0052	0.0074	1	0.0011	--	0.0011	0.0011	--	0.0011	520	0	0.6	0	12	0	--	--
	trans-1,2-Dichloroethylene	mg/kg	70	0%	70	0.00023	0.00083	0.001	0.00087	0.0011	0.0015	0	--	--	--	--	--	--	120	--	0.03	--	0.6	--	--	--
	trans-1,3-Dichloropropylene	mg/kg	70	0%	70	0.00021	0.0016	0.0021	0.0017	0.0021	0.0029	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Tribromomethane	mg/kg	70	0%	70	0.00025	0.00091	0.001	0.00088	0.0011	0.0015	0	--	--	--	--	--	--	62	--	0.04	--	0.8	--	--	--
	Trichloroethylene	mg/kg	70	16%	59	0.00006	0.001	0.0051	0.0033	0.0052	0.0074	11	0.00027	0.00072	0.0021	0.0033	0.0039	0.016	1.1	0	0.003	3	0.06	0	--	--
	Vinyl acetate	mg/kg	55	0%	55	0.00018	0.001	0.001	0.001	0.0011	0.0015	0	--	--	--	--	--	--	990	--	8	--	160	--	--	--
	Vinyl chloride	mg/kg	70	0%	70	0.00024	0.0017	0.0021	0.0017	0.0021	0.0029	0	--	--	--	--	--	--	0.35	--	0.0007	--	0.014	--	--	--
	Xylenes (total)	mg/kg	17	0%	17	0.00084	0.00088	0.0009	0.00089	0.00092	0.00094	0	--	--	--	--	--	--	210	--	10	--	200	--	--	--

Notes:

BCL = Basic Comparison Levels (BCLs) from NDEP 2009b. Values used are residential soil BCLs.
LBCL = Leaching-based BCLs from NDEP 2009b.
Max = Maximum
Min = Minimum
Q1 = 1st quartile (25th percentile)
Q3 = 3rd quartile (75th percentile)
This table includes data only to 10 feet bgs. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in the tables in Appendix B, which include all data, regardless of depth.
The values used in this are simply a comparison to NDEP BCL values for historical data, for information purposes only. Use of 1/10 of the risk-based screening level in the text on page 4-4 is proposed for the identification exceeding samples for the confirmation dataset. Therefore, these are two different uses of these values and should not be considered the same.
Because both non-detect and detected radionuclides have reported activity levels, calculated summary statistics (and exceedances of comparison levels) are presented as detected regardless of the lab detect flag. Lab detect flags are represented by the censored (non-detect) and detect count fields in the table.
Values for Q1, median, mean, and Q3 are rounded to 2 significant figures. BCLs are rounded to 2 significant figures.
a - Range of detections include estimated values of detect results between the detection limit and reporting limit. As such some minimum detected concentrations may be below the minimum reporting limit. In these cases the respective sample results are flagged in the dataset.
b - Values used are the maximum from the shallow soils background data set presented in the Background Shallow Soil Summary Report, BMI Complex and Common Area Vicinity (BRC/TIMET 2007).
c - ATSDR screening value of 50 parts per trillion (ppt) (see text). TCDD TEQ values are calculated from congener-specific concentrations. An individual TCDD TEQ value may include detect and non-detect congeners. Therefore, the number of detects and non-detects, and a frequency of detection for TCDD TEQ are not presented.
d - Exceedances of comparison levels for radionuclides are only shown for the eight radionuclides currently included in the project analyte list. Exceedance of background is shown for all radionuclides historically analyzed for within the Upper Ponds sub-area.
-- = Not applicable or no value has been established.

TABLE 1B
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE I DATA)
(Page 1 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects	USEPA SSL (DAF 1)	Count of Detects	USEPA SSL (DAF 20)	Count of Detects	Max. Bkgrnd ^b	Count of Detects
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max		> BCL	(DAF 1)	> DAF 1	(DAF 20)	> DAF 20	Bkgrnd ^b	> Bkgrnd
Alcohols/Glycols	Ethanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Ethylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Methanol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Propylene glycol	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldehydes	Acetaldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Formaldehyde	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dioxins/Furans	1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	6	100%	0	--	--	--	--	--	--	6	280	570	1200	1500	2400	3700	--	--	--	--	--	--	--	--
	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	6	100%	0	--	--	--	--	--	--	6	190	210	270	270	320	370	--	--	--	--	--	--	--	--
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	6	100%	0	--	--	--	--	--	--	6	110	250	820	1100	1900	3000	--	--	--	--	--	--	--	--
	1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,7,8-Pentachlorodibenzofuran	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2,3,4,7,8-Pentachlorodibenzofuran	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2,3,7,8-Tetrachlorodibenzofuran	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Octachlorodibenzodioxin	pg/g	6	100%	0	--	--	--	--	--	--	6	340	360	520	590	770	1200	--	--	--	--	--	--	--	--
	Octachlorodibenzofuran	pg/g	6	100%	0	--	--	--	--	--	--	6	2600	3100	5300	7200	12000	17000	--	--	--	--	--	--	--	--
	TCDD TEQ	pg/g	6	-- ^c	0	--	--	--	--	--	--	6	6.7	12	24	30	46	71.8	50	1	--	--	--	--	--	--
General Chemistry	Ammonia	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Bicarbonate alkalinity	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Bromide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Carbonate alkalinity	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Chlorate	mg/kg	11	0%	11	0.05	0.051	0.052	0.17	0.5	0.51	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Chloride	mg/kg	5	100%	0	--	--	--	--	--	--	5	3.8	3.8	4.1	6.8	11	13	--	--	--	--	--	--	1110	0
	Cyanide (Total)	mg/kg	17	18%	14	0.13	0.																			

TABLE 1B
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE I DATA)
(Page 2 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects	USEPA SSL (DAF 1)	Count of Detects	USEPA SSL (DAF 20)	Count of Detects	Max. Bkgrnd ^b	Count of Detects
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max		> BCL		> DAF 1		> DAF 20		> Bkgrnd
Metals	Lead	mg/kg	22	100%	0	--	--	--	--	--	--	22	11	18	68	410	520	2300	400	6	--	--	--	--	35.1	15
	Lithium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Magnesium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Manganese	mg/kg	20	100%	0	--	--	--	--	--	--	20	200	450	730	2200	1600	20000	1080	5	3.3	20	66	20	1090	5
	Mercury	mg/kg	12	42%	7	0.09	0.1	0.1	0.099	0.1	0.1	5	0.14	0.15	0.34	0.43	0.77	0.88	13	0	0.1	5	2	0	0.11	5
	Molybdenum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Nickel	mg/kg	13	100%	0	--	--	--	--	--	--	13	12.2	18	22	66	51	459.3	1540	0	7	13	140	1	30	5
	Niobium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Palladium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Phosphorus (as P)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Platinum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Potassium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Selenium	mg/kg	12	17%	10	0.6	0.6	0.62	1.1	1.5	3	2	0.66	--	0.77	0.77	--	0.88	390	0	0.3	2	6	0	0.6	2
	Silicon	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Silver	mg/kg	12	58%	5	0.2	0.2	0.21	0.21	0.21	0.21	7	0.51	0.96	3.6	6.7	7.5	29.4	390	0	2	4	40	0	0.2609	7
	Sodium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Strontium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Thallium	mg/kg	19	63%	7	0.1	0.1	0.51	0.39	0.51	0.52	12	0.1	1.3	2.8	6.2	10	25.6	5.5	4	0.4	11	8	4	1.8	8
	Tin	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Titanium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Tungsten	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Uranium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Vanadium	mg/kg	22	100%	0	--	--	--	--	--	--	22	36	64	210	770	690	7770	390	8	300	9	6000	1	59.1	18
	Zinc	mg/kg	4	100%	0	--	--	--	--	--	--	4	30	31	40	39	46	46	23500	0	620	0	12400	0	121	0
	Zirconium	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Organochlorine Pesticides	2,4-DDD	mg/kg	6	67%	2	0.0074	--	0.0075	0.0075	--	0.0076	4	0.25	0.32	0.61	0.57	0.78	0.82	--	--	--	--	--	--	--	--
	2,4-DDE	mg/kg	6	100%	0	--	--	--	--	--	--	6	0.46	2	3	2.8	3.9	4.1	--	--	--	--	--	--	--	--
	4,4-DDD	mg/kg	29	14%	25	0.00098	0.0036	0.005	0.12	0.065	1.08	4	0.52	0.62	1.1	1.1	1.5	1.6	2.4	0	0.8	3	16	0	--	--
	4,4-DDE	mg/kg	29	83%	5	0.0036	0.0043	0.005	0.0047	0.005	0.005	24	0.0061	0.092	0.33	3.5	5.1	32	1.7	9	3	7	60	0	--	--
	4,4-DDT	mg/kg	29	59%	12	0.0033	0.005	0.065	0.19	0.33	0.83	17	0.0082	0.023	0.1	1	1.8	6.4	1.7	4	2	3	40	0	--	--
	Aldrin	mg/kg	29	0%	29	0.001	0.0019	0.005	0.071	0.022	1.08	0	--	--	--	--	--	--	0.029	--	0.02	--	0.4	--	--	--
	alpha-BHC	mg/kg	29	10%	26	0.0017	0.0042	0.005	0.083	0.054	1.08	3	0.01	0.01	0.4	0.34	0.6	0.6	0.09	2	0.00003	3	0.0006	3	--	--
	alpha-Chlordane	mg/kg	29	14%	25	0.0012	0.0019	0.005	0.082	0.034	1.08	4	0.0088	0.0091	0.11	0.18	0.43	0.51	--	--	--	--	--	--	--	--
	beta-BHC	mg/kg	29	17%																						

TABLE 1B
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE I DATA)
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Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	USEPA SSL (DAF 1)	Count of Detects > DAF 1	USEPA SSL (DAF 20)	Count of Detects > DAF 20	Max. Bkgrnd ^b	Count of Detects > Bkgrnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Organo-phosphorus Pesticides	Famphur	mg/kg	6	0%	6	0.0034	0.0034	0.0035	0.0035	0.0035	0.0036	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Fenthion	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Malathion	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Methyl parathion	mg/kg	6	0%	6	0.0067	0.0067	0.0069	0.0069	0.007	0.007	0	--	--	--	--	--	--	15	--	--	--	--	--	--	--
	Mevinphos	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Naled	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	O,O,O-Triethyl phosphorothioate	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Parathion	mg/kg	6	0%	6	0.0055	0.0055	0.0057	0.0057	0.0058	0.0058	0	--	--	--	--	--	--	370	--	--	--	--	--	--	--
	Phorate	mg/kg	6	0%	6	0.006	0.006	0.0061	0.0061	0.0062	0.0063	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Phosmet	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Ronnel	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Sulfotep	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Organic Acids	Tetrachlorvinphos (Stiropfos)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4-Chlorobenzenesulfonic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzenesulfonic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Diethyl phosphorodithioic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Dimethyl phosphorodithioic acid	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polynuclear Aromatic Hydrocarbons	Acenaphthene	mg/kg	15	7%	14	0.035	0.036	0.65	0.4	0.67	0.69	1	6	--	6	6	--	6	4690	0	29	0	580	0	--	--
	Acenaphthylene	mg/kg	15	0%	15	0.035	0.036	0.65	0.42	0.67	0.69	0	--	--	--	--	--	--	150	--	--	--	--	--	--	--
	Anthracene	mg/kg	15	0%	15	0.035	0.036	0.65	0.42	0.67	0.69	0	--	--	--	--	--	--	23500	--	590	--	11800	--	--	--
	Benzo(a)anthracene	mg/kg	15	13%	13	0.035	0.036	0.66	0.47	0.68	0.69	2	0.037	--	0.042	0.042	--	0.047	0.62	0	0.08	0	1.6	0	--	--
	Benzo(a)pyrene	mg/kg	15	0%	15	0.035	0.036	0.65	0.42	0.67	0.69	0	--	--	--	--	--	--	0.062	--	0.4	--	8	--	--	--
	Benzo(b)fluoranthene	mg/kg	15	0%	15	0.035	0.036	0.65	0.42	0.67	0.69	0	--	--	--	--	--	--	0.62	--	0.2	--	4	--	--	--
	Benzo(g,h,i)perylene	mg/kg	15	0%	15	0.035	0.036	0.65	0.42	0.67	0.69	0	--	--	--	--	--	--	2350	--	--	--	--	--	--	--
	Benzo(k)fluoranthene	mg/kg	15	0%	15	0.035	0.036	0.65	0.42	0.67	0.69	0	--	--	--	--	--	--	6.2	--	2	--	40	--	--	--
	Chrysene	mg/kg	15	20%	12	0.035	0.036	0.66	0.46	0.68	0.69	3	0.037	0.037	0.049	0.089	0.18	0.18	62	0	8	0	160	0	--	--
	Dibenzo(a,h)anthracene	mg/kg	15	0%	15	0.035	0.036	0.65	0.42	0.67	0.69	0	--	--	--	--	--	--	0.062	--	0.08	--	1.6	--	--	--
	Indeno(1,2,3-cd)pyrene	mg/kg	15	0%	15	0.035	0.036	0.65	0.42	0.67	0.69	0	--	--	--	--	--	--	0.62	--	0.7	--	14	--	--	--
	Phenanthrene	mg/kg	15	0%	15																					

TABLE 1B
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE I DATA)
(Page 5 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	USEPA SSL (DAF 1)	Count of Detects > DAF 1	USEPA SSL (DAF 20)	Count of Detects > DAF 20	Max. Bkgrnd ^b	Count of Detects > Bkgrnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Semi-Volatile Organic Compounds	p-Cresol	mg/kg	9	0%	9	0.64	0.66	0.67	0.67	0.69	0.69	0	--	--	--	--	--	--	310	--	--	--	--	--	--	
	Pentachlorobenzene	mg/kg	6	83%	1	0.035	--	0.035	0.035	--	0.035	5	0.2	0.58	1.2	1.1	1.5	1.5	49	0	--	--	--	--	--	
	Pentachlorophenol	mg/kg	15	0%	15	0.34	0.36	3.3	2.1	3.4	3.5	0	--	--	--	--	--	--	3	--	0.001	--	0.02	--	--	
	Phenol	mg/kg	15	0%	15	0.035	0.036	0.65	0.42	0.67	0.69	0	--	--	--	--	--	--	18300	--	5	--	100	--	--	
	Phenyl Disulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Phenyl Sulfide	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Phthalic acid	mg/kg	6	0%	6	0.26	0.26	0.27	0.27	0.27	0.28	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	
	p-Nitroaniline	mg/kg	15	0%	15	0.34	0.36	3.2	2	3.4	3.5	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
Pyridine	mg/kg	6	0%	6	0.035	0.035	0.036	0.036	0.036	0.037	0	--	--	--	--	--	--	61	--	--	--	--	--	--		
Volatile Organic Compounds	1,1,1,2-Tetrachloroethane	mg/kg	6	0%	6	0.00023	0.00023	0.00024	0.00024	0.00025	0.00025	0	--	--	--	--	--	--	3.7	--	--	--	--	--	--	
	1,1,1-Trichloroethane	mg/kg	18	0%	18	0.00015	0.00016	0.001	0.00075	0.001	0.0012	0	--	--	--	--	--	--	1390	--	0.1	--	2	--	--	
	1,1,2,2-Tetrachloroethane	mg/kg	18	0%	18	0.00015	0.00015	0.001	0.00075	0.001	0.0012	0	--	--	--	--	--	--	0.47	--	0.0002	--	0.004	--	--	
	1,1,2-Trichloroethane	mg/kg	18	0%	18	0.0003	0.00031	0.0021	0.0015	0.0021	0.0024	0	--	--	--	--	--	--	1	--	0.0009	--	0.018	--	--	
	1,1-Dichloroethane	mg/kg	18	0%	18	0.00099	0.001	0.001	0.001	0.001	0.0012	0	--	--	--	--	--	--	4.2	--	1	--	20	--	--	
	1,1-Dichloroethylene	mg/kg	18	0%	18	0.00057	0.0006	0.001	0.0009	0.001	0.0012	0	--	--	--	--	--	--	280	--	0.003	--	0.06	--	--	
	1,1-Dichloropropene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1,2,3-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1,2,3-Trichloropropane	mg/kg	6	0%	6	0.00058	0.00058	0.0006	0.0006	0.00061	0.00061	0	--	--	--	--	--	--	0.32	--	--	--	--	--	--	
	1,2,4-Trichlorobenzene	mg/kg	15	13%	13	0.00077	0.00081	0.66	0.46	0.68	0.69	2	0.0048	--	0.005	0.005	--	0.0051	140	0	0.3	0	6	0	--	
	1,2,4-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	6	0%	6	0.00093	0.00093	0.00096	0.00095	0.00097	0.00098	0	--	--	--	--	--	--	0.01	--	--	--	--	--	--	
	1,2-Dichlorobenzene	mg/kg	18	11%	16	0.00016	0.00038	0.0011	0.0019	0.0041	0.0052	2	0.0029	--	0.003	0.003	--	0.003	370	0	0.9	0	18	0	--	
	1,2-Dichloroethane	mg/kg	18	0%	18	0.00046	0.00048	0.001	0.00086	0.001	0.0012	0	--	--	--	--	--	--	0.43	--	0.001	--	0.02	--	--	
	1,2-Dichloroethylene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1,2-Dichloropropane	mg/kg	18	0%	18	0.00039	0.00041	0.001	0.00083	0.001	0.0012	0	--	--	--	--	--	--	0.82	--	0.001	--	0.02	--	--	
	1,3,5-Trichlorobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1,3,5-Trimethylbenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1,3-Dichlorobenzene	mg/kg	18	0%	18	0.00014	0.00014	0.001	0.0017	0.0022	0.0052	0	--	--	--	--	--	--	230	--	--	--	--	--	--	
	1,3-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1,4-Dichlorobenzene	mg/kg	18	22%	14	0.00011	0.001	0.0011	0.0021	0.0051	0.0052	4	0.00045	0.00045	0.0018	0.0019	0.0034	0.0035	2.6	0	0.1	0	2	0	--	
	2,2-Dichloropropane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2-Chloroethyl vinyl ether	mg/kg	12	0%	12	0.001	0.001	0.001	0.0011	0.0011	0.0012	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	2-Phenylbutane	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	4-Chlorotoluene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Acetone	mg/kg	18	0%	18	0.003	0.0032	0.004	0.005	0.0057	0.01	0	--	--	--	--	--	--	60000	--	0.8	--	16	--	--	
	Acetonitrile	mg/kg	6	0%	6	0.0021	0.0021	0.0021	0.0021	0.0021	0.0022	0.0022	0	--	--	--	--	--	--	1470	--	--	--	--	--	--
	Benzene	mg/kg	18	0%	18	0.00018	0.00018	0.001	0.0017	0.0022	0.0052	0	--	--	--	--	--	--	0.81	--	0.002	--	0.04	--	--	
	Bromobenzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Bromodichloromethane	mg/kg	18	0%	18	0.00035	0.00037	0.001	0.00082	0.001	0.0012	0	--	--	--	--	--	--	10	--	0.03	--	0.6	--	--	
	Bromomethane	mg/kg	18	0%	18	0.00033	0.00034	0.0021	0.0022	0.0031	0.0052	0	--	--	--	--	--	--	8.7	--	0.01	--	0.2	--	--	
	Carbon disulfide	mg/kg	18	0%	18	0.00057	0.0006	0.001	0.0009	0.001	0.0012	0	--	--	--	--	--	--	720	--	2	--	40	--	--	
	Carbon tetrachloride	mg/kg	18	0%	18	0.00094	0.00099	0.001	0.002	0.0022	0.0052	0	--	--	--	--	--	--	0.3	--	0.003	--	0.06	--	--	
	CFC-11	mg/kg	18	0%	18	0.00053	0.00055	0.001	0.0018	0.0022	0.0052	0	--	--	--	--	--	--	880	--	--	--	--	--	--	
	CFC-12	mg/kg	6	0%	6	0.00039	0.00039	0.0004	0.0004	0.00041	0.00041	0	--	--	--	--	--	--	220	--	--	--	--	--	--	
	Chlorinated fluorocarbon (Freon 113)	mg/kg	6	0%	6	0.00056	0.00056																			

TABLE 1B
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE I DATA)
(Page 6 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident	Count of Detects	USEPA SSL	Count of Detects	USEPA SSL	Count of Detects	Max.	Count of Detects
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max	Soil BCL	> BCL	(DAF 1)	> DAF 1	(DAF 20)	> DAF 20	Bkgrnd ^b	> Bkgrnd
Volatile Organic Compounds	Methyl isobutyl ketone	mg/kg	18	0%	18	0.0017	0.0018	0.0052	0.0041	0.0052	0.0059	0	--	--	--	--	--	--	5800	--	--	--	--	--	--	--
	Methyl n-butyl ketone	mg/kg	12	0%	12	0.003	0.0031	0.0031	0.0032	0.0032	0.0035	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MTBE (Methyl tert-butyl ether)	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	n-Butyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	n-Propyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	o-Xylene	mg/kg	12	0%	12	0.001	0.001	0.001	0.0011	0.0011	0.0012	0	--	--	--	--	--	--	280	--	9	--	180	--	--	--
	Styrene (monomer)	mg/kg	12	0%	12	0.001	0.001	0.001	0.0011	0.0011	0.0012	0	--	--	--	--	--	--	1730	--	0.2	--	4	--	--	--
	tert-Butyl benzene	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Tetrachloroethylene	mg/kg	18	0%	18	0.00029	0.0003	0.001	0.0017	0.0022	0.0052	0	--	--	--	--	--	--	0.62	--	0.003	--	0.06	--	--	--
	Toluene	mg/kg	18	0%	18	0.00014	0.00014	0.0021	0.0021	0.0031	0.0052	0	--	--	--	--	--	--	520	--	0.6	--	12	--	--	--
	trans-1,2-Dichloroethylene	mg/kg	18	0%	18	0.00023	0.00024	0.001	0.00078	0.001	0.0012	0	--	--	--	--	--	--	120	--	0.03	--	0.6	--	--	--
	trans-1,3-Dichloropropylene	mg/kg	18	0%	18	0.00021	0.00022	0.0021	0.0015	0.0021	0.0024	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Tribromomethane	mg/kg	18	0%	18	0.00025	0.00027	0.001	0.00079	0.001	0.0012	0	--	--	--	--	--	--	62	--	0.04	--	0.8	--	--	--
	Trichloroethylene	mg/kg	18	0%	18	0.00037	0.00039	0.001	0.0018	0.0022	0.0052	0	--	--	--	--	--	--	1.1	--	0.003	--	0.06	--	--	--
	Vinyl acetate	mg/kg	12	0%	12	0.001	0.001	0.001	0.0011	0.0011	0.0012	0	--	--	--	--	--	--	990	--	8	--	160	--	--	--
	Vinyl chloride	mg/kg	18	0%	18	0.00025	0.00026	0.0021	0.0015	0.0021	0.0024	0	--	--	--	--	--	--	0.35	--	0.0007	--	0.014	--	--	--
	Xylenes (total)	mg/kg	6	0%	6	0.0009	0.0009	0.00092	0.00092	0.00094	0.00094	0	--	--	--	--	--	--	210	--	10	--	200	--	--	--

Notes:

BCL = Basic Comparison Levels (BCLs) from NDEP 2009b. Values used are residential soil BCLs.

LBCL = Leaching-based BCLs from NDEP 2009b.

Max = Maximum

Min = Minimum

Q1 = 1st quartile (25th percentile)

Q3 = 3rd quartile (75th percentile)

This table includes data only to 10 feet bgs. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in the tables in Appendix B, which include all data, regardless of depth.

The values used in this are simply a comparison to NDEP BCL values for historical data, for information purposes only. Use of 1/10 of the risk-based screening level in the text on page 4-4 is proposed for the identification exceeding samples for the confirmation dataset. Therefore, these are two different uses of these values and should not be considered the same.

Because both non-detect and detected radionuclides have reported activity levels, calculated summary statistics (and exceedances of comparison levels) are presented as detected regardless of the lab detect flag. Lab detect flags are represented by the censored (non-detect) and detect count fields in the table.

Values for Q1, median, mean, and Q3 are rounded to 2 significant figures. BCLs are rounded to 2 significant figures.

a - Range of detections include estimated values of detect results between the detection limit and reporting limit. As such some minimum detected concentrations may be below the minimum reporting limit. In these cases the respective sample results are flagged in the dataset.

b - Values used are the maximum from the shallow soils background data set presented in the Background Shallow Soil Summary Report, BMI Complex and Common Area Vicinity (BRC/TIMET 2007).

c - ATSDR screening value of 50 parts per trillion (ppt) (see text). TCDD TEQ values are calculated from congener-specific concentrations. An individual TCDD TEQ value may include detect and non-detect congeners. Therefore, the number of detects and non-detects, and a frequency of detection for TCDD TEQ are not presented.

d - Exceedances of comparison levels for radionuclides are only shown for the eight radionuclides currently included in the project analyte list. Exceedance of background is shown for all radionuclides historically analyzed for within the Upper Ponds sub-area.

-- = Not applicable or no value has been established.

TABLE 1C
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE II DATA)
(Page 1 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	USEPA SSL (DAF 1)	Count of Detects > DAF 1	USEPA SSL (DAF 20)	Count of Detects > DAF 20	Max. Bkgrnd ^b	Count of Detects > Bkgrnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Alcohols/Glycols	Ethanol	mg/kg	2	0%	2	1.8	--	1.8	1.8	--	1.8	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Ethylene glycol	mg/kg	2	0%	2	2.6	--	2.6	2.6	--	2.6	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	--
	Methanol	mg/kg	2	0%	2	1.3	--	1.3	1.3	--	1.3	0	--	--	--	--	--	--	30600	--	--	--	--	--	--	--
	Propylene glycol	mg/kg	2	0%	2	51	--	51	51	--	51	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	--
Aldehydes	Acetaldehyde	mg/kg	2	0%	2	0.2	--	0.21	0.21	--	0.22	0	--	--	--	--	--	--	14	--	--	--	--	--	--	--
	Formaldehyde	mg/kg	2	0%	2	0.1	--	0.11	0.11	--	0.11	0	--	--	--	--	--	--	11	--	--	--	--	--	--	--
Dioxins/Furans	1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/g	11	91%	1	1.4	--	1.4	1.4	--	1.4	10	19	640	1800	47000	16000	420000	--	--	--	--	--	--	--	--
	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	pg/g	11	91%	1	1	--	1	1	--	1	10	45	110	2900	8900	4800	68000	--	--	--	--	--	--	--	--
	1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/g	11	91%	1	0.62	--	0.62	0.62	--	0.62	10	8.4	180	590	18000	6000	160000	--	--	--	--	--	--	--	--
	1,2,3,4,7,8-Hexachlorodibenzofuran	pg/g	2	50%	1	1.1	--	1.1	1.1	--	1.1	1	11	--	11	11	--	11	--	--	--	--	--	--	--	--
	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	pg/g	2	0%	2	0.097	--	0.95	0.95	--	1.8	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,6,7,8-Hexachlorodibenzofuran	pg/g	2	50%	1	0.57	--	0.57	0.57	--	0.57	1	6.4	--	6.4	6.4	--	6.4	--	--	--	--	--	--	--	--
	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	pg/g	2	50%	1	0.12	--	0.12	0.12	--	0.12	1	4.4	--	4.4	4.4	--	4.4	--	--	--	--	--	--	--	--
	1,2,3,7,8,9-Hexachlorodibenzofuran	pg/g	2	0%	2	0.087	--	0.94	0.94	--	1.8	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	pg/g	2	0%	2	0.14	--	0.97	0.97	--	1.8	0	--	--	--	--	--	--	0.000078	--	--	--	--	--	--	--
	1,2,3,7,8-Pentachlorodibenzofuran	pg/g	2	50%	1	0.51	--	0.51	0.51	--	0.51	1	6.2	--	6.2	6.2	--	6.2	--	--	--	--	--	--	--	--
	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	pg/g	2	0%	2	0.1	--	1	1	--	1.9	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2,3,4,6,7,8-Hexachlorodibenzofuran	pg/g	2	0%	2	0.16	--	1	1	--	1.9	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2,3,4,7,8-Pentachlorodibenzofuran	pg/g	2	50%	1	0.31	--	0.31	0.31	--	0.31	1	4.4	--	4.4	4.4	--	4.4	--	--	--	--	--	--	--	--
	2,3,7,8-Tetrachlorodibenzofuran	pg/g	2	50%	1	0.68	--	0.68	0.68	--	0.68	1	3.2	--	3.2	3.2	--	3.2	--	--	--	--	--	--	--	--
	2,3,7,8-Tetrachlorodibenzo-p-dioxin	pg/g	2	0%	2	0.056	--	0.53	0.53	--	1	0	--	--	--	--	--	--	3.9E-06	--	--	--	--	--	--	--
	Octachlorodibenzodioxin	pg/g	11	91%	1	2.3	--	2.3	2.3	--	2.3	10	89	160	6800	13000	13000	77000	--	--	--	--	--	--	--	--
	Octachlorodibenzofuran	pg/g	11	100%	0	--	--	--	--	--	--	11	9.5	1300	14000	190000	150000	1700000	--	--	--	--	--	--	--	--
	TCDD TEQ	pg/g	11	-- ^c	0	--	--	--	--	--	--	11	0.33	7.6	57	700	170	6657.7	50	6	--	--	--	--	--	--
General Chemistry	Ammonia	mg/kg	2	0%	2	0.22	--	0.22	0.22	--	0.22	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	--
	Bicarbonate alkalinity	mg/kg	2	100%	0	--	--	--	--	--	--	2	360	--	400	400	--	430	--	--	--	--	--	--	--	--
	Bromide	mg/kg	2	0%	200%	0.21	--	0.21	0.21	--	0.21	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Carbonate alkalinity	mg/kg	2	0%	2	25	--	25	25	--	25	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Chlorate	mg/kg	42	43%	24	0.05	0.051	0.053	0.19	0.054	1	18	0.011	0.029	0.11	0.61	0.5	6.4	--	--	--	--	--	--	--	--
	Chloride	mg/kg	13	100%	0	--	--	--	--	--	--	13	7.9	13	130	380	270	2700	--	--	--	--	--	--	1110	1
	Cyanide (Total)	mg/kg	53	47%	28	0.12	1	1	0.9	1.1	1.2	25	0.27	0.78	1.6	1.5	2.1	3	1220	0	2	6	40	0	--	--
	Fluoride	mg/kg	2	100%	0	--	--	--	--	--	--	2	0.69	--	0.95	0.95	--	1.2	3670	0	--	--	--	--	2.5	0
	Iodide	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Nitrate (as N)	mg/kg	2	100%	0	--	--	--	--	--	--	2	0.4	--	1.2	1.2	--	2	--	--	--	--	--	--	102	0
	Nitrite (as N)	mg/kg	2	0%	2	0.03	--	0.03	0.03	--	0.03	0	--	--	--	--	--	--	--	--	--	--	--	--	0.21	--
	Orthophosphate as P	mg/kg	2	50%	1	0.24	--	0.24	0.24	--	0.24	1	2.8	--	2.8	2.8	--	2.8	--	--	--	--	--	--	--	--
	Perchlorate	mg/kg	57	91%	5	0.04	0.04	0.04	1.7	4.2	8.32	52	0.043	0.17	1.6	5.1	7.8	26	55	0	--	--	--	--	--	--
	Sulfate	mg/kg	2	100%	0	--	--	--	--	--	--	2	81.7	--	120	120	--	155	--	--	--	--	--	--	4130	0
Sulfide	mg/kg	2	0%	2	7.2	--	7.2	7.2	--	7.2	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Total Kjeldahl Nitrogen (TKN)	mg/kg	2	0%	2	1.6	--	1.6	1.6	--	1.6	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Chlorinated Herbicides	2,2-Dichloropropionic acid	mg/kg	2	0%	2	0.022	--	0.022	0.022	--	0.022	0	--	--	--	--	--	--	1830	--	--	--	--	--	--	--
	2,4,5-T	mg/kg	11	0%	11	0.0027	0.0051	0.0051	0.0047	0.0052	0.0053	0	--	--	--	--	--	--	610	--	--	--	--	--	--	--
	2,4,5-TP	mg/kg	11	0%	11	0.0012	0.0033	0.0033	0.003	0.0034	0.0035	0	--	--	--	--	--	--	490	--	--	--	--	--	--	--
	2,4-D	mg/kg	11	0%	11	0.012	0.03	0.03	0.027	0.031	0.031	0	--	--	--	--	--	--	690	--	--	--	--	--	--	--
	4-(2,4-Dichlorophenoxy)butyric acid	mg/kg	2	0%	2	0.022	--	0.022	0.022	--	0.022	0	--	--	--											

TABLE 1C
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE II DATA)
(Page 2 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	USEPA SSL (DAF 1)	Count of Detects > DAF 1	USEPA SSL (DAF 20)	Count of Detects > DAF 20	Max. Bkgrnd ^b	Count of Detects > Bkgrnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Metals	Lead	mg/kg	89	100%	0	--	--	--	--	--	--	89	6.7	48	980	2600	3300	20000	400	49	--	--	--	--	35.1	71
	Lithium	mg/kg	2	100%	0	--	--	--	--	--	--	2	9.6	--	11	11	--	11.6	160	0	--	--	--	--	26.5	0
	Magnesium	mg/kg	4	100%	0	--	--	--	--	--	--	4	79	94	2600	3100	6700	7260	100000	0	649	2	12970	0	17500	0
	Manganese	mg/kg	101	100%	0	--	--	--	--	--	--	101	240	880	4000	11000	18000	45523.8	1080	70	3.3	101	66	101	1090	70
	Mercury	mg/kg	44	57%	19	0.09	0.1	0.1	0.1	0.11	0.12	25	0.019	0.27	1.5	1.5	2.2	4.4	13	0	0.1	22	2	6	0.11	22
	Molybdenum	mg/kg	4	100%	0	--	--	--	--	--	--	4	0.89	0.94	15	35	90	110	390	0	3.6	2	72	1	2	2
	Nickel	mg/kg	46	100%	0	--	--	--	--	--	--	46	9.8	19	55	150	220	916.7	1540	0	7	46	140	16	30	28
	Niobium	mg/kg	2	50%	1	0.224	--	0.22	0.22	--	0.224	1	18.6	--	19	19	--	18.6	--	--	--	--	--	--	2.8	1
	Palladium	mg/kg	2	100%	0	--	--	--	--	--	--	2	0.42	--	0.54	0.54	--	0.66	--	--	--	--	--	--	1.5	0
	Phosphorus (as P)	mg/kg	2	100%	0	--	--	--	--	--	--	2	739	--	970	970	--	1200	--	--	--	--	--	--	--	--
	Platinum	mg/kg	2	50%	1	0.0108	--	0.011	0.011	--	0.0108	1	0.039	--	0.039	0.039	--	0.039	--	--	--	--	--	--	0.099	0
	Potassium	mg/kg	4	100%	0	--	--	--	--	--	--	4	21.1	22	700	750	1500	1570	--	--	--	--	--	--	3890	0
	Selenium	mg/kg	46	11%	41	0.301	0.67	6	4.4	6.3	15.2	5	0.28	0.57	3.2	3.2	5.8	5.9	390	0	0.3	4	6	0	0.6	4
	Silicon	mg/kg	2	100%	0	--	--	--	--	--	--	2	604	--	720	720	--	837	--	--	--	--	--	--	4150	0
	Silver	mg/kg	46	59%	19	0.2	0.21	0.58	1.3	2.1	5	27	0.44	3.4	15	16	29	42.9	390	0	2	24	40	1	0.2609	27
	Sodium	mg/kg	4	100%	0	--	--	--	--	--	--	4	141	150	170	180	210	227	--	--	--	--	--	--	1320	0
	Strontium	mg/kg	2	100%	0	--	--	--	--	--	--	2	146	--	150	150	--	155	46900	0	--	--	--	--	808	0
	Thallium	mg/kg	79	63%	29	0.1	0.1	0.5	0.34	0.51	0.53	50	0.3	1.2	3.3	25	29	330	5.5	20	0.4	48	8	19	1.8	32
	Tin	mg/kg	2	100%	0	--	--	--	--	--	--	2	2.1	--	3.1	3.1	--	4	46900	0	--	--	--	--	0.8	2
	Titanium	mg/kg	2	100%	0	--	--	--	--	--	--	2	207	--	500	500	--	786	100000	0	150030	0	3000600	0	1010	0
	Tungsten	mg/kg	2	50%	1	0.0175	--	0.018	0.018	--	0.0175	1	5.4	--	5.4	5.4	--	5.4	590	0	41	0	820	0	2.5	1
	Uranium	mg/kg	2	100%	0	--	--	--	--	--	--	2	0.53	--	0.97	0.97	--	1.4	230	0	13.5	0	270	0	2.7	0
	Vanadium	mg/kg	67	100%	0	--	--	--	--	--	--	67	19.9	86	170	1200	2300	7780	390	27	300	29	6000	2	59.1	57
	Zinc	mg/kg	2	100%	0	--	--	--	--	--	--	2	27.9	--	34	34	--	39.8	23500	0	620	0	12400	0	121	0
	Zirconium	mg/kg	2	100%	0	--	--	--	--	--	--	2	3.6	--	34	34	--	64.8	--	--	--	--	--	--	179	0
Organochlorine Pesticides	2,4-DDD	mg/kg	9	56%	4	0.00072	0.00072	0.00073	0.019	0.056	0.075	5	0.0023	0.14	0.3	0.25	0.35	0.38	--	--	--	--	--	--	--	--
	2,4-DDE	mg/kg	11	73%	3	0.1	0.1	0.1	0.1	0.11	0.11	8	0.052	0.069	8.9	7.6	14	16	--	--	--	--	--	--	--	--
	4,4-DDD	mg/kg	97	3%	94	0.0001	0.005	0.1	1.5	1.2	10.55	3	0.072	0.072	0.18	0.22	0.42	0.42	2.4	0	0.8	0	16	0	--	--
	4,4-DDE	mg/kg	97	97%	3	0.005	0.005	0.005	0.11	0.33	0.33	94	0.0013	0.22	4.4	24	21	190	1.7	57	3	52	60	14	--	--
	4,4-DDT	mg/kg	98	74%	25	0.00022	0.0036	0.065	0.89	0.58	8.3	73	0.0039	0.09	1.4	6.7	7.3	67	1.7	36	2	30	40	2	--	--
	Aldrin	mg/kg	97	1%	96	0.0001	0.005	0.036	1.1	1	10.55	1	0.004	--	0.004	0.004	--	0.004	0.029	0	0.02	0	0.4	0	--	--
	alpha-BHC	mg/kg	98	13%	85	0.00062	0.005	0.05	1.2	1.1	10.55	13	0.0022	0.0035	0.12	0.92	1.9	4.4	0.09	7	0.00003	13	0.0006	13	--	--
	alpha-Chlordane	mg/kg	97	18%	80	0.00012	0.005	0.23	1.3	1.5	10.55	17	0.0065	0.025	0.063	0.094	0.09	0.53	--	--	--	--	--	--	--	--
	beta-BHC	mg/kg	97	24%	74	0.0017	0.005	0.17	1.4	1.7	10.55	23	0.0008	0.0058	0.022	0.11	0.093	1.1	0.32	2	0.0001	23	0.002	21	--	--
	Chlordane	mg/kg	88	3%	85	0.0019	0.03	0.88	12	10	88	3	4.4	4.4	6	30	80	80	1.6	3	0.5	3	10	1	--	--
	delta-BHC	mg/kg	97	1%	96	0.00011	0.005	0.036	1.1	1.1	10.55	1	0.0007	--	0.0007	0.0007	--	0.0007	--	--	--	--	--	--	--	--
	Dieldrin	mg/kg	97	1%	96	0.00024	0.005	0.091	1.5	1.2	10.55	1	0.0043	--	0.0043	0.0043	--	0.0043	0.03	0	0.0002	1	0.004	1	--	--
	Endosulfan I	mg/kg	97	42%	56	0.00013	0.005	0.05	1.5	1.1	10.55	41	0.0029	0.076	2.1	28	33	270	--	--	--	--	--	--	--	--
	Endosulfan II	mg/kg	97	3%	94	0.0001	0.005	0.1	1.5	1.2	10.55	3	0.0046	0.0046	0.25	0.22	0.41	0.41	--	--	--	--	--	--	--	--
	Endosulfan sulfate	mg/kg	97	0%	97	0.00024	0.005	0.083	1.5	1.2	10.55	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Endrin	mg/kg	97	1%	96	0.0002	0.005	0.078	1.5	1.2	10.55	1	0.72	--	0.72	0.72	--	0.72	18	0	0.05	1	1	0	--	--
	Endrin																									

TABLE 1C
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE II DATA)
(Page 3 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	USEPA SSL (DAF 1)	Count of Detects > DAF 1	USEPA SSL (DAF 20)	Count of Detects > DAF 20	Max. Bkgrnd ^b	Count of Detects > Bkgrnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Organo-phosphorus Pesticides	Famphur	mg/kg	11	0%	11	0.0023	0.0033	0.0033	0.0031	0.0034	0.0034	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Fenthion	mg/kg	2	0%	2	0.0013	--	0.0013	0.0013	--	0.0013	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Malathion	mg/kg	2	0%	2	0.001	--	0.001	0.001	--	0.001	0	--	--	--	--	--	--	--	1220	--	--	--	--	--	
	Methyl parathion	mg/kg	11	0%	11	0.001	0.0065	0.0066	0.0056	0.0067	0.0068	0	--	--	--	--	--	--	--	15	--	--	--	--	--	
	Mevinphos	mg/kg	2	0%	2	0.0044	--	0.0044	0.0044	--	0.0044	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Naled	mg/kg	2	0%	2	0.0027	--	0.0027	0.0027	--	0.0027	0	--	--	--	--	--	--	--	120	--	--	--	--	--	
	O,O,O-Triethyl phosphorothioate	mg/kg	2	0%	2	0.0017	--	0.0017	0.0017	--	0.0017	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Parathion	mg/kg	11	0%	11	0.0027	0.0054	0.0054	0.005	0.0056	0.0057	0	--	--	--	--	--	--	--	370	--	--	--	--	--	
	Phorate	mg/kg	11	0%	11	0.0019	0.0058	0.0059	0.0052	0.006	0.0061	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Phosmet	mg/kg	2	0%	2	0.015	--	0.015	0.015	--	0.015	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Ronnel	mg/kg	2	0%	2	0.0018	--	0.0018	0.0018	--	0.0018	0	--	--	--	--	--	--	--	3060	--	--	--	--	--	
	Sulfotep	mg/kg	2	0%	2	0.0011	--	0.0011	0.0011	--	0.0011	0	--	--	--	--	--	--	--	--	--	--	--	--	--	
Tetrachlorvinphos (Stiropfos)	mg/kg	2	0%	2	0.0018	--	0.0018	0.0018	--	0.0018	0	--	--	--	--	--	--	--	20	--	--	--	--	--		
Organic Acids	4-Chlorobenzenesulfonic acid	mg/kg	2	0%	2	1	--	1	1	--	1	0	--	--	--	--	--	--	78200	--	0.07	--	1.4	--	--	
	Benzenesulfonic acid	mg/kg	2	0%	2	1	--	1	1	--	1	0	--	--	--	--	--	--	39100	--	--	--	--	--	--	
	Diethyl phosphorodithioic acid	mg/kg	2	0%	2	1	--	1	1	--	1	0	--	--	--	--	--	--	6260	--	--	--	--	--	--	
	Dimethyl phosphorodithioic acid	mg/kg	2	0%	2	1	--	1	1	--	1	0	--	--	--	--	--	--	7820	--	--	--	--	--	--	
Polynuclear Aromatic Hydrocarbons	Acenaphthene	mg/kg	50	0%	50	0.034	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	4690	--	29	--	580	--	--	
	Acenaphthylene	mg/kg	50	0%	50	0.034	0.65	0.68	0.59	0.69	2.6	0	--	--	--	--	--	--	150	--	--	--	--	--	--	
	Anthracene	mg/kg	50	0%	50	0.0044	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	23500	--	590	--	11800	--	--	
	Benzo(a)anthracene	mg/kg	51	31%	35	0.0056	0.65	0.68	1.3	0.69	26	16	0.036	0.089	0.19	0.17	0.23	0.31	0.62	0	0.08	12	1.6	0	--	
	Benzo(a)pyrene	mg/kg	51	0%	51	0.0048	0.65	0.68	1	0.7	26	0	--	--	--	--	--	--	0.062	--	0.4	--	8	--	--	
	Benzo(b)fluoranthene	mg/kg	51	4%	49	0.011	0.65	0.68	1.1	0.7	26	2	0.24	--	0.28	0.28	--	0.31	0.62	0	0.2	2	4	0	--	
	Benzo(g,h,i)perylene	mg/kg	50	0%	50	0.012	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	2350	--	--	--	--	--	--	
	Benzo(k)fluoranthene	mg/kg	50	0%	50	0.0054	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	6.2	--	2	--	40	--	--	
	Chrysene	mg/kg	51	53%	24	0.0064	0.65	0.68	0.6	0.69	0.77	27	0.061	0.13	0.45	0.43	0.67	0.91	62	0	8	0	160	0	--	
	Dibenzo(a,h)anthracene	mg/kg	50	0%	50	0.012	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	0.062	--	0.08	--	1.6	--	--	
	Indeno(1,2,3-cd)pyrene	mg/kg	50	2%	49	0.0056	0.65	0.68	0.59	0.7	2.6	1	0.044	--	0.044	0.044	--	0.044	0.62	0	0.7	0	14	0	--	
	Phenanthrene	mg/kg	51	51%	25	0.007	0.66	0.68	0.6	0.69	0.77	26	0.054	0.13	0.62	0.82	1.1	3.7	25	0	--	--	--	--	--	
Pyrene	mg/kg	51	51%	25	0.011	0.66	0.68	0.6	0.69	0.77	26	0.05	0.096	0.41	0.38	0.51	0.96	2350	0	210	0	4200	0	--		
Polychlorinated Biphenyls	Aroclor 1016	mg/kg	42	0%	42	0.0065	0.014	1.3	6.1	13	29	0	--	--	--	--	--	--	3.9	--	--	--	--	--	--	
	Aroclor 1221	mg/kg	42	0%	42	0.0073	0.014	1.3	6.1	13	29	0	--	--	--	--	--	--	0.22	--	--	--	--	--	--	
	Aroclor 1232	mg/kg	42	0%	42	0.0083	0.014	1.3	6.1	13	29	0	--	--	--	--	--	--	0.22	--	--	--	--	--	--	
	Aroclor 1242	mg/kg	42	0%	42	0.0077	0.014	1.3	6.1	13	29	0	--	--	--	--	--	--	0.22	--	--	--	--	--	--	
	Aroclor 1248	mg/kg	42	0%	42	0.0098	0.014	1.3	6.1	13	29	0	--	--	--	--	--	--	0.22	--	--	--	--	--	--	
	Aroclor 1254	mg/kg	42	0%	42	0.0081	0.014	1.3	6.1	13	29	0	--	--	--	--	--	--	0.22	--	--	--	--	--	--	
Radionuclides ^d	Aroclor 1260	mg/kg	42	0%	42	0.0077	0.014	1.3	6.1	13	29	0	--	--	--	--	--	--	0.22	--	--	--	--	--	--	
	Radium-226	pCi/g	18	100%	0	--	--	--	--	--	--	18	0.03	1.5	5	9.9	19	36.5	0.0071	18	0.016	18	0.32	17	2.36	10
	Radium-228	pCi/g	18	100%	0	--	--	--	--	--	--	18	0.2	1.8	2.3	2.5	3.1	5.65	0.013	18	0.016	18	0.32	17	2.94	4
	Thorium-228	pCi/g	18	100%	0	--	--	--	--	--	--	18	1.39	1.8	1.9	2.5	3	5.9	0.0078	18	0.0023	18	0.045	18	2.28	6
	Thorium-230	pCi/g	18	100%	0	--	--	--	--	--	--	18	0.87	1.4	4.8	14	26	46.7	3.2	9	0.00084	18	0.017	18	3.01	9
	Thorium-232	pCi/g	18	100%	0	--	--	--	--	--	--	18	1.31	1.6	1.7	2.4	2.9	6.26	2.8	4	0.0029	18	0.058	18	2.23	6
	Uranium-233/234	pCi/g	18	100%	0	--	--	--	--	--	--	18	0.81	1.1	5.1	11	21	33.3	4.2	9	--	--	--	--	2.84	11
	Uranium-235/236	pCi/g	18	89%	2	--	--	--	--	--	--	16	0.018	0.093	0.38	0.61	1.1	1.76	0.11	13	--	--	--	--	0.21	10
	Uranium-238	pCi/g	18	100%																						

TABLE 1C
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE II DATA)
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Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	USEPA SSL (DAF 1)	Count of Detects > DAF 1	USEPA SSL (DAF 20)	Count of Detects > DAF 20	Max. Bkgrnd ^b	Count of Detects > Bkgrnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Radionuclides ^d	Protactinium-234	pCi/g	2	0%	2	--	--	--	--	--	--	0	-0.12	--	-0.1	-0.1	--	-0.08	--	--	--	--	--	--	0.13	0
	Radium-223	pCi/g	2	50%	1	--	--	--	--	--	--	1	0.46	--	0.66	0.66	--	0.86	--	--	--	--	--	--	0.4	2
	Radium-224	pCi/g	2	100%	0	--	--	--	--	--	--	2	3.1	--	3.2	3.2	--	3.2	--	--	--	--	--	--	2.11	2
	Thallium-208	pCi/g	14	100%	0	--	--	--	--	--	--	14	0.37	0.5	0.59	1	1.2	3.93	--	--	--	--	--	--	0.72	6
	Thorium-234	pCi/g	14	93%	1	--	--	--	--	--	--	13	0.13	1.8	3.2	12	20	39	--	--	--	--	--	--	2.5	8
Semi-Volatile Organic Compounds	1,2,4,5-Tetrachlorobenzene	mg/kg	11	18%	9	0.011	0.023	0.034	0.029	0.035	0.036	2	0.057	--	0.065	0.065	--	0.073	18	0	--	--	--	--	--	--
	1,2-Diphenylhydrazine	mg/kg	9	0%	9	0.034	0.034	0.034	0.034	0.035	0.036	0	--	--	--	--	--	--	0.61	--	--	--	--	--	--	--
	1,4-Dioxane	mg/kg	9	0%	9	0.034	0.034	0.034	0.034	0.035	0.036	0	--	--	--	--	--	--	44	--	--	--	--	--	--	--
	2,4,5-Trichlorophenol	mg/kg	50	0%	50	0.031	0.57	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	6110	--	14	--	280	--	--	--
	2,4,6-Trichlorophenol	mg/kg	50	2%	49	0.032	0.65	0.68	0.59	0.7	2.6	1	0.087	--	0.087	0.087	--	0.087	44	0	0.008	1	0.16	0	--	--
	2,4-Dichlorophenol	mg/kg	50	0%	50	0.026	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	180	--	0.05	--	1	--	--	--
	2,4-Dimethylphenol	mg/kg	50	0%	50	0.029	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	1220	--	0.4	--	8	--	--	--
	2,4-Dinitrophenol	mg/kg	50	0%	50	0.066	3.3	3.4	2.9	3.5	13	0	--	--	--	--	--	--	120	--	0.01	--	0.2	--	--	--
	2,4-Dinitrotoluene	mg/kg	50	0%	50	0.018	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	1.6	--	0.00004	--	0.0008	--	--	--
	2,6-Dinitrotoluene	mg/kg	50	0%	50	0.021	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	61	--	0.00003	--	0.0006	--	--	--
	2-Chloronaphthalene	mg/kg	50	0%	50	0.016	0.57	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	6260	--	--	--	--	--	--	--
	2-Chlorophenol	mg/kg	50	0%	50	0.014	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	390	--	0.2	--	4	--	--	--
	2-Methylnaphthalene	mg/kg	41	0%	41	0.015	0.67	0.69	0.7	0.7	2.6	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2-Nitroaniline	mg/kg	50	0%	50	0.034	3.3	3.4	2.9	3.5	13	0	--	--	--	--	--	--	180	--	--	--	--	--	--	--
	2-Nitrophenol	mg/kg	50	0%	50	0.02	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3,3'-Dichlorobenzidine	mg/kg	41	0%	41	0.024	1.3	1.4	1.4	1.4	5.2	0	--	--	--	--	--	--	1.1	--	0.0003	--	0.006	--	--	--
	3-Methylphenol & 4-Methylphenol	mg/kg	11	0%	11	0.04	0.068	0.069	0.064	0.07	0.071	0	--	--	--	--	--	--	310	--	--	--	--	--	--	--
	3-Nitroaniline	mg/kg	41	0%	41	0.026	3.4	3.4	3.5	3.5	13	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4,6-Dinitro-o-cresol	mg/kg	39	0%	39	3.2	3.4	3.4	3.7	3.5	13	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4-Bromophenyl phenyl ether	mg/kg	51	0%	51	0.023	0.65	0.68	1	0.7	26	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4-Chloro-3-Methylphenol	mg/kg	50	0%	50	0.027	1.3	1.3	1.2	1.4	5.2	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4-Chlorophenyl phenyl ether	mg/kg	41	0%	41	0.019	0.67	0.69	0.7	0.7	2.6	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	4-Nitrophenol	mg/kg	50	0%	50	0.043	3.3	3.4	2.9	3.5	13	0	--	--	--	--	--	--	490	--	--	--	--	--	--	--
	Acetophenone	mg/kg	11	0%	11	0.034	0.034	0.034	0.037	0.036	0.049	0	--	--	--	--	--	--	1740	--	--	--	--	--	--	--
	Aniline	mg/kg	11	0%	11	0.034	0.034	0.034	0.035	0.036	0.039	0	--	--	--	--	--	--	85	--	--	--	--	--	--	--
	Azobenzene	mg/kg	2	0%	2	0.1	--	0.1	0.1	--	0.1	0	--	--	--	--	--	--	3.9	--	--	--	--	--	--	--
	Benzenethiol	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Benzoic acid	mg/kg	42	2%	41	0.12	3.4	3.4	6.4	3.5	130	1	2.8	--	2.8	2.8	--	2.8	100000	0	20	0	400	0	--	--
	Benzyl alcohol	mg/kg	41	0%	41	0.034	1.3	1.4	1.4	1.4	5.2	0	--	--	--	--	--	--	30600	--	--	--	--	--	--	--
	Benzyl butyl phthalate	mg/kg	51	2%	50	0.027	0.65	0.69	1.1	0.7	26	1	0.53	--	0.53	0.53	--	0.53	240	0	810	0	16200	0	--	--
	bis(2-Chloroethoxy) methane	mg/kg	50	0%	50	0.021	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	bis(2-Chloroethyl) ether	mg/kg	50	0%	50	0.014	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	0.24	--	0.00002	--	0.0004	--	--	--
	bis(2-Chloroisopropyl) ether	mg/kg	50	0%	50	0.016	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	3.4	--	--	--	--	--	--	--
	bis(2-Ethylhexyl) phthalate	mg/kg	42	10%	38	0.035	0.67	0.69	1.3	0.7	26	4	0.079	0.15	0.41	0.39	0.62	0.68	35	0	180	0	3600	0	--	--
	bis(p-Chlorophenyl) disulfide	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	bis(p-Chlorophenyl) sulfone	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Carbazole	mg/kg	41	0%	41	0.021	0.67	0.69	0.7	0.7	2.6	0	--	--	--	--	--	--	24	--	0.03	--	0.6	--	--	--
	Dibenzofuran	mg/kg	41	0%	41	0.023	0.67	0.69	0.7	0.7	2.6	0	--	--	--	--	--	--	160	--	--	--	--	--	--	--
	Dibutyl phthalate	mg/kg	51	2%	50	0.029	0.65	0.68	1	0.69	26	1	7.5	--	7.5	7.5	--	7.5	6110	0	270	0	5400	0	--	--
	Diethyl phthalate	mg/kg	50	0%	50	0.034	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	48900	--	--	--	--	--	--	--
	Dimethyl phthalate	mg/kg	50	0%	50	0.02	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	--
	Di-n-octyl phthalate	mg/kg	50	0%	50	0.015	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Diphenyl sulfone	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	180	--	--	--	--	--	--	--
	Fluoranthene	mg/kg	51	51%	25	0.024	0.66	0.68	0.6	0.69	0.77	26	0.07	0.2	0.8	0.91	1.3	2.7	2290	0	210	0	4200	0	--	--
	Fluorene	mg/kg	50	0%	50	0.019	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	3130	--	28	--	560	--	--	--
	Hexachloro-1,3-butadiene	mg/kg	51	2%	50	0.013	0.65	0.68	1.1	0.7	26	1	1.4	--	1.4	1.4	--	1.4	6.2	0	0.1	1	2	0	--	--
	Hexachlorobenzene	mg/kg	51	65%	18	0.018	0.65	0.68	0.61	0.69	0.77	33	0.16	1.1	2.5	11	5.5	230	0.3	32	0.1	33	2	17	--	--
	Hexachlorocyclopentadiene	mg/kg	50	0%	50	0.073	0.57	0.68	0.63	0.69	2.6	0	--	--	--	--	--	--	370	--	20	--	400	--	--	--
	Hexachloroethane	mg/kg	50	0%	50	0.017	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	35	--	0.02	--	0.4	--	--	--
	Hydroxymethyl phthalimide	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Isophorone	mg/kg	41	0%	41	0.019	0.67	0.69	0.7	0.7	2.6	0	--	--	--	--	--	--	510	--	0.03	--	0.6	--	--	--
	Naphthalene	mg/kg	50	0%	50	0.015	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	3.1	--	4	--	80	--	--	--
	Nitrobenzene	mg/kg	50	0%	50	0.018	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	2.7	--	0.007	--	0.14	--	--	--
	N-nitrosodi-n-propylamine	mg/kg	50	0%	50	0.02	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	0.069	--	0.000002	--	0.00004	--	--	--
	N-nitrosodiphenylamine	mg/kg	50	0%	50	0.021	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	99	--	0.06	--	1.2	--	--	--
	o-Cresol	mg/kg	50	0%	50	0.02	0.65	0.68	0.58	0.69	2.6	0	--	--	--	--	--	--	3060	--	0.8	--	16	--	--	--
	p-Chloroaniline	mg/kg	51	0%	51	0.031	1.3	1.3	2.1	1.4	52	0	--	--	--	--	--	--	240	--	0.03	--	0.6	--	--	--

TABLE 1C
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE II DATA)
(Page 5 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	USEPA SSL (DAF 1)	Count of Detects > DAF 1	USEPA SSL (DAF 20)	Count of Detects > DAF 20	Max. Bkgnd ^b	Count of Detects > Bkgnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Semi-Volatile Organic Compounds	p-Cresol	mg/kg	39	0%	39	0.64	0.67	0.69	0.74	0.7	2.6	0	--	--	--	--	--	--	310	--	--	--	--	--	--	--
	Pentachlorobenzene	mg/kg	11	73%	3	0.022	0.022	0.022	0.026	0.034	0.034	8	0.052	0.078	0.12	0.38	0.26	2.1	49	0	--	--	--	--	--	--
	Pentachlorophenol	mg/kg	51	8%	47	0.12	3.2	3.4	5.4	3.5	130	4	0.48	0.69	1.3	1.1	1.5	1.5	3	0	0.001	4	0.02	4	--	--
	Phenol	mg/kg	51	0%	51	0.034	0.65	0.68	1	0.7	26	0	--	--	--	--	--	--	18300	--	5	--	100	--	--	--
	Phenyl Disulfide	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Phenyl Sulfide	mg/kg	2	0%	2	0.34	--	0.34	0.34	--	0.34	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Phthalic acid	mg/kg	11	0%	11	0.26	0.34	1.6	1.2	1.7	1.7	0	--	--	--	--	--	--	100000	--	--	--	--	--	--	--
	p-Nitroaniline	mg/kg	50	0%	50	0.022	3.3	3.4	2.9	3.5	13	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyridine	mg/kg	11	0%	11	0.068	0.34	0.34	0.29	0.35	0.35	0	--	--	--	--	--	--	61	--	--	--	--	--	--	--	
Volatile Organic Compounds	1,1,1,2-Tetrachloroethane	mg/kg	11	0%	11	0.00015	0.00023	0.00023	0.00022	0.00024	0.00024	0	--	--	--	--	--	--	3.7	--	--	--	--	--	--	--
	1,1,1-Trichloroethane	mg/kg	52	8%	48	0.00011	0.001	0.001	0.00094	0.0011	0.0015	4	0.00054	0.00055	0.00059	0.00068	0.0009	0.001	1390	0	0.1	0	2	0	--	--
	1,1,2,2-Tetrachloroethane	mg/kg	52	0%	52	0.00014	0.001	0.001	0.0009	0.0011	0.0015	0	--	--	--	--	--	--	0.47	--	0.0002	--	0.004	--	--	--
	1,1,2-Trichloroethane	mg/kg	52	0%	52	0.00029	0.002	0.0021	0.0018	0.0021	0.0029	0	--	--	--	--	--	--	1	--	0.0009	--	0.018	--	--	--
	1,1-Dichloroethane	mg/kg	52	0%	52	0.00022	0.001	0.001	0.001	0.0011	0.0015	0	--	--	--	--	--	--	4.2	--	1	--	20	--	--	--
	1,1-Dichloroethylene	mg/kg	52	0%	52	0.00056	0.001	0.001	0.00097	0.0011	0.0015	0	--	--	--	--	--	--	280	--	0.003	--	0.06	--	--	--
	1,1-Dichloropropene	mg/kg	2	0%	2	0.00018	--	0.00018	0.00018	--	0.00018	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3-Trichlorobenzene	mg/kg	2	0%	2	0.0018	--	0.0018	0.0018	--	0.0018	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2,3-Trichloropropane	mg/kg	11	0%	11	0.00057	0.00057	0.00057	0.00064	0.00059	0.00091	0	--	--	--	--	--	--	0.32	--	--	--	--	--	--	--
	1,2,4-Trichlorobenzene	mg/kg	51	20%	41	0.00075	0.32	0.68	1.1	0.7	26	10	0.0029	0.61	0.7	0.89	1.1	2.7	140	0	0.3	9	6	0	--	--
	1,2,4-Trimethylbenzene	mg/kg	2	0%	2	0.00056	--	0.00056	0.00056	--	0.00056	0	--	--	--	--	--	--	140	--	--	--	--	--	--	--
	1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	11	0%	11	0.00091	0.00091	0.00092	0.00093	0.00095	0.00099	0	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--
	1,2-Dichlorobenzene	mg/kg	53	23%	41	0.00015	0.0011	0.0052	0.02	0.0053	0.66	12	0.00033	0.00062	0.0013	0.0027	0.0031	0.015	370	0	0.9	0	18	0	--	--
	1,2-Dichloroethane	mg/kg	52	0%	52	0.00014	0.001	0.001	0.00093	0.0011	0.0015	0	--	--	--	--	--	--	0.43	--	0.001	--	0.02	--	--	--
	1,2-Dichloroethylene	mg/kg	2	0%	2	0.00063	--	0.00063	0.00063	--	0.00063	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,2-Dichloropropane	mg/kg	52	0%	52	0.0001	0.001	0.001	0.00092	0.0011	0.0015	0	--	--	--	--	--	--	0.82	--	0.001	--	0.02	--	--	--
	1,3,5-Trichlorobenzene	mg/kg	2	0%	2	0.0051	--	0.0051	0.0051	--	0.0051	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1,3,5-Trimethylbenzene	mg/kg	2	0%	2	0.00051	--	0.00051	0.00051	--	0.00051	0	--	--	--	--	--	--	50	--	--	--	--	--	--	--
	1,3-Dichlorobenzene	mg/kg	53	6%	50	0.00013	0.001	0.0051	0.016	0.0053	0.66	3	0.00047	0.00047	0.0012	0.0025	0.0059	0.0059	230	0	--	--	--	--	--	--
	1,3-Dichloropropane	mg/kg	2	0%	2	0.00066	--	0.00066	0.00066	--	0.00066	0	--	--	--	--	--	--	1130	--	0.001	--	0.02	--	--	--
	1,4-Dichlorobenzene	mg/kg	53	23%	41	0.00011	0.001	0.0051	0.0035	0.0053	0.0074	12	0.0012	0.0014	0.0035	0.043	0.0072	0.42	2.6	0	0.1	1	2	0	--	--
	2,2-Dichloropropane	mg/kg	2	0%	2	0.00018	--	0.00018	0.00018	--	0.00018	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2-Chloroethyl vinyl ether	mg/kg	41	0%	41	0.001	0.001	0.0011	0.0011	0.0011	0.0015	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2-Chlorotoluene	mg/kg	2	0%	2	0.0011	--	0.0011	0.0011	--	0.0011	0	--	--	--	--	--	--	510	--	--	--	--	--	--	--
	2-Phenylbutane	mg/kg	2	0%	2	0.00087	--	0.00087	0.00087	--	0.00087	0	--	--	--	--	--	--	220	--	--	--	--	--	--	--
	4-Chlorotoluene	mg/kg	2	0%	2	0.00067	--	0.00067	0.00067	--	0.00067	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Acetone	mg/kg	52	23%	40	0.0013	0.0036	0.01	0.0082	0.011	0.017	12	0.0035	0.0039	0.006	0.016	0.016	0.082	60000	0	0.8	0	16	0	--	--
	Acetonitrile	mg/kg	11	0%	11	0.002	0.002	0.002	0.0026	0.0021	0.0054	0	--	--	--	--	--	--	1470	--	--	--	--	--	--	--
	Benzene	mg/kg	52	0%	52	0.00011	0.001	0.0051	0.0034	0.0053	0.0074	0	--	--	--	--	--	--	0.81	--	0.002	--	0.04	--	--	--
	Bromobenzene	mg/kg	2	0%	2	0.00021	--	0.00021	0.00021	--	0.00021	0	--	--	--	--	--	--	64	--	--	--	--	--	--	--
	Bromodichloromethane	mg/kg	52	0%	52	0.00007	0.001	0.001	0.00091	0.0011	0.0015	0	--	--	--	--	--	--	10	--	0.03	--	0.6	--	--	--
	Bromomethane	mg/kg	52	0%	52	0.00032	0.0021	0.0051	0.0037	0.0053	0.0074	0	--	--	--	--	--	--	8.7	--	0.01	--	0.2	--		

TABLE 1C
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
FIRST EIGHT ROWS SUB-AREAS (PHASE II DATA)
(Page 6 of 6)

Parameter of Interest	Compound List	Units	Total Count	Detect Freq.	Censored (Non-Detect) Data							Detected Data ^a							Resident Soil BCL	Count of Detects > BCL	USEPA SSL (DAF 1)	Count of Detects > DAF 1	USEPA SSL (DAF 20)	Count of Detects > DAF 20	Max. Bkgnd ^b	Count of Detects > Bkgnd
					Count	Min	Q1	Median	Mean	Q3	Max	Count	Min	Q1	Median	Mean	Q3	Max								
Volatile Organic Compounds	Methyl isobutyl ketone	mg/kg	52	0%	52	0.00092	0.0051	0.0052	0.0046	0.0053	0.0074	0	--	--	--	--	--	--	5800	--	--	--	--	--	--	--
	Methyl n-butyl ketone	mg/kg	41	0%	41	0.003	0.0031	0.0032	0.0032	0.0032	0.0044	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MTBE (Methyl tert-butyl ether)	mg/kg	2	0%	2	0.00028	--	0.00028	0.00028	--	0.00028	0	--	--	--	--	--	--	39	--	--	--	--	--	--	--
	n-Butyl benzene	mg/kg	2	0%	2	0.00077	--	0.00077	0.00077	--	0.00077	0	--	--	--	--	--	--	240	--	--	--	--	--	--	--
	n-Propyl benzene	mg/kg	2	0%	2	0.00053	--	0.00053	0.00053	--	0.00053	0	--	--	--	--	--	--	240	--	--	--	--	--	--	--
	o-Xylene	mg/kg	43	0%	43	0.00022	0.001	0.001	0.001	0.0011	0.0015	0	--	--	--	--	--	--	280	--	9	--	180	--	--	--
	Styrene (monomer)	mg/kg	43	0%	43	0.00021	0.001	0.001	0.001	0.0011	0.0015	0	--	--	--	--	--	--	1730	--	0.2	--	4	--	--	--
	tert-Butyl benzene	mg/kg	2	0%	2	0.00056	--	0.00056	0.00056	--	0.00056	0	--	--	--	--	--	--	390	--	--	--	--	--	--	--
	Tetrachloroethylene	mg/kg	52	10%	47	0.00021	0.001	0.0051	0.0033	0.0053	0.0064	5	0.00039	0.0016	0.0028	0.003	0.0046	0.0049	0.62	0	0.003	2	0.06	0	--	--
	Toluene	mg/kg	52	2%	51	0.00013	0.0021	0.0051	0.0037	0.0053	0.0074	1	0.0011	--	0.0011	0.0011	--	0.0011	520	0	0.6	0	12	0	--	--
	trans-1,2-Dichloroethylene	mg/kg	52	0%	52	0.00023	0.001	0.001	0.0009	0.0011	0.0015	0	--	--	--	--	--	--	120	--	0.03	--	0.6	--	--	--
	trans-1,3-Dichloropropylene	mg/kg	52	0%	52	0.00021	0.002	0.0021	0.0018	0.0021	0.0029	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Tribromomethane	mg/kg	52	0%	52	0.00025	0.001	0.001	0.00092	0.0011	0.0015	0	--	--	--	--	--	--	62	--	0.04	--	0.8	--	--	--
	Trichloroethylene	mg/kg	52	21%	41	0.00006	0.0011	0.0052	0.004	0.0053	0.0074	11	0.00027	0.00072	0.0021	0.0033	0.0039	0.016	1.1	0	0.003	3	0.06	0	--	--
	Vinyl acetate	mg/kg	43	0%	43	0.00018	0.001	0.001	0.001	0.0011	0.0015	0	--	--	--	--	--	--	990	--	8	--	160	--	--	--
Vinyl chloride	mg/kg	52	0%	52	0.00024	0.002	0.0021	0.0018	0.0021	0.0029	0	--	--	--	--	--	--	0.35	--	0.0007	--	0.014	--	--	--	
Xylenes (total)	mg/kg	11	0%	11	0.00084	0.00088	0.00088	0.00088	0.0009	0.00092	0	--	--	--	--	--	--	210	--	10	--	200	--	--	--	

Notes:

BCL = Basic Comparison Levels (BCLs) from NDEP 2009b. Values used are residential soil BCLs.

LBCL = Leaching-based BCLs from NDEP 2009b.

Max = Maximum

Min = Minimum

Q1 = 1st quartile (25th percentile)

Q3 = 3rd quartile (75th percentile)

This table includes data only to 10 feet bgs. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in the tables in Appendix B, which include all data, regardless of depth.

The values used in this are simply a comparison to NDEP BCL values for historical data, for information purposes only. Use of 1/10 of the risk-based screening level in the text on page 4-4 is proposed for the identification exceeding samples for the confirmation dataset. Therefore, these are two different uses of these values and should not be considered the same.

Because both non-detect and detected radionuclides have reported activity levels, calculated summary statistics (and exceedances of comparison levels) are presented as detected regardless of the lab detect flag. Lab detect flags are represented by the censored (non-detect) and detect count fields in the table.

Values for Q1, median, mean, and Q3 are rounded to 2 significant figures. BCLs are rounded to 2 significant figures.

a - Range of detections include estimated values of detect results between the detection limit and reporting limit. As such some minimum detected concentrations may be below the minimum reporting limit. In these cases the respective sample results are flagged in the dataset.

b - Values used are the maximum from the shallow soils background data set presented in the Background Shallow Soil Summary Report, BMI Complex and Common Area Vicinity (BRC/TIMET 2007).

c - ATSDR screening value of 50 parts per trillion (ppt) (see text). TCDD TEQ values are calculated from congener-specific concentrations. An individual TCDD TEQ value may include detect and non-detect congeners. Therefore, the number of detects and non-detects, and a frequency of detection for TCDD TEQ are not presented.

d - Exceedances of comparison levels for radionuclides are only shown for the eight radionuclides currently included in the project analyte list. Exceedance of background is shown for all radionuclides historically analyzed for within the Upper Ponds sub-area.

-- = Not applicable or no value has been established.

TABLE 2
SUMMARY OF RECENT (5TH MONITORING EVENT) ALLUVIAL AQUIFER GROUNDWATER DATA FROM
MONITORING WELLS AA-18, AA-UW6, MCF-16C AND POD8
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 6)

Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	NDEP Water BCL	MCF-16C On-Site May 2008	AA-18 1,000' North May 2008	AA-UW6 450' East May 2008	POD8 850' West May 2008
Aldehydes	Acetaldehyde	µg/L	340	--	66	--	< 30 UJ	R	R
	Chloroacetaldehyde	µg/L	--	--	--	--	< 10 U	R	R
	Formaldehyde	µg/L	--	--	1.5	--	< 60 UJ	R	R
General Chemistry	Alkalinity	mg/L	--	--	--	74 J-CAB	100 J-CAB	57 J-CAB	217 J-CAB
	Ammonia	µg/L	--	--	730	< 7.8 U	< 7.8 U	< 7.8 U	< 7.8 U
	Bicarbonate alkalinity	mg/L	--	--	--	74 J-CAB	100 J-CAB	57 J-CAB	217 J-CAB
	Bromide	µg/L	--	--	--	< 250 U	460	980 J+	590
	Bromine	µg/L	--	--	--	< 5000 U	930	2000 J+	1200
	Carbonate alkalinity	mg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
	Chlorate	µg/L	--	--	--	19000	< 53 U	< 53 U	3200
	Chloride	mg/L	--	250	--	1230 J-CAB	225 J-CAB	226 J-CAB	1230 J-CAB
	Chlorine	mg/L	--	--	4.0	2460	450	452	2460
	Chlorite	µg/L	--	1,000	--	< 1000 U	< 100 U	< 200 U	< 200000 U
	Cyanide (Total)	µg/L	--	200	200	< 3.6 U	< 28.2 U	R	29 J-
	Fluoride	mg/L	--	4.0	4.0	0.5 J	0.71	0.62 J+	1.1
	Hydroxide alkalinity	mg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
	Iodide	µg/L	--	--	--	< 3000 U	< 3000 U	< 3000 U	< 3000 U
	Ion Balance Difference	percent	--	--	--	12.8	7.2	12.3	7.8
	Nitrate (as N)	µg/L	--	10,000	10,000	23800	10800	7600 J-	41600
	Nitrite (as N)	µg/L	--	1,000	1,000	< 1000 U	< 400 U	< 400 UJ	< 1000 U
	Orthophosphate as P	µg/L	--	--	--	< 500 U	< 50 U	< 50 UJ	< 50 U
	Perchlorate	µg/L	--	18/24.5 ⁽²⁾	18	11100	106	65.1	226
	Sulfate	mg/L	--	250	--	5570 J-CAB	429 J-CAB	2480 J-CAB	1410 J-CAB
	Sulfide	µg/L	--	--	--	< 180 U	< 180 U	7800	< 180 U
	Total Inorganic Carbon	mg/L	--	--	--	62.1	26.7 J	20.2 J+	101
	Total Kjeldahl Nitrogen (TKN)	µg/L	--	--	--	< 250 U	< 250 U	< 250 UJ	550
	Total Organic Carbon	mg/L	--	--	--	< 10 U	< 0.2 U	< 10 U	< 10 U
Metals	Aluminum	µg/L	--	50	36,500	< 495.5 U	101 J+	< 198.2 U	250 J
	Antimony	µg/L	--	6	6	< 34 U	< 6.8 UJ	< 13.6 UJ	< 17 U
	Arsenic	µg/L	--	10	10	< 96.5 U	28.1 J	102 J	< 48.25 U
	Barium	µg/L	--	2,000	2,000	< 26.2 U	22.2	15.6 J	29.3 J
	Beryllium	µg/L	--	4	4	< 6.4 U	< 1.28 U	< 2.56 U	< 3.2 U
	Boron	µg/L	--	--	7,300	3520 J-CAB	642 J-J-CAB	1910 J-J-CAB	1810 J-CAB
	Cadmium	µg/L	--	5	5	< 2.1 U	< 0.42 UJ	< 0.84 UJ	< 1.05 U
	Calcium	µg/L	--	--	--	590000 J-J-CAB	96400 J-CAB	370000 J-CAB	394000 J-CAB
	Chromium (Total)	µg/L	--	100	--	155 J	< 30 U	< 60 U	< 75 U
	Chromium (VI)	µg/L	--	--	100	73	< 20 U	< 20 U	< 20 U
	Cobalt	µg/L	--	--	11	< 12.2 U	< 2.44 U	< 4.88 U	< 6.1 U
	Copper	µg/L	--	1,300	1,360	< 40.5 U	< 8.1 U	< 16.2 U	< 20.25 U
	Iron	µg/L	--	300	25,600	< 800 U	< 160 U	< 320 U	R
	Lead	µg/L	--	15	15	< 24.6 U	< 4.92 U	< 9.84 U	< 12.3 U
	Lithium	µg/L	--	--	73	732 J	87.5 J	242 J	< 96.2 U
	Magnesium	µg/L	--	--	207,000	671000 J-CAB	54400 J-CAB	157000 J-CAB	262000 J-CAB
	Manganese	µg/L	--	50	510	< 30 U	< 6 U	42.2	< 15 U
	Mercury	µg/L	--	2	2	< 0.0612 U	< 0.0612 U	< 0.0612 U	< 0.0927 U
	Molybdenum	µg/L	--	--	180	223 J+	11.1 J	91 J	21.2 J
	Nickel	µg/L	--	--	730	< 24.335 U	< 4.867 U	< 9.734 U	13.9 J
	Niobium	µg/L	--	--	--	< 137.5 U	< 27.5 U	< 55 U	< 68.75 U
	Palladium	µg/L	--	--	--	29.4	4.5 J-	15.6 J-	22.3
	Phosphorus (as P)	µg/L	--	25 ⁽³⁾	--	< 950 U	< 190 U	< 380 U	< 475 U
	Platinum	µg/L	--	--	--	< 4.25 U	< 0.85 U	< 1.7 U	< 2.125 U
	Potassium	µg/L	--	--	--	357000 J-CAB	15100 J-J-CAB	63300 J-J-CAB	24900 J-CAB

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Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	NDEP Water BCL	MCF-16C On-Site May 2008	AA-18 1,000' North May 2008	AA-UW6 450' East May 2008	POD8 850' West May 2008
Metals	Selenium	µg/L	--	50	50	< 24.02 U	< 4.804 U	< 9.608 U	20.8 J
	Silicon	µg/L	--	--	--	19500 J-CAB	26900 J-CAB	28100 J-CAB	45800 J-CAB
	Silver	µg/L	--	100	180	< 10.14 U	< 2.028 U	< 4.056 U	< 5.07 U
	Sodium	µg/L	--	--	--	542000 J-CAB	137000 J-CAB	324000 J-CAB	421000 J-CAB
	Strontium	µg/L	--	--	21,900	9910 J+	2280 J	7960 J	9250
	Sulfur	µg/L	--	--	--	1340000 J	130000	663000	373000 J
	Thallium	µg/L	--	2	2	< 6.75 U	< 1.35 U	< 2.7 U	< 33.75 U
	Tin	µg/L	--	--	21,900	< 34 U	< 6.8 U	< 13.6 U	< 17 U
	Titanium	µg/L	--	--	146,000	< 50.5 U	< 10.1 U	< 20.2 U	< 25.25 U
	Tungsten	µg/L	--	--	270	< 75.5 U	< 15.1 U	< 30.2 U	< 37.75 U
	Uranium	µg/L	--	30	30	12.4 J	7 J	< 4.192 U	50.4
	Vanadium	µg/L	--	--	180	< 104.55 U	50.4 J-	< 41.82 UJ	< 52.275 U
	Zinc	µg/L	--	500	11,000	< 200 U	< 40 U	< 80 U	< 100 UJ
	Zirconium	µg/L	--	--	--	< 45 U	< 9 U	< 18 U	< 22.5 U
Organic Acids	4-Chlorobenzenesulfonic acid	µg/L	--	--	36,500	< 50 U	< 50 U	< 50 U	< 50 U
	Benzenesulfonic acid	µg/L	--	--	18,300	< 50 U	< 50 U	< 50 U	< 50 U
	Diethyl phosphorodithioic acid	µg/L	--	--	2,920	< 50 U	< 50 U	< 50 U	< 50 U
	Dimethyl phosphorodithioic acid	µg/L	--	--	3,650	< 250 U	< 250 U	< 250 U	< 250 U
	Phthalic acid	µg/L	--	--	73,000	< 50 U	< 50 U	< 50 U	< 50 U
Organochlorine Pesticides	2,4-DDD	µg/L	--	--	--	< 0.0071 U	--	< 0.0071 U	< 0.0071 U
	2,4-DDE	µg/L	--	--	--	< 0.012 U	--	< 0.012 U	< 0.012 U
	4,4-DDD	µg/L	--	--	0.28	< 0.0038 U	--	< 0.0038 U	< 0.0075 U
	4,4-DDE	µg/L	29	--	0.2	< 0.0027 U	--	< 0.0027 U	< 0.013 U
	4,4-DDT	µg/L	--	--	0.2	< 0.0056 U	--	< 0.0056 UJ	< 0.013 U
	Aldrin	µg/L	0.071	--	0.004	< 0.004 U	--	< 0.004 U	< 0.0044 U
	alpha-BHC	µg/L	3.1	--	0.011	0.12	--	< 0.0025 U	0.1
	alpha-Chlordane	µg/L	--	2	--	< 0.003 U	--	< 0.003 U	< 0.0057 U
	beta-BHC	µg/L	--	--	0.037	< 0.013 U	--	< 0.013 U	0.069
	Chlordane	µg/L	12	2	2	< 0.18 U	--	< 0.18 U	< 0.099 U
	delta-BHC	µg/L	--	--	--	< 0.006 U	--	< 0.006 U	< 0.0046 U
	Dieldrin	µg/L	0.86	--	0.0042	< 0.0023 U	--	< 0.0023 U	< 0.0057 U
	Endosulfan I	µg/L	--	--	--	< 0.0025 U	--	< 0.0025 U	< 0.0078 U
	Endosulfan II	µg/L	--	--	--	< 0.01 U	--	< 0.01 U	< 0.0053 U
	Endosulfan sulfate	µg/L	--	--	--	< 0.017 U	--	< 0.017 U	< 0.0063 U
	Endrin	µg/L	--	2	2	< 0.0028 U	--	0.047 J+	< 0.0068 U
	Endrin aldehyde	µg/L	--	--	--	< 0.0032 U	--	< 0.0032 U	< 0.009 U
	Endrin ketone	µg/L	--	--	--	< 0.016 U	--	< 0.016 U	< 0.005 U
	gamma-Chlordane	µg/L	--	2	--	0.053 J	--	< 0.0027 U	< 0.0088 U
	Heptachlor	µg/L	0.4	0.4	0.4	< 0.0025 U	--	< 0.0025 U	< 0.034 U
	Heptachlor epoxide	µg/L	--	0.2	0.2	< 0.0032 U	--	< 0.0032 U	< 0.0062 U
	Lindane	µg/L	11	0.2	0.2	< 0.0025 U	--	< 0.0025 U	< 0.0032 U
	Methoxychlor	µg/L	--	40	40	< 0.005 U	--	< 0.005 U	< 0.01 U
	Toxaphene	µg/L	--	3	3	< 0.33 U	--	< 0.33 U	< 0.59 U
Radionuclides	Radium-226	pCi/L	--	--	5	1.17	0.34 U	1.97	1
	Radium-228	pCi/L	--	--	5	0.992	0.394 U	0.45 U	0.333 U
	Radium-226/228	pCi/L	--	5 ⁽⁶⁾	--	2.16	0.73	2	1.33
	Thorium-228	pCi/L	--	--	0.11	0.407	0.372 U	0.68 U	0.0183 U
	Thorium-230	pCi/L	--	--	0.042	0.0838 U	0.034 U	0.00771 U	0.0403 U
	Thorium-232	pCi/L	--	--	0.14	0.0608 U	0.125 U	-0.0555 U	-0.0318 U
	Uranium-233/234	pCi/L	--	--	--	3.95	2.35 J	2.16	22.2 J
	Uranium-235/236	pCi/L	--	--	--	0.198	0.374 U	0.164 U	1.15
	Uranium-238	pCi/L	--	--	--	2.94	2.02	1.93	18.4

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Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	NDEP Water BCL	MCF-16C On-Site May 2008	AA-18 1,000' North May 2008	AA-UW6 450' East May 2008	POD8 850' West May 2008
SVOCs	1,2,4,5-Tetrachlorobenzene	µg/L	--	--	11	--	--	< 1 U	--
	1,2-Diphenylhydrazine	µg/L	--	--	0.084	--	--	< 1 U	--
	1,4-Dioxane	µg/L	--	--	6.1	--	--	< 2 U	--
	2,4,5-Trichlorophenol	µg/L	--	--	3,650	--	--	< 2 U	--
	2,4,6-Trichlorophenol	µg/L	--	--	6.1	--	--	< 2 U	--
	2,4-Dichlorophenol	µg/L	--	--	110	--	--	< 1 U	--
	2,4-Dimethylphenol	µg/L	--	--	730	--	--	< 1 U	--
	2,4-Dinitrophenol	µg/L	--	--	73	--	--	< 10 U	--
	2,4-Dinitrotoluene	µg/L	--	--	0.22	--	--	< 1.1 U	--
	2,6-Dinitrotoluene	µg/L	--	--	37	--	--	< 1.1 U	--
	2-Chloronaphthalene	µg/L	--	--	2,920	--	--	< 1 U	--
	2-Chlorophenol	µg/L	1,100	--	180	--	--	< 1 U	--
	2-Methylnaphthalene	µg/L	3,300	--	--	--	--	< 1 U	--
	2-Nitroaniline	µg/L	--	--	110	--	--	< 2 U	--
	2-Nitrophenol	µg/L	--	--	--	--	--	< 1 U	--
	3,3'-Dichlorobenzidine	µg/L	--	--	0.15	--	--	< 1 U	--
	3-Methylphenol/4-Methylphenol	µg/L	--	--	180	--	--	< 1.2 U	--
	3-Nitroaniline	µg/L	--	--	--	--	--	< 1.1 U	--
	4-Bromophenyl phenyl ether	µg/L	--	--	--	--	--	< 1 U	--
	4-Chloro-3-Methylphenol	µg/L	--	--	--	--	--	< 1 U	--
	4-Chlorophenyl phenyl ether	µg/L	--	--	--	--	--	< 1 U	--
	4-Chlorothioanisole	µg/L	--	--	--	--	--	< 19 U	--
	4-Nitrophenol	µg/L	--	--	290	--	--	< 5 U	--
	Acenaphthene	µg/L	--	--	2,190	--	--	< 1 U	--
	Acenaphthylene	µg/L	--	--	1,100	--	--	< 1 U	--
	Acetophenone	µg/L	800,000	--	3,650	--	--	< 1 U	--
	Aniline	µg/L	--	--	12	--	--	< 1 U	--
	Anthracene	µg/L	--	--	11,000	--	--	< 1.1 U	--
	Azobenzene	µg/L	--	--	0.54	--	--	< 1 U	--
	Benzenethiol	µg/L	--	--	--	--	--	< 2 U	--
	Benzo(a)anthracene	µg/L	--	--	0.092	--	--	< 1 U	--
	Benzo(a)pyrene	µg/L	--	0.2	0.2	--	--	< 1 U	--
	Benzo(b)fluoranthene	µg/L	--	--	0.092	--	--	< 1 U	--
	Benzo(g,h,i)perylene	µg/L	--	--	1,100	--	--	< 1 U	--
	Benzo(k)fluoranthene	µg/L	--	--	0.92	--	--	< 1 U	--
	Benzoic acid	µg/L	--	--	146,000	--	--	< 5 U	--
	Benzyl alcohol	µg/L	--	--	18,300	--	--	< 1 U	--
	Benzyl butyl phthalate	µg/L	--	--	7,300	--	--	< 1 U	--
	bis(2-Chloroethoxy) methane	µg/L	0.0045	--	--	--	--	< 1 U	--
	bis(2-Chloroethyl) ether	µg/L	10	--	0.054	--	--	< 1 U	--
	bis(2-Chloroisopropyl) ether	µg/L	51	--	0.9	--	--	< 1 U	--
	bis(2-Ethylhexyl) phthalate	µg/L	--	6	6	--	--	< 1 U	--
	bis(p-Chlorophenyl) disulfide	µg/L	--	--	--	--	--	< 10 U	--
	bis(p-Chlorophenyl) sulfone	µg/L	--	--	--	--	--	< 0.19 U	--
	Carbazole	µg/L	--	--	3.4	--	--	< 1 U	--
	Chrysene	µg/L	--	--	9.2	--	--	< 1 U	--
	Dibenzo(a,h)anthracene	µg/L	--	--	0.0092	--	--	< 1 U	--
	Dibenzofuran	µg/L	--	--	73	--	--	< 1 U	--
	Dibutyl phthalate	µg/L	--	--	3,650	--	--	< 1 U	--
	Diethyl phthalate	µg/L	--	--	29,200	--	--	< 1 U	--
	Dimethyl phthalate	µg/L	--	--	365,000	--	--	< 1 U	--
	Di-n-octyl phthalate	µg/L	--	--	--	--	--	< 5 U	--

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SVOCs	Diphenyl sulfone	µg/L	--	--	110	--	--	< 0.27 U	--
	Fluoranthene	µg/L	--	--	1,460	--	--	< 1 U	--
	Fluorene	µg/L	--	--	1460	--	--	< 1 U	--
	Hexachloro-1,3-butadiene	µg/L	0.33	--	0.86	--	--	< 1 U	--
	Hexachlorobenzene	µg/L	1	1	1	--	--	< 1 U	--
	Hexachlorocyclopentadiene	µg/L	50	50	50	--	--	< 2.5 U	--
	Hexachloroethane	µg/L	3.8	--	4.8	--	--	< 1 U	--
	Hydroxymethyl phthalimide	µg/L	--	--	--	--	--	< 1.4 U	--
	Indeno(1,2,3-cd)pyrene	µg/L	--	--	0.092	--	--	< 1 U	--
	Isophorone	µg/L	--	--	71	--	--	< 1 U	--
	Naphthalene	µg/L	150	--	4.3	--	--	< 1 U	--
	Nitrobenzene	µg/L	2,000	--	3.7	--	--	< 1 U	--
	N-nitrosodi-n-propylamine	µg/L	--	--	0.0096	--	--	< 1 U	--
	N-nitrosodiphenylamine	µg/L	--	--	14	--	--	< 1 U	--
	o-Cresol	µg/L	--	--	1,830	--	--	< 2 U	--
	Octachlorostyrene	µg/L	--	--	150	--	--	< 0.68 U	--
	p-Chloroaniline	µg/L	--	--	--	--	--	< 1 U	--
	p-Chlorothiophenol	µg/L	--	--	180	--	--	< 2.6 U	--
	Pentachlorobenzene	µg/L	--	--	29	--	--	< 2.7 U	--
	Pentachlorophenol	µg/L	--	1	1	--	--	< 2 U	--
	Phenanthrene	µg/L	--	--	1,100	--	--	< 1 U	--
	Phenol	µg/L	--	--	11,000	--	--	< 4 U	--
	Phenyl Disulfide	µg/L	--	--	--	--	--	< 0.61 U	--
	Phenyl Sulfide	µg/L	--	--	--	--	--	< 0.73 U	--
	p-Nitroaniline	µg/L	--	--	--	--	--	< 1.3 U	--
	Pyrene	µg/L	--	--	37	--	--	< 1 U	--
	Pyridine	µg/L	--	--	1,100	--	--	< 5 U	--
VOCs	1,1,1,2-Tetrachloroethane	µg/L	3.3	--	2.3	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
	1,1,1-Trichloroethane	µg/L	3,100	200	200	< 0.099 U	< 0.099 U	< 0.099 U	< 0.099 U
	1,1,2,2-Tetrachloroethane	µg/L	3	--	0.3	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U
	1,1,2-Trichloroethane	µg/L	5	5	5	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	1,1-Dichloroethane	µg/L	2,200	--	12	< 0.07 U	< 0.07 U	< 0.07 U	< 0.07 U
	1,1-Dichloroethene	µg/L	190	7	7	< 0.085 U	< 0.085 U	< 0.085 U	< 0.085 U
	1,1-Dichloropropene	µg/L	--	--	--	< 0.087 U	< 0.087 U	< 0.087 U	< 0.087 U
	1,2,3-Trichlorobenzene	µg/L	--	--	--	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U
	1,2,3-Trichloropropane	µg/L	290	--	0.034	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U
	1,2,4-Trichlorobenzene	µg/L	3,400	70	70	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U
	1,2,4-Trimethylbenzene	µg/L	24	--	51	< 0.069 U	< 0.069 U	< 0.069 U	< 0.069 U
	1,2-Dibromo-3-chloropropane	µg/L	33	0.2	0.2	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
	1,2-Dichlorobenzene	µg/L	2,600	600	600	< 0.16 U	< 0.16 U	0.17 J	< 0.16 U
	1,2-Dichloroethane	µg/L	5	5	5	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
	1,2-Dichloroethene	µg/L	--	--	--	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U
	1,2-Dichloropropane	µg/L	35	5	5	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U
	1,3,5-Trichlorobenzene	µg/L	--	--	--	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U
	1,3,5-Trimethylbenzene	µg/L	25	--	590	< 0.058 U	< 0.058 U	< 0.058 U	< 0.058 U
	1,3-Dichlorobenzene	µg/L	830	--	110	< 0.046 U	< 0.046 U	< 0.046 U	< 0.046 U
	1,3-Dichloropropane	µg/L	0.84	--	730	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
	1,4-Dichlorobenzene	µg/L	8,200	75	75	< 0.1 U	< 0.1 U	0.29 J	< 0.1 U
	1-Nonanal	µg/L	--	--	--	< 0.007 UJ	< 0.007 UJ	< 0.007 U	< 0.007 UJ
	2,2,3-Trimethylbutane	µg/L	--	--	--	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
	2,2-Dichloropropane	µg/L	--	--	--	< 0.084 U	< 0.084 U	< 0.084 U	< 0.084 U
	2,2-Dimethylpentane	µg/L	--	--	--	< 0.093 U	< 0.093 U	< 0.093 U	< 0.093 U

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VOCs	2,3-Dimethylpentane	µg/L	--	--	--	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
	2,4-Dimethylpentane	µg/L	--	--	--	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U
	2-Chlorotoluene	µg/L	--	--	730	< 0.068 U	< 0.068 U	< 0.068 U	< 0.068 U
	2-Nitropropane	µg/L	0.18	--	0.0063	< 0.034 UJ	< 0.034 UJ	< 0.034 U	< 0.034 UJ
	2-Phenylbutane	µg/L	--	--	370	< 0.053 U	< 0.053 U	< 0.053 U	< 0.053 U
	3,3-dimethylpentane	µg/L	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
	3-ethylpentane	µg/L	--	--	--	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U
	3-Methylhexane	µg/L	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
	4-Chlorotoluene	µg/L	--	--	--	< 0.068 U	< 0.068 U	< 0.068 U	< 0.068 U
	Acetone	µg/L	220,000	--	32,600	< 0.56 U	< 0.56 U	4.3	< 0.56 U
	Acetonitrile	µg/L	42,000	--	440	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U
	Benzene	µg/L	5	5	5	< 0.032 U	< 0.032 U	< 0.032 U	< 0.032 U
	Bromobenzene	µg/L	--	--	490	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
	Bromodichloromethane	µg/L	2.1	80 ⁽⁷⁾	1.1	0.56 J	< 0.088 U	< 0.088 U	< 0.088 U
	Bromomethane	µg/L	--	--	48	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
	Carbon disulfide	µg/L	560	--	3,520	0.78 J	< 0.029 U	< 0.029 U	< 0.029 U
	Carbon tetrachloride	µg/L	5	5	5	1.9	< 0.042 U	< 0.042 U	< 0.042 U
	Freon 11	µg/L	180	--	9,890	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
	Freon 12	µg/L	14	--	5840	< 0.074 U	< 0.074 UJ	< 0.074 U	< 0.074 UJ
	Freon 113	µg/L	1,500	--	876,000	< 0.072 U	< 0.072 U	< 0.072 U	< 0.072 U
	Chlorobenzene	µg/L	390	100	100	< 0.48 U	< 0.48 U	< 0.48 U	< 0.48 U
	Chlorobromomethane	µg/L	3.2	--	--	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	Chlorodibromomethane	µg/L	--	80 ⁽⁷⁾	0.7	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
	Chloroethane	µg/L	28,000	--	23	< 0.085 U	< 0.085 U	< 0.085 U	< 0.085 U
	Chloroform	µg/L	80	80 ⁽⁷⁾	1.6	210	7.2 J+	0.44 J	1.4
	Chloromethane	µg/L	--	--	81	< 0.036 U	< 0.036 UJ	< 0.036 U	< 0.036 UJ
	cis-1,2-Dichloroethene	µg/L	210	70	70	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U
	cis-1,3-Dichloropropene	µg/L	--	--	--	< 0.099 U	< 0.099 U	< 0.099 U	< 0.099 U
	Cymene	µg/L	--	--	--	< 0.04 U	< 0.04 U	< 0.04 U	< 0.04 U
	Dibromomethane	µg/L	990	--	370	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U
	Dichloromethane	µg/L	58	5	5	< 0.091 U	< 0.091 U	< 0.091 U	< 0.091 U
	Ethanol	µg/L	--	--	--	< 36 U	< 36 U	< 36 UJ	< 36 U
	Ethylbenzene	µg/L	700	700	700	< 0.061 U	< 0.061 U	< 0.061 U	< 0.061 U
	Hexane, 2-methyl-	µg/L	--	--	--	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
	Isopropylbenzene	µg/L	8.4	--	3,440	< 0.032 U	< 0.032 U	< 0.032 U	< 0.032 U
	m,p-Xylene	µg/L	--	--	42,600	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U
	Methyl disulfide	µg/L	--	--	--	< 0.089 U	< 0.089 U	< 0.089 U	< 0.089 U
	Methyl ethyl ketone	µg/L	440,000	--	21,300	< 0.96 UJ	< 0.96 UJ	< 0.96 U	< 0.96 UJ
	Methyl iodide	µg/L	--	--	--	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U
	Methyl isobutyl ketone	µg/L	14,000	--	2,900	< 0.72 U	< 0.72 U	< 0.72 U	< 0.72 U
	Methyl n-butyl ketone	µg/L	--	--	--	< 0.08 U	< 0.08 U	< 0.08 UJ	< 0.08 U
	MTBE (Methyl tert-butyl ether)	µg/L	120,000	--	35	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U
	n-Butyl benzene	µg/L	260	--	370	< 0.069 U	< 0.069 U	< 0.069 U	< 0.069 U
	n-Heptane	µg/L	--	--	--	< 0.08 U	< 0.08 U	< 0.08 U	< 0.08 U
	n-Propyl benzene	µg/L	320	--	370	< 0.029 U	< 0.029 U	< 0.029 U	< 0.029 U
	o-Xylene	µg/L	--	--	42,600	< 0.056 U	< 0.056 U	< 0.056 U	< 0.056 U
	Styrene	µg/L	8,900	100	100	< 0.079 U	< 0.079 U	< 0.079 U	< 0.079 U
	tert-Butyl benzene	µg/L	290	--	370	< 0.039 U	< 0.039 U	< 0.039 U	< 0.039 U
	Tetrachloroethene	µg/L	5	5	5	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U
	Toluene	µg/L	1,500	1,000	1,000	< 0.029 U	< 0.029 U	0.22 J	< 0.029 U
	trans-1,2-Dichloroethene	µg/L	180	100	100	< 0.089 U	< 0.089 U	< 0.089 U	< 0.089 U
	trans-1,3-Dichloropropene	µg/L	--	--	--	< 0.08 U	< 0.08 U	< 0.08 U	< 0.08 U

TABLE 2
SUMMARY OF RECENT (5TH MONITORING EVENT) ALLUVIAL AQUIFER GROUNDWATER DATA FROM
MONITORING WELLS AA-18, AA-UW6, MCF-16C AND POD8
FIRST EIGHT ROWS SUB-AREAS
(Page 6 of 6)

Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	NDEP Water BCL	MCF-16C On-Site May 2008	AA-18 1,000' North May 2008	AA-UW6 450' East May 2008	POD8 850' West May 2008
VOCs	Tribromomethane	µg/L	0.0083	80 ⁽⁷⁾	8.5	< 0.27 U	< 0.27 U	< 0.27 U	< 0.27 U
	Trichloroethene	µg/L	5	5	5	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
	Vinyl acetate	µg/L	9,600	--	16,200	< 0.22 U	< 0.22 U	< 0.22 U	< 0.22 U
	Vinyl chloride	µg/L	2	2	2	< 0.13 U	< 0.13 U	< 0.13 U	< 0.13 U
	Xylenes (total)	µg/L	22,000	10,000	10,000	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U
Water Quality Parameters	Conductivity	umhos/cm	--	--	--	4750	1740	1360	5770
	Hardness, Total	mg/L	--	--	--	4000	525	1400	2290
	pH (Hydrogen Ion)	--	--	6.5-9 ⁽³⁾	--	7.4 J	7.9 J	7.8	6.4 J
	Total Dissolved Solids	mg/L	--	500	--	16000	1160	5850	4140 J-
	Total Suspended Solids	mg/L	--	--	--	5	10	7	8

⁽¹⁾Groundwater to indoor air vapor intrusion screening level; from USEPA. 2002. Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance). Table 2c (Generic Screening Levels and Summary Sheet; Risk = 1 x 10⁻⁶).

⁽²⁾A MCL for perchlorate has not been promulgated. The USEPA Drinking Water Equivalent Level of 24.5 µg/L was used.

⁽³⁾A NDEP water quality standard was used for Class A (municipal or domestic supply) waters for pH and total phosphorus based on Nevada Administrative Code (NAC) 445A.118 through 445A.225.

⁽⁴⁾The MCL for Alpha Particles was used as comparison to Gross Alpha results. The MCL excludes the contributions from radon and uranium. The Gross Alpha concentrations were not adjusted due to contributions from radon nor uranium prior to comparison to MCL.

⁽⁵⁾The MCL for Beta particles photon emitters is 4 millirems per year and was not used to compare to Gross Beta concentrations.

⁽⁶⁾The constituent is regulated under the MCL for the combined concentration of radium-226 and radium-228. For comparison to the MCL, concentrations of both constituents are summed.

⁽⁷⁾The constituent is regulated under the MCL for Total Trihalomethanes (TTHM). For comparison to the MCL for TTHM, concentrations of all TTHM constituents need to be considered. Chloroform was the only TTHM detected and the detection limits of all TTHM analyzed for do not sum to a concentration that would exceed the TTHM MCL.

Bold values indicate value exceeds lowest comparison level; *italicized* values indicate detection limit exceeds lowest comparison level.

TABLE 3
SAMPLE-SPECIFIC COLLECTION DEPTHS
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 3)

Sample Location	Sample Type	Grading Plan	Sample Depth 1	Sample Depth 2	Sample Depth 3
ERC1-AQ28	Random with Flux (Berm)	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-AR27	Random with Flux (Pond)	Cut -7	0 (Fill/Surface)	7 (Surface)	17 (Subsurface)
ERC1-AR28	Random (Pond)	Cut -6	0 (Fill/Surface)	6 (Surface)	16 (Subsurface)
ERC1-AR29	Random with Flux (Pond)	Fill +1	0 (Surface)	10 (Subsurface)	--
ERC1-AR30	Random with Flux (Pond)	-- 0	0 (Surface)	10 (Subsurface)	--
ERC1-AR31	Random with Flux (Pond)	-- 0	0 (Surface)	10 (Subsurface)	--
ERC1-AR32	Random with Flux	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-AR33	Random with Flux	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AS27	Random with Flux (Pond)	Cut -6	0 (Fill/Surface)	6 (Surface)	16 (Subsurface)
ERC1-AS28	Random with Flux (Berm)	Cut -6	0 (Fill/Surface)	6 (Surface)	16 (Subsurface)
ERC1-AS29	Random with Flux (Pond)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AS30	Random (Berm)	Fill +4	0 (Surface)	10 (Subsurface)	--
ERC1-AS31	Random (Pond)	-- 0	0 (Surface)	10 (Subsurface)	--
ERC1-AS32	Random with Flux (Berm)	Fill +1	0 (Surface)	10 (Subsurface)	--
ERC1-AS33	Random with Flux (Pond)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AS34	Random with Flux (Pond)	Fill +1	0 (Surface)	10 (Subsurface)	--
ERC1-AS35	Random with Flux	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-AT26	Random with Flux (Pond)	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-AT27	Random with Flux (Berm)	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-AT28	Random with Flux (Berm)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AT29	Random (Pond)	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-AT30	Random with Flux (Berm)	Cut -9	0 (Fill/Surface)	9 (Surface)	19 (Subsurface)
ERC1-AT31	Random (Pond)	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-AT32	Random (Pond)	Fill +2	0 (Surface)	10 (Subsurface)	--
ERC1-AT33	Random (Berm)	Fill +1	0 (Surface)	10 (Subsurface)	--
ERC1-AT34	Random with Flux (Berm)	Fill +2	0 (Surface)	10 (Subsurface)	--
ERC1-AT35	Random with Flux (Pond)	Cut -1	0 (Fill/Surface)	11 (Subsurface)	--
ERC1-AT36	Random with Flux	-- 0	0 (Surface)	10 (Subsurface)	--
ERC1-AT37	Random with Flux	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-AU26	Random with Flux (Pond)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AU27	Random with Flux (Berm)	Cut -5	0 (Fill/Surface)	5 (Surface)	15 (Subsurface)
ERC1-AU28	Random (Berm)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AU29	Random with Flux (Berm)	Cut -9	0 (Fill/Surface)	9 (Surface)	19 (Subsurface)
ERC1-AU30	Random with Flux (Pond)	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-AU31	Random with Flux (Pond)	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-AU32	Random (Berm)	Fill +1	0 (Surface)	10 (Subsurface)	--
ERC1-AU33	Random with Flux (Pond)	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-AU34	Random (Berm)	Fill +4	0 (Surface)	10 (Subsurface)	--
ERC1-AU35	Random with Flux (Pond)	Fill +7	0 (Surface)	10 (Subsurface)	--
ERC1-AU36	Random (Berm)	Fill +1	0 (Surface)	10 (Subsurface)	--
ERC1-AU37	Random (Pond)	Cut -5	0 (Fill/Surface)	5 (Surface)	15 (Subsurface)
ERC1-AV27	Random (Pond)	-- 0	0 (Surface)	10 (Subsurface)	--
ERC1-AV28	Random with Flux (Pond)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AV29	Random (Pond)	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-AV30	Random (Pond)	Cut -1	0 (Fill/Surface)	11 (Subsurface)	--
ERC1-AV31	Random with Flux (Berm)	Cut -5	0 (Fill/Surface)	5 (Surface)	15 (Subsurface)

TABLE 3
SAMPLE-SPECIFIC COLLECTION DEPTHS
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 3)

Sample Location	Sample Type	Grading Plan	Sample Depth 1	Sample Depth 2	Sample Depth 3
ERC1-AV32	Random with Flux (Berm)	Cut -9	0 (Fill/Surface)	9 (Surface)	19 (Subsurface)
ERC1-AV33	Random with Flux (Berm)	Cut -11	0 (Fill/Surface)	11 (Surface)	21 (Subsurface)
ERC1-AV34	Random (Pond)	-- 0	0 (Surface)	10 (Subsurface)	--
ERC1-AV35	Random (Berm)	Fill +3	0 (Surface)	10 (Subsurface)	--
ERC1-AV36	Random (Berm)	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-AW27	Random (Berm)	Cut -7	0 (Fill/Surface)	7 (Surface)	17 (Subsurface)
ERC1-AW28	Random with Flux (Pond)	Cut -1	0 (Fill/Surface)	11 (Subsurface)	--
ERC1-AW29	Random (Pond)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AW30	Random with Flux (Pond)	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-AW31	Random (Berm)	Cut -8	0 (Fill/Surface)	8 (Surface)	18 (Subsurface)
ERC1-AW32	Random (Berm)	Cut -9	0 (Fill/Surface)	9 (Surface)	19 (Subsurface)
ERC1-AW33	Random with Flux (Pond)	Fill +3	0 (Surface)	10 (Subsurface)	--
ERC1-AW34	Random with Flux (Berm)	Cut -8	0 (Fill/Surface)	8 (Surface)	18 (Subsurface)
ERC1-AW35	Random with Flux (Pond)	Fill +2	0 (Surface)	10 (Subsurface)	--
ERC1-AX30	Random with Flux (Pond)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AX31	Random (Berm)	Cut -8	0 (Fill/Surface)	8 (Surface)	18 (Subsurface)
ERC1-AX32	Random (Pond)	Cut -1	0 (Fill/Surface)	11 (Subsurface)	--
ERC1-AX33	Random with Flux (Pond)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AX34	Random (Berm)	Cut -6	0 (Fill/Surface)	6 (Surface)	16 (Subsurface)
ERC1-AX35	Random with Flux (Pond)	Cut -1	0 (Fill/Surface)	11 (Subsurface)	--
ERC1-AY33	Random (Berm)	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-AY34	Random (Pond)	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-AY35	Random (Berm)	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-JS01	Pond	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-JS02	Berm	Cut -7	0 (Fill/Surface)	7 (Surface)	17 (Subsurface)
ERC1-JS03	Berm with Flux	Fill +1	0 (Surface)	10 (Subsurface)	--
ERC1-JS04	Pond with Flux	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-JS05	Berm	Cut -6	0 (Fill/Surface)	6 (Surface)	16 (Subsurface)
ERC1-JS06	Judgemental with Flux	Cut -5	0 (Fill/Surface)	5 (Surface)	15 (Subsurface)
ERC1-JS07	Berm with Flux	Cut -9	0 (Fill/Surface)	9 (Surface)	19 (Subsurface)
ERC1-JS08	Berm with Flux	Fill +3	0 (Surface)	10 (Subsurface)	--
ERC1-JS09	Pond with Flux	Fill +1	0 (Surface)	10 (Subsurface)	--
ERC1-JS10	Berm with Flux	Fill +2	0 (Surface)	10 (Subsurface)	--
ERC1-JS11	Berm	Cut -1	0 (Fill/Surface)	11 (Subsurface)	--
ERC1-JS12	Pond with Flux	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-JS13	Pond with Flux	Fill +3	0 (Surface)	10 (Subsurface)	--
ERC1-JS14	Pond with Flux	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-JS15	Pond with Flux	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-JS16	Berm	Cut -9	0 (Fill/Surface)	9 (Surface)	19 (Subsurface)
ERC1-JS17	Pond with Flux	-- 0	0 (Surface)	10 (Subsurface)	--
ERC1-JS18	Berm with Flux	Cut -11	0 (Fill/Surface)	11 (Surface)	21 (Subsurface)
ERC1-JS19	Berm	Cut -9	0 (Fill/Surface)	9 (Surface)	19 (Subsurface)
ERC1-JS20	Pond with Flux	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-JS21	Pond with Flux	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-JS22	Berm with Flux	Cut -8	0 (Fill/Surface)	8 (Surface)	18 (Subsurface)
ERC1-JS23	Pond with Flux	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)

TABLE 3
SAMPLE-SPECIFIC COLLECTION DEPTHS
FIRST EIGHT ROWS SUB-AREAS
(Page 3 of 3)

Sample Location	Sample Type	Grading Plan	Sample Depth 1	Sample Depth 2	Sample Depth 3
ERC1-JS24	Pond with Flux	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-JS25	Berm	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-JS26	Berm with Flux	Cut -6	0 (Fill/Surface)	6 (Surface)	16 (Subsurface)
ERC1-JS27	Berm with Flux	Cut -9	0 (Fill/Surface)	9 (Surface)	19 (Subsurface)
ERC1-JS28	Berm with Flux	Cut -8	0 (Fill/Surface)	8 (Surface)	18 (Subsurface)
ERC1-JS29	Pond with Flux	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-JS30	Berm	Cut -8	0 (Fill/Surface)	8 (Surface)	18 (Subsurface)
ERC1-JS31	Pond with Flux	Cut -3	0 (Fill/Surface)	3 (Surface)	13 (Subsurface)
ERC1-JS32	Berm with Flux	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
ERC1-JS33	Berm	Cut -8	0 (Fill/Surface)	8 (Surface)	18 (Subsurface)
ERC1-JS34	Berm with Flux	Cut -5	0 (Fill/Surface)	5 (Surface)	15 (Subsurface)
ERC1-JS35	Pond with Flux	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-JS36	Berm with Flux	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
ERC1-JS37	Judgemental with Flux	-- 0	0 (Surface)	10 (Subsurface)	--

Note: Because sample collection will be over a two to three foot depth interval, sample locations with an anticipated cut depth less than three feet will only be sampled at the surface and one post-grade subsurface depth.

Yellow shaded locations (ERC1-AR28, ERC1-AT31 and ERC1-JS01) indicates deep soil samples will be collected for physical parameter analyses.

Green shaded locations (ERC1-AS31, ERC1-AT29 and ERC1-AT33) indicates subsurface soil samples will also include synthetic precipitation leaching procedure (SPLP) sampling and analysis. Depths are in feet bgs (current grade).

TABLE 4
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 12)

Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Ions	EPA 300.0	Bromide	24959-67-9	✓	✓	(g)	(h)
		Bromine	7726-95-6	(a)	(a)	(a)	(h)
		Chlorate	14866-68-3	✓	✓	(g)	(h)
		Chloride	16887-00-6	✓	✓	(g)	(h)
		Chlorine (soluble)	7782-50-5	(a)	(a)	(a)	(h)
		Chlorite	14998-27-7	(a)	(a)	(a)	(h)
		Fluoride	16984-48-8	✓	✓	(g)	(h)
		Nitrate (as N)	14797-55-8	✓	✓	(g)	(h)
		Nitrite (as N)	14797-65-0	✓	✓	(g)	(h)
		Orthophosphate	14265-44-2	✓	✓	(g)	(h)
		Sulfate	14808-79-8	✓	✓	(g)	(h)
	EPA 377.1	Sulfite	14265-45-3	(a)	(a)	(a)	(h)
	EPA 314.0	Perchlorate	14797-73-0	✓	✓	(g)	✓
Dissolved Gases	RSK 175	Ethane	74-84-0	(a)	(a)	(a)	(h)
		Ethylene	74-85-1	(a)	(a)	(a)	(h)
		Methane	74-82-8	(a)	(a)	(a)	(h)
Chlorinated Compounds	EPA 551.1	Chloral	75-87-6	(i)	(i)	(g)	(h)
		Dichloroacetaldehyde	79-02-7	(i)	(i)	(g)	(h)
Polychlorinated Dibenzo-dioxins/ Dibenzofurans	EPA 8290	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	✓	(e)	(e)	(h)
		1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	✓	(e)	(e)	(h)
		1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	✓	(e)	(e)	(h)
		1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	✓	(e)	(e)	(h)
		1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	✓	(e)	(e)	(h)
		1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	✓	(e)	(e)	(h)
		1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	✓	(e)	(e)	(h)
		1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	✓	(e)	(e)	(h)
		1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	✓	(e)	(e)	(h)
		1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	✓	(e)	(e)	(h)
		1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	✓	(e)	(e)	(h)
		1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	✓	(e)	(e)	(h)
		1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	✓	(e)	(e)	(h)
		2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	✓	(e)	(e)	(h)
		2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	✓	(e)	(e)	(h)
		2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	✓	(e)	(e)	(h)
		2,3,7,8-Tetrachlororodibenzo-p-dioxin	1746-01-6	✓	(e)	(e)	(h)
Asbestos	Elutriator/TEM	Asbestos	1332-21-4	✓	(f)	(f)	(h)

TABLE 4
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
FIRST EIGHT ROWS SUB-AREAS
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Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
General Chemistry Parameters	EPA 350.2	Ammonia (as N)	7664-41-7	✓	✓	(g)	(h)
	EPA 9010/9014	Cyanide (Total)	57-12-5	✓	✓	(g)	(h)
	EPA 345.1	Iodine	7553-56-2	(a)	(a)	(a)	(h)
	EPA 9045C	pH in soil	pH	✓	✓	✓	(h)
	EPA 9040B	pH in water	pH	(a)	(a)	(a)	(h)
	EPA 376.1/376.2	Sulfide	18496-25-8	✓	✓	(g)	(h)
	Mod. EPA 415.1	Total inorganic carbon	7440-44-0	✓	✓	(g)	(h)
	EPA 351.2	Total Kjeldahl nitrogen (TKN)	TKN	✓	✓	(g)	(h)
	EPA 415.1	Total organic carbon (TOC)	7440-44-0	✓	✓	✓	(h)
Metals	EPA 6020/6010B	Aluminum	7429-90-5	✓	✓	(g)	✓
		Antimony	7440-36-0	✓	✓	(g)	✓
		Arsenic	7440-38-2	✓	✓	(g)	✓
		Barium	7440-39-3	✓	✓	(g)	✓
		Beryllium	7440-41-7	✓	✓	(g)	✓
		Boron	7440-42-8	✓	✓	(g)	✓
		Cadmium	7440-43-9	✓	✓	(g)	✓
		Calcium	7440-70-2	✓	✓	(g)	✓
		Chromium	7440-47-3	✓	✓	(g)	✓
		Cobalt	7440-48-4	✓	✓	(g)	✓
		Copper	7440-50-8	✓	✓	(g)	✓
		Iron	7439-89-6	✓	✓	(g)	✓
		Lead	7439-92-1	✓	✓	(g)	✓
		Lithium	1313-13-9	✓	✓	(g)	✓
		Magnesium	7439-95-4	✓	✓	(g)	✓
		Manganese	7439-96-5	✓	✓	(g)	✓
		Molybdenum	7439-98-7	✓	✓	(g)	✓
		Nickel	7440-02-0	✓	✓	(g)	✓
		Niobium	7440-03-1	(i)	(i)	(g)	✓
		Palladium	7440-05-3	(i)	(i)	(g)	✓
		Phosphorus	7723-14-0	(i)	(i)	(g)	✓
		Platinum	7440-06-4	(i)	(i)	(g)	✓
		Potassium	7440-09-7	✓	✓	(g)	✓
		Selenium	7782-49-2	✓	✓	(g)	✓
		Silicon	7440-21-3	(i)	(i)	(g)	✓
		Silver	7440-22-4	✓	✓	(g)	✓
		Sodium	7440-23-5	✓	✓	(g)	✓
		Strontium	7440-24-6	✓	✓	(g)	✓

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SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
FIRST EIGHT ROWS SUB-AREAS
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Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Metals (continued)	EPA 6020/6010B	Sulfur	7704-34-9	(i)	(i)	(g)	✓
		Thallium	7440-28-0	✓	✓	(g)	✓
		Tin	7440-31-5	✓	✓	(g)	✓
		Titanium	7440-32-6	✓	✓	(g)	✓
		Tungsten	7440-33-7	✓	✓	(g)	✓
		Uranium	7440-61-1	✓	✓	(g)	✓
		Vanadium	7440-62-2	✓	✓	(g)	✓
		Zinc	7440-66-6	✓	✓	(g)	✓
		Zirconium	7440-67-7	(i)	(i)	(g)	✓
	EPA 7196A	Chromium (VI)	18540-29-9	✓	✓	(g)	✓
Organophosphorous Pesticides	EPA 7470/7471A	Mercury	7439-97-6	✓	✓	(g)	✓
	EPA 8141A	Azinphos-ethyl	264-27-19	(b)	(b)	(b)	(h)
		Azinphos-methyl	86-50-0	(b)	(b)	(b)	(h)
		Carbophenothion	786-19-6	(b)	(b)	(b)	(h)
		Chlorpyrifos	2921-88-2	(b)	(b)	(b)	(h)
		Coumaphos	56-72-4	(b)	(b)	(b)	(h)
		Demeton-O	298-03-3	(b)	(b)	(b)	(h)
		Demeton-S	126-75-0	(b)	(b)	(b)	(h)
		Diazinon	333-41-5	(b)	(b)	(b)	(h)
		Dichlorvos	62-73-7	(b)	(b)	(b)	(h)
		Dimethoate	60-51-5	(b)	(b)	(b)	(h)
		Disulfoton	298-04-4	(b)	(b)	(b)	(h)
		EPN	2104-64-5	(b)	(b)	(b)	(h)
		Ethoprop	13194-48-4	(b)	(b)	(b)	(h)
		Ethyl parathion	56-38-2	(b)	(b)	(b)	(h)
		Fampphur	52-85-7	(b)	(b)	(b)	(h)
		Fenthion	55-38-9	(b)	(b)	(b)	(h)
		Malathion	121-75-5	(b)	(b)	(b)	(h)
		Methyl carbophenothion	953-17-3	(b)	(b)	(b)	(h)
		Methyl parathion	298-00-0	(b)	(b)	(b)	(h)
		Mevinphos	7786-34-7	(b)	(b)	(b)	(h)
		Naled	300-76-5	(b)	(b)	(b)	(h)
		O,O,O-Triethyl phosphorothioate (TEPP)	297-97-2	(b)	(b)	(b)	(h)
		Phorate	298-02-2	(b)	(b)	(b)	(h)

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SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
FIRST EIGHT ROWS SUB-AREAS
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Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Organophosphorous Pesticides (continued)	EPA 8141A	Phosmet	732-11-6	(b)	(b)	(b)	(h)
		Ronnel	299-84-3	(b)	(b)	(b)	(h)
		Stiropfos (Tetrachlorovinphos)	22248-79-9	(b)	(b)	(b)	(h)
		Sulfotep	3689-24-5	(b)	(b)	(b)	(h)
Chlorinated Herbicides	EPA 8151A	2,4,5-T	93-76-5	(b)	(b)	(b)	(h)
		2,4,5-TP (Silvex)	93-72-1	(b)	(b)	(b)	(h)
		2,4-D	94-75-7	(b)	(b)	(b)	(h)
		2,4-DB	94-82-6	(b)	(b)	(b)	(h)
		Dalapon	75-99-0	(b)	(b)	(b)	(h)
		Dicamba	1918-00-9	(b)	(b)	(b)	(h)
		Dichloroprop	120-36-5	(b)	(b)	(b)	(h)
		Dinoseb	88-85-7	(b)	(b)	(b)	(h)
		MCPA	94-74-6	(b)	(b)	(b)	(h)
		MCPP	93-65-2	(b)	(b)	(b)	(h)
Organic Acids	HPLC	4-Chlorobenzene sulfonic acid	98-66-8	(b)	(b)	(b)	(h)
		Benzenesulfonic acid	98-11-3	(b)	(b)	(b)	(h)
		O,O-Diethylphosphorodithioic acid	298-06-6	(b)	(b)	(b)	(h)
		O,O-Dimethylphosphorodithioic acid	756-80-9	(b)	(b)	(b)	(h)
Nonhalogenated Organics	EPA 8015B	Ethylene glycol	107-21-1	(b)	(b)	(b)	(h)
		Ethylene glycol monobutyl ether	111-76-2	(b)	(b)	(b)	(h)
		Methanol	67-56-1	(b)	(b)	(b)	(h)
		Propylene glycol	57-55-6	(b)	(b)	(b)	(h)
Organochlorine Pesticides	EPA 8081A	2,4-DDD	53-19-0	✓	✓	(g)	✓
		2,4-DDE	3424-82-6	✓	✓	(g)	✓
		4,4-DDD	72-54-8	✓	✓	(g)	✓
		4,4-DDE	72-55-9	✓	✓	(g)	✓
		4,4-DDT	50-29-3	✓	✓	(g)	✓
		Aldrin	309-00-2	✓	✓	(g)	✓
		alpha-BHC	319-84-6	✓	✓	(g)	✓
		alpha-Chlordane	5103-71-9	✓	✓	(g)	✓
		beta-BHC	319-85-7	✓	✓	(g)	✓
		Chlordane	57-74-9	✓	✓	(g)	✓
		delta-BHC	319-86-8	✓	✓	(g)	✓
		Dieldrin	60-57-1	✓	✓	(g)	✓
		Endosulfan I	959-98-8	✓	✓	(g)	✓
		Endosulfan II	33213-65-9	✓	✓	(g)	✓
		Endosulfan sulfate	1031-07-8	✓	✓	(g)	✓

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SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
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Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Organochlorine Pesticides (continued)	EPA 8081A	Endrin	72-20-8	✓	✓	(g)	✓
		Endrin aldehyde	7421-93-4	✓	✓	(g)	✓
		Endrin ketone	53494-70-5	✓	✓	(g)	✓
		gamma-BHC (Lindane)	58-89-9	✓	✓	(g)	✓
		gamma-Chlordane	5103-74-2	✓	✓	(g)	✓
		Heptachlor	76-44-8	✓	✓	(g)	✓
		Heptachlor epoxide	1024-57-3	✓	✓	(g)	✓
		Methoxychlor	72-43-5	✓	✓	(g)	✓
		Toxaphene	8001-35-2	✓	✓	(g)	✓
Polychlorinated Biphenyls	EPA 8082	Aroclor 1016 (j)	12674-11-2	✓	(e)	(e)	(h)
		Aroclor 1221 (j)	11104-28-2	✓	(e)	(e)	(h)
		Aroclor 1232 (j)	11141-16-5	✓	(e)	(e)	(h)
		Aroclor 1242 (j)	53469-21-9	✓	(e)	(e)	(h)
		Aroclor 1248 (j)	12672-29-6	✓	(e)	(e)	(h)
		Aroclor 1254 (j)	11097-69-1	✓	(e)	(e)	(h)
		Aroclor 1260 (j)	11096-82-5	✓	(e)	(e)	(h)
	EPA 1668	PCB-77	32598-13-3	✓	(e)	(e)	(h)
		PCB-81	70362-50-4	✓	(e)	(e)	(h)
		PCB-105	32598-14-4	✓	(e)	(e)	(h)
		PCB-114	74472-37-0	✓	(e)	(e)	(h)
		PCB-118	31508-00-6	✓	(e)	(e)	(h)
		PCB-123	65510-44-3	✓	(e)	(e)	(h)
		PCB-126	57465-28-8	✓	(e)	(e)	(h)
		PCB-156	38380-08-4	✓	(e)	(e)	(h)
		PCB-157	69782-90-7	✓	(e)	(e)	(h)
		PCB-167	52663-72-6	✓	(e)	(e)	(h)
		PCB-169	32774-16-6	✓	(e)	(e)	(h)
		PCB-189	39635-31-9	✓	(e)	(e)	(h)
		PCB-209	2051-24-3	✓	(e)	(e)	(h)
Polynuclear Aromatic Hydrocarbons	EPA 8310 ¹ or EPA 8270SIM	Acenaphthene	83-32-9	✓	✓	(g)	(h)
		Acenaphthylene	208-96-8	✓	✓	(g)	(h)
		Anthracene	120-12-7	✓	✓	(g)	(h)
		Benzo(a)anthracene	56-55-3	✓	✓	(g)	(h)
		Benzo(a)pyrene	50-32-8	✓	✓	(g)	(h)
		Benzo(b)fluoranthene	205-99-2	✓	✓	(g)	(h)
		Benzo(g,h,i)perylene	191-24-2	✓	✓	(g)	(h)
		Benzo(k)fluoranthene	207-08-9	✓	✓	(g)	(h)

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SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
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Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Polynuclear Aromatic Hydrocarbons (continued)	EPA 8310 ¹ or EPA 8270SIM	Chrysene	218-01-9	✓	✓	(g)	(h)
		Dibenzo(a,h)anthracene	53-70-3	✓	✓	(g)	(h)
		Indeno(1,2,3-cd)pyrene	193-39-5	✓	✓	(g)	(h)
		Phenanthrene	85-01-8	✓	✓	(g)	(h)
		Pyrene	129-00-0	✓	✓	(g)	(h)
Radionuclides	EPA 900.0 or EPA 9310	Gross alpha	G_Alpha	(c)	(c)	(c)	(h)
		Gross beta	G_Beta	(c)	(c)	(c)	(h)
	EPA 901.1/ HASL GA-01-R	Actinium-228	14331-83-0	(c)	(c)	(c)	(h)
		Bismuth-212	14913-49-6	(c)	(c)	(c)	(h)
		Bismuth-214	14733-03-0	(c)	(c)	(c)	(h)
		Cobalt-57	13981-50-5	(c)	(c)	(c)	(h)
		Cobalt-60	10198-40-0	(c)	(c)	(c)	(h)
		Lead-210	14255-04-0	(c)	(c)	(c)	(h)
		Lead-211	015816-77-0	(c)	(c)	(c)	(h)
		Lead-212	15092-94-1	(c)	(c)	(c)	(h)
		Lead-214	15067-28-4	(c)	(c)	(c)	(h)
		Potassium-40	13966-00-2	(c)	(c)	(c)	(h)
		Thallium-208	14913-50-9	(c)	(c)	(c)	(h)
		Thorium-227	15623-47-9	(c)	(c)	(c)	(h)
		Thorium-234	15065-10-8	(c)	(c)	(c)	(h)
	HASL A-01-R	Thorium-232	7440-29-1	✓	✓	(g)	(h)
		Thorium-228	14274-82-9	✓	✓	(g)	(h)
		Thorium-230	14269-63-7	✓	✓	(g)	(h)
		Uranium-233/234	13966-29-5	✓	✓	(g)	(h)
		Uranium 235/236	15117-96-1	✓	✓	(g)	(h)
		Uranium-238	7440-61-1	✓	✓	(g)	(h)
	EPA 903.0 / 903.1	Radium-226	13982-63-3	✓	✓	(g)	✓
	EPA 904.0	Radium-228	15262-20-1	✓	✓	(g)	✓
	Quantitate from Parent or Daughter Radionuclide	Actinium-227 (from Th-227)	14952-40-0	(c)	(c)	(c)	(h)
		Bismuth-210 (from Pb-210)	14331-79-4	(c)	(c)	(c)	(h)
		Bismuth-211 (from Pb-211)	15229-37-5	(c)	(c)	(c)	(h)
		Polonium-210 (from Pb-210)	13981-52-7	(c)	(c)	(c)	(h)
		Polonium-212 (from Bi-212)	13981-52-7	(c)	(c)	(c)	(h)
		Polonium-214 (from Bi-214)	15735-67-8	(c)	(c)	(c)	(h)
		Polonium-216 (from Pb-212)	15756-58-8	(c)	(c)	(c)	(h)
		Polonium-218 (from Pb-214)	15422-74-9	(c)	(c)	(c)	(h)
		Protactinium-231 (from U-235)	14331-85-2	(c)	(c)	(c)	(h)

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Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Radionuclides (continued)	Quantitate from Parent or Daughter Radionuclide	Protactinium-234 (from Th-234)	15100-28-4	(c)	(c)	(c)	(h)
		Radium-223 (from Th-227)	15623-45-7	(c)	(c)	(c)	(h)
		Radium-224 (from Pb-212)	13233-32-4	(c)	(c)	(c)	(h)
		Thallium-207 (from Pb-211)	14133-67-6	(c)	(c)	(c)	(h)
		Thorium-231 (from U-235)	14932-40-2	(c)	(c)	(c)	(h)
Radon	FLUX	Radon-220	22481-48-7	(d)	(d)	(d)	(h)
		Radon-222	14859-67-7	(d)	(d)	(d)	(h)
Aldehydes	EPA 8315A	Acetaldehyde	75-07-0	✓	✓	(g)	(h)
		Chloroacetaldehyde	107-20-0	(i)	(i)	(g)	(h)
		Dichloroacetaldehyde	79-02-7	(i)	(i)	(g)	(h)
		Formaldehyde	50-00-0	✓	✓	(g)	(h)
		Trichloroacetaldehyde	75-87-6	(i)	(i)	(g)	(h)
Semivolatile Organic Compounds	EPA 8270C ²	1,2,4,5-Tetrachlorobenzene	95-94-3	✓	✓	(g)	✓
		1,2-Diphenylhydrazine	122-66-7	✓	✓	(g)	✓
		1,4-Dioxane	123-91-1	✓	✓	(g)	✓
		2,2'/4,4'-Dichlorobenzil	3457-46-3	✓	✓	(g)	✓
		2,4,5-Trichlorophenol	95-95-4	✓	✓	(g)	✓
		2,4,6-Trichlorophenol	88-06-2	✓	✓	(g)	✓
		2,4-Dichlorophenol	120-83-2	✓	✓	(g)	✓
		2,4-Dimethylphenol	105-67-9	✓	✓	(g)	✓
		2,4-Dinitrophenol	51-28-5	✓	✓	(g)	✓
		2,4-Dinitrotoluene	121-14-2	✓	✓	(g)	✓
		2,6-Dinitrotoluene	606-20-2	✓	✓	(g)	✓
		2-Chloronaphthalene	91-58-7	✓	✓	(g)	✓
		2-Chlorophenol	95-57-8	✓	✓	(g)	✓
		2-Methylnaphthalene	91-57-6	✓	✓	(g)	✓
		2-Nitroaniline	88-74-4	✓	✓	(g)	✓
		2-Nitrophenol	88-75-5	✓	✓	(g)	✓
		3,3-Dichlorobenzidine	91-94-1	✓	✓	(g)	✓
		3-Nitroaniline	99-09-2	✓	✓	(g)	✓
		4,4'-Dichlorobenzil	3457-46-3	✓	✓	(g)	✓
		4-Bromophenyl phenyl ether	101-55-3	✓	✓	(g)	✓
		4-Chloro-3-methylphenol	59-50-7	✓	✓	(g)	✓
		4-Chlorophenyl phenyl ether	7005-72-3	✓	✓	(g)	✓
		4-Chlorothioanisole	123-09-1	✓	✓	(g)	✓
		4-Chlorothiophenol	106-54-7	✓	✓	(g)	✓
		4-Nitroaniline	100-01-6	✓	✓	(g)	✓

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Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Semivolatile Organic Compounds (continued)	EPA 8270C ²	4-Nitrophenol	100-02-7	✓	✓	(g)	✓
		Acenaphthene	83-32-9	✓	✓	(g)	✓
		Acenaphthylene	208-96-8	✓	✓	(g)	✓
		Acetophenone	98-86-2	✓	✓	(g)	✓
		Aniline	62-53-3	✓	✓	(g)	✓
		Anthracene	120-12-7	✓	✓	(g)	✓
		Azobenzene	103-33-3	✓	✓	(g)	✓
		Benzo(a)anthracene	56-55-3	✓	✓	(g)	✓
		Benzo(a)pyrene	50-32-8	✓	✓	(g)	✓
		Benzo(b)fluoranthene	205-99-2	✓	✓	(g)	✓
		Benzo(g,h,i)perylene	191-24-2	✓	✓	(g)	✓
		Benzo(k)fluoranthene	207-08-9	✓	✓	(g)	✓
		Benzoic acid	65-85-0	✓	✓	(g)	✓
		Benzyl alcohol	100-51-6	✓	✓	(g)	✓
		bis(2-Chloroethoxy)methane	111-91-1	✓	✓	(g)	✓
		bis(2-Chloroethyl) ether	111-44-4	✓	✓	(g)	✓
		bis(2-Chloroisopropyl) ether	108-60-1	✓	✓	(g)	✓
		bis(2-Ethylhexyl) phthalate	117-81-7	✓	✓	(g)	✓
		bis(Chloromethyl) ether	542-88-1	✓	✓	(g)	✓
		bis(p-Chlorophenyl) sulfone	80-07-9	✓	✓	(g)	✓
		bis(p-Chlorophenyl)disulfide	1142-19-4	✓	✓	(g)	✓
		Butylbenzyl phthalate	85-68-7	✓	✓	(g)	✓
		Carbazole	86-74-8	✓	✓	(g)	✓
		Chrysene	218-01-9	✓	✓	(g)	✓
		Dibenzo(a,h)anthracene	53-70-3	✓	✓	(g)	✓
		Dibenzofuran	132-64-9	✓	✓	(g)	✓
		Dichloromethyl ether	542-88-1	✓	✓	(g)	✓
		Diethyl phthalate	84-66-2	✓	✓	(g)	✓
		Dimethyl phthalate	131-11-3	✓	✓	(g)	✓
		Di-n-butyl phthalate	84-74-2	✓	✓	(g)	✓
		Di-n-octyl phthalate	117-84-0	✓	✓	(g)	✓
		Diphenyl disulfide	882-33-7	✓	✓	(g)	✓
		Diphenyl sulfide	139-66-2	✓	✓	(g)	✓
		Diphenyl sulfone	127-63-9	✓	✓	(g)	✓
		Fluoranthene	206-44-0	✓	✓	(g)	✓
		Fluorene	86-73-7	✓	✓	(g)	✓
		Hexachlorobenzene	118-74-1	✓	✓	(g)	✓

TABLE 4
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
FIRST EIGHT ROWS SUB-AREAS
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Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Semivolatile Organic Compounds (continued)	EPA 8270C ²	Hexachlorobutadiene	87-68-3	✓	✓	(g)	✓
		Hexachlorocyclopentadiene	77-47-4	✓	✓	(g)	✓
		Hexachloroethane	67-72-1	✓	✓	(g)	✓
		Hydroxymethyl phthalimide	118-29-6	✓	✓	(g)	✓
		Indeno(1,2,3-cd)pyrene	193-39-5	✓	✓	(g)	✓
		Isophorone	78-59-1	✓	✓	(g)	✓
		m,p-Cresol	106-44-5	✓	✓	(g)	✓
		Naphthalene	91-20-3	✓	✓	(g)	✓
		Nitrobenzene	98-95-3	✓	✓	(g)	✓
		N-nitrosodi-n-propylamine	621-64-7	✓	✓	(g)	✓
		N-nitrosodiphenylamine	86-30-6	✓	✓	(g)	✓
		o-Cresol	95-48-7	✓	✓	(g)	✓
		Octachlorostyrene	29082-74-4	✓	✓	(g)	✓
		p-Chloroaniline (4-Chloroaniline)	106-47-8	✓	✓	(g)	✓
		p-Chlorobenzenethiol	106-54-7	✓	✓	(g)	✓
		Pentachlorobenzene	608-93-5	✓	✓	(g)	✓
		Pentachlorophenol	87-86-5	✓	✓	(g)	✓
		Phenanthrene	85-01-8	✓	✓	(g)	✓
		Phenol	108-95-2	✓	✓	(g)	✓
		Phthalic acid	88-99-3	✓	✓	(g)	✓
		Pyrene	129-00-0	✓	✓	(g)	✓
		Pyridine	110-86-1	✓	✓	(g)	✓
		Thiophenol	108-98-5	✓	✓	(g)	✓
		Tentatively Identified Compounds (TICs)		✓	✓	(g)	✓
Volatile Organic Compounds	EPA 8260B	1,1,1,2-Tetrachloroethane	630-20-6	✓	✓	(g)	(h)
		1,1,1-Trichloroethane	71-55-6	✓	✓	(g)	(h)
		1,1,2,2-Tetrachloroethane	79-34-5	✓	✓	(g)	(h)
		1,1,2-Trichloroethane	79-00-5	✓	✓	(g)	(h)
		1,1-Dichloroethane	75-34-3	✓	✓	(g)	(h)
		1,1-Dichloroethene	75-35-4	✓	✓	(g)	(h)
		1,1-Dichloropropene	563-58-6	✓	✓	(g)	(h)
		1,2,3-Trichlorobenzene	87-61-6	✓	✓	(g)	(h)
		1,2,3-Trichloropropane	96-18-4	✓	✓	(g)	(h)
		1,2,4-Trichlorobenzene	120-82-1	✓	✓	(g)	(h)
		1,2,4-Trimethylbenzene	95-63-6	✓	✓	(g)	(h)
		1,2-Dichlorobenzene	95-50-1	✓	✓	(g)	(h)
		1,2-Dichloroethane	107-06-2	✓	✓	(g)	(h)

TABLE 4
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
FIRST EIGHT ROWS SUB-AREAS
(Page 10 of 12)

Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Volatile Organic Compounds (continued)	EPA 8260B	1,2-Dichloroethene	540-59-0	✓	✓	(g)	(h)
		1,2-Dichloropropane	78-87-5	✓	✓	(g)	(h)
		1,3,5-Trichlorobenzene	108-70-3	✓	✓	(g)	(h)
		1,3,5-Trimethylbenzene	108-67-8	✓	✓	(g)	(h)
		1,3-Dichlorobenzene	541-73-1	✓	✓	(g)	(h)
		1,3-Dichloropropene	542-75-6	✓	✓	(g)	(h)
		1,3-Dichloropropane	142-28-9	✓	✓	(g)	(h)
		1,4-Dichlorobenzene	106-46-7	✓	✓	(g)	(h)
		2,2-Dichloropropane	594-20-7	✓	✓	(g)	(h)
		2,2-Dimethylpentane	590-35-2	✓	✓	(g)	(h)
		2,2,3-Trimethylbutane	464-06-2	✓	✓	(g)	(h)
		2,3-Dimethylpentane	565-59-3	✓	✓	(g)	(h)
		2,4-Dimethylpentane	108-08-7	✓	✓	(g)	(h)
		2-Chlorotoluene	95-49-8	✓	✓	(g)	(h)
		2-Hexanone	591-78-6	✓	✓	(g)	(h)
		2-Methylhexane	591-76-4	✓	✓	(g)	(h)
		2-Nitropropane	79-46-9	✓	✓	(g)	(h)
		3,3-Dimethylpentane	562-49-2	✓	✓	(g)	(h)
		3-Ethylpentane	617-78-7	✓	✓	(g)	(h)
		3-Methylhexane	589-34-4	✓	✓	(g)	(h)
		4-Chlorobenzene	108-90-7	✓	✓	(g)	(h)
		4-Chlorotoluene	106-43-4	✓	✓	(g)	(h)
		4-Methyl-2-pentanone (MIBK)	108-10-1	✓	✓	(g)	(h)
		Acetone	67-64-1	✓	✓	(g)	(h)
		Acetonitrile	75-05-8	✓	✓	(g)	(h)
		Benzene	71-43-2	✓	✓	(g)	(h)
		Bromobenzene	108-86-1	✓	✓	(g)	(h)
		Bromodichloromethane	75-27-4	✓	✓	(g)	(h)
		Bromoform	75-25-2	✓	✓	(g)	(h)
		Bromomethane	74-83-9	✓	✓	(g)	(h)
		Carbon disulfide	75-15-0	✓	✓	(g)	(h)
		Carbon tetrachloride	56-23-5	✓	✓	(g)	(h)
		Chlorobenzene	108-90-7	✓	✓	(g)	(h)
		Chlorobromomethane	74-97-5	✓	✓	(g)	(h)
		Chlorodibromomethane	124-48-1	✓	✓	(g)	(h)
		Chloroethane	75-00-3	✓	✓	(g)	(h)
		Chloroform	67-66-3	✓	✓	(g)	(h)

TABLE 4
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
FIRST EIGHT ROWS SUB-AREAS
(Page 11 of 12)

Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Volatile Organic Compounds (continued)	EPA 8260B	Chloromethane	74-87-3	✓	✓	(g)	(h)
		cis-1,2-Dichloroethene	156-59-2	✓	✓	(g)	(h)
		cis-1,3-Dichloropropene	10061-01-5	✓	✓	(g)	(h)
		Cymene (Isopropyltoluene)	99-87-6	✓	✓	(g)	(h)
		Dibromochloroethane	73506-94-2	✓	✓	(g)	(h)
		Dibromochloromethane	124-48-1	✓	✓	(g)	(h)
		Dibromochloropropane	96-12-8	✓	✓	(g)	(h)
		Dibromomethane	74-95-3	✓	✓	(g)	(h)
		Dichloromethane (Methylene chloride)	75-09-2	✓	✓	(g)	(h)
		Dimethyldisulfide	624-92-0	✓	✓	(g)	(h)
		Ethanol	64-17-5	✓	✓	(g)	(h)
		Ethylbenzene	100-41-4	✓	✓	(g)	(h)
		Freon-11	75-69-4	✓	✓	(g)	(h)
		Freon-113	76-13-1	✓	✓	(g)	(h)
		Freon-12	75-71-8	✓	✓	(g)	(h)
		Heptane	142-82-5	✓	✓	(g)	(h)
		Isoheptane	31394-54-4	✓	✓	(g)	(h)
		Isopropylbenzene	98-82-8	✓	✓	(g)	(h)
		m,p-Xylene	mp-XYL	✓	✓	(g)	(h)
		Methyl ethyl ketone (2-Butanone)	78-93-3	✓	✓	(g)	(h)
		Methyl iodide	74-88-4	✓	✓	(g)	(h)
		MTBE (Methyl tert-butyl ether)	1634-04-4	✓	✓	(g)	(h)
		n-Butyl benzene	104-51-8	✓	✓	(g)	(h)
		n-Propylbenzene	103-65-1	✓	✓	(g)	(h)
		Nonanal	124-19-6	✓	✓	(g)	(h)
		o-Xylene	95-47-6	✓	✓	(g)	(h)
		sec-Butylbenzene	135-98-8	✓	✓	(g)	(h)
		Styrene	100-42-5	✓	✓	(g)	(h)
		tert-Butyl benzene	98-06-6	✓	✓	(g)	(h)
		Tetrachloroethene	127-18-4	✓	✓	(g)	(h)
		Toluene	108-88-3	✓	✓	(g)	(h)
		trans-1,2-Dichloroethene	156-60-5	✓	✓	(g)	(h)
		trans-1,3-Dichloropropene	10061-02-6	✓	✓	(g)	(h)
		Trichloroethene	79-01-6	✓	✓	(g)	(h)
		Vinyl acetate	108-05-4	✓	✓	(g)	(h)
		Vinyl chloride	75-01-4	✓	✓	(g)	(h)
		Xylenes (total)	1330-20-7	✓	✓	(g)	(h)
		Tentatively Identified Compounds (TICs)		✓	✓	(g)	(h)

TABLE 4
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
FIRST EIGHT ROWS SUB-AREAS
(Page 12 of 12)

Parameter of Interest	Analytical Method	Compound List	CAS Number	Sample Depth (from Table 4)			SPLP
				Depth 1	Depth 2/3	Deep	
Water Quality Parameters	EPA 120.1	Conductivity	COND	(a)	(a)	(a)	(h)
	EPA 130.2	Hardness, total	Hardness	(a)	(a)	(a)	(h)
	EPA 160.1	Total dissolved solids	TDS	(a)	(a)	(a)	(h)
	EPA 160.2	Total suspended solids	TSS	(a)	(a)	(a)	(h)
	EPA 310.1	Alkalinity, Total (as CaCO ₃)	ALK	(a)	(a)	(a)	(h)
		Bicarbonate alkalinity	71-52-3	(a)	(a)	(a)	(h)
		Carbonate alkalinity	3812-32-6	(a)	(a)	(a)	(h)
		Hydroxide alkalinity	OH-ALK	(a)	(a)	(a)	(h)
Flashpoint	EPA 1010	Flammables	NA	(b)	(b)	(b)	(h)
Total Petroleum Hydrocarbons	EPA 8015	Diesel	64742-46-7	(b)	(b)	(b)	(h)
		Gasoline	8006-61-9	(b)	(b)	(b)	(h)
		Grease	68153-81-1	(b)	(b)	(b)	(h)
		Mineral Spirits	NA	(b)	(b)	(b)	(h)
White Phosphorus	EPA 7580M	White phosphorus	12185-10-3	(b)	(b)	(b)	(h)
Methyl Mercury	EPA 1630	Methyl mercury	22967-92-6	(b)	(b)	(b)	(h)
Soil Physical Parameters	ASTM D2937/ MOSA1Ch .13	Dry bulk density	NA	(g)	✓	✓	(h)
	ASTM D2435/ MOSA1Ch .18	Total porosity	NA	(g)	✓	✓	(h)
	ASTM D5084	Soil permeability/saturated hydraulic cond.	NA	(g)	✓	✓	(h)
	ASTM D854	Specific gravity of soils	NA	(g)	✓	✓	(h)
	SW846 Method 9081	Cation exchange capacity	NA	(g)	✓	✓	(h)
	ASTM D2216/D4643/D2974	Volumetric water content	NA	(g)	✓	✓	(h)
	ASTM D422	Grain size analysis by sieve and hydrometer	NA	(g)	✓	✓	(h)
	EPA 415.1/ASTM 2947	Fractional organic carbon content	NA	(g)	✓	✓	(h)

Notes:

Laboratory limits are subject to matrix interferences and may not always be achieved in all samples.

The laboratory will be instructed to report the top 25 Tentatively Identified Compounds (TICs) under method 8260B and 8270C.

NA = Not applicable.

a - Groundwater only analyte.

b - Removed based on rationale provided in the text.

c - Removed consistent with approved list of radionuclides for project analysis.

d - Radon will be sampled and analyzed via surface flux sampling and analysis protocols.

e - Dioxins/furans and PCBs will only be analyzed for in fill and surface soil samples only.

f - Asbestos will only be analyzed for in current grade surface soil samples only.

g - Soil physical parameters will be collected from at-depth samples only; from three sample locations (see Table 3).

h - Rationale provided in text for analyte list for synthetic precipitation leaching procedure (SPLP); from three subsurface sample locations (see Table 3).

i - Removed based on Revisions to the Analyte List Technical Memorandum approved by NDEP on 10/16/2008.

j - Extraction only; analyze for Aroclors only if the sum of PCB congeners is greater than 33 ppb.

¹For polynuclear aromatic hydrocarbons, either Method 8310 or Method 8270SIM is the primary analytical method.

⁴Method 3540 for extraction and Method 3640 for cleanup are to be used as appropriate.

TABLE 5
PROPOSED SOIL VAPOR FLUX SAMPLE ANALYSES
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 3)

Compound	CAS Number	MDL ppbv	RL ppbv	MDL µg/m ³	RL µg/m ³
List of Compounds for USEPA Method TO-15 Full Scan Mode Operation and MDLs					
1,1,1,2-Tetrachloroethane	630-20-6	0.1	0.51	0.72	3.62
1,1,1-Trichloroethane	71-55-6	0.1	0.52	0.58	2.89
1,1,2,2-Tetrachloroethane	79-34-5	0.1	0.52	0.73	3.65
1,1,2-Trichloroethane	79-00-5	0.1	0.51	0.57	2.86
1,1-Dichloroethane	75-34-3	0.1	0.52	0.43	2.15
1,1-Dichloroethene	75-35-4	0.1	0.52	0.42	2.13
1,1-Dichloropropene	563-58-6	0.1	0.49	0.46	2.3
1,2,3-Trichloropropane	96-18-4	0.11	0.55	0.68	3.39
1,2,4-Trichlorobenzene	120-82-1	0.1	0.52	0.79	3.94
1,2,4-Trimethylbenzene	95-63-6	0.1	0.52	0.52	2.61
1,2-Dibromo-3-chloropropane	96-12-8	0.22	1.1	2.2	10.98
1,2-Dibromoethane	106-93-4	0.1	0.52	0.82	4.09
1,2-Dichlorobenzene	95-50-1	0.1	0.52	0.64	3.2
1,2-Dichloroethane	107-06-2	0.1	0.52	0.43	2.15
1,2-Dichloropropane	78-87-5	0.1	0.52	0.49	2.46
1,3,5-Trimethylbenzene	108-67-8	0.1	0.52	0.53	2.64
1,3-Dichlorobenzene	541-73-1	0.1	0.52	0.64	3.2
1,3-Dichloropropane	142-28-9	0.11	0.54	0.52	2.58
1,4-Dichlorobenzene	106-46-7	0.1	0.52	0.64	3.2
1,4-Dioxane	123-91-1	0.09	0.44	0.33	1.64
2,2-Dichloropropane	594-20-7	0.11	0.53	0.5	2.53
2-Butanone	78-93-3	0.09	0.43	0.26	1.31
2-Hexanone	591-78-6	0.09	0.44	0.37	1.86
Acetone	67-64-1	0.09	0.45	0.22	1.1
Acetonitrile	75-05-8	0.22	1.12	0.48	2.39
Benzene	71-43-2	0.1	0.52	0.34	1.7
Benzyl chloride	100-44-7	0.09	0.45	0.48	2.41
Bromochloromethane	74-97-5	0.1	0.51	0.55	2.76
Bromodichloromethane	75-27-4	0.08	0.4	0.55	2.77
Bromoform	75-25-2	0.09	0.47	0.99	4.96
Bromomethane	74-83-9	0.1	0.51	0.41	2.04
Carbon disulfide	75-15-0	0.09	0.45	0.29	1.45
Carbon tetrachloride	56-23-5	0.1	0.52	0.67	3.38
Chlorobenzene	108-90-7	0.1	0.52	0.5	2.48
Chloroethane	75-00-3	0.1	0.51	0.28	1.39
Chloroform	67-66-3	0.1	0.52	0.52	2.59
Chloromethane	74-87-3	0.1	0.51	0.22	1.09
cis-1,2-Dichloroethene	156-59-2	0.1	0.52	0.42	2.11
cis-1,3-Dichloropropene	10061-01-5	0.1	0.52	0.48	2.41
Dibromochloromethane	124-48-1	0.09	0.44	0.77	3.87
Dibromomethane	74-95-3	0.11	0.55	0.97	4.84

TABLE 5
PROPOSED SOIL VAPOR FLUX SAMPLE ANALYSES
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 3)

Compound	CAS Number	MDL ppbv	RL ppbv	MDL µg/m³	RL µg/m³
Dichlorodifluoromethane	75-71-8	0.1	0.51	0.52	2.61
Dichloromethane	75-09-2	0.1	0.52	0.37	1.86
Ethanol	64-17-5	0.22	1.12	0.44	2.18
Ethylbenzene	100-41-4	0.1	0.52	0.46	2.33
Freon 113	76-13-1	0.1	0.52	0.81	4.07
Hexachlorobutadiene	87-68-3	0.1	0.52	1.14	5.68
Isobutyl alcohol	78-83-1	0.23	1.13	0.84	4.21
Isopropylbenzene	98-82-8	0.11	0.57	0.58	2.89
Isopropyltoluene	99-87-6	0.11	0.55	0.62	3.12
m & p-Xylene	108-38-3	0.21	1.03	0.92	4.61
Methyl iodide	4227-95-6	0.19	0.94	1.13	5.67
Methyl Isobutyl Ketone	108-10-1	0.09	0.46	0.38	1.95
Methyl tert butyl ether	1634-04-4	0.08	0.39	0.29	1.45
Naphthalene	91-20-3	0.22	1.09	1.19	5.9
n-Butylbenzene	104-51-8	0.1	0.52	0.59	2.95
n-Heptane	142-82-5	0.08	0.42	0.35	1.78
n-Propylbenzene	103-65-1	0.11	0.54	0.55	2.74
o-Xylene	95-47-6	0.1	0.52	0.46	2.31
sec-Butylbenzene	135-98-8	0.11	0.52	0.59	2.95
Styrene	100-42-5	0.1	0.52	0.45	2.26
tert-Butylbenzene	98-06-6	0.11	0.52	0.59	2.85
Tetrachloroethene	127-18-4	0.1	0.52	0.72	3.61
Toluene	108-88-3	0.1	0.52	0.4	2
trans-1,2-Dichloroethene	156-60-5	0.09	0.44	0.36	1.8
trans-1,3-Dichloropropene	10061-02-6	0.1	0.52	0.48	2.41
Trichloroethene	79-01-6	0.1	0.52	0.57	2.85
Trichlorofluoromethane	75-69-4	0.1	0.51	0.59	2.95
Vinyl acetate	108-05-4	0.09	0.43	0.31	1.56
Vinyl chloride	75-01-4	0.1	0.51	0.27	1.35

TABLE 5
PROPOSED SOIL VAPOR FLUX SAMPLE ANALYSES
FIRST EIGHT ROWS SUB-AREAS
 (Page 3 of 3)

Compound	CAS Number	MDL ppbv	RL ppbv	MDL $\mu\text{g}/\text{m}^3$	RL $\mu\text{g}/\text{m}^3$
List of Compounds for USEPA Method TO-15 Selective Ion Mode (SIM) Operation and MDLs					
1,1,1,2-Tetrachloroethane	630-20-6	0.005	0.026	0.035	0.18
1,1,2,2-Tetrachloroethane	79-34-5	0.005	0.026	0.035	0.18
1,1,2-Trichloroethane	79-00-5	0.005	0.026	0.028	0.14
1,2,3-Trichloropropane	96-18-4	0.005	0.026	0.031	0.16
1,2-Dibromo-3-chloropropane	96-12-8	0.01	0.026	0.098	0.26
1,2-Dibromoethane	106-93-4	0.005	0.026	0.039	0.2
1,2-Dichlorobenzene	95-50-1	0.005	0.026	0.031	0.16
1,2-Dichloroethane	107-06-2	0.005	0.026	0.021	0.11
1,2-Dichloropropane	78-87-5	0.005	0.026	0.024	0.12
1,3-Dichlorobenzene	541-73-1	0.005	0.026	0.031	0.16
1,4-Dichlorobenzene	106-46-7	0.005	0.026	0.031	0.16
Benzene	71-43-2	0.005	0.026	0.016	0.085
Benzyl chloride	100-44-7	0.005	0.026	0.026	0.14
Bromodichloromethane	75-27-4	0.005	0.026	0.034	0.18
Carbon tetrachloride	56-23-5	0.005	0.026	0.032	0.17
Chloroform	67-66-3	0.005	0.026	0.025	0.13
Dibromochloromethane	124-48-1	0.005	0.026	0.043	0.23
Hexachlorobutadiene	87-68-3	0.01	0.026	0.108	0.28
Naphthalene	91-20-3	0.01	0.026	0.534	0.14
Tetrachloroethene	127-18-4	0.005	0.026	0.035	0.18
Trichloroethene	79-01-6	0.005	0.026	0.027	0.14
Vinyl chloride	75-01-4	0.005	0.026	0.013	0.068

Note:

The actual reported MDL may vary based on Canister dilution or matrix interferences.

CAS - Chemical abstract system

MDL - Method detection limit

RL - Reporting limit

ppbv - Parts per billion by volume

$\mu\text{g}/\text{m}^3$ - microgram per cubic meter

APPENDIX A

**NDEP COMMENTS AND
BRC'S RESPONSE TO COMMENTS**

**Response to NDEP Comments Received August 24, 2009 on the
Sampling and Analysis Plan for the First Eight Rows Sub-Areas dated July 2009**

1. General comment, please note that the comments provided herein are broad in scope. Hence, these comments will result in substantive global changes to the sampling and analysis plan (SAP). Please note that due to these broad issues comprehensive comments were not developed for this SAP.

Response: *BRC understands that NDEP's initial comments are broad in nature and that a more comprehensive set of comments will be provided by NDEP upon completing their review of the revised SAP.*

2. General comment, this SAP does not contain the most recent information about the overall sub-area. Extensive remediation has already taken place, but the data included as part of this SAP are pre-remediation. There are some sections in the text of this SAP (e.g., page 2-45) that state that BRC is currently conducting remediation (or perhaps has completed remediation). Please incorporate the most recent datasets (if available) into the next revision of this SAP and edit the text where necessary that describes that remediation has already been conducted prior to sampling (this includes the DQOs section). It is strange from a conceptual site model (CSM) perspective to develop a SAP when remediation is incomplete.

Response: *Mass-scale remediation of the First Eight Rows sub-area is now complete as of the date of the revised SAP submittal. Although BRC has obtained initial results of confirmation sampling for a portion (Phase I, also referred to as 7A) of the First Eight Rows, BRC will complete the collection of the remaining confirmation samples (for Phase II or 7B) and also conduct some additional step-out sampling at certain locations in 7A (based on the initial results). All of these confirmation datasets, collected after removal of the mass contamination, will be used in the risk assessment for closure. It is premature and confusing to provide these data in the revised SAP, as this SAP is the plan for these confirmation samples.*

In general, it is not a unique situation for a SAP to be prepared prior to completion of remediation; BRC expects that remediation will not be complete for the remaining sub-areas (i.e., Spray Wheel, TIMET Ponds, and Staging sub-areas) until after the associated SAPs are generated.

The Closure reports for a given sub-area will include detailed summaries of post-remediation sub-area conditions. Because of this, BRC feels that it is confusing to include "current" (i.e., in-progress remediation) summaries of chemical occurrence patterns at the Site simply because this is a moving target.

The primary purpose of the chemical occurrence summaries in the SAPs is to describe the known nature and extent of impacts from historical site operations. This information is then used to identify the need for additional biased sampling locations to augment the sample locations proposed as part of the SAP, such that all potential source areas are addressed. Assuming the general nature and extent of impacts is known based on historical sampling data, post-remediation conditions at the First Eight Rows sub-area would not be likely to materially affect the placement of biased samples. If anything, post-remediation conditions would likely trigger a

smaller number of biased sampling points as compared to pre-remediation conditions. Section 4.1 of the SAP has been revised to note that if currently unknown impacted areas are identified during remediation, BRC will: 1) inform NDEP regarding the presence of these areas; 2) evaluate the need for additional biased sampling points to address those areas; and 3) modify the sampling program as needed, with NDEP concurrence.

The original SAP text makes note of the on-going remediation in numerous locations throughout the report; however, in response to NDEP's comment, the text has been revised in Section 2.8 and the DQO section (Sections 3.1.1 and 3.1.4) to clarify that remediation will have been completed prior to SAP sampling. In addition, the purpose of the SAP (Section 1.1) has been refined in response to this comment.

3. General comment, there is a great deal of reference to the removal of stockpiled soils and disposal in the CAMU. Please incorporate or better reference the supporting documents that point to these removals.

Response: *At this point in the CAP remediation process, the only documents that specifically document stockpile removal from Eastside and disposal in the CAMU are daily progress reports and monthly Interim Status Reports submitted to NDEP. As specified in the CAP, remedial activities for a given sub-area will be documented in the Closure Report prepared at the conclusion of remediation at that sub-area. The First Eight Rows SAP has been revised in Section 2.5 to generally direct the reader to these documents.*

4. General comment, please discuss how BRC intends to evaluate the First Eight Rows Sub-Areas. Will the area be evaluated as one unit (i.e., Phase I + Phase II); evaluated separately; or is BRC leaving both options open? The next revision of this SAP should include more information that will outline what is planned for these sub-areas other than what is included in Section 3.4.2.

Response: *The First Eight Rows SAP has been revised in Section 1.0, page 1-1, to clarify that Phase I and II of the First Eight Rows may be evaluated as one or two units. BRC will make that determination based on the results of the sampling performed in accordance with this SAP.*

5. General comment, it is unclear what wastes were stored in ponds PUB-05, PUC-04, and PUD-04. These ponds are highlighted on Figure 7, but they are not described in the text. Please clarify. Also on this figure, pond PUD-08 is highlighted as an excavated waste holding area in the text but is not highlighted on the figure.

Response: *The listing in the text of excavated waste holding areas in the text has been revised to be consistent with the highlighting in the figure; both the text and figure have been revised to more accurately reflect the locations of the secure holding areas. Specifically, PUB-05 and PUC-04 have been added to the text as holding areas, references in the text to holding areas in cells PUA-10, PUB-10, and PUC-08 have been removed, and the highlighting of cells PUA-10, PUB-10, and PUC-08 has been removed from the figure. It should be noted that BRC found no references in the text to pond PUD-08 having been a holding area.*

6. General comment, in future SAP submissions, please refer to a specific NDEP leaching-based Basic Comparison Level (LBCL, DAF 1 or DAF 20) when discussing in the text. It is difficult to know which one BRC is referring to when grouping both into the phrase “the LBCL”.

Response: *The First Eight Rows SAP has been revised to reflect the use of the term LBCL when referencing these terms generically, and the use of the term LBCL_{DAF1} when referring to the value against which chemical detections were compared (Section 2.8).*

7. General comment, it is unclear in Section 4 whether the sampling design will be applicable to this sub-area now that the site has been scraped. Please clarify if sampling will be conducted as described in this Section given the current status of the Site or if the approach will be modified based on observations of contamination noted during remediation. For example, if there was a section of the sub-area that was far more contaminated than previously expected additional biased sampling may be warranted.

Response: *BRC believes that the sampling design is still applicable to the Site. As noted in the response to Comment #2, Section 4.1 of the SAP has been revised to allow for the possibility that currently unknown impacted areas may be identified during remediation, and that additional biased sampling points may be needed. However, since the mass remediation is now complete, any such areas will be addressed in subsequent re-scrape plans and sampling pursuant to such plans.*

8. Section 1.0, last paragraph (and also Figure 9), please clarify why there are no biased sample locations in the ditches.

Response: *As seen in Footnote 9 in Section 2, the portion of the Beta Ditch that forms the western boundary of the sub-area has been assigned to the TIMET Ponds sub-area. There are no ditches within the First Eight Rows sub-area. The text has been revised (in Section 1.0 and various other locations) to clarify this, and to remove references to biased sampling within ditches.*

9. Section 2.5, it is suggested that a new Section 2.5.5. be added. This Section should discuss the excavations and remediation that was conducted within this sub-area. In addition, a separate Figure should be added to clarify this. This Section should explicitly discuss the excavation of soil associated with this sub-area as well as the use of this sub-area as a drying field for the former TIMET ponds wastes.

Response: *Section 2.5.4 discusses the use of the Site as a drying field for the TIMET pond contents. Section 2.5.5 has been added to discuss in general terms the recent (2009) remediation performed at the Site. Details of that remediation (including figures as appropriate) will be presented in the remediation completion report that will be submitted upon finalization of remediation.*

10. Figure 9, the NDEP has the following comments:

- a. The Utility Corridor sub-area is not clearly removed from the sub-area of interest in this SAP. The Utility Corridor sub-area relationship to the Beta Ditch location should also be clarified.
- b. The location of the Beta Ditch is not apparent on this Figure relative to the southern portion of the sub-area.
- c. It is not clear why only the May 2008 soil removal areas are shown. As noted above, it is suggested that a separate Figure be developed which explicitly shows the remediation that has been conducted within this sub-area.

Response: Figure 9 in the revised SAP has been modified to present the Utility Corridor sub-area (including its relationship to the Beta Ditch) and the Beta Ditch location relative to the Site boundaries. The text has also been revised in Section 2.1 to indicate that the sub-area boundary has been constructed such that the Beta Ditch serves as the boundary between the Site and TIMET Ponds sub-area, and that there is a narrow gap between that boundary and the Utility Corridor sub-area further to the east. In addition, the First Eight Rows acreage presented in the SAP has been revised to reflect the removal of the Utility Corridor sub-area from the Site.

All historical remediation areas within the sub-area (that is, prior to the recently completed mass-scale remediation) are shown on Figure 7.

11. Appendix C, general comment, it is noted that a vast majority of the surface soils data has been excavated as part of the remediation that has been conducted (or is still on-going). In addition, some of the sub-surface data has also likely been removed. It is requested that additional Figures (within this Appendix or as a separate Appendix) be developed to represent the post-remediation conditions that are being investigated. NDEP understands and accepts that there will not be much data to present on these Figures, however, this is a good justification/explanation for this SAP.

Response: Figures showing chemical-specific occurrence patterns under post-remediation conditions will be included in the Closure Report for the sub-area.

~~REDLINE/STRIKE-OUT TEXT~~

1.0 INTRODUCTION

Basic Remediation Company (BRC) has prepared this Sampling and Analysis Plan (SAP) for the First Eight Rows sub-areas (Phases I and II combined). The SAP describes tasks for performance of confirmation sampling of Site soils and soil vapor flux in order to obtain a no further action determination (NFAD) for these areas. The term NFAD is defined in the *Settlement Agreement and Administrative Order on Consent: BMI Common Areas, Phase 3* (AOC3; Nevada Division of Environmental Protection [NDEP] 2006) in Section XVII.

This ~~revision~~~~initial version~~ of the SAP, Revision 1, incorporates comments received from the NDEP, dated August 24, 2009, on Revision 0 of the First Eight Rows SAP, dated July 2009~~all previously submitted BMI Common Areas (Eastside) sub-area SAPs~~. The NDEP comments and BRC's response to these comments are ~~not included in Appendix A. Also included in;~~ however, Appendix A is ~~provided as a~~ redline/strikeout version of the text showing the revisions from the July 2009 version of the SAP~~placeholder for consistency with these previous sub-area SAPs~~. An electronic version of the entire report, as well as original format files (MS Word and MS Excel) of all text and tables are included in Appendix B.

The First Eight Rows sub-areas represent two of several sub-areas of the BMI Common Areas (Eastside) located in Clark County, Nevada (Figure 1), and encompasses an area of approximately 201.5~~203.7~~ acres¹ (Figure 2). For development purposes, it has been divided into two separate areas that will be addressed on separate schedules: the southeastern half (Phase I sub-area), which comprises approximately 77.12 acres, and the northwestern half (Phase II sub-area), which comprises approximately 124.4~~126.5~~ acres. BRC will determine whether the two development parcels are to be evaluated for closure as a single unit or separately based on the results of the sampling that will be performed in accordance with this SAP. For the purpose of this SAP, the area associated with both Phases will hereinafter be referred to collectively as the "Site," and distinctions between the portions of the Site associated with each Phase will be made when appropriate.

The Site includes unlined wastewater effluent evaporation/infiltration ponds ~~(and an associated conveyance ditch)~~ that were built and into which various plant wastewaters were discharged from 1942 through 1976. This SAP relies upon information provided in the *BRC Closure Plan* for the BMI Common Areas (BRC *et al.* 2007; hereinafter "Closure Plan"). The main text of the

¹ This acreage estimate reflects a change from that presented in the Closure Plan (208.2 acres) that has resulted from the revision of site boundaries that occurred subsequent to Closure Plan finalization.

Closure Plan provides discussions of the following elements relative to the BMI Common Areas project as a whole:

- The project history, including cleanup goals and project objective (Closure Plan Sections 1 and 2);
- The list of ~~Site~~site-related chemicals (Closure Plan Section 3);
- The conceptual site model (CSM) addressing potential contaminant sources, the nature and extent of chemical of potential concern (COPC) occurrence, and potential exposure pathways (Closure Plan Section 4; a CSM discussion specific to the Site is provided in Section 2 of this SAP);
- Data verification and validation procedures (Closure Plan Section 5);
- The procedures used to evaluate the usability and adequacy of data for use in the risk assessment (Closure Plan Sections 6 and 9);
- The data quality objectives (DQOs; Closure Plan Section 7; a DQO discussion specific to the Site is provided in Section 3 of this SAP);
- The remedial alternative study process for the Site (Closure Plan Section 8);
- Risk assessment procedures that will be used for Site closure (Closure Plan Section 9 for human health and Section 10 for ecological); and
- Data quality assessment (DQA; Closure Plan Section 5).

~~Mass-scale remediation has recently been completed. Remediation is currently being conducted~~ based on existing Site data, prior to conducting the ~~confirmation samplingsite characterization activities~~ proposed under this SAP (see Section 2.8). Therefore, risk assessments for the Site will be conducted primarily using the data collected as part of this SAP, which has been designed to produce data representative of the conditions to which current (non-remediation workers) or future users would be exposed. The need for additional remediation will be primarily based on the data collected based on this SAP.

Validated, reliable historical data associated with areas or depth intervals not affected by the remediation will be used as appropriate to augment the dataset derived from the SAP activities.² However, the following data gaps associated with the existing Site characterization have been identified: many of the previous samples were composite samples; most of the previous soil samples from within the uppermost 10 feet below ground surface (bgs) were collected at least eight years ago; few of the previous samples have been analyzed for all of the major chemicals or chemical families and several analyses used different analytical methods than established in the current analytical program for the BMI Common Areas; no vapor flux samples have been collected; and spatial coverage of the Site is incomplete. Much of the historical data is associated with soil intervals that will be excavated during remediation and will not represent conditions to which future ~~Site~~^{site} users would be exposed. Furthermore, the historical data represent incomplete coverage for certain constituents and will be redundant for others after implementation of this SAP. Therefore, BRC anticipates that the historical data will not generally be included in the risk assessment. However, a data usability evaluation will be conducted to determine whether any of the historical data can or should be used in the risk assessment or it will be explained why the new data supplants the old data. These historical data are useful for CSM purposes and are discussed in Section 2.0.

Sampling performed as described in this SAP relies on the statistical methodologies presented in the *Statistical Methodology Report* (NewFields 2006). The Statistical Methodology Report describes the statistical methods that will be used to confirm the final soils closure at each of the Eastside sub-areas of the BMI Common Areas.

The SAP presents sampling procedures that will be performed to assess ~~site~~^{site} conditions in soils and soil vapor flux at the Site after remediation has been performed. As described in the Closure Plan, this information will be used to determine potential impacts to current (non-remediation workers) or future Site users from chemicals present in ~~Site~~^{site} soils and whether additional remediation is needed to achieve cleanup goals. In this SAP, as recommended in the Statistical Methodology Report, soil samples will be collected throughout the Site on a systematic sampling basis. ~~This random sampling consists, consisting~~ of a regular 3-acre grid overlay across the property with a randomly placed sample within each grid cell. ~~The goal of this sampling is~~ to provide enough samples for 1) completion of a statistically robust assessment of contaminant distribution, and subsequently; 2); to provide a robust dataset upon which to perform a human

² Only those historical data that are representative of the conditions to which current (non-remediation workers) or future users would be exposed (*i.e.*, excluding data associated with soils removed from the Site prior to the risk assessment) and that pass a data usability evaluation will be included in the risk assessment for the Site.

health risk assessment. Additional biased sampling locations will be selected within or near small-scale contamination points of interest, including but not limited to previous debris locations, ponds, and berm walls, ~~and the conveyance ditches~~. Soil vapor flux samples will be collected from a subset of the soil sampling locations (that is, one sample within each grid cell).

1.1 PURPOSE OF THE SAP

The purpose of this SAP is to develop a sampling program for the Site that will provide an understanding of pre-development ~~evaluate~~ soil and soil vapor conditions (including any indirect impacts from underlying groundwater) ~~that may have been impacted~~ at the Site.³ Portions of the Site are known to be impacted with chemicals as a result of historical Site operations, from former activities and without performing a formal risk assessment; BRC assumes that remediation would be required for protection of human health and the environment. As a result, mass-scale remediation has recently been completed in accordance with the Corrective Action Plan (CAP; BRC 2006) based on existing Site data, prior to conducting the confirmation sampling proposed under this SAP (see Section 2.8). BRC expects that risk assessments for Site closure will primarily use the data collected as part of this SAP, which has been designed to produce data representative of the conditions to which current users (i.e., those existing after remediation is performed) or future (post-development) users would be exposed. Data collected under this SAP will also be used to assess the need for additional remediation beyond what has been performed in advance of the SAP sampling.

~~adjoining lands.~~ The scope of this investigation is limited to soil and soil vapor flux sampling in an effort to assess issues that might directly impact Site development potential consistent with the Closure Plan. However, the data will be used to determine any impacts to groundwater from future ~~Site~~ site uses. That is, data will be collected to evaluate the soil-to-groundwater leaching pathway. The objective of the field investigation is to identify and characterize the distribution of Site-related chemicals (SRCs) such that the potential impacts from chemicals present in ~~Site~~ site soils to current (non-remediation workers) and future Site users can be determined through risk assessment. Surface and subsurface samples that will be collected are depth-discrete soil matrix samples and surface vapor flux samples. Although this SAP does include data collection for

³ This SAP includes summaries of chemical data associated with historical sampling events at the Site. These summaries document the known nature and extent of chemical occurrence at the Site, which was used to identify the need for additional biased sampling locations to augment the sample locations proposed as part of the SAP (Section 4), such that all potential source areas are addressed. This SAP includes a process for adding sampling locations in response to the discovery of currently unknown impacted areas, if any, that may be identified during remediation.

evaluating groundwater as a potential source to the vapor intrusion pathway, it does not address potential groundwater issues, which are being investigated separately by BRC pursuant to AOC3 (NDEP 2006) as part of an overall evaluation of the BMI Common Areas. The investigation is designed to provide sufficient data to support risk-based decisions (including decisions to seek an NFAD) for the Site. The NFAD for the Site will contain a deed restriction precluding potable use of groundwater beneath the Site.

2.0 CONCEPTUAL SITE MODEL

The following sections provide information about the Site, previous investigations that have been conducted at the Site, interim remedial measures (IRMs) that have occurred, and the existing Site dataset. An overview of the CSM for the Site is provided in the Closure Plan. Consistent with the structure of prior SAPs, this section includes a summary of the investigations performed at the Site during the following primary project phases: prior to IRM performance (Section 2.4); during or immediately following any IRMs (Section 2.6); and subsequent to IRM performance (Section 2.7).

2.1 SITE DESCRIPTION

The Site (Figure 2) is approximately ~~201.5~~203.7 acres in size,⁴ and is gently sloping to the northeast. As noted in Section 1, it has been divided into two separate areas: the southeastern half (Phase I sub-area), which comprises approximately 77.~~12~~ acres, and the northwestern half (Phase II sub-area), which comprises approximately ~~124.4~~126.5 acres. Both sub-areas within the Site contain unlined wastewater effluent evaporation/infiltration ponds⁵ and a portion of an associated conveyance ditch forms the western boundary of the Phase II sub-area.⁶ These features were once associated with historical conveyance and/or disposal of operations effluent and cooling water by companies operating at the BMI Complex. The former effluent ponds comprise the entirety of the Site except (1) a thin strip of land in the Phase I sub-area just south of the southernmost row (Upper Pond row UA, see Figure 1), and (2) a small plot of land immediately east of Upper Pond row UG in the Phase I sub-area (see Figure 1). The individual ponds (approximately 2 to 6 acres in size) are distinct and defined by berms along the north, east, and

⁴ This delineation of two separate Phases and the associated acreage estimate reflect a change from the Closure Plan that has resulted from the revision of site boundaries that occurred subsequent to Closure Plan finalization. The First Eight Rows combined acreage has decreased from the 208.2 acres presented in the Closure Plan

⁵ The Closure Plan and historical documents associated with the BMI Common Areas distinguish two primary sets of ponds in the Common Areas that are associated with historical conveyance and/or disposal operations: the “Upper Ponds” and the “Lower Ponds”. The pond row labels shown on Figure 1 distinguish between the two; the 18 rows of Upper Ponds are labeled with a “U” followed by a letter (A through R) and the ten rows of Lower Ponds are labeled with an “L” followed by a letter (A through J). The Upper Ponds are the basis of the name applied to the Upper Ponds sub-area; but the Upper Ponds sub-area does not encompass all of the Upper Ponds, rather only the northern half of the Upper Ponds, which had little to no historical usage (the southern portion of the Upper Ponds are within the First Eight Rows [Phases I and II], TIMET Ponds, and Spray Wheel sub-areas). The Lower Ponds are located further north on the BMI Common Areas, within the Western Hook-Development and Western Hook-Open Space sub-areas, and were previously located within the footprint of the City of Henderson WRF prior to its construction, during which they were regraded.

⁶ Note that this ditch is not included within the Site, but falls within the boundaries of the TIMET Ponds sub-area.

west sides. In general, the berms are relatively uniformly-shaped, often with angular corners showing little evidence of erosion.

As seen on Figures 1 and 2, the Utility Corridor sub-area transects the southwestern corner of the Site (both sub-areas) and then runs along the western boundary of the Site (Phase II sub-area) adjacent to the Beta Ditch before extending off-site into the Spray Wheel sub-area. There is a narrow gap between the Site boundary and the Utility Corridor sub-area further to the east. The Utility Corridor sub-area consists of a 50-foot wide ditch, which starts at the sewer alignment excavation north of Parcel 4B, and extends through the Staging, First Eight Rows, Spray Wheel, Upper Ponds, and Galleria North sub-areas until it meets up with the tie-in location at the City of Henderson Water Reclamation Facility (WRF) (see Figure 1). The Utility Corridor sub-area was defined subsequent to the final BRC Closure Plan to allow expedited characterization and remediation in order to facilitate the installation of a new 48-inch sewer line along this alignment. An NFAD was received from NDEP for the Utility Corridor sub-area on January 8, 2009, for commercial or industrial land use for site soils above 10 feet below ground. Detailed discussions and data presentation/review for the Utility Corridor sub-area are presented in the *Data Review and Human Health Risk Assessment for the Utility Corridor Sub-Area* (BRC 2009a; In Revision).

The Site was undeveloped desert land until the construction of the effluent evaporation/infiltration ponds ~~and associated conveyance ditches~~, into which various plant wastewaters were discharged from 1942 through 1976. Evidence in later aerial photographs from 1978 and 1980 indicates that effluent was subsequently discharged into some of the former ponds at the Site from ponds located where the Southern Rapid Infiltration Basins (RIBs) were later constructed by the City of Henderson for municipal wastewater treatment. Later aerial photographs (1987 and beyond) show no evidence of continued discharges to the Site from the Southern RIBS area. It is assumed, but cannot be confirmed, that this discharge was associated with City water treatment operations. Based on the aerial photographs from 1978 and 1980, former ponds receiving effluent during that period were in the southwestern quadrant of the Site (*i.e.*, the first four rows of Ponds, locations closest to the Beta Ditch) and the Staging sub-area to the south. The effluent appears to have been discharged to the Site via a portion of the Beta Ditch.

Since the early to mid-1980s, the Site has been vacant and unused, except for temporary stockpiling of soils excavated from other Eastside areas, as discussed later in this section. The native soils are compacted, poorly-sorted, non-plastic, light brown to red silty sand with varying

amounts of gravel. Within individual effluent evaporation/infiltration ponds, surficial material consists of very fine material that grades in color from greenish-gray to light yellowish-brown; in places, the ground surface is white. This discolored material has been interpreted to be residual sediment associated with historic effluent disposal in the ponds. This material/discoloration is evident in many effluent evaporation/infiltration ponds contained within the Site. The presence of this material is consistent with the use of these former ponds for historical wastewater discharge, which is further supported by historical aerial photographs that show evidence of fluids within the ponds.

Exposures to current receptors (*i.e.*, trespassers/visitors, occasional on-site workers, and off-site residents) are being managed through ~~Site site~~ access control. Under the prospective redevelopment plan, the Site may be used for a variety of potential purposes. Residential land use (low, medium and high density) with roads, parks and trails interspersed, is currently planned for the majority of the Site. A school land use is also planned for the southwestern corner of the Phase I sub-area. The entire Site will be enhanced by restoration and redevelopment once remediation is complete. Therefore, exposures to ecological receptors will be mitigated or removed (see Section 10 of the Closure Plan). Future receptors identified as “on-site receptors” are defined as receptors located within the current Site boundaries (Figure 2), while future “off-site receptors” are those located outside the current Site boundaries. Many potential human receptors are possible at the Site in the period during and after redevelopment. The potentially exposed populations and their potential routes of exposure are discussed in Section 9 of the Closure Plan.

The current development plan for the Site is shown on Figure 3. To construct commercial facilities, the land will be cut and/or filled, paved with roads or foundations, and nurtured with imported soils from other areas within the Common Areas⁷ as needed. Figure 4 shows the current grading plan for the Site, indicating which areas will be filled and which areas will be cut.

Because the background general water quality (*i.e.*, high salt concentrations) of the groundwater beneath the Site and in the surrounding area is poor and because BRC will place institutional controls in the form of a deed restriction to prevent future users from utilizing groundwater beneath the Site, the use of private water wells by residents, businesses, or parks for drinking

⁷ Note: Imported soil data will not be included in risk assessment calculations. However, the chemical data for fill material from the Site may be useful for evaluating sub-areas to receive this fill (that is, imported fill that may be used at the Site will have been included in risk assessments for sub-areas where the fill was obtained).

water, irrigation water, or other non-potable uses (e.g., washing cars, filling swimming pools) will not occur in the post-redevelopment phase.

Although direct exposures to groundwater will not occur; indirect exposures are possible. The primary indirect exposure pathway from groundwater is the infiltration of volatile organic compounds (VOCs) and radon from soil and groundwater to indoor air. In addition, residual levels of chemicals in soil may leach and impact groundwater quality beneath the Site. Collection of data to evaluate both of these migration pathways at the Site is presented in this SAP.

The Site is surrounded on all sides by Eastside sub-areas as follows:

- | | |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| North | • The Upper Ponds sub-area (approximately 281.6 <u>283.3</u> acres ⁸) |
| South | • The Staging sub-area (approximately 126.2 <u>145</u> acres ⁹); and |
| | • Parcel 4B sub-area (approximately 278.4 acres) |
| East | • The Mohawk sub-area (approximately 54.7 acres ¹⁰) |
| West | • The TIMET Ponds sub-area (approximately 209.9 acres), on a portion of which TIMET constructed lined evaporation ponds, into which it flowed effluent from its titanium manufacturing process from 1983 to 2005; ¹¹ and |
| | • The Spray Wheel sub-area (approximately 125.6 <u>128.7</u> acres), which is the former site of an evaporative agricultural-type mechanism operated by TIMET for the evaporative disposal of aqueous salt waste from 1983 to 1991. |

Chemicals historically detected in these sub-areas are similar to those found at the Site.

⁸ This acreage estimate reflects a change from that presented in the Closure Plan (284.5 acres) that has resulted from the revision of site boundaries that occurred subsequent to Closure Plan finalization.

⁹ Subsequent to Closure Plan finalization, the former Southern RIBs sub-area (245.1 acres as defined in the Closure Plan) was separated into a smaller Southern RIBs sub-area (~~84.2~~95.8 acres) and the Staging sub-area (~~126.2~~145 acres), and the property west of Boulder Highway was removed from this sub-area.

¹⁰ This acreage estimate reflects a change from that presented in the Closure Plan (49.2 acres) that has resulted from the revision of site boundaries that occurred subsequent to Closure Plan finalization.

¹¹ A portion of the Beta Ditch forms the border between the TIMET Ponds and First Eight Rows sub-areas. This portion of the Beta Ditch will be evaluated as part of the TIMET Ponds sub-area.

The phased remediation schedule for Eastside calls for the Mohawk, Upper Ponds, and Parcel 4B sub-areas to be remediated concurrent with or prior to the Site. The NDEP concluded in 1997 that no further characterization of the Parcel 4B sub-area was required and that development could proceed without environmental restriction. However, subsequent to this decision, additional sampling and analysis was conducted in 2007, supplemented by additional sampling in 2008. Following the first round of sampling in 2007, surface soil was scraped and removed from several areas within the Parcel 4B sub-area followed by additional sampling. A screening-level human health risk assessment has been conducted for this sub-area, currently in review by NDEP, to determine whether re-affirmation of the NFAD for Parcel 4B is warranted. Remediation is currently on-going at the Mohawk sub-area, and is expected to be completed in Summer 2009, to be confirmed by a human health risk assessment. This process will also be conducted for the Upper Ponds sub-area after sampling is performed in accordance with the SAP for that area (BRC 2009b; approved by NDEP on May 18, 2009) to delineate locations requiring remediation.

Remediation of the other adjacent sub-areas (TIMET Ponds, Spray Wheel, and Staging sub-areas) is scheduled to be finalized after remediation of the Site. Based on historical sampling, and as will be presented in the SAPs for those sub-areas, soils in these sub-areas contain chemicals at concentrations greater than applicable comparison levels for protection of human health and groundwater protection (see Section 2.8). Remediation at those adjacent sub-areas involves major earth-moving activities and could result in a significant amount of airborne dispersion and/or overland runoff that could adversely affect Site conditions if mitigation measures were not employed. However, potential~~Despite this timing,~~ impacts from these areas to the Site are considered negligible because dust suppression/mitigation measures and storm water pollution prevention controls have been implemented at each sub-area undergoing remediation since remediation initiation are being—and will be implemented during future remediation activities¹². These dust suppression controls are implemented to comply with applicable air quality regulations and to impede the generation of airborne dust due to intrusive on-site activities. These control measures are discussed in detail in the ~~Corrective Action Plan (CAP~~ (BRC 2006). In addition, emissions of particulate matter from the ~~Site~~site are being monitored by

¹² The possibility exists that airborne dispersion and/or overland transport of surface soils/sediments from other adjacent sub-areas could have historically resulted in contamination at the First Eight Rows sub-areas. However, if this was in fact the case, the nature and extent of associated impacts would be evident from historical surface soil data, and/or the data to be collected under this SAP. The need for remediation of the First Eight Rows sub-areas will be based on current chemical concentrations in Site soils regardless of the source of contamination, and including airborne dispersion and overland transport, if any.

BRC as described in the *Perimeter Air Monitoring Plan* (BRC 2008) to assess the effectiveness of these dust control measures.

At the time of this SAP submittal, the contents of the lined ponds in the TIMET Ponds sub-area are being excavated and transported to the Corrective Action Management Unit (CAMU) for disposal. For certain ponds, dewatering is being performed to reduce the moisture content to a level appropriate for placement into the CAMU. The Site has been used as a temporary staging area for these activities prior to the soils being transported to the CAMU. Some temporary stockpiles created during these staging activities are evident as darkened areas on the aerial photograph provided in Figure 2, but these stockpile locations within the Site have since been removed.

2.2 SURFACE WATER

Surface water flow occurs for brief periods of time during periodic precipitation events. The nature of the unlined wastewater effluent evaporation/infiltration ponds and their construction currently serve to reduce overland transport of surface waters collected within the former Ponds area. Under current conditions, it is unlikely that contaminants in surface waters generated within the Site will migrate via overland transport to the Las Vegas Wash from the Site due to (1) the distance to the Wash (greater than one mile); and (2) the intervening presence of the Weston Hills and Tuscany developments and northern RIBs between the Site and the Wash. However, the presence of the drainage ditch along the western boundary of the Site (Phase II sub-area) suggests the current potential for rainfall to be carried from the Site to the Wash.

After development there will continue to be a low likelihood that contaminants in surface waters generated within the Site will migrate via overland transport to the Las Vegas Wash from the Site, because of (1) the removal of the Beta Ditch during remediation; (2) the large distance to the Wash; (3) the intervening presence of other developed properties; and (4) storm water features as part of the future development of the Site.

2.3 GEOLOGY/HYDROGEOLOGY

As is common throughout the Las Vegas Valley, Site soils are primarily sand and gravel, with occasional cobbles. This is consistent with the depositional environment of an alluvial fan. The Site is located on alluvial fan sediments, with a surface that slopes to the north-northeast at a gradient of approximately 0.02 foot per foot (ft/ft) towards the Las Vegas Wash. Regional drainage is generally to the east.

The uppermost strata beneath the Site consist primarily of alluvial sands and gravels derived from the River Mountains and from the volcanic source rocks in the McCullough Range, located to the southeast and southwest of the Site, respectively. These uppermost alluvial sediments were deposited within the last two million years and are of Quaternary age, and are thus mapped and referred to as the Quaternary alluvium (Qal; Carlsen *et al.* 1991). The Qal is typically on the order of 30 to 50 feet thick at the Site with variations due, in part, to the non-uniform contact between the Qal and the underlying Upper Muddy Creek Formation (UMCf).

The UMCf underlies the Qal. The Muddy Creek formation, of which the UMCf is the uppermost part, is a lacustrine deposition from the Tertiary Age, and it underlies much of the Las Vegas Valley. It is more than 2,000 feet thick in places. The lithology of the UMCf underlying the Site is typically fine-grained (sandy silt and clayey silt), although layers with increased sand content are sporadically encountered. These UMCf materials have typically low permeability, with hydraulic conductivities on the order of 10^{-6} to 10^{-8} centimeters per second (Weston 1993). The UMCf in the vicinity of the Site was encountered at depths ranging from 35 feet to 75 ft bgs, and extending to the maximum explored depth of 400 feet bgs. Lithologic cross sections using Site-specific stratigraphic information are shown on Figures 5 and 6.

Two distinct, laterally continuous water-bearing zones are present within the upper 400 feet of the Site subsurface: (1) an upper, unconfined water-bearing zone primarily within the Qal (referred to as the Shallow Zone¹³), and (2) a deep, confined water-bearing zone that occurs in a sandier depth interval within the silts of the deeper UMCf (referred to as the Deep Zone). Between these two distinct water-bearing zones, a series of saturated sand stringers were sporadically and unpredictably encountered during drilling (referred to as the Middle Zone).

The Shallow Zone is an unconfined, shallower, water-bearing zone that occurs across the BMI Common Areas. Within the Site boundaries, water in the Shallow Zone occurs in the Qal. The water surface in the Shallow Zone generally follows topography, with the water surface sloping towards the Las Vegas Wash. According to recent groundwater monitoring performed in April-May 2008 (BRC and MWH 2008) the depth from the surface to first groundwater at the Site is approximately 60 feet bgs. Wells completed in the Shallow Zone are not highly productive, with sustainable flows typically less than five gallons per minute. Chemical occurrence within this

¹³ Note: hydrogeologic and lithologic nomenclature is based on NDEP (2009a).

water-bearing zone, based on recent monitoring data associated with wells installed within and in the vicinity of the Site, is discussed in Section 2.9.¹⁴

Groundwater seeps currently exist at various locations within the Common Areas near the Las Vegas Wash. However, an evaluation of historical aerial photos taken between 1964 and 1970 indicates that seeps have historically appeared to the north of the Site (in the Western Hook-Open Space, Galleria North, and Sunset North Commercial sub-areas), and at nearby off-site locations, but not in the Site itself. Evidence of seeps was not observed in aerial photographs after 1972. The extent to which these former seeps historically affected contaminant transport (e.g., by means of enhanced surface water transport to the Wash or upward migration into overlying soils) is unknown.

2.4 HISTORICAL SITE INVESTIGATIONS PRIOR TO IRM PERFORMANCE

Shallow soil samples were collected within the Site prior to initiation of the above-referenced IRM activities during the following separate events (see Figure 2 for sample locations; the results of these field sampling events are summarized in the database excerpt provided in Appendix B):

- The BMI Common Areas Environmental Conditions Investigation (ECI) conducted during March and April 1996 (dataset 1a). The soil investigation activities were performed in accordance with a work plan approved by NDEP in February 1996 (ERM 1996a). The soil sampling results for the investigation activities were presented in the ECI report (ERM 1996b), which was approved by NDEP in March 1997. Data validation results are presented in the Data Validation Summary Report (DVSR) for dataset 1a (ERM 2006a), which was approved by NDEP on September 12, 2006; and
- Supplemental soil investigation conducted in November 1998 (dataset 6b) in the Upper Ponds. During this sampling event, soil samples were collected from three locations within the Site and analyzed for various ~~Site~~site-related chemicals and for pesticides and/or radionuclides by the toxicity characteristic leaching procedure (TCLP). These data were not collected under a formal NDEP-approved work plan. Data validation results are presented in

¹⁴ Chemical occurrence in both the shallow and deep water-bearing zones beneath the Eastside and CAMU areas is currently being characterized under a process separate from the Closure Plan process under which this SAP has been prepared, which focuses on site soils. This SAP summarizes chemical occurrence trends in the shallow water-bearing zone, which is more likely to affect potential users under current and future land uses. A more detailed presentation of chemical occurrence patterns within both zones will be provided upon completion of the on-going groundwater investigation, and the CSM for the Eastside and CAMU areas will be updated accordingly.

the DVSR for dataset 6b (ERM 2006b), which was approved by NDEP on October 25, 2006.

During these investigations, soil samples at various depths were collected and analyzed for VOCs, semi-volatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), organochlorine pesticides, polychlorinated biphenyls (PCBs), metals, perchlorate, and/or radionuclides. As seen on Figure 2, the majority of these samples were composite samples. The results of these field sampling events are provided in the database excerpt provided in Appendix B, and are summarized in Section 2.8. No pre-IRM samples were collected in the Site within the footprint of the Mohawk IRM (discussed on the next section).

2.5 INTERIM REMEDIAL MEASURES (IRMs)

This section describes the various on-site and off-site IRMs affecting the Site that have been performed to date by BRC as part of the overall Eastside remediation effort. Soils excavated in 1999 and 2000 during IRMs conducted within the Mohawk¹⁵ and Western Hook sub-areas were transported to the Site and placed in secured locations within the First Eight Rows sub-areas in accordance with approved IRM work plans (ERM 1999a and 1999b). At that time, those soils were treated to prevent generation of wind-blown dusts and runoff. Excavated soils associated with ~~these IRMs~~~~the Mohawk IRM~~ were stockpiled within former effluent ponds PUA-04, PUB-04, ~~PUB-05~~, PUC-03, ~~PUC-04~~, ~~PUD-03~~, and ~~PUD-04.03~~, ~~whereas the stockpile area for the Western Hook area soils was within former effluent ponds PUA-10, PUB-10, and PUC-8~~. Figure 7 depicts these initial stockpile areas and additional stockpile areas established to hold soils subsequently excavated from other portions of the Common Areas. Activities associated with stockpile removal from Eastside and disposal in the CAMU are documented in daily progress reports and monthly Interim Status Reports that are regularly submitted to NDEP. As specified in the CAP, remedial activities for a given sub-area will be documented in the Closure Report prepared at the conclusion of remediation at that sub-area. As such, interim stockpile storage, removal, and disposal in the CAMU will be discussed in the sub-area-specific Closure Reports. These IRMs are described in more detail below.

¹⁵ Soils excavated during the Mohawk IRM included some from areas within the Site (eastern edge of Phase I sub-area, see Figure 7).

2.5.1 On-Site Excavation during Mohawk IRM

To expedite restoration of the Site in response to development demands, in 1999/2000 BRC elected to perform an IRM in the Mohawk sub-area, which is adjacent to the Site to the east. The majority of the IRM was performed during October and November of 1999, with the balance completed by March 2000. As seen in Figure 7, four former effluent ponds along the shared boundary are partially contained within the Mohawk and First Eight Rows (Phase I) sub-areas: PUA-03, PUB-03, PUC-02, and PUD-02 (Figure 7). Because the Mohawk IRM extended the full length of the impacted ponds without regard for sub-area boundaries, the Mohawk IRM also addressed the portions of these shared ponds that were included within the First Eight Rows sub-areas. The IRM was performed following the procedures specified in the *Mohawk Area IRM Workplan* (ERM 1999a), which was approved by NDEP on July 23, 1999. IRM activities consisted of:

- Excavation of the impacted shallow soils (a total estimated 16,000 cubic yards from the Mohawk and First Eight Rows sub-areas),
- Transportation to a secured location within the First Eight Rows sub-areas (*i.e.*, within former effluent ponds PUA-04, PUB-04, PUC-03, and PUD-03), and
- Treatment to prevent generation of wind-blown dusts and runoff.

BRC's intent was that these soils would ultimately be placed into the off-site CAMU after its construction. Results of the IRM for the Site were presented in the IRM completion report (ERM 2000a); this report has not been approved by NDEP. The stockpiled soils associated with the Mohawk IRM were recently removed from the Site and transported to the CAMU.

2.5.2 Long-Term Stockpiling of Off-Site Mohawk IRM Soils

Excavated soils from six other ponds in the Mohawk sub-area (*i.e.*, PUA-01 and -02, PUB-01 and -02, PUC-01 and PUD-01) were also transported to the Site (Phase I sub-area) during the IRM described in the prior bullet. As discussed above, these excavated soils (a total estimated 16,000 cubic yards of soil from both sub-areas) were stockpiled on the Site within former effluent ponds PUA-04, PUB-04, PUC-03, and PUD-03 after the IRM was completed in 2000. The stockpiled soils associated with the Mohawk IRM were recently removed from the Site and transported to the CAMU.

2.5.3 Long-Term Stockpiling of Off-Site Sunset North IRM Soils

In 1999/2000 BRC also elected to perform an IRM in selected Lower Ponds within the former Sunset North Area, which has now been redesignated as multiple Eastside sub-areas. The IRM addressed portions of the Western Hook-Development, Sunset North Commercial and Upper Ponds sub-areas, and was performed between October 1999 and May 2000. The IRM was conducted following the procedures specified in the *Sunset North Area IRM Workplan* (ERM 1999b), which was approved by NDEP on August 27, 1999. IRM activities consisted of:

- Excavation of the impacted shallow soils (an estimated 130,000 cubic yards),
- Transportation to a second secured location within the First Eight Rows sub-areas (*i.e.*, within former effluent ponds PUA-~~0410~~, PUB-~~04~~, PUB-05, PUC-03, PUC-04, PUD-03~~10~~, and PUD-~~04.08~~), and
- Treatment to prevent generation of wind-blown dusts and runoff.
- As above, BRC's intent was that these soils would ultimately be placed into the off-site CAMU after its construction. Results of the IRM were presented in the IRM completion report (ERM 2000b); this report has not been approved by NDEP.

The stockpiled soils associated with the Sunset North IRM were recently removed from the Site and transported to the CAMU.

2.5.4 Short-Term Stockpiling of TIMET Ponds ~~and Spray Wheel~~ Soils

In the Summer 2008, remediation activities were initiated in the TIMET Ponds sub-area in accordance with the CAP, and have involved:

- Excavation of soils from various locations within this sub-area,
- Dewatering of the contents of certain ponds, and
- Transportation of those soils to either (1) the off-site CAMU, or, (2) to the Site, where they were temporarily staged prior to their ultimate disposal in the CAMU.

Some temporary stockpiles created during these staging activities are evident as darkened areas on the aerial photograph provided in Figure 7, but stockpile locations within the Site are and

have been routinely changed throughout the TIMET Pond soil staging process, and at this point have mostly been removed to the CAMU.

2.5.5 CAP Remediation Within the Site

By definition, IRMs are “interim” remedial activities conducted at a given site, performed in advance of: (1) longer-term evaluations of applicable remedial options, (2) selection of a final remedy to address conditions at that site, and (3) implementation of that remedy. As previously noted, a final remedy for the Site has been selected and the CAP has been approved by NDEP. Based on existing historical data showing the presence of elevated chemical concentrations in Site soils, BRC has completed mass-scale remediation at the Site in accordance with the CAP, in advance of conducting sampling in accordance with this SAP. Remedial activities included excavation of impacted materials from the Site and off-site transport of these materials to the CAMU, as well as the temporary use of the Site for dewatering the contents of TIMET Ponds prior to transport to the CAMU (Section 2.5.4). Details of that remediation (including figures as appropriate) will be presented in the remediation completion report that will be submitted upon finalization of remediation.

2.6 IRM-RELATED CONFIRMATION SAMPLING

Most of the IRMs referenced in the prior section involved excavation at off-site locations, and no confirmation sampling was performed at on-site locations as part of those IRMs. However, confirmation sampling was conducted within the site boundaries during one IRM: the Mohawk IRM. Four Mohawk IRM sample locations fall within the Site boundaries (Phase I sub-area): PUA-03N, PUA-03S, PUB-03N and PUB-03S. Confirmation sampling procedures associated with that IRM are summarized below.

The confirmation samples collected from each former pond were analyzed for the following: metals, perchlorate, organochlorine pesticides, radionuclides, and asbestos. Soil sampling was conducted during October 1999 (dataset 7a). As noted above, the soil sampling activities were performed in accordance with an NDEP-approved work plan (ERM 1999a). The soil sampling results for the investigation activities were presented in the IRM completion report (ERM 2000a). All data associated with the IRM confirmation sampling have been validated. Data validation results are presented in the DVSR for dataset 7a (ERM 2006c), which was approved by NDEP on October 17, 2006. The post-IRM data are also included in the database excerpt provided in Appendix B. Because no pre-IRM samples were collected within the IRM areas that

fell within the Site, it is not possible to evaluate the degree to which chemical concentrations at the Site were reduced by the IRM activities.

2.7 INVESTIGATIONS SUBSEQUENT TO IRM

Soil samples were collected within the Site after conducting the initial IRM (*i.e.*, 2000 and later) during the following separate events (see Figure 2 for sample locations; data associated with all of these sampling events are provided in Appendix B):

- Supplemental soil investigation conducted in October 1999 (dataset 6a) in the Upper Ponds. During this sampling event, soil samples were collected from the eastern and northern berms of five effluent ponds within the Site, and were analyzed for asbestos, metals, perchlorate, and/or pesticides. These data were not collected under a formal NDEP-approved work plan. Data validation results are presented in the DVSR for dataset 6a (ERM 2006d), which was approved by NDEP on October 25, 2006.
- Supplemental soil investigation conducted in October 1999 (dataset 6d) in the Upper Ponds. These data were not collected under a formal NDEP-approved work plan. Data validation results are presented in the DVSR for dataset 6d (ERM 2006e), which was approved by NDEP on October 10, 2006.
- Discrete/composite soil investigation conducted in July 2000 (dataset 8a). The soil investigation activities were performed in accordance with ERM's work plan submitted in July 2000 and approved by NDEP on July 18, 2000. The soil sampling results for the investigation activities were presented in letters to NDEP dated August 11, 2000 (soil sampling results) and August 28, 2000 (statistical analysis of results); these letters have not been approved by NDEP. Data validation results are presented in the DVSR for dataset 8a (ERM 2006f), which was approved by NDEP on October 10, 2006.
- Deep soil characterization conducted in June/July 2004 during monitoring well installation at one on-site location (SB-16-B) as part of the overall Eastside 2004 Hydrologic Characterization Investigation (dataset 27). The soil investigation activities were performed in accordance with a work plan submitted in December 2003 (MWH 2003) and approved by NDEP in January 2004. The sampling results for the investigation activities were presented in the 2004 version of the BRC Closure Plan, which was not approved by NDEP. Data validation results are presented in the DVSR for dataset 27 (MWH 2006a), which was approved by NDEP on August 31, 2006.

- Supplemental soil investigation conducted in April 2005 (dataset 33) in the vicinity of the TIMET Spray Wheel to assess chemical occurrence at depth; the only location sampled within the Site was SWB-24, which lies adjacent to the southeastern edge of the Spray Wheel sub-area. These data were not collected under a formal NDEP-approved work plan. Data validation results are presented in the DVSR for dataset 33 (MWH 2006b), which was approved by NDEP on September 26, 2006.
- Waste characterization conducted in July and August 2006 (dataset 39). The soil investigation activities were performed in accordance with BRC's SAP submitted on June 29, 2006, and approved by NDEP in July 2006. The soil sampling results for the investigation activities were previously presented in the *Remedial Action Plan* (RAP; BRC 2007), which was approved by NDEP on September 24, 2007. Data validation results are presented in the DVSR for dataset 39 (MWH 2006c), which was approved by NDEP on November 3, 2006.

During these investigations, soil samples at various depths were collected and analyzed for VOCs, SVOCs, organochlorine pesticides, organophosphorus pesticides, PCBs, chlorinated herbicides, dioxins/furans, aldehydes, alcohols/glycols, organic acids, PAHs, metals, general chemistry, perchlorate, and/or radionuclides. The data associated with these investigations subsequent to the IRM are also included in the database excerpt provided in Appendix B.

2.8 CHEMICAL DISTRIBUTION WITHIN SOILS

This section provides summaries of chemical data associated with historical sampling events at the Site. It should be noted that because mass-scale remediation activities have been conducted at the Site in accordance with the CAP, the summary tables and chemical distribution figures and summaries presented later in this section do not reflect current conditions (i.e., conditions at the time of this SAP submittal). Because confirmation sampling associated with the mass-scale remediation has not been completed, the SAP does not include any sampling results associated with the CAP remediation process. The historical data were used to assess the need for biased sampling locations to augment the sample locations proposed as part of the SAP (Section 4), such that all potential source areas are addressed in the SAP sampling program. The historical data summaries are accordingly provided in this SAP to present the known nature of impacts at the Site (pre-CAP remediation) such that the adequacy of the sampling program in this SAP can be demonstrated. Recognizing that the historical data summaries do not reflect current conditions, this SAP includes a process for adding sampling locations in response to the

discovery of currently unknown impacted areas, if any, that may be identified during remediation (Section 4).

A summary of historic, compound-specific soil chemical data for the Site from surface to 10 feet bgs is presented in Table 1 (Note: Table 1A presents data for both of the First Eight Rows sub-areas; Table 1B presents data for the Phase I sub-area only; and Table 1C presents data for the Phase II sub-area only).¹⁶ Location-specific historical sampling results associated with the Site, including depth intervals deeper than 10 feet bgs, are provided in Appendix B, Tables B-1 through B-11, and included electronically in Appendix B.¹⁷ Sample locations are shown on Figure 2. Various applicable constituent-specific comparison levels are provided on the tables for reference, specifically:

- NDEP Basic Comparison Levels (BCLs) for residential soil (NDEP 2009b), hereinafter “BCL_{RS}”,
- NDEP BCLs for protection of groundwater (LBCL), assuming dilution attenuation factors (DAF) of 1 and 20 (NDEP 2009b), hereinafter “LBCL”, and
- The maximum background concentration (for metals and radionuclides only), derived from the background soil dataset for the Common Areas presented in *Background Shallow Soil Summary Report, BMI Complex and Common Areas Vicinity* (BRC/TIMET 2007), which was approved by NDEP on July 26, 2007. Establishment of background conditions for the Common Areas project is complicated by the unique geologic conditions in the area, specifically, the Common Areas location at the confluence of alluvial fan deposits from the McCullough Range to the southwest and the River Mountains to the east. Efforts are currently underway to determine whether chemical differences exist in soils derived from the two geologic formations. The First Eight Rows sub-areas appear to be underlain by sediments that are derived from both mountain ranges, and background conditions associated with soils in this area may be slightly different from those used as comparison levels in this report, which are primarily associated with alluvial fan deposits derived from

¹⁶ Although the Utility Corridor sub-area crosses the Site, because this is a different sub-area, with different land use considerations, and an NFAD, data associated with the Utility Corridor sub-area are not included in Table 1 or this summary of Site data. Utility Corridor sub-area data are included on the figures in Appendix C.

¹⁷ In most cases, the sample nomenclature for samples collected within the Upper Ponds is consistent with the pond IDs – for example, a sample collected from Upper Pond row H, the first pond to the east, at 1 foot bgs was historically assigned a sample ID of “PUH-01-1”. The pond rows and individual ponds within them are labeled on Figure 2. In cases where this nomenclature convention was not followed (*i.e.*, SB-16-B), the boring location can be seen on Figure 2; when such borings are noted in the text, the Pond locations are provided for ease of reference.

the McCullough Range. However, these maximum reported background values are considered adequate for the purposes of this SAP. BRC is currently preparing a report that will summarize the results of background investigations performed in the Common Areas vicinity, and will identify the specific background datasets appropriate for comparisons to soil data from specific sub-areas within the Common Areas. BRC plans to obtain approval of this report prior to completing the closure risk assessment activities for the Site, which will be based on the results of soil sampling in accordance with this SAP and will include comparisons to applicable background soil data.

~~It should be noted that with the remediation activities currently being conducted at the Site in accordance with the CAP, the summary tables and chemical distribution figures and summaries presented later in this section do not reflect current conditions (i.e., conditions at the time of this SAP submittal). However, these data summaries are provided to present the known nature of impacts at the Site such that the adequacy of the sampling program in this SAP can be demonstrated.~~

Figures showing the assumed post-IRM distribution of various representative chemicals at the Site are presented in Appendix C. SRCs were generally selected for graphical depictions if (1) a sufficient number of analyses for that constituent were performed; (2) multiple BCL_{RS} exceedances were observed for that constituent at concentrations in excess of background concentrations; and/or (3) an appreciable number of LBCL exceedances (DAFI) were observed for that constituent at concentrations in excess of background concentrations. For organochlorine pesticides and radionuclides, a single representative constituent was selected for graphical displays. Using these criteria, chemical occurrence figures were prepared for the following constituents, which are discussed in greater detail below along with all constituents reported at concentrations in excess of their BCL_{RS} or LBCL_{DAFI}:

Constituent	Soil Depth	Figure No.	Constituent	Soil Depth	Figure No.
Antimony	0 to 2 feet bgs	Figure C-1	Silver	0 to 2 feet bgs	Figure C-23
	3 to 10 feet bgs	Figure C-2		3 to 10 feet bgs	Figure C-24
Arsenic	0 to 2 feet bgs	Figure C-3	Thallium	0 to 2 feet bgs	Figure C-25
	3 to 10 feet bgs	Figure C-4		3 to 10 feet bgs	Figure C-26
Barium	0 to 2 feet bgs	Figure C-5	Vanadium	0 to 2 feet bgs	Figure C-27
	3 to 10 feet bgs	Figure C-6		3 to 10 feet bgs	Figure C-28
Beryllium	0 to 2 feet bgs	Figure C-7	Cyanide	0 to 2 feet bgs	Figure C-29
	3 to 10 feet bgs	Figure C-8		3 to 10 feet bgs	Figure C-30
Cadmium	0 to 2 feet bgs	Figure C-9	Perchlorate	0 to 2 feet bgs	Figure C-31
	3 to 10 feet bgs	Figure C-10		3 to 10 feet bgs	Figure C-32
Chromium	0 to 2 feet bgs	Figure C-11	4,4-DDE	0 to 2 feet bgs	Figure C-33

Lead	3 to 10 feet bgs	Figure C-12	1,2,4-Trichloro- benzene	3 to 10 feet bgs	Figure C-34
	0 to 2 feet bgs	Figure C-13		0 to 2 feet bgs	Figure C-35
Manganese	3 to 10 feet bgs	Figure C-14	Benzo(a) anthracene	3 to 10 feet bgs	Figure C-36
	0 to 2 feet bgs	Figure C-15		0 to 2 feet bgs	Figure C-37
Mercury	3 to 10 feet bgs	Figure C-16	Hexachloro- benzene	3 to 10 feet bgs	Figure C-38
	0 to 2 feet bgs	Figure C-17		0 to 2 feet bgs	Figure C-39
Nickel	3 to 10 feet bgs	Figure C-18	Dioxins/Furans	3 to 10 feet bgs	Figure C-40
	0 to 2 feet bgs	Figure C-19		0 to 2 feet bgs	Figure C-41
Selenium	3 to 10 feet bgs	Figure C-20	Radium-226	3 to 10 feet bgs	Figure C-42
	0 to 2 feet bgs	Figure C-21		0 to 2 feet bgs	Figure C-43
	3 to 10 feet bgs	Figure C-22		3 to 10 feet bgs	Figure C-43

These figures also include samples within the Utility Corridor sub-area, as well as all results within 1,000 feet of the Site from the adjacent sub-areas to provide information on the current upgradient, downgradient, and cross-gradient conditions.

Unless otherwise noted, to assess the potential threat to human health, chemical detections were compared to the BCL_{RS} . In addition, to assess the potential for impacts to groundwater quality, chemical detections at the Site were also compared to the LBCL (DAF 1; $LBCL_{DAFI}$) established for each chemical. However, it should be noted that the maximum reported background concentrations¹⁸ for several metals (for example, arsenic) are appreciably higher than the comparison levels. In these cases, the evaluations focused on those BCL_{RS} and $LBCL_{DAFI}$ exceedances that were higher than the maximum; therefore, comparison to background concentrations is more appropriate for these metals than using the BCL_{RS} and $LBCL$ as points of comparison. Chemical occurrence patterns for the chemicals detected at concentrations in excess of comparison levels, in samples collected from surface to 10 feet bgs, are provided below.

2.8.1 Aluminum

Aluminum was detected in all four of the soil samples in which it was analyzed (one surface¹⁹ and three subsurface samples; Table B-1). None of these detections were higher than the 77,200 mg/kg BCL_{RS} . However, all four exceeded the 75 mg/kg $LBCL_{DAFI}$ (maximum detection 12,000 mg/kg at PUB-10, 10 feet bgs). These four $LBCL_{DAFI}$ exceedances were lower than the 15,300 mg/kg maximum background detection.

¹⁸ Values used are the maximum from the shallow soils background dataset presented in the *Background Shallow Soil Summary Report, BMI Complex and Common Area Vicinity* (BRC/TIMET 2007).

¹⁹ Surface samples are defined as those collected from the surface to 2 feet bgs; subsurface samples are defined as those collected from depths great than 2 feet bgs.

2.8.2 Antimony

Of the 97 Site soil samples in which antimony was analyzed (63 surface and 34 subsurface samples; Table B-1), antimony was detected in approximately 88 percent. Sixteen of these detections were higher than the 31 mg/kg BCL_{RS}; these samples were associated with the following locations:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-08	0	41.2
PUA-10	0	49.9
PUB-06	0	49.9
PUD-09	0	51.9
PUE-07	0	70.5
PUB-09	0	91.9
PUA-09	0	92.3
PUC-07	0	107.2

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-09	10	120
PUB-10	5	151.2
PUB-10	0	174.7
PUE-07	0	240
PUB-10	10	290
PUB-08	0	302.4
PUC-07	0	390
PUB-10	0	490

Seventy-nine samples (including those listed above) exceeded the 0.3 mg/kg LBCL_{DAFI}. These exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)
BDB-15	0
PUA-05	0
PUA-07	0
PUA-07	5
PUA-07-N-D	0
PUA-07-N-S	0
PUA-09	0
PUA-09	5
PUA-10	0
PUB-03N	0
PUB-03S	0
PUB-05	0
PUB-06	0
PUB-06	5
PUB-08	0
PUB-08	5
PUB-09	0
PUB-09	5
PUB-09	10
PUB-10	0
PUB-10	0
PUB-10	5
PUB-10	10
PUB-10	10
PUB-10-E-D	0
PUB-10-E-S	0
PUB-10-N-S	0

Sample ID	Depth (ft bgs)
PUC-03	0
PUC-05	0
PUC-05	5
PUC-07	0
PUC-07	0
PUC-07	5
PUC-07	5
PUC-07	10
PUC-07-E-D	0
PUC-07-E-S	0
PUC-07-N-D	0
PUC-07-N-S	0
PUC-08	0
PUC-08	5
PUD-06	0
PUD-06	5
PUD-06-E-D	0
PUD-06-N-S	0
PUD-08	0
PUD-08	5
PUD-09	0
PUD-09	5
PUE-02	0
PUE-03	0
PUE-03	5
PUE-05	0
PUE-05	5

Sample ID	Depth (ft bgs)
PUE-06	0
PUE-07	0
PUE-07	0
PUE-07	5
PUE-07	5
PUE-07	10
PUE-07-E-D	0
PUE-07-E-S	0
PUE-07-N-D	0
PUE-07-N-S	0
PUF-01	0
PUF-01	5
PUF-02	0
PUF-03	0
PUF-03	0
PUF-03	5
PUF-05	0
PUG-02	0
PUG-03	0
PUG-04	0
PUG-04	0
PUG-05	0
PUG-06	0
PUG-06	0
PUG-07	0

All but one of the antimony LBCL_{DAFI} exceedances were higher than the 0.5 mg/kg maximum background concentration. It should be noted that the standard reporting limits employed during the historical sampling events are often higher than the LBCL_{DAFI}, and it is unknown whether antimony is also present in those samples at concentrations in excess of the LBCL_{DAFI}. The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS}, if present, would have been reported. The distribution of antimony for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-1 and C-2, respectively.

2.8.3 Arsenic

Of the 112 Site soil samples in which arsenic was analyzed (81 surface and 31 subsurface samples; Table B-1), arsenic was detected in approximately 95 percent. All of the detections were higher than the 0.39 mg/kg BCL_{RS} and the 1 mg/kg LBCL_{DAFI}. Sixty-six samples had reported arsenic concentrations in excess of the maximum shallow soil background level (7.2 mg/kg; from BRC/TIMET 2007). These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)	Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-06-N-S	0	7.3	PUA-09SCD	0	60
PUF-05	0	7.3	PUE-07	5	62.2
PUF-01	0	7.5	PUA-09NED	0	65
PUE-07-N-S	0	7.5	PUC-08	0	75.7
PUC-07-E-D	0	8	PUA-09SCOM	0	77
PUE-07-N-D	0	8.5	PUA-09SWD	0	78
PUG-02	0	9.1	PUA-09SED	0	79
PUC-07-E-S	0	10	PUA-09NCOM	0	84
BDB-15	0	10	PUA-10	0	94.2
PUA-07	0	10.5	PUB-06	0	112
PUB-04	0	11	PUB-09	0	119
PUC-08	5	12.6	PUA-09NWD	0	120
PUG-06	0	12.6	PUB-09	10	130
PUD-09	5	12.8	PUB-10	10	140
PUE-03	0	12.9	PUB-10NED	0	150
PUB-10-N-S	0	14	PUC-07	0	162.41
PUE-05	0	14.7	PUE-07NCD	0	180
PUE-02	0	15	PUE-07SWD	0	180
PUC-03	5	15	PUB-10NCD	0	190
PUD-08	0	15.9	PUB-10NWD	0	190
PUB-10SWD	0	16	PUE-07NED	0	190
PUC-05	0	16.7	PUE-07SCOM	0	190
PUB-08	5	21.7	PUB-10	0	193

PUB-05	0	22	PUE-07NCOM	0	200
PUE-06	0	27.5	PUE-07SED	0	200
PUD-06	0	29	PUE-07NWD	0	210
PUG-07	0	35.3	PUB-10	5	211
PUB-10SCOM	0	44	PUA-09	0	218
PUC-03	0	45	PUB-10SCD	0	220
PUA-09NCD	0	53	PUE-07SCD	0	220
PUC-07	5	53.1	PUE-07	0	233
PUD-09	0	55.5	PUB-10NCOM	0	240
PUB-09	5	57.6	PUB-08	0	280

The reporting limits for the six non-detections were sufficiently low such that detections greater than background, if present, would have been reported. The distribution of arsenic for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-3 and C-4, respectively.

2.8.4 Barium

Barium was detected in all of the 87 Site soil samples in which barium was analyzed (58 surface and 29 subsurface samples; Table B-1). Six of the detections were higher than the 15,300 mg/kg BCL_{RS}; these exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)	Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-09	0	16,600	PUB-10	0	17,600
PUA-09	0	16,800	PUB-08	0	18,100
PUC-07	0	17,500	PUD-09	0	18,900

All of the barium detections exceeded the 82 mg/kg LBCL_{DAFI}. However, more than half of the detections (46 detections) were lower than the maximum background concentration of 836 mg/kg. The 41 samples with barium detections greater than background, including those listed above) were as follows:

Sample ID	Depth (ft bgs)	Sample ID	Depth (ft bgs)	Sample ID	Depth (ft bgs)
BDB-15	0	PUB-10-N-S	0	PUE-02	0
PUA-07	0	PUC-03	0	PUE-03	0
PUA-09	0	PUC-03	5	PUE-05	0
PUA-10	0	PUC-05	0	PUE-06	0
PUB-04	0	PUC-07	0	PUE-07	0
PUB-05	0	PUC-07	5	PUE-07	5
PUB-06	0	PUC-07-E-S	0	PUE-07-E-S	0
PUB-06	5	PUC-08	0	PUE-07-N-S	0
PUB-08	0	PUC-08	5	PUF-03	0
PUB-08	5	PUD-06	0	PUF-05	0
PUB-09	0	PUD-08	0	PUG-02	0
PUB-09	5	PUD-08	5	PUG-06	0

PUB-10	0	PUD-09	0	PUG-07	0
PUB-10	5	PUD-09	5		

The distribution of barium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-5 and C-6, respectively.

2.8.5 Beryllium

Of the 57 Site soil samples in which beryllium was analyzed (31 surface and 26 subsurface samples; Table B-1), it was detected in all but one sample. None of the detections were higher than the 160 mg/kg BCL_{RS}, but twelve results exceeded the 3 mg/kg LBCL_{DAFI}. These twelve results are also higher than the maximum background concentration of 0.89 mg/kg, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-10	0	3.4
PUB-09	5	3.6
PUC-07	0	4.1
PUA-09	0	4.8
PUB-06	0	5.3
PUC-08	0	5.6

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-10	0	6.9
PUD-09	0	7.1
PUE-07	5	9.6
PUB-08	0	10.3
PUB-10	5	11.1
PUE-07	0	13.5

The distribution of beryllium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-7 and C-8, respectively.

2.8.6 Cadmium

Of the 46 Site soil samples in which cadmium was analyzed (22 surface and 24 subsurface samples; Table B-1), it was detected in approximately 20 percent. None of the detections were higher than the 39 mg/kg BCL_{RS}, but five results exceeded the 0.4 mg/kg LBCL_{DAFI}. These five cadmium results are also higher than the 0.16 mg/kg maximum background concentration, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-04	0	0.49
PUB-04	5	0.52
PUD-06	0	3.1
PUE-07	0	4.9
PUA-09	0	8.7

It should be noted that many of the reporting limits employed during the historical sampling events are higher than the LBCL_{DAFI} and maximum background concentration, and it is

unknown whether cadmium is also present in those samples at concentrations in excess of the LBCL_{DAFI}/maximum background concentration. The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS}, if present, would have been reported. The distribution of cadmium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-9 and C-10, respectively.

2.8.7 Chromium

Chromium was detected in all of the 89 Site soil samples in which it was analyzed (58 surface and 31 subsurface samples; Table B-1). Thirty-six of the detections were higher than the 240 mg/kg BCL_{RS}; these detections are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)	Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-03N	0	270	PUE-07	5	1,290
PUC-03	5	310	PUC-08	0	1,610
PUB-05	0	320	PUB-09	0	1,700
PUE-05	5	368	PUG-06	0	1,710
PUB-09	5	432	PUD-08	0	1,720
PUC-03	0	440	PUC-05	0	1,850
PUF-03	0	460	PUE-07	0	1,990
PUG-05	0	480	PUE-06	0	2,020
PUC-07	5	544	PUF-05	0	2,020
PUB-09	10	570	PUE-05	0	2,040
PUG-04	0	623	PUB-10	5	2,080
PUE-03	0	641	PUC-07	0	2,294
PUG-07	0	745	PUD-06	0	2,380
PUA-05	0	826	PUB-10	0	2,420
PUB-06	0	1,050	PUD-09	0	2,420
PUE-02	0	1,100	PUA-07	0	3,070
PUA-10	0	1,170	PUA-09	0	3,200
PUB-10	10	1,200	PUB-08	0	3,830

In addition, all of the chromium detections were higher than the 2 mg/kg LBCL_{DAFI}. Nearly all of these detections (80 detections) were higher than the 16.7 mg/kg maximum background detection. These eighty chromium exceedances higher than background, including those listed above, are associated with the following locations:

Sample ID	Depth (ft bgs)	Sample ID	Depth (ft bgs)	Sample ID	Depth (ft bgs)
BDB-15	0	PUB-10	10	PUD-09	5
PUA-03N	0	PUB-10-E-D	0	PUE-02	0
PUA-03S	0	PUB-10-E-S	0	PUE-03	0
PUA-05	0	PUB-10-N-D	0	PUE-03	5
PUA-05	5	PUB-10-N-S	0	PUE-05	0
PUA-07	0	PUC-03	0	PUE-05	5

Sample ID	Depth (ft bgs)
PUA-07	5
PUA-07-E-D	0
PUA-07-N-D	0
PUA-07-N-S	0
PUA-09	0
PUA-09	5
PUA-10	0
PUB-03N	0
PUB-03S	0
PUB-04	0
PUB-04	5
PUB-05	0
PUB-06	0
PUB-06	5
PUB-08	0
PUB-08	5
PUB-09	0
PUB-09	5
PUB-09	10
PUB-10	0
PUB-10	5

Sample ID	Depth (ft bgs)
PUC-03	5
PUC-05	0
PUC-05	5
PUC-07	0
PUC-07	5
PUC-07-E-D	0
PUC-07-E-S	0
PUC-07-N-D	0
PUC-07-N-S	0
PUC-08	0
PUC-08	5
PUD-06	0
PUD-06	5
PUD-06-E-D	0
PUD-06-E-S	0
PUD-06-N-D	0
PUD-06-N-S	0
PUD-08	0
PUD-08	5
PUD-09	0

Sample ID	Depth (ft bgs)
PUE-06	0
PUE-06	5
PUE-07	0
PUE-07	5
PUE-07-E-D	0
PUE-07-E-S	0
PUE-07-N-D	0
PUE-07-N-S	0
PUF-01	0
PUF-01	5
PUF-02	0
PUF-03	0
PUF-03	5
PUF-05	0
PUG-02	0
PUG-03	0
PUG-04	0
PUG-05	0
PUG-06	0
PUG-07	0
SB-16-B	7

The distribution of chromium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-11 and C-12, respectively.

2.8.8 Chromium (VI)

Hexavalent chromium was detected in all four of the Site soil samples in which it was analyzed (one surface and three subsurface samples; Table B-1). None of the detections were higher than the 230 mg/kg BCL_{RS}. However, two detections were higher than the 2 mg/kg LBCL_{DAFI}. These two exceedances are associated with samples collected from 10 ft bgs at locations PUB-09 and PUB-10 (29 mg/kg and 3.7 mg/kg, respectively). These two detections were also higher than the 0.251 mg/kg maximum background detection.

2.8.9 Cobalt

Cobalt was detected in all 4 of the Site soil samples in which it was analyzed (one surface and three subsurface samples; Table B-1). Exceedances of the 23 mg/kg BCL_{RS} and the 33 mg/kg LBCL_{DAFI} were reported for two samples (samples collected from 10 feet bgs in former ponds PUB-09 and PUB-10, 68 mg/kg and 230 mg/kg, respectively). These two detections were also higher than the 16.3 mg/kg maximum background detection.

2.8.10 Copper

Copper was detected in all 59 of the Site soil samples in which it was analyzed (Table B-1). None of the detections were higher than the 2,910 mg/kg BCL_{RS}. However, 37 detections were higher than the 35 mg/kg LBCL_{DAFI}. These 37 LBCL_{DAFI} exceedances were also higher than the 30.5 mg/kg maximum background detection, and are as follows:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-05	5	35.2
PUA-09	5	36.8
PUA-03N	0	41
PUE-05	5	44.3
BDB-15	0	52.5
PUF-03	5	57.9
PUF-01	0	65.4
PUE-03	0	67.8
PUC-07	5	68.4
PUA-07	5	74.4
PUG-04	0	88.9
PUB-08	5	113.4
PUB-06	0	127
PUB-09	5	141.9
PUB-09	10	220
PUC-08	0	307.7
PUC-07	0	311.6
PUD-06	0	345.9
PUE-07	5	349.7

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-05	0	359
PUA-07	0	369.3
PUB-10	10	370
PUA-10	0	374.3
PUB-09	0	385.9
PUE-07	0	406.7
PUE-05	0	412.5
PUB-10	0	415.6
PUG-06	0	439.3
PUC-05	0	493.9
PUB-10	5	508.9
PUB-08	0	525.5
PUA-09	0	536.4
PUF-05	0	638.4
PUD-08	0	640.5
PUE-06	0	641
PUD-09	0	687
PUG-07	0	730.2

2.8.11 Iron

Iron was detected in both of the Site soil samples in which it was analyzed (one surface and one subsurface sample; Table B-1). Neither of the detections were higher than the 54,800 mg/kg BCL_{RS}. However, both detections were higher than the 7.5 mg/kg LBCL_{DAFI} (samples collected from 0 and 7 feet bgs at SB-16-B, 7,840 mg/kg and 11,100 mg/kg, respectively). These two detections were lower than the 19,700 mg/kg maximum background detection.

2.8.12 Lead

Lead was detected in all 111 of the Site soil samples in which it was analyzed (80 surface and 31 subsurface samples; Table B-1). Fifty-five of these detections were higher than the 400 mg/kg BCL_{RS}; a LBCL_{DAFI} has not been established for this constituent. These 55 exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUG-02	0	470

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-07NCD	0	2,900

PUA-05	0	482	PUD-08	0	2,950
PUE-03	0	495	PUA-09SCD	0	3,000
PUG-05	0	510	PUE-05	0	3,070
PUE-02	0	630	PUG-06	0	3,270
PUG-04	0	868	PUC-08	0	3,280
PUC-03	0	970	PUA-09SWD	0	3,300
PUB-09	5	983	PUA-09NCD	0	3,400
PUC-07	5	1,030	PUE-07NED	0	3,400
PUF-05	0	1,040	PUB-10	10	3,800
PUE-07SWD	0	1,100	PUE-06	0	3,940
PUB-10SWD	0	1,300	PUA-09NCOM	0	4,500
PUE-07SCD	0	1,300	PUA-10	0	4,640
PUG-07	0	1,390	PUA-09	0	5,130
PUA-07	0	1,670	PUD-09	0	6,150
PUB-09	10	1,700	PUE-07SED	0	6,500
PUE-07SCOM	0	1,700	PUA-09NWD	0	7,700
PUE-07	0	1,740	PUB-10	5	8,320
PUE-07	5	1,920	PUC-07	0	9,011
PUA-09SCOM	0	2,100	PUB-09	0	9,290
PUB-06	0	2,100	PUB-10NCD	0	11,000
PUE-07NWD	0	2,200	PUB-10	0	11,200
PUC-05	0	2,230	PUB-10NED	0	12,000
PUA-09SED	0	2,300	PUB-10SCD	0	12,000
PUE-07NCOM	0	2,300	PUB-10NCOM	0	13,000
PUB-10SCOM	0	2,600	PUB-08	0	15,400
PUD-06	0	2,690	PUB-10NWD	0	20,000
PUA-09NED	0	2,700			

All of the above exceedances were higher than the maximum background concentration for lead (35.1 mg/kg). The distribution of lead for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-13 and C-14, respectively.

2.8.13 Magnesium

Magnesium was detected in all four of the Site soil samples in which it was analyzed (one surface and three subsurface samples; Table B-1). None of the detections were higher than the 100,000 mg/kg BCL_{RS}. However, two detections were higher than the 649 mg/kg LBCL_{DAFI} (samples collected from 0 and 7 feet bgs at SB-16-B, 5,060 mg/kg and 7,260 mg/kg, respectively). These two detections were lower than the 17,500 mg/kg maximum background detection.

2.8.14 Manganese

Manganese was detected in all 121 of the Site soil samples in which it was analyzed (87 surface and 34 subsurface samples; Table B-1). Of these detections, 75 were higher than the 1,080 mg/kg

BCL_{RS}. These detections, which are also higher than the maximum background concentration for manganese (1,090 mg/kg), are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-07-E-S	0	1100
PUE-07-E-D	0	1200
PUB-10-N-D	0	1300
PUB-10-N-S	0	1400
PUG-04	0	1400
PUD-09	5	1469.4
PUB-08	5	1638.9
PUD-08	5	1726.4
PUE-02	0	1800
PUC-07	5	1800
PUC-08	5	1951.8
PUF-03	0	2389.3
PUF-01	0	2499
PUG-05	0	2500
PUE-03	0	2512.2
PUF-03	0	2600
PUC-07	10	2700
PUG-04	0	2720
PUC-07	5	2842.3
PUB-10	10	3500
PUC-07-E-D	0	3900
PUE-03	0	4000
PUB-10-E-D	0	4100
PUB-06	0	4154.3
PUC-07-N-D	0	4200
PUB-09	5	4662.6
PUB-09	10	6900
PUA-07	0	6905.2
PUB-10NCD	0	11000
PUE-07	5	11965.2
PUE-07SED	0	12000
PUE-07SWD	0	12000
PUB-08	0	12427.5
PUA-09SWD	0	13000
PUB-10NED	0	13000
PUB-10SCD	0	13000
PUA-09SCOM	0	14000
PUB-10NWD	0	14000

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-10	5	14225.1
PUB-10NCOM	0	15000
PUC-07	0	15342.2
PUC-08	0	15900
PUA-09NED	0	16000
PUE-07	0	16000
PUE-07NCD	0	16000
PUE-07SCOM	0	16000
PUD-06	0	16400.9
PUE-07SCD	0	17000
PUA-09SCD	0	18000
PUC-07	0	18000
PUG-06	0	18444.6
PUA-09SED	0	20000
PUA-09	0	20493.5
PUA-09NCD	0	21000
PUE-07NCOM	0	22000
PUE-07	0	22668.1
PUE-07NWD	0	23000
PUB-10	0	24000
PUB-10SCOM	0	24000
PUE-07NED	0	24000
PUB-10	0	24269.2
PUA-10	0	24922
PUB-10	10	25000
PUF-05	0	25458.4
PUA-09NWD	0	28000
PUG-06	0	28000
PUB-10SWD	0	30000
PUD-09	0	30587
PUB-09	0	32626.7
PUA-09NCOM	0	34000
PUE-05	0	34783.9
PUD-08	0	38423.8
PUC-05	0	40202
PUE-06	0	43926.6
PUG-07	0	45523.8

All of the detections (an additional 46 manganese detections beyond those listed above) were higher than the 3.3 mg/kg LBCL_{DAF1}. However, these additional 46 detections were lower than the 1,090 mg/kg maximum background detection. The distribution of manganese for soil samples

collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-15 and C-16, respectively.

2.8.15 Mercury

Of the 56 Site soil samples in which mercury was analyzed (28 surface and 28 subsurface samples; Table B-1), it was detected in approximately 54 percent. None of the detections were higher than the 13 mg/kg BCL_{RS}, but 27 results exceeded the 0.1 mg/kg LBCL_{DAFI}. These 27 mercury exceedances are also higher than the 0.11 mg/kg maximum background concentration, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-09	5	0.12
PUC-08	5	0.13
PUC-03	5	0.14
PUC-03	0	0.15
PUB-09	5	0.21
PUC-07	5	0.33
PUB-06	0	0.34
PUA-05	0	0.66
PUG-06	0	0.86
PUA-07	0	0.88
PUC-08	0	0.91
PUG-07	0	1.2
PUB-10	5	1.3
PUE-07	5	1.3

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-10	0	1.5
PUB-10	0	1.5
PUA-09	0	1.6
PUC-05	0	1.6
PUE-05	0	1.7
PUE-07	0	1.8
PUB-09	0	1.9
PUB-08	0	2.4
PUD-09	0	2.5
PUF-05	0	2.7
PUD-08	0	3.1
PUD-06	0	3.4
PUE-06	0	4.4

The reporting limits for non-detections were all lower than BCL_{RS}, and most were sufficiently low such that concentrations in excess of the LBCL_{DAFI}, if present, would have been reported. The distribution of mercury for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-17 and C-18, respectively.

2.8.16 Molybdenum

Molybdenum was detected in all four of the Site soil samples in which it was analyzed (one surface and three subsurface samples; Table B-1). None of the detections were higher than the 390 mg/kg BCL_{RS}. However, two detections were higher than the 3.6 mg/kg LBCL_{DAFI} (samples collected from 10 feet bgs from former ponds PUB-09 and PUB-10, 29 mg/kg and 110 mg/kg, respectively). These two detections were also higher than the 2 mg/kg maximum background detection; the other two detections were lower than the maximum background concentration.

2.8.17 Nickel

Nickel was detected in all 59 of the Site soil samples in which it was analyzed (31 surface and 28 subsurface samples; Table B-1). None of these detections exceeded the 1,540 mg/kg BCL_{RS}, however, all were higher than the 7 mg/kg LBCL_{DAFI}. Several of these detections (26 detections) were lower than the maximum background concentration for nickel (30 mg/kg). The 33 detections higher than background are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-08	5	32
PUF-03	0	32.8
PUF-03	5	33.7
PUA-03N	0	37
PUF-01	0	47.1
PUE-03	0	51.7
PUC-07	5	52.8
PUB-06	0	53.9
PUB-09	10	58
PUB-09	5	64.9
PUG-04	0	75.6
PUB-10	5	110.2
PUA-05	0	118.8
PUA-09	0	128.5
PUB-08	0	129
PUB-10	10	140
PUC-07	0	151.5

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-07	5	164.3
PUC-08	0	188
PUB-10	0	196.8
PUA-10	0	199.5
PUE-07	0	272.2
PUB-09	0	336.2
PUG-06	0	344.4
PUG-07	0	353.9
PUD-06	0	355.2
PUF-05	0	355.2
PUA-07	0	459.3
PUD-09	0	483.8
PUD-08	0	508.4
PUE-05	0	513.7
PUC-05	0	532.5
PUE-06	0	916.7

The distribution of nickel for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-19 and C-20, respectively.

2.8.18 Selenium

Of the 58 Site soil samples in which it was analyzed (28 surface and 30 subsurface samples; Table B-1), selenium was reported in only seven samples (approximately 12 percent). None of the detections were higher than the 390 mg/kg BCL_{RS}; however, all but one of the detections were higher than the 0.3 mg/kg LBCL_{DAFI}. These six exceedances were also higher than the 0.6 mg/kg maximum background concentration for selenium, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-03	0	0.66
PUB-08	5	0.85

PUC-03	5	0.88
PUA-09	0	3.2
PUB-10	0	5.6
PUB-08	0	5.9

The standard reporting limits employed during the historical sampling events are higher than the LBCL_{DAFI} (and the background range in most cases), and it is unknown whether selenium is also present in those samples at concentrations in excess of the LBCL_{DAFI} (or background). The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS}, if present, would have been reported. The distribution of selenium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-21 and C-22, respectively.

2.8.19 Silver

Of the 58 Site soil samples in which it was analyzed (28 surface and 30 subsurface samples; Table B-1), silver was reported in approximately 59 percent. None of the detections were higher than the 390 mg/kg BCL_{RS}; however, the majority of the detections (28) were higher than the 2 mg/kg LBCL_{DAFI}. These 28 exceedances were also higher than the 0.2609 mg/kg maximum background concentration for silver, and are associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUF-03	5	2.2
PUE-03	0	2.7
PUF-03	0	3
PUC-07	5	3.4
PUB-06	0	3.6
PUC-03	0	3.9
PUE-07	5	5.2
PUC-08	0	5.5
PUB-09	5	6
PUA-05	0	7.5
PUB-10	10	7.6
PUA-09	0	9.5
PUG-06	0	11.5
PUE-07	0	14.5

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-08	0	16.8
PUD-09	0	20.8
PUG-07	0	20.8
PUE-05	0	22.4
PUC-07	0	23.39
PUF-05	0	28.4
PUB-09	0	29.2
PUA-07	0	29.4
PUE-06	0	30.1
PUB-10	0	30.2
PUB-10	5	30.6
PUA-10	0	34
PUC-05	0	38.9
PUB-08	0	42.9

The reporting limits for non-detections were all lower than BCL_{RS}, and most were sufficiently low such that concentrations in excess of the LBCL_{DAFI}, if present, would have been reported. The distribution of silver for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-23 and C-24, respectively.

2.8.20 Thallium

Of the 98 Site soil samples in which it was analyzed (64 surface and 34 subsurface samples; Table B-1), thallium was reported in approximately 63 percent. Twenty-four of these detections were higher than the 5.5 mg/kg BCL_{RS}; these exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUD-06	0	6.9
PUF-01	0	9.3
PUC-07-E-D	0	9.6
PUA-07	0	10.8
PUB-05	0	13
PUB-09	5	14.7
PUE-07	5	18.5
PUE-06	0	19.2
PUB-09	0	25.2
PUB-06	0	25.6
PUC-07	0	28.6
PUC-08	0	29.4

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUA-10	0	29.6
PUD-09	0	31.8
PUA-09	0	32
PUC-07	0	32
PUE-07	0	44
PUE-07	0	44.7
PUB-10	0	59.1
PUB-10	5	74.9
PUB-08	0	75
PUB-10	0	110
PUB-09	10	180
PUB-10	10	330

In addition, all but three of the detections were higher than the 0.4 mg/kg LBCL_{DAFI}. Some of these detections were lower than the 1.8 mg/kg maximum background detection; however, 40 were higher than background. The forty thallium LBCL_{DAFI} exceedances higher than background, including those listed above, are associated with the following locations:

Sample ID	Depth (ft bgs)
PUA-05	0
PUA-07	0
PUA-09	0
PUA-10	0
PUB-05	0
PUB-06	0
PUB-08	0
PUB-09	0
PUB-09	5
PUB-09	10
PUB-10	0
PUB-10	0
PUB-10	5
PUB-10	10

Sample ID	Depth (ft bgs)
PUB-10	10
PUC-03	0
PUC-05	0
PUC-07	0
PUC-07	0
PUC-07	5
PUC-07	5
PUC-07-E-D	0
PUC-08	0
PUD-06	0
PUD-06-N-D	0
PUD-09	0
PUD-09	5

Sample ID	Depth (ft bgs)
PUE-02	0
PUE-03	0
PUE-03	5
PUE-05	5
PUE-06	0
PUE-07	0
PUE-07	0
PUE-07	5
PUF-01	0
PUF-01	5
PUF-03	0
PUG-06	0
PUG-07	0

The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS} or background, if present, would have been reported. The distribution of thallium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-25 and C-26, respectively.

2.8.21 Vanadium

Vanadium was detected in all 89 of the Site soil samples in which it was analyzed (58 surface and 31 subsurface samples; Table B-1). Thirty-five of these detections were higher than the 390 mg/kg BCL_{RS}; these exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-03	5	420
PUA-03N	0	480
PUA-07	5	490
PUG-05	0	610
PUG-04	0	708
PUB-09	5	727
PUE-03	0	883
PUE-07	5	936
PUB-09	10	1,100
PUC-07	5	1,270
PUC-03	0	1,300
PUE-02	0	1,300
PUF-03	0	1,420
PUB-06	0	1,590
PUA-05	0	1,870
PUE-05	0	2,060
PUE-06	0	2,200
PUD-09	0	2,320

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-10	10	2,700
PUE-07	0	2,740
PUG-06	0	2,780
PUC-08	0	2,840
PUG-07	0	2,910
PUF-05	0	2,940
PUD-08	0	3,100
PUC-05	0	3,550
PUD-06	0	3,930
PUB-10	5	4,100
PUA-10	0	4,170
PUB-09	0	4,590
PUC-07	0	4,881
PUB-10	0	5,200
PUA-09	0	6,370
PUA-07	0	7,770
PUB-08	0	7,780

Thirty-eight vanadium detections were higher than the 300 mg/kg LBCL_{DAFI}. In addition to the samples listed above, vanadium LBCL_{DAFI} exceedances are associated with three surface soil samples, collected from former ponds PUB-05, PUG-02, and PUG-03. All comparison level exceedances were higher than the 59.1 mg/kg maximum background detection. The distribution of vanadium for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-27 and C-28, respectively.

2.8.22 Cyanide

Of the 70 Site soil samples in which it was analyzed (43 surface and 27 subsurface samples; Table B-6), cyanide was reported in approximately 40 percent. All of these detections were lower than the 1,220 mg/kg BCL_{RS}; however, six detections were higher than the 2 mg/kg LBCL_{DAFI}. These six LBCL_{DAFI} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUC-07	0	2.1
PUD-09	0	2.1
PUB-10	5	2.5
PUA-09	0	2.9

PUF-05	0	2.9
PUA-10	0	3

The reporting limits were sufficiently low such that concentrations in excess of the BCL_{RS} or LBCL_{DAFI}, if present, would have been reported. The distribution of cyanide for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-29 and C-30, respectively.

2.8.23 Other Inorganics

As seen in Table 1A and Tables B-1 and B-6 in Appendix B, several inorganic constituents in addition to those listed above were routinely detected in soil samples. None of these additional inorganic constituents were detected at concentrations in excess of either the BCL_{RS} or the LBCL_{DAFI}. The reporting limits for these additional inorganic constituents were sufficiently low such that concentrations in excess of the BCL_{RS} or LBCL_{DAFI}, if present, would have been reported.

Because perchlorate is a key compound of concern at the Common Areas, even though the detections do not meet the general criteria for graphic presentations in this SAP, the distribution of perchlorate for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-31 and C-32, respectively.

2.8.24 Organochlorine Pesticides

A total of 127 Site soil samples were analyzed for organochlorine pesticides (96 surface and 31 subsurface samples; Table B-2). Most of these analytes were detected in at least one sample. 2,4-DDD, 2,4-DDE, 4,4-DDE, and 4,4-DDT were the most commonly detected; these four constituents were detected in more than 50 percent of the samples in which they were analyzed. Several detections exceeded the BCL_{RS}; and/or LBCL_{DAFI} comparison levels as discussed below.

- 4,4-DDD was not detected in any samples at concentrations in excess of the 2.4 mg/kg BCL_{RS}; however, three detections were higher than the 0.8 mg/kg LBCL_{DAFI}. These exceedances were associated with three surface samples (WC-IM01, -02, and -06) collected from temporary IRM stockpiles in the Phase II sub-area. The maximum detection was 1.6 mg/kg (WC-IM01, surface sample).
- 4,4-DDE was detected in 66 soil samples at concentrations in excess of the 1.7 mg/kg BCL_{RS}; in addition, 59 of these detections were higher than the 3 mg/kg LBCL_{DAFI}. The 66 BCL_{RS} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-07	0	1.8
PUG-05	0	1.9
PUG-04	0	2.2
PUB-10NWD	0	2.4
PUA-05	0	2.5
WC-IM07	0	2.6
PUA-09SCD	0	2.7
PUE-07SCD	0	3.2
PUE-03	0	3.3
PUB-09	10	3.5
PUE-07NWD	0	3.5
PUF-03	0	3.8
WC-IM03	0	4.2
PUE-07SCOM	0	5
WC-UP05	0	5.4
PUE-02	0	5.4
PUE-07NCOM	0	6.1
WC-UP01	0	6.3
WC-IM04	0	6.3
PUB-09	5	6.4
WC-IM02	0	6.5
WC-UP07	0	6.7
WC-UP02	0	6.9
PUE-07	5	7.8
WC-UP04	0	8.3
WC-UP06	0	8.5
WC-IM06	0	8.8
PUE-07SWD	0	9
PUA-09SED	0	9.1
PUA-09NWD	0	9.2
WC-IM01	0	9.2
PUA-09SCOM	0	10
PUE-07NCD	0	11

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
WC-UP03	0	12
PUC-08	0	12
PUA-09NED	0	14
PUB-08	0	17
PUA-09NCOM	0	18
PUB-10NED	0	18
PUA-09NCD	0	19
PUE-07NED	0	19
PUA-09SWD	0	20
PUG-06	0	25
PUB-10	5	29
PUA-07	0	32
PUE-07SED	0	36
PUC-07	5	38
PUC-07	0	41
PUD-09	0	46
PUB-10NCD	0	48
PUA-09	0	55
PUB-10NCOM	0	60
PUE-05	0	63
PUB-10	0	69
PUD-06	0	70
PUB-10SCOM	0	71
PUB-10	10	74
PUB-10SCD	0	76
PUE-06	0	78
PUD-08	0	97
PUC-05	0	110
PUB-10SWD	0	140
PUG-07	0	140
PUB-09	0	180
PUA-10	0	190
PUF-05	0	190

- 4,4-DDT was detected in 40 soil samples at concentrations in excess of the 1.7 mg/kg BCL_{RS}; in addition, 33 of these detections were higher than the 2 mg/kg LBCL_{DAFI}. The 40 BCL_{RS} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
WC-IM03	0	1.8
PUE-07NCOM	0	1.8
WC-IM04	0	1.9
WC-UP02	0	1.9
PUE-07SWD	0	1.9
PUA-09NWD	0	2
PUA-09SCOM	0	2
PUA-09NED	0	2.1
PUA-09SWD	0	2.2

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
WC-IM06	0	6.4
PUA-09	0	7
PUF-05	0	7.5
PUC-07	0	7.7
PUB-10	5	11
PUE-07SED	0	11
PUC-07	5	11
PUD-08	0	12
PUB-10SCD	0	13

PUB-09	5	2.3	PUE-06	0	16
WC-UP03	0	2.3	PUD-09	0	17
WC-UP04	0	2.4	PUB-10	0	19
WC-IM02	0	2.6	PUB-10NCD	0	20
PUA-09NCOM	0	2.7	PUB-10NCOM	0	20
PUA-09NCD	0	2.7	PUB-10	10	21
WC-UP07	0	2.8	PUB-09	0	36
WC-IM01	0	3.4	PUA-10	0	39
PUE-07NCD	0	3.5	PUB-10SCOM	0	40
PUG-06	0	3.8	PUG-07	0	62
PUE-07NED	0	4.3	PUB-10SWD	0	67

- alpha-BHC was detected in nine soil samples at concentrations in excess of the 0.09 mg/kg BCL_{RS}. These nine BCL_{RS} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-07SWD	0	0.12
WC-IM02	0	0.4
PUC-07	0	0.42
WC-IM06	0	0.6
PUE-06	0	1.1
PUB-10	0	1.7
PUB-10	5	2.1
PUA-10	0	2.1
PUB-10SCOM	0	4.4

In addition to the samples listed above, exceedances of the 0.00003 mg/kg alpha-BHC LBCL_{DAFI} were observed for seven more soil samples, collected at the following locations/depths: PUC-03 (surface sample); PUE-06 (5 ft bgs); PUF-03 (5 ft bgs); SB-16-B (surface and 7 ft bgs); WC-UP06 (surface sample); and WC-UP07 (surface sample).

- beta-BHC was detected in two soil samples at concentrations in excess of the 0.32 mg/kg BCL_{RS}; those exceedances were associated with samples collected from PUA-09SCD (surface sample, 0.45 mg/kg) and WC-IM04 (IRM stockpile, 1.1 mg/kg). In addition to these two samples, 26 more detections were higher than the 0.0001 mg/kg LBCL_{DAFI}. Those 26 additional LBCL_{DAFI} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)
PUA-07-N-D	0
PUB-10-N-S	0
PUC-07-E-S	0
PUC-07-N-S	0
PUC-08	5
PUD-06-N-S	0
PUE-07-E-S	0
PUE-07NCD	0
PUE-07NCOM	0

Sample ID	Depth (ft bgs)
PUE-07-N-S	0
PUE-07NWD	0
PUE-07SCD	0
PUE-07SWD	0
PUF-01	5
PUF-05	5
SB-16-B	0
SB-16-B	7
WC-BD02	0

Sample ID	Depth (ft bgs)
WC-IM02	0
WC-IM06	0
WC-IM07	0
WC-UP01	0
WC-UP04	0
WC-UP05	0
WC-UP06	0
WC-UP07	0

- Chlordane was detected in three soil samples. All three detections were in excess of the 1.6 mg/kg BCL_{RS} and the 0.5 mg/kg LBCL_{DAFI}, and were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUE-05	0	4.4
PUC-08	0	6
PUD-09	0	80

- Dieldrin was detected in one soil sample (5 ft bgs sample at PUC-08), at a concentration of 0.0043 mg/kg. This detection is lower than the 0.03 mg/kg BCL_{RS}, but is higher than the 0.0002 mg/kg LBCL_{DAFI}.
- Endrin was detected in one soil sample (5 ft bgs sample at PUB-09), at a concentration of 0.72 mg/kg. This detection is lower than the 18 mg/kg BCL_{RS}, but is higher than the 0.05 mg/kg LBCL_{DAFI}.
- Heptachlor was detected in three soil samples; one of these detections was in excess of the 0.11 mg/kg BCL_{RS} and the 1 mg/kg LBCL_{DAFI} (PUB-10 at 5 ft bgs, 3.1 mg/kg).
- Lindane was detected in five soil samples. Two of these detections were in excess of the 0.44 mg/kg BCL_{RS} and all five were higher than the 0.0005 mg/kg LBCL_{DAFI}. These exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
SB-16-B	0	0.002
SB-16-B	7	0.0044
WC-IM06	0	0.39
PUB-10SCOM	0	10
PUB-10SWD	0	19

- Methoxychlor was detected in eight soil samples. None of these detections were in excess of the 310 mg/kg BCL_{RS}, but three were higher than the 8 mg/kg LBCL_{DAFI}. These exceedances were associated with surface soils collected from PUA-09 and PUA-10, and with a 5 ft bgs sample collected from PUC-07. The maximum detection was 110 mg/kg (PUA-10).

With the exception of alpha-BHC, beta-BHC, dieldrin, and lindane, the reporting limits for organochlorine pesticides were generally sufficiently low such that concentrations in excess of the comparison levels, if present, would be reported. For these four exceptions, the reporting limits were routinely higher than the LBCL_{DAFI} and often higher than the BCL_{RS}, and it is unknown whether these constituents are also present in additional Site samples at concentrations

in excess of those comparison levels. The distribution of 4,4-DDE for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-33 and C-34, respectively.

2.8.25 Volatile Organic Compounds

Seventy-one Site soil samples were analyzed for VOCs (43 surface and 28 subsurface samples; Table B-3). As seen in Table 1A and Table B-3, fourteen VOCs were detected in at least one sample; 1,2-dichlorobenzene and 1,4-dichlorobenzene were detected the most frequently, in 20 percent and 23 percent of the samples, respectively. None of the detections were above the BCL_{RS}; the standard reporting limits were lower than the BCL_{RS}, and concentrations in excess of the BCL_{RS}, if present, would have been reported.

Five VOCs were reported at concentrations higher than the LBCL_{DAFI}; these exceedances are summarized below.

- 1,2,4-Trichlorobenzene was detected in 12 soil samples; the maximum detection was 2.7 mg/kg (PUA-10, surface sample). None of these detections were in excess of the 140 mg/kg BCL_{RS}, but the following nine sample exhibited detections higher than the 0.3 mg/kg LBCL_{DAFI}:

Sample ID	Depth (ft bgs)
PUA-09	0
PUA-10	0
PUB-08	0
PUB-09	0
PUB-10	0

Sample ID	Depth (ft bgs)
PUC-05	0
PUD-08	0
PUD-09	0
PUE-06	0

- 1,4-Dichlorobenzene was detected in 16 soil samples; the maximum detection was 0.42 mg/kg (PUC-07, surface sample). None of these detections were in excess of the 2.6 mg/kg BCL_{RS}, and only one detection was higher than the 0.1 mg/kg LBCL_{DAFI} (PUC-07).
- Dichloromethane was detected in eight soil samples; the maximum detection was 0.0045 mg/kg (PUB-10, surface sample). None of these detections were in excess of the 11 mg/kg BCL_{RS}, but all eight detections were higher than the 0.001 mg/kg LBCL_{DAFI}. These detections were associated with the following samples:

Sample ID	Depth (ft bgs)
PUA-09	0

Sample ID	Depth (ft bgs)
PUC-08	0

PUA-10	0	PUD-06	0
PUB-09	0	PUD-08	0
PUB-10	0	WC-UP04	0

- Tetrachloroethylene was detected in five soil samples; the maximum detection was 0.0049 mg/kg (PUA-09, surface sample). None of these detections were in excess of the 0.62 mg/kg BCL_{RS}, but two detections were higher than the 0.003 mg/kg LBCL_{DAFI}. These detections were associated with surface soil samples collected in former ponds PUA-09 and PUB-10.
- Trichloroethylene was detected in 11 soil samples; the maximum detection was 0.016 mg/kg (sample ID WC-IM04). None of these detections were in excess of the 1.1 mg/kg BCL_{RS}, but three detections were higher than the 0.003 mg/kg LBCL_{DAFI}. These detections were associated with samples WC-IM04, WC-UP04 and WC-UP07 (stockpiled soils associated with the Sunset North and Mohawk IRMs).

However, in some cases the reporting limits employed during the historical sampling events are higher than the LBCL_{DAFI}, and it is unknown whether these constituents are present in samples at concentrations in excess of the LBCL_{DAFI}. These analytes with reporting limits routinely higher than the LBCL_{DAFI} are as follows:

- | | |
|-----------------------------|------------------------|
| • 1,1,2,2-Tetrachloroethane | • Carbon tetrachloride |
| • 1,1,2-Trichloroethane | • Dichloromethane |
| • 1,2,4-Trichlorobenzene | • Tetrachloroethylene |
| • 1,2-Dichloroethane | • Trichloroethylene |
| • 1,2-Dichloropropane | • Vinyl chloride |
| • Benzene | |

Otherwise, the reporting limits for VOCs were sufficiently low such that concentrations in excess of the LBCL_{DAFI}, if present, would be reported.

As an example of VOC occurrence patterns at the Site, the distribution of 1,2,4-trichlorobenzene for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-35 and C-36, respectively.

2.8.26 Semi-Volatile Organic Compounds

Sixty-six Site soil samples were analyzed for SVOCs (43 surface and 23 subsurface samples; Table B-4). As seen in Table 1A and Table B-4, sixteen SVOCs were detected in at least one

sample. Hexachlorobenzene was detected the most frequently, in 65 percent of the samples; pentachlorobenzene was also detected at a high detection frequency (76 percent), but was only included as an analyte in 17 samples (13 detections). With the exception of hexachlorobenzene and 2,4-dinitrotoluene, all the SVOC detections were lower than the BCL_{RS}; six SVOCs were detected at concentrations in excess of the LBCL_{DAFI}. These comparison level exceedances are discussed below.

- 2,4,6-Trichlorophenol was detected in one sample; that detection (0.087 mg/kg, from WC-IM04, a Mohawk IRM stockpile sample) was lower than the 44 mg/kg BCL_{RS}, but exceeded the 0.008 mg/kg LBCL_{DAFI}.
- 2,4-Dinitrotoluene was detected in one sample; that detection (6.5 mg/kg, from a surface soil sample in former pond PUC-03) was higher than the 1.6 mg/kg BCL_{RS}, and exceeded the 0.00004 mg/kg LBCL_{DAFI}.
- 2-Chlorophenol was detected in one sample; that detection (7.8 mg/kg, from a surface soil sample in former pond PUC-03) was lower than the 390 mg/kg BCL_{RS}, but exceeded the 0.2 mg/kg LBCL_{DAFI}.
- Hexachloro-1,3-butadiene was detected in one sample; that detection (1.4 mg/kg, from a surface soil sample in former pond PUA-10) was lower than the 6.2 mg/kg BCL_{RS}, but exceeded the 0.1 mg/kg LBCL_{DAFI}.
- Hexachlorobenzene was detected in 43 samples; all but two of the hexachlorobenzene detections exceeded the 0.3 mg/kg BCL_{RS}. These 41 hexachlorobenzene BCL_{RS} exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
PUB-06	0	0.35
WC-UP06	0	0.35
WC-UP07	0	0.37
PUA-05	0	0.39
PUD-09	5	0.44
WC-IM07	0	0.47
WC-UP05	0	0.56
PUA-10	5	0.57
PUB-09	5	0.67
PUA-07	5	0.69
WC-IM03	0	1

Sample ID	Depth (ft bgs)	Concentration (mg/kg)
WC-UP02	0	1.8
PUE-07	0	1.9
PUF-05	0	2.5
PUA-09	0	3
PUC-07	0	3
PUA-07	0	3.2
PUA-09	5	3.4
PUE-05	0	3.7
PUC-05	0	3.8
PUG-07	0	4.3
PUD-09	0	4.4

PUG-06	0	1.1	PUC-07	5	4.4
WC-UP01	0	1.1	PUA-10	0	6.6
WC-UP03	0	1.1	PUB-08	0	6.6
WC-UP04	0	1.1	PUD-08	0	8.4
WC-IM01	0	1.2	PUB-09	0	8.6
WC-IM06	0	1.2	PUE-06	0	16
WC-IM02	0	1.5	PUB-10	0	18
PUD-06	0	1.6	WC-IM04	0	20
PUE-07	5	1.6	PUB-10	5	230
PUC-08	0	1.8			

In addition to the samples listed above, hexachlorobenzene was also detected at a concentration above the 0.1 mg/kg LBCL_{DAFI} in one more sample: the WC-BD02 surface sample.

- Pentachlorophenol was detected in surface soil samples from the following 4 former ponds: PUB-09, PUB-10, PUE-06, and PUG-07. The maximum detection was 1.5 mg/kg (PUB-09 surface sample), and all 4 detections were lower than the 3 mg/kg BCL_{RS}. However, all of the detections exceeded the 0.001 mg/kg LBCL_{DAFI}.

For SVOC non-detects, the standard reporting limits were lower than the BCL_{RS} in all cases except for 3,3-dichlorobenzidine, bis(2-chloroethyl)ether, hexachlorobenzene, n-nitrosodi-n-propylamine and pentachlorophenol, which routinely had reporting limits higher than the BCL_{RS}. With the exception of these five compounds, concentrations in excess of the BCL_{RS}, if present, would have been reported for SVOCs. For these and several other SVOCs the reporting limits employed during the historical sampling events are higher than the LBCL_{DAFI}, and it is unknown whether these constituents are present in those samples at concentrations in excess of the LBCL_{DAFI}. The additional analytes with reporting limits routinely higher than the LBCL_{DAFI} are as follows:

- 2,4,6-Trichlorophenol
- 2,4-Dichlorophenol
- 2,4-Dimethylphenol
- 2,4-Dinitrophenol
- 2,4-Dinitrotoluene
- 2,6-Dinitrotoluene
- 2-Chlorophenol
- Carbazole
- Hexachloro-1,3-butadiene
- Hexachloroethane
- Isophorone
- Nitrobenzene
- n-Nitrosodiphenylamine
- p-Chloroaniline

The distribution of hexachlorobenzene for soil samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site is shown on Figures C-39 and C-40, respectively.

2.8.27 Dioxins and Furans

Seventeen Site soil samples were analyzed for dioxins and furans (16 surface and one subsurface samples; Table B-5). At least one of the individual dioxins and furans congeners analyzed were reported as detections in each sample. Comparison levels have not been established for individual congeners. To assess the potential threat to human health, dioxins/furans toxic equivalency (TEQ) concentrations for each sample were compared to the Agency for Toxic Substances and Disease Registry (ATSDR) comparison value of 50 parts per trillion (ppt). Seven of the samples analyzed had calculated TEQ values in excess of this comparison level; these exceedances were associated with the following samples:

Sample ID	Depth (ft bgs)	TEQ Value (mg/kg)
WC-UP07	0	57
WC-UP04	0	71
WC-IM02	0	72
WC-UP02	0	165
WC-UP03	0	170
WC-UP01	0	502.7
WC-IM04	0	6658

LBCL_{DAFI} values have not been established for dioxin/furans; thus the potential for impacts to groundwater quality due to their presence could not be assessed by comparisons to these levels. The distribution of dioxins/furans for soil samples collected in the intervals from 0 to 2 feet bgs at the Site is shown on Figure C-41.

2.8.28 Polychlorinated Biphenyls

Fifty-four Site soil samples were analyzed for PCBs (Aroclors only) (27 surface, 27 subsurface; Table B-8). PCBs were not detected in any of these samples. The reporting limits for PCBs analyzed were higher than the BCL_{RS} in some cases; thus it is unknown whether these constituents are present in those samples at concentrations in excess of the BCL_{RS}. LBCL_{DAFI} values have not been established for these compounds. It is noted that lack of PCB congener data is a data gap for the Site; congener analysis will be performed as part of this SAP to fill this data gap.

2.8.29 Organophosphorus Pesticides

Seventeen Site soil samples were analyzed for organophosphorus pesticides (16 surface, one subsurface; Table B-7). Organophosphorus pesticides were not detected in any of these samples. The reporting limits were lower than the BCL_{RS}; thus concentrations in excess of the BCL_{RS}, if present, would have been reported. LBCL_{DAFI} values have not been established for these compounds.

2.8.30 Chlorinated Herbicides

Seventeen Site surface soil samples were analyzed for chlorinated herbicides (16 surface, one subsurface; Table B-10); there were no detections reported in these samples. The standard reporting limits were lower than the BCL_{RS}; thus concentrations in excess of the BCL_{RS}, if present, would have been reported. LBCL_{DAFI} values have not been established for these compounds.

2.8.31 Polynuclear Aromatic Hydrocarbons

Sixty-six Site soil samples were analyzed for PAHs (43 surface, 23 subsurface; Table B-11); chrysene was detected the most frequently (in 45 percent of the samples). In addition to chrysene, the other six PAHs detected were: acenaphthene (in one sample), benzo(a)anthracene (in 18 samples), benzo(b)fluoranthene (in two samples), indeno(1,2,3-dc)pyrene (in one sample), and phenanthrene and pyrene (both detected in 26 samples). The maximum detection was 6 mg/kg of acenaphthene (PUC-03). None of the PAH detections exceeded the BCL_{RS}. Detections of two PAHs exceeded the LBCL_{DAFI}: benzo(a)anthracene and benzo(b)fluoranthene as summarized below:

- Benzo(a)anthracene was detected in 18 samples at concentrations lower than the 0.62 mg/kg BCL_{RS}; of these, 12 detections exceeded the 0.08 mg/kg LBCL_{DAFI} (maximum detection 0.31 mg/kg, in the surface soil sample collected in former pond PUB-09). These 12 detections are associated with the following samples:

Sample ID	Depth (ft bgs)
PUA-09	0
PUB-08	0
PUB-09	0
PUB-10	0
PUC-05	0
PUC-07	0

Sample ID	Depth (ft bgs)
PUD-08	0
PUE-05	0
PUE-06	0
PUE-07	0
PUE-07	5
PUG-07	0

- Benzo(b)fluoranthene was detected in two samples, at concentrations lower than the 0.62 mg/kg BCL_{RS}; however, both detections exceeded the 0.2 mg/kg LBCL_{DAFI}. These detections are both associated with samples collected from former pond PUE-07 (0.31 mg/kg in the surface soil sample, and 0.24 mg/kg in the 5 ft bgs sample).

The standard PAH reporting limits were generally, but not always, lower than the BCL_{RS} and the LBCL_{DAFI}; thus concentrations in excess of these comparison levels, if present, would have been reported. In several cases the standard reporting limits employed during the older sampling events are higher than the BCL_{RS} and/or LBCL_{DAFI}, and it is unknown whether these constituents are present in those samples at concentrations in excess of these comparison levels. These analytes with reporting limits frequently higher than the BCL_{RS} and LBCL_{DAFI} are as follows:

- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Dibenzo(a,h)anthracene
- Indeno(1,2,3-c,d)pyrene

2.8.32 Aldehydes

Two Site soil samples (surface and subsurface samples from SB-16-B; Table B-6) were analyzed for aldehydes. Neither acetaldehyde nor formaldehyde were detected in either sample. The reporting limits were lower than the BCL_{RS}; thus concentrations in excess of the BCL_{RS}, if present, would have been reported. LBCL_{DAFI} values have not been established for these compounds.

2.8.33 Organic Acids and Glycol/Alcohols

Two Site soil samples (surface and subsurface samples from SB-16-B; Table B-10) were analyzed for organic acids and glycols/alcohols; there were no detections reported in the samples. The standard reporting limits were lower than the BCL_{RS}; thus concentrations in excess of the BCL_{RS}, if present, would have been reported. The reporting limit for 4-chlorobenzene sulfonic acid (the only analyte in these analyses with an established LBCL_{DAFI}) was higher than the LBCL_{DAFI}, and it is unknown whether this constituent is present at a concentration in excess of the LBCL_{DAFI}.

2.8.34 Radionuclides

Radionuclides were detected in all 30 of the Site soil samples analyzed (16 surface and 14 subsurface soil samples; Table B-9). Exceedances of comparison levels for radionuclides are only shown in Table 1A for the eight radionuclides currently included in the project analyte list (radium-226, radium-228, thorium-228, thorium-230, thorium-232, uranium-233/234, uranium-235/236, and uranium-238). Of those detections greater than comparison levels, several are lower than the maximum background activity, as shown in Table 1A. Detections higher than comparison levels and background are summarized below for each radionuclide:

- Radium-226 was detected in all but three of the samples in which it was analyzed (27 detections); all of these detections were higher than the BCL_{RS} and LBCL_{DAFI} (0.0071 pCi/g and 0.016 pCi/g, respectively). However, only 13 of those detections were higher than the 2.36 pCi/g maximum background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUC-07	5	4.94
PUB-10	10	5
PUB-06	0	5.19
PUG-05	0	5.42
PUB-09	10	6.06
PUC-03	0	7
PUE-05	0	11.3

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-07	0	15.7
PUD-06	0	18.9
PUD-08	0	20.9
PUC-07	0	27.7
PUC-05	0	31.5
PUB-08	0	36.5

- Radium-228 was detected in all samples in which it was analyzed (30 samples); all of these detections were higher than the BCL_{RS} and LBCL_{DAFI} (0.013 pCi/g and 0.016 pCi/g, respectively). However, only seven of those detections were higher than the 2.94 pCi/g maximum background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-03N	0	3.13
PUC-03	0	3.32
PUC-07	0	3.69
PUD-08	0	3.87
PUE-05	0	3.91
PUC-05	0	5.65
PUA-07	0	8.44

- Thorium-228 was detected in all samples in which it was analyzed (30 samples); all of these detections were higher than the 0.0078 pCi/g BCL_{RS} and the 0.0023 pCi/g, LBCL_{DAFI}). Eight detections were higher than the 2.28 pCi/g maximum background activity. These detections are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-07	5	2.46
PUE-05	0	2.86
PUB-08	0	2.99
PUD-06	0	3.11

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUC-07	0	3.4
PUD-08	0	5.21
PUC-05	0	5.9
PUA-07	0	9.58

- Thorium-230 was detected in all samples in which it was analyzed (30 samples); 13 of these detections were higher than the 3.2 pCi/g BCL_{RS} and all of them were higher than the 0.00084 pCi/g LBCL_{DAFI}. Thirteen detections (corresponding to those samples with BCL_{RS} exceedances) were higher than the 3.01 pCi/g maximum background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUB-06	0	4.3
PUA-07	5	5.84
PUB-09	10	6.93
PUC-03	0	6.97
PUC-07	5	7.43
PUD-06	0	18.5
PUE-05	0	21.6

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUB-10	10	23.9
PUB-08	0	31.7
PUA-07	0	35.7
PUC-07	0	36.8
PUD-08	0	37.4
PUC-05	0	46.7

- Thorium-232 was detected in all samples in which it was analyzed (28 samples); 5 of these detections were higher than the 2.8 pCi/g BCL_{RS} and all of them were higher than the 0.0029 pCi/g LBCL_{DAFI}. However, only seven of those detections were higher than the 2.23 pCi/g maximum background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUE-05	0	2.7
PUB-08	0	2.72
PUD-06	0	3.55
PUC-07	0	4.1
PUD-08	0	5.08
PUC-05	0	6.26
PUA-07	0	10.81

- Uranium-233/234 was detected in all samples in which it was analyzed (30 samples); 12 of these detections were higher than the 4.2 pCi/g BCL_{RS}. An LBCL_{DAFI} has not been established for this constituent. The twelve BCL_{RS} exceedances were higher than the 2.84 pCi/g maximum background activity. These BCL_{RS}/background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-07	5	4.9
PUC-07	5	6.81
PUB-06	0	7.6
PUB-09	10	8.58
PUE-05	0	15.33

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUD-06	0	20.5
PUB-08	0	23.6
PUA-07	0	27.3
PUD-08	0	29
PUC-07	0	30.7

PUB-10	10	17.3	PUC-05	0	33.3
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- Uranium-235/236 was detected in all but two of the samples in which it was analyzed (28 detections); 19 of these detections were higher than the 0.11 pCi/g BCL_{RS}. An LBCL_{DAFI} has not been established for this constituent. Fourteen detections were higher than the 0.21 pCi/g maximum background activity. These BCL_{RS}/background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUA-07	5	0.243
PUG-05	0	0.26
PUC-03	0	0.268
PUB-06	0	0.392
PUC-07	5	0.501
PUB-09	10	0.51
PUE-05	0	0.93

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUB-10	10	1.06
PUD-06	0	1.08
PUB-08	0	1.13
PUA-07	0	1.34
PUC-07	0	1.51
PUD-08	0	1.56
PUC-05	0	1.76

- Uranium-238 was detected in all 30 of the samples in which it was analyzed; all of these detections were higher than the 0.46 pCi/g BCL_{RS}. An LBCL_{DAFI} has not been established for this constituent. Of these, fifteen detections were higher than the 2.37 pCi/g maximum background activity. These background exceedances are associated with the following samples:

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUE-05	5	2.8
PUG-05	0	3.29
PUC-03	0	3.63
PUA-07	5	5.01
PUC-07	5	6.84
PUB-06	0	7.33
PUB-09	10	8.93
PUE-05	0	15.28

Sample ID	Depth (ft bgs)	Activity (pCi/g)
PUB-10	10	16.3
PUD-06	0	19
PUB-08	0	23
PUA-07	0	25.5
PUD-08	0	26.7
PUC-07	0	30.3
PUC-05	0	33.5

As presented in NDEP guidance (NDEP 2009c), as part of the process used to evaluate radionuclide data for the Common Areas, BRC will assess whether secular equilibrium has been attained (as an indication that steady-state conditions have been reached). Given the limited amount of radionuclide data for this Site and the differences in sample collection procedures (*i.e.*, a mix of composite and discrete) and historical analytical methods, and without conducting statistical equivalence testing, the data indicate that secular equilibrium has been broadly attained at the Site for the thorium decay chain. Specifically, the mean radioactivities for thorium-232, radium-228, and thorium-228 are comparable (2.4 pCi/g, 2.6 pCi/g, and 2.4 pCi/g, respectively), and are close to the maximum background radioactivity levels. However, the mean values for the uranium chain are more variable, and are appreciably higher than the maximum background

activities. A more thorough evaluation of secular equilibrium status will be performed after collecting radionuclide data in accordance with this SAP.

The distribution of radium-226, representative of radionuclides, for samples collected in the intervals from 0 to 2 feet bgs and 3 to 10 feet bgs at the Site are shown on Figures C-42 and C-43, respectively.

2.8.35 Summary of Soil Exceedances

As summarized above and in the associated data tables (Tables 1A, 1B, 1C and Appendix B), sampling of Site soils has been limited, and the analyte list is incomplete. Based on the limited historical data, the BCL_{RS} and LBCL_{DAFI} exceedances noted below were observed.

The following constituents were reported at concentrations higher than the BCL_{RS} and the maximum background concentration (where applicable):

- | | | |
|-------------|-------------|----------------------|
| • Antimony | • Thallium | • Chlordane |
| • Arsenic | • Vanadium | • Heptachlor |
| • Barium | • TCDD | • Lindane |
| • Chromium | • 4,4-DDE | • 2,4-Dinitrotoluene |
| • Cobalt | • 4,4-DDT | • Hexachlorobenzene |
| • Lead | • alpha-BHC | • Radionuclides |
| • Manganese | • beta-BHC | |

The following constituents were reported at concentrations higher than the LBCL_{DAFI} and the maximum background concentration (where applicable):

- | | | |
|-------------|------------|----------------------------|
| • Aluminum | • Silver | • Benzo(a)anthracene |
| • Antimony | • Thallium | • Benzo(b)fluoranthene |
| • Arsenic | • Vanadium | • 2,4,6-Trichlorophenol |
| • Barium | • Cyanide | • 2,4-Dinitrotoluene |
| • Beryllium | • 4,4-DDD | • 2-Chlorophenol |
| • Cadmium | • 4,4-DDE | • Hexachloro-1,3-butadiene |

- | | | |
|--------------------|----------------|--------------------------|
| • Chromium (Total) | • 4,4-DDT | • Hexachlorobenzene |
| • Chromium (VI) | • alpha-BHC | • Pentachlorophenol |
| • Cobalt | • beta-BHC | • 1,2,4-Trichlorobenzene |
| • Copper | • Chlordane | • 1,4-Dichlorobenzene |
| • Manganese | • Dieldrin | • Dichloromethane |
| • Mercury | • Endrin | • Tetrachloroethylene |
| • Molybdenum | • Heptachlor | • Trichloroethylene |
| • Nickel | • Lindane | • Radionuclides |
| • Selenium | • Methoxychlor | |

Reported values above these comparison levels were observed across the Site; however, the highest reported values were often associated with samples collected from within the southwestern quadrant (*i.e.*, first three rows, former pond cells closest to the Beta Ditch).

2.8.36 On-Going Remedial Actions

Due to the large number of comparison level exceedances currently observed in Site soils and the magnitude of those exceedances, BRC is currently conducting remediation of Site soils in accordance with the approved CAP (BRC 2006) prior to implementing this SAP. This remedial action consists of excavating soils with visual or other evidence of impacts from the former effluent ponds, and transporting those soils to the off-site CAMU for disposal. The soils targeted for excavation include discolored sediments/soils and sediments/soils associated with historical sampling locations with elevated reported values, but not necessarily corresponding to exceedances of the BCL_{RS} and/or $LBCL_{DAFI}$ for a given analyte.

2.9 CHEMICAL DISTRIBUTION WITHIN GROUNDWATER

For evaluating Shallow Zone groundwater quality at the Site, the following wells in the immediate Site vicinity were used: on-site well MCF-16C, and off-site wells AA-18, AA-UW6, and POD8. Wells MCF-16C and AA-UW6 are depicted on Figure 2; wells AA-18 and POD8 are outside the figure boundaries, north and west of the Site, respectively. The data associated with these wells from the most recent groundwater monitoring event (May through June 2008) are presented in Table 2. Data validation results are presented in the DVSR for dataset 51 (ERM 2008), which was approved by NDEP on November 1, 2008. Chemical occurrence patterns for

the chemicals detected in groundwater from these wells are provided below. For data evaluation purposes, the detections were compared to the following, where established:

- U.S. Environmental Protection Agency (USEPA) Maximum Contaminant Levels (MCLs);
- Human health screening levels for indoor air intrusion (USEPA generic groundwater to indoor air screening level; “Vapor Intrusion Screening Level,” hereinafter “VI SL”); and
- The NDEP residential water BCL (BCL_W).

Organic Compounds. The few organic compounds detected during the 5th groundwater monitoring event are as follows:

- alpha-BHC was detected in samples collected from wells MCF-16 and POD8 at relatively low concentrations (maximum detection 0.12 $\mu\text{g/L}$ at MCF-16). MCLs have not been established for this constituent. The detections (0.1 $\mu\text{g/L}$ and 0.12 $\mu\text{g/L}$) were well below the 3.1 $\mu\text{g/L}$ VI SL, but exceed the 0.011 $\mu\text{g/L}$ BCL_W .
- beta-BHC was detected in the sample collected from well POD8 at a concentration of 0.069 $\mu\text{g/L}$. An MCL and VI SL have not been established for this constituent. The detection was higher than the 0.037 $\mu\text{g/L}$ BCL_W .
- Endrin was detected in the sample collected from well AA-UW6 at a concentration of 0.047 $\mu\text{g/L}$. A VI SL has not been established for this constituent. The detection was lower than the MCL and the BCL_W (2 $\mu\text{g/L}$ for both).
- gamma-Chlordane was detected in the sample collected from well MCF-16C at a concentration of 0.053 $\mu\text{g/L}$. A VI SL and BCL_W have not been established for this constituent. The detection was lower than the 2 $\mu\text{g/L}$ MCL.
- 1,2-Dichlorobenzene was detected in the sample collected from well AA-UW6 at a concentration of 0.17 $\mu\text{g/L}$. The detection was lower than the BCL_W and the MCL (600 $\mu\text{g/L}$ for both), and the 2,600 $\mu\text{g/L}$ VI SL.
- 1,4-Dichlorobenzene was detected in the sample collected from well AA-UW6 at a concentration of 0.29 $\mu\text{g/L}$. The detection was lower than the BCL_W and the MCL (75 $\mu\text{g/L}$ for both) and the 8,200 $\mu\text{g/L}$ VI SL.

- Acetone was detected in the sample from AA-UW6 at a reported concentration of 4.3 µg/L. An MCL has not been established for this compound. The detection was well below the 220,000 µg/L VI SL and the 32,600 µg/L BCL_w.
- Bromodichloromethane was detected in the sample from MCF-16C at a reported concentration of 0.56 µg/L. The detection was below the 80 µg/L MCL the 2.1 µg/L VI SL, and the 1.1 µg/L BCL_w.
- Carbon disulfide was detected in the sample from MCF-16C at a reported concentration of 0.78 µg/L. An MCL has not been established for this compound. The detection was well below the 560 µg/L VI SL and the 3,520 µg/L BCL_w.
- Carbon tetrachloride was detected in the sample from MCF-16C at a reported concentration of 1.9 µg/L. The detection was below the VI SL, MCL, and BCL_w (5 µg/L for all three comparison levels).
- Chloroform was detected in samples from all of the wells. The highest detection was 210 µg/L (MCF-16C); this was the only detection higher than the MCL and VI SL (80 µg/L each). The MCF-16C and AA-18 (7.2 µg/L) detections were higher than the 1.6 µg/L BCL_w.
- Toluene was detected in a sample from AA-UW6 at a reported concentration of 0.22 µg/L. The detection was well below the MCL and BCL_w (1,000 µg/L for both), the 1,500 µg/L VI SL.

No other organic chemicals were detected in these monitoring wells. The standard reporting limits for most of the analytes in these samples were sufficiently low such that concentrations in excess of the comparison levels, if present, would be detected. The exceptions are as follows:

Constituent	Reporting Limit	Comparison Level of Concern ²⁰
Formaldehyde	60 µg/L	1.5 µg/L BCL _w no VI SL; no MCL
1,2-Diphenylhydrazine	1 µg/L	0.084 µg/L BCL _w no VI SL; no MCL
2,4-Dinitrotoluene	1.1 µg/L	0.22 µg/L BCL _w no VI SL; no MCL
3,3-Dichlorobenzidine	1 µg/	0.15 µg/L BCL _w no VI SL; no MCL
Azobenzene	1 µg/L	0.54 µg/L BCL _w no VI SL; no MCL

²⁰ This table lists only those comparison levels that are lower than the standard reporting limit.

Constituent	Reporting Limit	Comparison Level of Concern ²⁰
Benzo(a)anthracene	1 µg/L	0.092 µg/L BCL _w no VI SL; no MCL
Benzo(a)pyrene	1 µg/L	0.2 µg/L MCL; 0.2 µg/L BCL _w no VI SL
Benzo(b)fluoranthene	1 µg/L	0.092 µg/L BCL _w no VI SL; no MCL
Benzo(k)fluoranthene	1 µg/L	0.92 µg/L BCL _w no VI SL; no MCL
bis(2-Chloroethoxy)methane	1 µg/L	0.0045 µg/L VI SL no MCL; no BCL _w
bis(2-Chloroethyl)ether	1 µg/L	0.054 µg/L BCL _w adequately low for VI SL; no MCL
bis(2-Chloroisopropyl)ether	1 µg/L	0.9 µg/L BCL _w adequately low for VI SL; no MCL
Dibenzo(a,h)anthracene	1 µg/L	0.0092 µg/L BCL _w no VI SL; no MCL
Hexachloro-1,3-butadiene	1 µg/L	0.33 µg/L VI SL; 0.86 µg/L BCL _w no MCL
Hexachlorobenzene	1 µg/L	0.042 µg/L BCL _w adequately low for VI SL and MCL
Indeno(1,2,3-cd)pyrene	1 µg/L	0.092 µg/L BCL _w no VI SL; no MCL
n-Nitrosodi-n-propylamine	1 µg/L	0.0096 µg/L BCL _w no VI SL; no MCL
Pentachlorophenol	2 µg/L	1 µg/L MCL; 1 µg/L BCL _w no VI SL
1,2,3-Trichloropropane	0.22 µg/L	0.034 µg/L BCL _w adequately low for VI SL; no MCL
1,2-Dibromo-3-chloropropane	0.48 µg/L	0.2 µg/L MCL; 0.2 µg/L BCL _w adequately low for VI SL
2-Nitropropane	0.034 µg/L	0.0063 µg/L BCL _w adequately low for VI SL; no MCL
Tribromomethane	0.27 µg/L	0.0083 µg/L VI SL adequately low for BCL _w and MCL

For these constituents it cannot be determined whether they are present in Site groundwater at concentrations greater than the comparison levels noted above.

Inorganic Compounds. Inorganic compounds were routinely detected in the groundwater samples. It should be noted that many of these constituents are naturally-occurring in groundwater, and the extent to which the detections represent background conditions was not evaluated for this SAP. The following constituents were detected at concentrations above their respective MCLs and BCL_w²¹ as summarized below:

- Chloride is higher than the 250 mg/L MCL in samples collected from wells MCF-16C and POD8 at reported concentrations of 1,230 mg/L (both wells).

²¹ VI SLs have not been established for inorganic constituents.

- Chlorine is higher than the 4 mg/L BCL_W in samples collected from all of the wells. The maximum reported concentration was 2,460 mg/L (MCF-16C and POD8).
- Nitrate is higher than the 10,000 mg/L MCL and BCL_W in samples collected from all of the wells except AA-UW6, which had a lower reported concentration. The maximum reported concentration was 41,600 mg/L (POD8).
- Perchlorate is higher than the USEPA Drinking Water Equivalent Level and BCL_W²² (24.5 µg/L and 18 µg/L, respectively) in samples collected from all of the wells; the maximum detection was 11,100 µg/L (MCF-16C).
- Sulfate is higher than the 250 mg/L MCL in samples collected from all of the wells; the maximum reported concentration was 5,570 mg/L (MCF-16C).
- Aluminum is higher than the 50 µg/L MCL in samples collected from wells AA-18 and POD8 (maximum detection 250 µg/L at POD8). The reporting limits for the other samples were elevated above the MCL, and it is unknown whether aluminum is also present at these locations at concentrations above the MCL.
- Arsenic is higher than the MCL and BCL_W (10 µg/L for both) in samples collected from wells AA-18 and AA-UW6; the highest concentration is associated with AA-UW6 (102 µg/L). The reporting limits for the other two samples were elevated above the MCL and BCL_W, and it is unknown whether arsenic is also present at these locations at elevated concentrations.
- Chromium is higher than the 100 µg/L MCL in the sample collected from well MCF-16C (155 µg/L).
- Lithium is higher than the 73 µg/L BCL_W in the samples collected from wells MCF-16C, AA-18 and AA-UW6; the highest concentration is associated with MCF-16C (732 µg/L). The reporting limit for the sample from POD8 was elevated above the BCL_W, and it is unknown whether lithium is also present at that location at elevated concentrations.
- Magnesium is higher than the 207,000 µg/L BCL_W in samples collected from wells MCF-16C and POD8; the highest concentration is associated with MCF-16C (671,000 µg/L).

²² An MCL has not been established for this constituent.

- Molybdenum is higher than the 180 µg/L BCL_W in the sample collected from well MCF-16C (223 µg/L).
- Uranium is higher than the 30 µg/L MCL in the sample collected from well POD8 (50.4 µg/L).
- Thorium-228 is higher than the 0.11 pCi/L BCL_W in the sample collected from well MCF-16C (0.407 pCi /L). The reporting limits for the samples from wells AA-18 and AA-UW6 were elevated above the BCL_W, and it is unknown whether thorium-228 is also present at those locations at elevated activity levels.
- Total Dissolved Solids (TDS) is higher than the 500 mg/L MCL in samples collected from all of the wells; the maximum reported concentration was 16,000 mg/L (MCF-16C).

It should be noted that reporting limits for several analytes in addition to those noted above were routinely higher than the MCLs or BCL_W (*i.e.*, antimony, iron, and thallium), and it cannot be ascertained if these constituents are present in Site groundwater at concentrations greater than those comparison levels. Chemical occurrence in both the shallow and deep water-bearing zones beneath the Eastside and CAMU areas is currently being characterized under a process separate from the Closure Plan process under which this SAP has been prepared, which focuses on site soils. A more detailed presentation of chemical occurrence patterns within these water-bearing zones (including comparisons to background conditions) and an assessment of the potential health risks will be provided upon completion of the on-going groundwater investigation, and the CSM for the Eastside and CAMU areas will be updated accordingly.

3.0 DATA QUALITY OBJECTIVES

The DQO process is a seven-step iterative planning approach used to prepare plans for environmental data collection activities. It provides a systematic approach for defining the criteria that a data collection design should satisfy, and covers: problem definition; when, where, and how to collect samples or measurements; determination of tolerable decision error rates; and the number of samples or measurements that should be collected. DQOs define the purpose of the data collection effort, clarify what the data should represent to satisfy this purpose, and specify the performance requirements for the quality of the data to be obtained. The DQO process, as defined by USEPA's *Guidance on Systematic Planning Using the Data Quality Objectives Process, EPA QA/G-4* (USEPA 2006), consists of 7 steps:

Step 1 - State the Problem;

Step 2 - Identify the Goal of the Study;

Step 3 - Identify Information Inputs;

Step 4 - Define the Boundaries of the Study;

Step 5 - Develop the Analytical Approach;

Step 6 - Specify Performance or Acceptance Criteria; and

Step 7 - Develop the Plan for Obtaining Data.

A general overview of USEPA and NDEP's 7-step DQO process is provided in the Closure Plan. The key decision inputs to the DQO process, namely the Step 2 Principal Study Questions (PSQs), are also provided in the Closure Plan. The PSQs are the central Eastside Area-wide questions that provide a basis for the overall closure effort. Per discussions with the NDEP, the other steps of the DQO process are to be addressed, on an Eastside Area sub-area basis (for soils), in the respective sub-area SAPs. Steps 1 through 5 of the DQO process are described below for this Site. Implementation of DQO Steps 6 and 7 is described in the Statistical Methodology Report, which presents the statistical approach to sample design for the Eastside Area sub-areas soils investigations.

3.1 STATE THE PROBLEM (STEP 1)

The first step in the DQO process is to define the problem that initiated the study in such a way that the focus of the study is unambiguous. This section provides the following information: a summarization of the problem being addressed; identification of the assessment team; identification of the key decision-makers and stakeholders; and a presentation of the schedule.

3.1.1 Problem Statement

As presented in the Closure Plan, the Site includes open land that has been modified to accept wastewater discharges from the BMI Complex through various trenches and evaporation ponds from 1942 through 1976. Currently, the approximately ~~201.5~~^{203.7} acre Site includes former unlined disposal ponds ~~and an effluent conveyance ditch~~ associated with historical BMI Complex operations. The industrial activity on this Site may have resulted in concentrations of chemicals that drive unacceptable human health risk. Residual contamination remains at the Site as a consequence of these discharges. The goal of this work is to remediate the Site such that chemical concentrations in all relevant media do not pose an unacceptable risk to human health and the environment under current and future land use scenarios. The problem that needs to be addressed is one of returning at least the upper 10 feet of soils at the Site to conditions that pass a human health risk assessment, with restrictions on access to deeper soils and on the use of groundwater. Risk assessment at the Site includes exposure to soils, but also exposure to VOCs and radon, which might emanate from the vadose zone or from groundwater. A further consideration is the potential for leaching contaminants into groundwater.

The Site is currently vacant. The potential on-site and off-site receptors are currently trespassers/visitors, occasional on-site workers, and off-site residents. Risks to current receptors are being managed through Site access control. Under the current, prospective redevelopment plan, the Site will be used for residential land use (low, medium, and high density) with roads, parks and trails interspersed, with a school land use in the southwestern corner of the Phase I sub-area (Figure 3). Consequently, receptors that are considered for this problem include construction workers, residents (adult and child), maintenance workers, and trespassers. The potentially exposed populations for the Site and their potential routes of exposure are presented on Figure 8 and are summarized in Section 9 of the Closure Plan.

As described in the Closure Plan and in the Statistical Methodology Report, remediation for all media will be to risk-based levels protective of human health and the environment under current and future land use scenarios. The problem will be addressed through iterative remediation until

sufficient remediation (removal of soil) has been performed that acceptable human health risks have been attained. Mass-scale remediation has been completed based on existing Site data, prior to conducting the confirmation sampling proposed under this SAP (see Section 2.8). The risk assessments performed for Site closure will primarily use the data collected as part of this SAP, which has been designed to produce data representative of the conditions to which current (non-remediation workers) or future users would be exposed. The need for additional remediation will be primarily based on the SAP sampling results. The final site conditions will include regrading of on-site soils, so that the future surface will not consist of the same soil as the current surface. Imported fill material may or may not be needed, including fill from other Sites. The grading plan for this Site is presented on Figure 4.

Although the primary focus is human health risk assessment for residential and commercial use scenarios, secondary issues that will be addressed include contamination of deeper soils and groundwater beneath the Site. BRC will also discuss the issue of off-Site transport of contaminants with the NDEP should the NDEP determine that this is necessary, maintaining consistency with the AOC3. However, because remediation of the Site will be to on-site residential standards, risks to off-site receptors are expected to be minimal.

3.1.2 Proposed Assessment Team

A multi-disciplinary approach is being and will be followed with participation by qualified geologists, chemists, radiochemists, hydrogeologists, biologists, ecologists, engineers, remediation specialists, toxicologists, risk assessors (human health and ecological), statisticians, field sampling personnel, community relations personnel, risk communications specialists, project developers, and project managers. BRC maintains an active roster of key team members, which will be periodically updated as appropriate throughout the project term. Key team members are identified in Section 1.4 of the Closure Plan.

3.1.3 Key Decision Makers and Stakeholders

The NDEP is the primary and the ultimate decision-maker for the project. Stakeholders include BRC, the City of Henderson, Clark County, the State of Nevada, the United States Government, the local public, site developers, and other interested persons.

3.1.4 Schedule

BRC has established a phased schedule for the Eastside Area such that the various sub-areas are addressed sequentially. The timing of the phased closures is closely spaced to avoid potential complications associated with the presence of contaminated soils near areas that have been successfully remediated and closed and to mitigate potential impacts on adjacent residential housing developments.

As noted in Section 3.1.1, mass-scale remediation has been completed based on existing Site data prior to conducting SAP sampling activities, and risk assessments performed for Site closure will primarily use data collected as part of this SAP (i.e., after remediation has been substantively performed). For the purposes of Site closure, it is these post-remediation/pre-development conditions that are most appropriate to evaluate in terms of potential exposures and risks to then-current (non-remediation workers) or future users.

Surface and shallow soil data will be used to evaluate both the current (post-remediation, pre-development) and future (post-development) exposures and risks. Once these data have been collected and preliminary risk calculations have been completed, BRC will determine whether the acceptable chemical concentrations and/or risk levels defined for the Site have been attained and will discuss this determination with the NDEP. If it is determined that acceptable risk levels have not been attained, BRC will perform additional remediation activities consistent with the CAP (BRC 2006), and will repeat the assessment process until risk-based goals are achieved. Each iterative remediation and data collection process is expected to take place over a one to two month period, but may extend into a slightly longer period.

3.2 IDENTIFY THE GOAL OF THE STUDY (STEP 2)

The purpose of this step is to define the Site-specific PSQs that need to be resolved in order to address the problem identified in Step 1, and to identify alternative actions that may be taken, depending on the answers to the PSQs. As noted above, the project PSQs are presented in the Closure Plan. The primary PSQ associated with this SAP is:

Are the current (post-remediation, pre-development) and future (post-development) incremental risks to human health or the environment from exposure to Site soil and soil vapor flux sufficiently low that they are acceptable?

If the incremental risks are not sufficiently low, then reasonable further action will be taken;

otherwise, no further action will be taken and a risk assessment report will be prepared. Secondary PSQs deal with groundwater quality in the context of the overall site, and on the impact of site contamination on off-site human receptors. Ecological risk assessment issues will be discussed with the NDEP should NDEP determine that an ecological risk assessment is warranted.

The following fundamental assumptions apply:

1. The PSQs will be assessed only after BRC has determined that achievement of Site cleanup goals is expected for Site soils.²³ Cleanup goals for the project are defined in Sections 1.1 and 9.1.1 of the Closure Plan and in the Statistical Methodology Report. The data pool employed in the risk assessment will comprise only those data collected in accordance with this SAP,²⁴ after remediation activities have been performed during the closure process, if such remediation occurs.
2. The data used in PSQ assessment will undergo a rigorous Quality Assurance/Quality Control (QA/QC) review prior to that assessment, in accordance with the procedures described in the *BRC Quality Assurance Project Plan* (QAPP; BRC and ERM 2009). Based on this QA/QC review, only~~Only~~ those data determined ~~as a result~~ to be suitable for use will be included in the closure data pool. Furthermore, the adequacy of the data pool will be evaluated following the procedures provided in Section 9.3 of the Closure Plan. If found to be inadequate, additional sampling and analysis may be performed.

Stated another way, the decision is to determine whether or not Site conditions²⁵ result in acceptable human health risks and environmental risks for future land uses. This will be determined through human health risk assessment for potential future on-site receptors. Potential alternative actions (from the Closure Plan) that may be taken include: (1) No Action (in this context No Action means no additional action beyond removal of contaminated soils presently located on Site), (2) institutional controls/limited action, (3) importation and use of clean fill (on-

²³ The existing historical data suggest that some remediation is needed to attain cleanup goals and BRC has initiated remediation in accordance with the CAP; the need for further remediation will be properly evaluated on the basis of data collected under this SAP, in accordance with the approved risk assessment methodology in the Closure Plan.

²⁴ Data collected prior to SAP approval that might also be representative of Site conditions will not be included in the risk assessment; however, a data usability evaluation will be conducted to determine whether any of the historical data can be used in Site risk assessment, or it will be explained why the new data supplants the old data. However, the historical data may be used to help develop the CSM for both this Site and the overall Eastside.

²⁵ "Site conditions" in the context of this sentence refers to those conditions assessed after performing any excavation of impacted soils and disposing of them outside the Site.

site capping of soils), and (4) excavation of soils and on-site landfill disposal at the project CAMU.

How the study decisions will be determined for the Site, including how the risk assessment will be performed, is presented in the Closure Plan.

3.3 IDENTIFY INFORMATION INPUTS (STEP 3)

The purpose of this step is to identify the information needed to resolve the PSQs identified in Step 2. The data inputs for the primary PSQ are listed below. Risk assessment will be the primary means of answering the PSQs, and will incorporate the various data inputs listed below. These data inputs either 1) are already established, as presented in this SAP or the Closure Plan, 2) will be obtained during the soil and soil vapor flux sampling programs specified in this SAP, or, 3) currently exist as data gaps that will be resolved prior to performing risk assessment. A comprehensive list of the necessary data inputs for addressing the primary PSQ is provided below.

- Input parameters for human health risk assessment and assessment of impacts to groundwater considering relevant exposure pathways associated with potential future land uses.
- Toxicity inputs parameters consistent with current NDEP guidance (BCL_{RS}, NDEP 2009b).
- Input parameters for all fate and transport models (see Closure Plan and data to be collected as determined by this SAP).
- Site soil and soil vapor flux characterization data²⁶ collected according to this SAP.
- Identified locations/depth intervals, including elevations to adjust for use of fill material and regrading.
- Characterization data for imported fill if such fill is considered for use at the Site. At this point, it is not known whether imported fill materials will be used on Site.
- To address the secondary PSQs, soil data from depths greater than 10 feet bgs, and groundwater data will be used to address issues related to further understanding of vadose zone and groundwater contamination beneath the Site.

3.4 DEFINE THE BOUNDARIES OF THE STUDY (STEP 4)

The purpose of this step is to define the aspects of the project that affect the decision making process, including:

- The populations to be sampled;
- The geographical area applicable for decision making;
- Temporal boundaries for decision making;
- Any practical constraints that may interfere with data collection; and
- The scale for decision-making purposes.

Each of these portions of this step is presented below.

3.4.1 Sample Populations

Several target populations will be sampled for this project, including: surface and near-surface soils (*i.e.*, less than 10 feet bgs); subsurface soils (*i.e.*, greater than 10 feet bgs); groundwater; and, soil vapor flux. These populations were segregated based on their differences in media type and pathways for potential human residential exposure following redevelopment. For this project, samples will be collected for surface and near-surface soils and soil vapor flux to address the primary PSQ via human health assessment, and for cumulative risk across these media types and associated pathways. Samples will be collected for subsurface soils and groundwater to address the secondary PSQs.

3.4.2 Spatial Boundaries

The spatial boundaries of interest for the risk assessment are the spatial extent of the Site boundary to a depth of 10 feet bgs or deeper if construction activities are below this level. However, impacts to receptors exposed to these soils can also occur from vapor intrusion from the deeper vadose zone and groundwater. Consequently, the vertical extent of the Site that

²⁶ To be collected as determined by this SAP in accordance with the most recent NDEP-approved version of Standard Operating Procedure 16 (BRC, ERM and MWH, 2008)

encompasses vadose zone and groundwater is of interest. Based on expected land use, construction activities are not expected to occur at depths greater than 10 feet bgs.

Note that more than one set of surface spatial boundaries could ultimately be identified. For example, data may need to be grouped for sub-areas within the Site in order to appropriately address the decision units (*e.g.*, exposure areas). These spatial boundaries might be important if residual contamination varies across the Site either in the surface soils or by depth.

Because sub-areas within the Eastside are adjacent to each other, to assess or avoid potential impacts from other Site sources, risk assessment could be performed across Site boundaries, and/or adjacent Sites will be remediated in the same general time frame. To some extent this will depend on the spatial homogeneity of concentrations once remediation has been performed. Future remediation at adjacent Sites will involve dust suppression and storm water pollution prevention activities, mitigating potential impacts from cross-contamination.

3.4.3 Temporal Boundaries

The temporal boundaries of interest for this project are defined by the timeframe associated with decision making for each spatially distinct region of interest. Specifically, for each different land-use scenario, within each decision or exposure unit, both current and potential future risk needs to be considered and quantified. The time frame over which future risks will be evaluated can be regarded as indefinite, implying that future land uses must satisfy institutional constraints placed on the site now, or a new risk assessment will need to be performed. Specific issues for each medium are described below.

Surface Soil

The surface soil concentrations used in the risk assessment will be derived from then-existing soil conditions (that is, established during the characterization activities performed in accordance with this SAP). BRC assumes that these will reflect the concentration distribution for the project lifetime, and those data will be relied upon throughout the redevelopment process and for assessing risks under current and future land use scenarios. The timeframe for data collection, assessment, and decision-making will be from one to three months for surface soils. These soil data will be used to evaluate both current (post-remediation, pre-development) and future (post-development) exposures and risks.

Subsurface Soil and Groundwater

As noted, BRC does not expect that subsurface soils (generally greater than 10 feet bgs) will be an issue from a human exposure standpoint. However, subsurface soils will be sampled in order to determine potential impacts to groundwater in accordance with the secondary PSQ relating to the deeper vadose zone and groundwater in the context of the entire Site. These subsurface soil data will be used to evaluate both current (post-remediation, pre-development) and future (post-development) impacts to groundwater. Data to support the evaluation of potential impacts to groundwater will be collected. These data will be collected to support the migration to groundwater calculations included in the Closure Plan, as well as more refined modeling tools (such as, VLEACH, SESOIL, and PESTAN). Any indirect impacts from underlying groundwater will be addressed via the proposed surface flux measurements.

Soil Vapor Flux

The soil vapor fluxes used in the risk assessment will be derived from soil vapor flux data associated with existing soil and groundwater conditions (that is, data collected during the characterization activities performed in accordance with this SAP). BRC assumes that these will reflect the soil vapor flux distribution for the project lifetime, and those data will be relied upon throughout the redevelopment process and for assessing risks under current and future land use scenarios. The timeframe for data collection, assessment, and decision-making will be from one to three months for soil vapor flux. These soil vapor flux data will be used to evaluate both current (post-remediation, pre-development) and future (post-development) exposures and risks.

3.4.4 Practical Constraints for Data Collection

Since the Site is currently unoccupied, there are no access constraints for collecting soil or soil vapor flux samples from BRC's property as specified in this SAP. For groundwater (which is not part of this SAP), additional and/or routine sampling activities (such as groundwater sampling from monitoring wells) may be required following redevelopment. However, these constraints do not apply to the situation associated with this SAP and will be dealt with at a later time.

3.4.5 Scale of Decision-Making

The scale for decision-making regarding the primary PSQ varies based on the target sample population of interest. Redevelopment of the Site following remediation includes significant changes in land uses, including residential housing. Other potential development interests in

addition to residential housing include a school, roads, and trails (see Figure 3). However, the final redevelopment plans for the Site have not been completed and may change depending upon the results of post-remediation sampling. To facilitate the redevelopment of the Site with the fewest practical constraints due to residual contamination, the nominal scale for decision-making for the proposed residential exposure scenario, the most protective scenario, will be consistent with a typical residential lot size, which is 1/8th acre. However, if, as expected, the concentration distribution across the Site is statistically homogeneous representing a single population of concentrations for each chemical, then the decision unit will be the entire Site. Smaller decision units will only be defined if the spatial distribution of concentrations suggests the need to break the Site into smaller areas for risk-based decision-making. The same approach will be used for soil vapor flux, subsurface soils and groundwater as they feed into the human health risk assessment.

3.5 DEVELOP THE ANALYTICAL APPROACH (STEP 5)

The purpose of this DQO step, as described in USEPA guidance, is to define the population parameter (*e.g.*, mean risk) of interest for each population (surface soil, etc.), identify the appropriate action level (target risk level) for each population, and select measurement and analysis methods that can be used to properly evaluate the parameters against the action levels (*i.e.*, ensure detection limits do not exceed action levels, etc.). Once these actions are completed, decision rules (if-then statements) are developed for each population that state the alternative actions that would be taken depending upon the true value of the parameter relative to the specified action levels.

The PSQ-specific decision rules for the Site are presented below.

- If, after confirmation sampling conducted per the Closure Plan and this SAP, and subsequent risk assessment following procedures per the Closure Plan, it is deemed that the risk goals for the project (as discussed in Section 1 of the Closure Plan) are not met, then remediation per Alternative (4) (excavation of soils and on-site landfill disposal at the project CAMU) listed in Section 3.2 will be conducted to satisfy the risk goals. The risk assessment methodology for the project is presented in Section 9 of the Closure Plan.
- If, after implementation of the Decision Rule above it is determined that there are specific locations at the Site for which additional and continued remediation will not be practical or effective, then other alternatives such as Alternative (2) and Alternative (3) (institutional controls/limited action, and importation and use of clean fill) identified in Section 3.2 will be

evaluated considering overall protection, effectiveness, permanence, implementability, cost, regulatory acceptance, and community acceptance.

- If, after implementation of the Decision rule above it is determined that no further action needs to be taken in the top 10 feet of soils, a proposal for an NFAD will be made. This proposal will be made only after consultation with NDEP.

Data for the secondary PSQs (deeper soils and groundwater) will be evaluated for obvious issues that might require immediate action, and will be included in analysis of objectives related to the groundwater program for the entire Site.

4.0 SCOPE OF WORK

As noted above, based on existing historical analytical results, BRC has initiated remediation at the Site in accordance with the CAP (BRC 2006) prior to the sampling activities specified in this SAP. Decisions regarding the need for further remediation will be based on the initial data to be collected in accordance with this SAP as discussed in this section.

The risks posed to human health and the environment by chemicals remaining in Site soils will be assessed in accordance with the Risk Assessment Methodology provided in the Closure Plan. If this assessment indicates that risk-based cleanup goals established for the Site have not been met, additional phases of remediation, sampling/analysis and assessment will be performed as discussed in the CAP and the Closure Plan. Development may only proceed after attainment of acceptable risk levels under the future planned land uses – *i.e.*, after obtaining the NFAD from the NDEP.

The following is the proposed scope of work for investigating the Site and meeting the SAP objectives. This scope includes soil sampling (final and interim), soil vapor flux sampling,²⁷ and laboratory analyses of those samples. Much of the discussion below regarding confirmation soil sampling is taken from the Statistical Methodology Report.

4.1 INITIAL CONFIRMATION SOIL SAMPLING

As per the Statistical Methodology Report, the initial confirmation sampling in the Site will be conducted on the basis of combined random and biased (judgmental) sampling, as follows:

- **Stratified Random Locations:** For this purpose, the Site is covered by a 3-acre cell grid network. Within each 3-acre cell, a sampling location is randomly selected. Sampling locations are randomly selected within both full and partial grid cells if they are greater than 50 percent of the total grid cell area (based on the project-wide grid cell network and the Site boundaries; those partial grid cells that contain less than 50 percent of their area within the Site will be included in the adjacent sub-area SAPs). The main objective of this stratified random sampling is to provide uniform coverage of the Site.

²⁷ A study comparing soil gas sampling and surface flux sampling is planned for the project. The outcome of that study will determine whether soil flux data will continue to be collected for the project, or whether this data will be supplemented and/or replaced by soil gas data. The sampling for the Site will be revised accordingly. The sampling method does not affect the sample locations, number of samples, or the laboratory analysis in this SAP.

- **Biased Locations:** Additional sampling locations are selected within or near small-scale contamination points of interests, including but not limited to previous debris locations, ponds, and berms, ~~and ditches~~. For this purpose, the randomly selected location within a corresponding 3-acre cell may also be adjusted in order to cover a nearby point of interest.

~~Biased sampling will also be conducted along the lengths of the former conveyance ditches on the Site, at an approximate 200 foot linear spacing.~~ Additional biased sampling locations were placed so that each pond had at least one sample located within it, and that the pond berms also had an adequate number of samples. In all, the proposed sampling locations address each of the current land uses as follows:

<u>Land Use</u>	<u>Number of Samples</u>
Former Pond	51
Pond Berm	48
Conveyance Ditch	0
Debris/Other/Unused Land	7

Figure 9 and accompanying Table 3 show the random and biased discrete sampling locations that are proposed to be collected within the Site. In addition to the biased sampling locations noted above and on Figure 9, if currently unknown impacted areas are identified during on-going remediation, BRC will: 1) inform NDEP regarding the presence of these areas; 2) evaluate the need for additional biased sampling points to address those areas; and 3) modify the sampling program as needed, with NDEP concurrence.

At each selected location, multi-depth soil samples will be collected and analyzed for the project SRC list as follows. Proposed sample depths are 0 (surface) and 10 ft bgs at each sampling location. In addition, sample locations with grading greater than two ft bgs will also be sampled at the anticipated post-grading soil surface. Additionally, at three sample locations, within remediated ponds in the most heavily impacted portions of the Site, soil physical parameter data will be collected at 20 feet and every subsequent 10 feet within unsaturated soils above the capillary fringe until groundwater is reached or 50 feet deep, whichever is shallower.

Samples will be collected at:

1. Existing surface (0 ft bgs) and 10 ft bgs for sample locations in relatively flat (un-graded) locations;
2. Existing surface (0 ft bgs), post-grading surface, and post-grade 10 ft bgs for sample locations with substantial grading (that is, cut depths greater than two feet²⁸) and the uppermost sampled soil is expected to be used as surface fill;
3. Existing surface (0 ft bgs) and 10 ft bgs for sample locations with minimal grading (that is, cut depths less than two feet) and the uppermost sampled soil is expected to be used as surface fill; and
4. Existing surface (0 ft bgs) and 10 ft bgs for sample locations in an area expected to be covered by fill material.

The analytical sample results will then be divided into surface (0-2 ft depth), subsurface (2 ft -10 ft depth), and deep (>10 ft depth) layers, according to the following rules:

- **Rule 1: IF** the sample is collected in a relatively flat (un-graded) part of the Site (*i.e.*, an area not targeted for substantial grading), **THEN** the depth of the collected soil sample will be used to designate its soil layer grouping.
- **Rule 2: IF** the sample is collected in a part of the Site targeted for substantial grading, **AND** the sampled soil is located in an area expected to be covered by fill material (*e.g.*, exposed excavated surfaces of ponds), **THEN** the current surface soil sample will be classified as a surface (0-2 ft depth) sample, and the soil layer grouping of the remaining deeper sampled soil will be determined based on the difference between its elevation and the final (post-graded) surface elevation in that part of the Site.
- **Rule 3: IF** the sample is collected in a part of the Site targeted for substantial grading, **AND** the sampled soil is expected to be used as surface fill (*e.g.*, soil within a berm) **AND** the cut depth is expected to be greater than two feet, **THEN** the current surface soil sample will be classified as a fill material sample, a final (post-graded) surface sample will be classified as a surface (0-2 ft depth) sample, and the soil layer grouping of the remaining deeper sampled soil will be determined based on the difference between its elevation and the final (post-graded) surface elevation in that part of the Site.

²⁸ Because sample collection will be over a two to three foot depth interval, sample locations with an anticipated cut depth less than three feet will only be sampled at the surface and one post-grade subsurface depth.

- **Rule 4: IF** the sample is collected in a part of the Site targeted for substantial grading, **AND** the sampled soil is expected to be used as surface fill (*e.g.*, soil within a berm) **AND** the cut depth is expected to be less than two feet, **THEN** the current surface soil sample will be classified as both a fill material sample and as a surface (0-2 ft depth) sample, and the soil layer grouping of the remaining deeper sampled soil will be determined based on the difference between its elevation and the final (post-graded) surface elevation in that part of the Site.

A schematic example of these rules is shown on Figure 10. The current site grading plan is shown on Figure 4. It should be noted that this is the most current plan available, but not necessarily the final grading plan. The sample-specific collection depths are presented in Table 3.

All soil samples will be tagged in the database with numeric designations of their corresponding assigned soil layer grouping based on these rules. Initially, 271 soil samples will be collected from 106 soil boring locations (not including deep samples to be collected for soil physical parameter data). This includes 69 random and 37 biased sample locations; with the following number of samples representing each post-grade type of soil:

<u>Post-Grade Sample Type</u>	<u>Number of Samples</u> ²⁹
Fill material	79
Surface soil	163
Subsurface soil	108

It should be noted that, as discussed with NDEP, once a particular sub-area receives an NFAD from the NDEP, the cut material that is slated to be used as fill material elsewhere would not require additional testing. However, the chemical data for this fill material may be useful for evaluating sub-areas to receive fill (for example, if there is deeper contamination).

²⁹ Note that in some cases a soil sample may be considered both a fill sample and a surface sample (as indicated in Table 3). Therefore, the sum of the number of samples indicated for each post-grade sample type does not necessarily equal the total number of samples collected.

4.2 INTERMEDIATE SAMPLING AND CLEANUP

Upon layer-designation of confirmation soil samples, a series of tests will be conducted to determine whether sampled locations within a given layer include “exceeding” samples. An exceeding sample is one that warrants further investigation, which may include localized soil removal. Exceeding samples will be defined consistent with the following rules:

- **Chemicals without background concentrations:** For chemicals without corresponding background distributions, the distribution of its reported concentrations in each layer will be constructed. The 95 percent upper confidence limit (UCL) of these distributions will also be computed. **IF** the constructed distribution indicates the presence of anomalous concentrations (*e.g.*, high values at the end of an elongated tail of a uni-modal distribution, or values forming an elevated sub-population of a multi-modal distribution), **AND** the inclusion of these anomalous values causes the computed UCL to exceed 1/10 of the risk-based screening level of the chemical, **THEN** samples associated with anomalous values will be considered as potential exceeding samples. **IF** the constructed distribution indicates no presence of anomalous concentrations and the computed UCL exceeds 1/10 of the risk-based screening level of the chemical, **THEN** all samples associated with the layer will be considered as potential exceeding samples.
- **Chemicals with background concentrations:** For chemicals with corresponding background distributions, the distribution of its reported concentrations in each layer will be constructed. These concentration distributions will then be statistically compared to the background concentration distributions applicable to the Site [*Note: Establishment of background datasets applicable to specific portions of the Common Areas is currently in progress but will be determined prior to performing the risk assessment referenced in this section*]. Appropriate two-sample tests, including Quantile test, Slippage test, *t*-Test and the Wilcoxon rank sum test with Gehan modification, will be used to identify exceeding samples through comparison of Site and background distributions. **IF** inclusion of elevated measured values in a given layer causes the rejection of the appropriate two-sample test, **THEN** samples associated with such elevated values will be considered as potential exceeding samples.

Areas with potential exceeding samples may be subjected to re-sampling prior to the confirmation of the location as an exceeding sample. After any such re-sampling, the above process will be repeated to confirm the exceeding status of the targeted sample location. It should be noted that if the data indicate a more widespread or Site-wide contamination, then it might be

important to look at the effect on a sub-area basis rather than a sample basis. That is, additional alternatives, such as, changing the future land use, further division into smaller sub-areas, or more extensive remediation, would need to be considered and evaluated.

Upon confirmation of an exceeding sample, additional neighboring delineation sampling will be conducted based on a “step-out” approach. Step sizes and directions will be dependent on the location of the exceeding sample and perhaps the magnitude of the exceedance. Additional biased step-out or step-in sampling may be conducted to further refine the extent of the required removal. Each removal will be followed by confirmatory sampling. More detail on this approach is provided in the Statistical Methodology Report.

After the above intermediate removals, results associated with removed exceeding samples will be marked as excluded from the dataset, while non-exceeding delineation and confirmation data will be included in the dataset. The revised dataset will then be subjected to the above exceeding sample determination process, which will be repeated until all exceeding samples are adequately addressed.

4.3 FINAL CONFIRMATION DATASET

At this stage, the final confirmation soil dataset for the Site, consisting of: 1) the original non-exceeding confirmation data collected in accordance with this SAP³⁰ for the Site; 2) the non-exceeding data generated after intermediate sampling and cleanup, and 3) additional biased and random samples collected for confirmation, will be subjected to a series of statistical analyses in order to determine representative exposure concentrations for that sub-area, as described in the Statistical Methodology Report.

4.4 SOIL VAPOR FLUX SAMPLING

Concurrent with the confirmation soil sampling, BRC will implement soil vapor flux sampling across the Site. This SAP refers to and relies on the most recent NDEP-approved version of Standard Operating Procedure (SOP) 16 for technical description of sampling and analytical methodology, QA/QC protocols, and project procedural description. The sampling procedure for the effort includes the USEPA surface emission isolation flux chamber (flux chamber) and static chamber sampling to perform an air pathway analysis (APA) for the Site. A description of the

³⁰ As distinguished from the historical “confirmation” sampling data collected as part of or immediately after the IRM, which will not be included in the risk assessment dataset.

history, background, and operation of the USEPA-recommended flux chamber and radon flux approach is provided in SOP-16.

The flux chamber sample collection rationale is based on the project goal of obtaining a representative dataset of air emissions per sub-area. Flux chamber samples will be collected from each of the 3-acre grid cells. Soil vapor flux sampling locations have been preferentially selected to ~~will~~ coincide with a biased sampling location, ~~if any,~~ in a given cell. In cases where a given cell contains no biased samples; ~~if none are present,~~ the soil vapor flux sampling ~~coincides with~~ ~~will be performed at~~ the grid-specific random sampling location. This approach results in 69 soil vapor flux sampling locations, indicated on Figure 9, providing full spatial coverage of the Site. All of the flux chamber samples will be tested for both VOC flux and radon flux, and this density of sample collection should be adequate for sub-area characterization given: the random nature of the sample locations, the size of the sub-area, and the number of sample locations suggested by the USEPA (1986) in the flux chamber User's Guide for assessing zones of homogeneous site properties. A higher density of sample collection for VOCs is not warranted given the general lack of VOC detections in soils and groundwater.

4.5 CHEMICALS SELECTED FOR ANALYSIS

The proposed analyte list for soil samples is comprised of the BRC project SRC list, as presented in the Closure Plan³¹ and Table 4, with the following exceptions for this Site:

- Asbestos, dioxins/furans and PCBs will only be analyzed for in surface soil samples;
- Only acetaldehyde and formaldehyde will be analyzed for by USEPA Method 8315A (chloroacetaldehyde, dichloroacetaldehyde, and trichloroacetaldehyde removed based on the *Revisions to the Analyte List Technical Memorandum* approved by NDEP on October 16, 2008);
- The following metals will not be analyzed for: niobium, palladium, platinum, silicon, sulfur, and zirconium (removed based on the *Revisions to the Analyte List Technical Memorandum* approved by NDEP on October 16, 2008);

³¹ Specific analytes and analyte-specific reporting limits for each analysis are listed in Table 4 of the QAPP.

- Aroclors will be analyzed by USEPA Method 8082 only if the results of the analysis of total PCB congeners are greater than 33 ppb, which coincides with the standard reporting limit for this analysis;
- USEPA Method 8141A for organophosphorus pesticides will not be conducted. There have been only 47 detections of these compounds in over 10,000 soil sample records (<0.5 percent) from throughout the Eastside, and no detections in any of the seventeen soil samples collected within the Site that were analyzed for these compounds;
- USEPA Method 8151A for chlorinated herbicides will not be conducted. There have been no detections of these compounds in over 1,400 soil sample records from throughout the Eastside, including those associated with seventeen soil samples collected within the Site. Detection limits are below the BCL_{RS};
- HPLC Method for organic acids (historically conducted using a proprietary method developed by Alpha Analytical) will not be conducted. There have been only three detections of these compounds in 567 soil sample records (<0.5 percent) from throughout the Eastside, including those associated with two soil samples collected within the Site. Detection limits are below the BCL_{RS};
- USEPA Method 8015B for nonhalogenated organics will not be conducted. There have been only five detections of these compounds in 420 soil sample records (one percent) from throughout the Eastside. Of these, two samples were collected within the Site; nonhalogenated organics were not detected in the Site samples. Detection limits and the few detections have been well below the BCL_{RS};
- USEPA Method 8015 for total petroleum hydrocarbons (TPH) will not be conducted. There have been only three detections of these compounds in over 299 soil sample records (one percent) from throughout the Eastside. The few detections have been below 100 mg/kg, which is the typical low-end aesthetic threshold used for these compounds. While TPH is not proposed for analysis, its components are via other methods. In addition, TPH cannot be included in a risk assessment while its components can; and
- Consistent with the current project analyte list, the following radionuclides will be analyzed for: radium-226, radium-228, thorium-228, thorium-230, thorium-232, uranium-233/234, uranium-235/236, and uranium-238. Activities for other radionuclides on the project SRC list may be back-quantitated; however, the main radionuclides listed above will likely provide

information sufficient to perform a risk assessment. In addition, if the radionuclide activities are similar to background, then back-quantitation will be unnecessary and will not be performed.

The analyte list, as proposed in this SAP for the Site, consists of 307 of the 418 compounds (including water only parameters) on the project SRC list as well as physical parameters (Section 5.2.3) to support the evaluation of potential impacts to groundwater from migration of chemicals from soil. The analytical and preparatory methods used in accordance with this SAP adhere to the most recent version of the QAPP (BRC and ERM 2009), which has been revised to ensure appropriate comparisons to the background dataset. The proposed analyte list for soil vapor flux samples is comprised of the list provided in the most recent NDEP-approved version of SOP-16 (see the *BRC Field Sampling and Standard Operating Procedures* [FSSOP]; BRC, ERM and MWH 2008), including radon. This analyte list is provided in Table 5.

5.0 FIELD AND LABORATORY METHODS

5.1 FIELD METHODS

All Site work will be performed under the responsible control and direction of a Nevada State Certified Environmental Manager. All sampling and sample handling procedures will be consistent with the NDEP-approved BRC FSSOP (BRC, ERM and MWH 2008). In accordance with applicable federal regulation (Title 29, Code of Federal Regulations [CFR] Section 1910.120) all field activities will be performed in compliance with the *BRC Health and Safety Plan* (BRC and MWH 2005).

Pre-field and field activities will be conducted in accordance with the most recent NDEP-approved versions of applicable SOPs (BRC, ERM and MWH 2008). These SOPs include SOP-1 (Drilling Methods), SOP-6 (Sample Management and Shipping), SOP-7 (Soil Sampling), SOP-10 (Surveying), SOP-12 (Asbestos Soil Sampling), SOP-13 (Field Equipment Calibration Procedures), SOP-14 (Field Documentation), SOP-15 (Field Logbook), SOP-16 (Flux Chamber Source Testing), SOP-17, (Soil Logging), SOP-23 (Split Spoon Sampling), SOP-26 (Soil Grab Sampling), and SOP-39 (Photoionization Detector Screening).

The BRC QAPP (BRC and ERM 2009) and Health and Safety Plan (BRC and MWH 2005) prepared for the BMI Common Areas will be used for this proposed scope of work. The selected driller will notify the Underground Services Alert one-call notification system at least 48 hours before implementing any subsurface activities. BRC will also notify the NDEP at least one week prior to commencing field activities. Once the data are collected, BRC will subject the data to validation per procedures agreed to previously with the NDEP and consistent with the BRC QAPP (BRC and ERM 2009) and SOP-40.

Soil cuttings generated during soil sampling and Hollow Stem Auger (HSA) drilling activities will be collected and stored with the other remediation waste and sent to the CAMU.

5.2 LABORATORY METHODS

Samples submitted for laboratory analysis will be analyzed in accordance with approved methodologies by a State of Nevada-certified analytical laboratory. Samples not specified for analysis will be placed on hold pending the results of the initial analysis.

5.2.1 Soil Chemical Analyses

BRC's current analyte list as approved by the NDEP is presented in Table 4 of the QAPP. Table 4 of this SAP identifies the complete list of analytes proposed for analysis of soil samples along with the appropriate analytical methods. An explanation for the sampling depth-specific exclusion of a chemical for analysis is provided in Table 4 of this SAP. [Section 4.5 contains the rationale for exclusion of various chemical analyses from the SAP program for the Site.](#)

5.2.2 Soil Vapor Flux Analyses

As indicated in Table 5, all flux chamber samples will be analyzed by USEPA Method TO-15 full scan, and selective ion mode analyses on a sub-set of VOCs to achieve the lowest attainable method detection limits for the target list of study compounds (see most recent version of SOP-16). In addition, the samples will be collected and analyzed for radon. All samples will be analyzed for the target list with optimum method detection limits so that these data can be used to satisfy the sensitivity requirements of the human health risk assessment.

5.2.3 Soil Physical Parameters

In addition to chemical data, to support the evaluation of potential impacts to groundwater, soil physical properties will also be measured. These parameters will be collected to support the migration to groundwater calculations included in the Closure Plan, consistent with the USEPA Soil Screening Guidance (1996; 2000; 2002), as well as more refined modeling tools (such as, VLEACH, SESOIL, and PESTAN). Site-specific soil physical parameters to be measured include pH (USEPA Method 9045C), cation exchange capacity, dry bulk density, Soil permeability/saturated hydraulic conductivity, specific gravity, total porosity, volumetric water content, grain size analysis by sieve and hydrometer, and fractional organic carbon content (see Table 4). These soil physical parameters will be measured from each of the subsurface samples collected from the three deep sample locations at the Site (see Figure 9). This will ensure that soil physical parameters will be measured at various depths from across the Site so that all sample depths are represented. In addition, samples will be collected from three subsurface sample locations (see Figure 9 and Table 3) for conducting the synthetic precipitation leaching procedure (SPLP; USEPA Method 1312) with the extract analyzed for metals, organochlorine pesticides, SVOCs, radium-226, radium-228, and perchlorate. These analytes are considered those of greatest concern for potential migration and impacts to groundwater. These SPLP sample locations will be within remediated ponds in the most heavily impacted portions of the Site.

6.0 REPORTING AND SCHEDULING

After approval of the SAP by NDEP, BRC is prepared to promptly initiate field activities. BRC will be directly in charge of sampling with oversight conducted by NDEP. As discussed in Section 3.4.3 sampling activities are anticipated to be completed over a one to three month period, and laboratory analyses to be completed within a five to six-week period following field work completion. Once the data are collected, BRC will subject the data to validation per procedures agreed to previously with the NDEP and consistent with the BRC QAPP (BRC and ERM 2009) and SOP-40 (BRC, ERM and MWH 2008). Only those data determined by the QA/QC review to be suitable for use will be considered for the site dataset. A separate DVSR will be prepared and submitted to NDEP.

Upon receipt of laboratory analytical results and following data validation, a risk assessment will be conducted by BRC (in consultation with NDEP) to evaluate the risks posed to human health and the environment by chemicals remaining in Site soils. The risk assessment will be conducted in accordance with the Risk Assessment Methodology provided in the Closure Plan. As stated in the Closure Plan:

...risk assessment will not be initiated unless proper data sufficiency, representativeness, and adequacy analysis is first achieved. If necessary, additional data will be gathered or analyzed to meet the goals of data quality required for risk assessment. The risk assessment will, in turn, help to assure that these data characteristics are properly evaluated. Once risk assessment is completed, the assessment will be made as to whether the remediation conducted meets cleanup goals. If cleanup goals are not achieved, additional remediation, associated confirmation sampling, and assessment cycles will be conducted until a decision end point is reached – namely that the cleanup goals are either met (and the NFAD is issued or Site Closure is achieved, as the case may be) or proven infeasible because it is technically impractical or too costly, in which case changes in land use or institutional controls may be considered.

BRC will perform risk assessment calculations to justify additional remediation or sampling; however, these interim risk assessments will not be submitted to the NDEP. It is expected that the interim decisions (to support additional sampling or remediation) will be discussed with the NDEP on an informal but regular basis. Any additional sampling and remediation will be addressed as an addendum to this SAP.

The risk assessment report will be an inclusive report that will also contain the following items:

- A summary of the sampling procedures conducted;
- Sampling location map;
- Soil boring logs;
- An evaluation and summary of the collected data;
- Tables(s) summarizing soil results; and
- If appropriate, plan view maps indicating the locations of detected constituents in soil.

As noted above, completion of the risk assessment will be an iterative process. Once the risk assessment passes internal BRC review, with NDEP consultation, and meets the risk goals stated in the Closure Plan, the risk assessment report will be submitted to the NDEP, along with an NFAD request for the Site, in accordance with AOC3. That is, the risk assessment report will be prepared and submitted to the NDEP only when BRC is comfortable that acceptable human health risks have been attained.

APPENDIX B

ALL HISTORICAL SAMPLING RESULTS COLLECTED
FROM THE FIRST EIGHT ROWS SUB-AREAS

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 15)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals												
						Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Iron
I	PUA-03N	7a	0	N	10/20/1999	--	< 0.52 U	4.5	430	0.52	--	--	--	270	--	--	41	--
I	PUA-03S	7a	0	N	10/20/1999	--	< 0.51 U	4.7	550	0.47	--	--	--	31	--	--	15	--
I	PUA-05	1a	0	N	4/4/1996	--	7.1	3.7 J-	779 J	< 0.1 U	--	--	--	826	--	--	359	--
I	PUA-05	1a	5	N	4/4/1996	--	0.2	3.4 J-	475 J	1.1	--	--	--	21.3	--	--	35.2	--
I	PUA-07	1a	0	N	4/4/1996	--	25.7	10.5 J-	2670	0.6	--	--	--	3070	--	--	369.3	--
I	PUA-07	1a	5	N	4/4/1996	--	1.2	4.9 J-	460 J	1.3	--	--	--	165	--	--	74.4	--
I	PUA-07-E-D	6a	0	N	10/19/1999	--	< 0.5 U	4.3	400	--	--	--	--	110	--	--	--	--
I	PUA-07-E-S	6a	0	N	10/19/1999	--	< 0.51 U	4	420	--	--	--	--	16	--	--	--	--
I	PUA-07-N-D	6a	0	N	10/19/1999	--	0.53	4.8	350	--	--	--	--	190	--	--	--	--
I	PUA-07-N-S	6a	0	N	10/19/1999	--	1	6.3	505	--	--	--	--	21	--	--	--	--
I	PUA-09SED	8a	0	N	7/20/2000	--	--	79	--	--	--	--	--	--	--	--	--	--
I	PUB-03N	7a	0	N	10/20/1999	--	0.95	5.1	500	0.47	--	--	--	24	--	--	12	--
I	PUB-03S	7a	0	N	10/20/1999	--	1.1	5.5	590	0.57	--	--	--	27	--	--	15	--
I	PUB-04	1a	0	N	3/26/1996	--	--	11 J-	940	--	--	0.49	--	130	--	--	--	--
I	PUB-04	1a	5	N	3/26/1996	--	--	4.4 J-	450	--	--	0.52	--	20	--	--	--	--
I	PUB-05	6d	0	N	10/13/1999	--	9.8	22	1600	--	--	--	--	320	--	--	--	--
I	PUB-06	1a	0	N	4/3/1996	--	49.9	112 J-	7870	5.3	--	< 0.98 UJ	--	1050	--	--	127	--
I	PUB-06	1a	5	N	4/3/1996	--	0.8	6.7 J-	850	0.4	--	< 0.2 UJ	--	20	--	--	27.6	--
I	PUC-03	1a	0	N	3/26/1996	--	15.1	45 J-	8600	0.2	--	< 0.2 U	--	440	--	--	26.2	--
I	PUC-03	1a	5	N	3/26/1996	--	--	15 J-	1800	--	--	< 0.21 U	--	310	--	--	--	--
I	PUE-02	6d	0	N	10/12/1999	--	8.9 J-	15	2600	--	--	--	--	1100	--	--	--	--
I	PUF-01	1a	0	N	3/25/1996	--	4.1	7.5	750	1.2	--	< 0.2 U	--	130	--	--	65.4	--
I	PUF-01	1a	5	N	3/25/1996	--	2.6	5	520	0.6	--	< 1 U	--	42	--	--	26.6	--
II	BDB-15	1a	0	N	4/4/1996	--	0.8	10 J-	921 J	0.6	--	0.31 J-	--	19.2	--	--	52.5	--
II	BDB-15	1a	5	N	4/4/1996	--	0.1	2.6 J-	264 J	0.4	--	--	--	8.4	--	--	12.4	--
II	PUA-09	1a	0	N	4/3/1996	--	92.3	218 J-	16800	4.8	--	8.7 J-	--	3200	--	--	536.4	--
II	PUA-09	1a	5	N	4/3/1996	--	0.5	5.9 J-	428	0.4	--	< 0.2 UJ	--	135	--	--	36.8	--
II	PUA-09NCD	8a	0	N	7/20/2000	--	--	53	--	--	--	--	--	--	--	--	--	--
II	PUA-09NCOM	8a	0	N	7/20/2000	--	--	84	--	--	--	--	--	--	--	--	--	--
II	PUA-09NED	8a	0	N	7/20/2000	--	--	65	--	--	--	--	--	--	--	--	--	--
II	PUA-09NWD	8a	0	N	7/20/2000	--	--	120	--	--	--	--	--	--	--	--	--	--
II	PUA-09SCD	8a	0	N	7/20/2000	--	--	60	--	--	--	--	--	--	--	--	--	--
II	PUA-09SCOM	8a	0	N	7/20/2000	--	--	77	--	--	--	--	--	--	--	--	--	--
II	PUA-09SWD	8a	0	N	7/20/2000	--	--	78	--	--	--	--	--	--	--	--	--	--
II	PUA-10	1a	0	N	4/3/1996	--	49.9	94.2 J-	12300	3.4	--	< 1 UJ	--	1170	--	--	374.3	--
II	PUA-10	1a	5	N	4/3/1996	--	0.1	5.8 J-	336	0.3	--	< 0.2 UJ	--	15.5	--	--	25.3	--
II	PUB-08	1a	0	N	4/3/1996	--	302.4	280 J-	18100	10.3	--	< 1.2 UJ	--	3830	--	--	525.5	--

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 15)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals												
						Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Iron
II	PUB-08	1a	5	N	4/3/1996	--	6.5	21.7 J-	2700	0.8	--	< 0.2 UJ	--	126	--	--	113.4	--
II	PUB-09	1a	0	N	4/3/1996	--	91.9	119 J-	16600	1.2	--	< 1 UJ	--	1700	--	--	385.9	--
II	PUB-09	1a	5	N	4/3/1996	--	18.2	57.6 J-	6300	3.6	--	< 2 UJ	--	432	--	--	141.9	--
II	PUB-09	6b	10	N	11/17/1998	8500	120	130	--	--	--	--	--	570	29 J	68	220	--
II	PUB-09	6b	15	N	11/17/1998	8500	14	22	--	--	--	--	--	70	2.3 J	30	38	--
II	PUB-10	1a	0	N	4/3/1996	--	174.7	193 J-	17600	6.9	--	< 1.1 UJ	--	2420	--	--	415.6	--
II	PUB-10	1a	5	N	4/3/1996	--	151.2	211 J-	15200	11.1	--	< 1 UJ	--	2080	--	--	508.9	--
II	PUB-10	6b	10	N	11/17/1998	12000	290	140	--	--	--	--	--	1200	3.7 J	230	370	--
II	PUB-10	6b	15	N	11/17/1998	12000	260	170	--	--	--	--	--	1100	3.8 J	190	340	--
II	PUB-10	6d	0	N	10/19/1999	--	490	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	5	N	10/19/1999	--	< 0.52 U	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	10	N	10/19/1999	--	6.2	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	15	N	10/19/1999	--	< 0.54 U	4	380	--	--	--	--	14	--	--	--	--
II	PUB-10	6d	19	N	10/19/1999	--	< 0.53 U	4.4	240	--	--	--	--	12	--	--	--	--
II	PUB-10	6d	24	N	10/19/1999	--	< 0.54 U	5.4	210	--	--	--	--	15	--	--	--	--
II	PUB-10	6d	29	N	10/19/1999	--	< 0.53 U	5	260	--	--	--	--	13	--	--	--	--
II	PUB-10	6d	39	N	10/19/1999	--	< 0.53 U	4.3	240	--	--	--	--	12	--	--	--	--
II	PUB-10	6d	49	N	10/19/1999	--	< 0.52 U	4.9	220	--	--	--	--	12	--	--	--	--
II	PUB-10-E-D	6a	0	N	10/19/1999	--	4.2	6.5	410	--	--	--	--	49	--	--	--	--
II	PUB-10-E-S	6a	0	N	10/19/1999	--	1.1	5.2	530	--	--	--	--	25	--	--	--	--
II	PUB-10NCD	8a	0	N	7/20/2000	--	--	190	--	--	--	--	--	--	--	--	--	--
II	PUB-10NCOM	8a	0	N	7/20/2000	--	--	240	--	--	--	--	--	--	--	--	--	--
II	PUB-10-N-D	6a	0	N	10/19/1999	--	< 0.52 U	2.9	270	--	--	--	--	24	--	--	--	--
II	PUB-10NED	8a	0	N	7/20/2000	--	--	150	--	--	--	--	--	--	--	--	--	--
II	PUB-10-N-S	6a	0	N	10/19/1999	--	5.6	14	1300	--	--	--	--	61	--	--	--	--
II	PUB-10NWD	8a	0	N	7/20/2000	--	--	190	--	--	--	--	--	--	--	--	--	--
II	PUB-10SCD	8a	0	N	7/20/2000	--	--	220	--	--	--	--	--	--	--	--	--	--
II	PUB-10SCOM	8a	0	N	7/20/2000	--	--	44	--	--	--	--	--	--	--	--	--	--
II	PUB-10SWD	8a	0	N	7/20/2000	--	--	16	--	--	--	--	--	--	--	--	--	--
II	PUC-05	1a	0	N	4/3/1996	--	17	16.7 J-	7210	1.4	--	< 1 UJ	--	1850	--	--	493.9	--
II	PUC-05	1a	5	N	4/3/1996	--	0.6	5.8 J-	497	0.2	--	< 0.2 UJ	--	68	--	--	29.2	--
II	PUC-07	1a	0	N	4/3/1996	--	107.2	162.41	17499.59	4.1	--	< 0.97 U	--	2293.93	--	--	311.6	--
II	PUC-07	1a	5	N	4/3/1996	--	14.2	53.1 J-	8260	1.1	--	< 0.99 UJ	--	544	--	--	68.4	--
II	PUC-07	6d	0	N	10/20/1999	--	390	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	5	N	10/20/1999	--	1.1	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	10	N	10/20/1999	--	2.2	5	340	--	--	--	--	13	--	--	--	--
II	PUC-07	6d	15	N	10/20/1999	--	1.3	4.7	260	--	--	--	--	15	--	--	--	--

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals												
						Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Iron
II	PUC-07	6d	19	N	10/20/1999	--	0.94	4.8	330	--	--	--	--	13	--	--	--	--
II	PUC-07	6d	24	N	10/20/1999	--	1.1	5	440	--	--	--	--	13	--	--	--	--
II	PUC-07	6d	29	N	10/20/1999	--	0.63	5.2	340	--	--	--	--	14	--	--	--	--
II	PUC-07	6d	39	N	10/20/1999	--	1.8	39	51	--	--	--	--	43	--	--	--	--
II	PUC-07	6d	44	N	10/20/1999	--	0.89	21	260	--	--	--	--	26	--	--	--	--
II	PUC-07	6d	49	N	10/20/1999	--	< 0.72 U	14	85	--	--	--	--	20	--	--	--	--
II	PUC-07-E-D	6a	0	N	10/19/1999	--	4.9	8	820	--	--	--	--	130	--	--	--	--
II	PUC-07-E-S	6a	0	N	10/19/1999	--	3.3	10	1000	--	--	--	--	71	--	--	--	--
II	PUC-07-N-D	6a	0	N	10/19/1999	--	2.4	5.3	540	--	--	--	--	35	--	--	--	--
II	PUC-07-N-S	6a	0	N	10/19/1999	--	1.2	5.4	600	--	--	--	--	27	--	--	--	--
II	PUC-08	1a	0	N	4/2/1996	--	41.2	75.7	10600	5.6	--	< 2 U	--	1610	--	--	307.7	--
II	PUC-08	1a	5	N	4/2/1996	--	4.9	12.6	1400	1.7	--	< 2.1 U	--	78	--	--	33.2	--
II	PUD-06	1a	0	N	4/2/1996	--	25.3	29	8400	1.3	--	3.1	--	2380	--	--	345.9	--
II	PUD-06	1a	5	N	4/2/1996	--	2.9	< 5.9 U	283	1.6	--	< 2 U	--	17.6	--	--	26.9	--
II	PUD-06-E-D	6a	0	N	10/20/1999	--	0.56	4.1	490	--	--	--	--	83	--	--	--	--
II	PUD-06-E-S	6a	0	N	10/20/1999	--	< 0.5 U	4.3	440	--	--	--	--	35	--	--	--	--
II	PUD-06-N-D	6a	0	N	10/20/1999	--	< 0.5 U	5.7	370	--	--	--	--	150	--	--	--	--
II	PUD-06-N-S	6a	0	N	10/20/1999	--	1.4	7.3	600	--	--	--	--	61	--	--	--	--
II	PUD-08	1a	0	N	4/2/1996	--	15	15.9	4230	1.3	--	< 2.1 U	--	1720	--	--	640.5	--
II	PUD-08	1a	5	N	4/2/1996	--	5.8	< 6 U	990	0.9	--	< 2 U	--	49.4	--	--	22.7	--
II	PUD-09	1a	0	N	4/2/1996	--	51.9	55.5	18900	7.1	--	< 2.1 U	--	2420	--	--	687	--
II	PUD-09	1a	5	N	4/2/1996	--	4.2	12.8	1860	1.2	--	< 2 U	--	74.1	--	--	32	--
II	PUE-03	1a	0	N	4/1/1996	--	--	12.9 J	2220 J	0.4	--	< 2 U	--	641	--	--	67.8	--
II	PUE-03	1a	5	N	4/1/1996	--	7.1	< 6.2 UJ	539 J	0.8	--	< 2.1 U	--	16.9	--	--	16.3	--
II	PUE-03	6d	0	N	10/12/1999	--	7 J-	--	--	--	--	--	--	--	--	--	--	--
II	PUE-05	1a	0	N	4/1/1996	--	13.6	14.7 J	12100 J	1.4	--	< 2.1 U	--	2040	--	--	412.5	--
II	PUE-05	1a	5	N	4/1/1996	--	2.9	< 6.2 UJ	388 J	1.2	--	< 2.1 U	--	368	--	--	44.3	--
II	PUE-06	1a	0	N	4/1/1996	--	26.3	27.5 J	14100 J	2.7	--	< 2.2 U	--	2020	--	--	641	--
II	PUE-06	1a	5	N	4/1/1996	--	< 0.1 U	< 6.3 UJ	575 J	0.8	--	< 2.1 U	--	60.9	--	--	22.1	--
II	PUE-07	1a	0	N	4/2/1996	--	70.5	233	14900	13.5	--	4.9	--	1990	--	--	406.7	--
II	PUE-07	1a	5	N	4/2/1996	--	26.9	62.2	10900	9.6	--	< 2.1 U	--	1290	--	--	349.7	--
II	PUE-07	6b	15	N	11/17/1998	7900	40	65	--	--	--	--	--	200	15 J	31	74	--
II	PUE-07	6d	0	N	10/20/1999	--	240	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	5	N	10/20/1999	--	0.51	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	10	N	10/20/1999	--	1.5	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	15	N	10/20/1999	--	< 0.52 U	4	590	--	--	--	--	9	--	--	--	--
II	PUE-07	6d	19	N	10/20/1999	--	< 0.53 U	4.9	360	--	--	--	--	11	--	--	--	--

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals												
						Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Iron
II	PUE-07	6d	24	N	10/20/1999	--	< 0.53 U	6.5	340	--	--	--	--	12	--	--	--	--
II	PUE-07	6d	29	N	10/20/1999	--	< 0.53 U	4	250	--	--	--	--	12	--	--	--	--
II	PUE-07	6d	34	N	10/20/1999	--	< 0.53 U	5.3	350	--	--	--	--	14	--	--	--	--
II	PUE-07	6d	39	N	10/20/1999	--	< 0.53 U	6.7	550	--	--	--	--	32	--	--	--	--
II	PUE-07	6d	44	N	10/20/1999	--	< 0.53 U	5.3	510	--	--	--	--	12	--	--	--	--
II	PUE-07	6d	49	N	10/20/1999	--	1.3	6.1	390	--	--	--	--	9.8	--	--	--	--
II	PUE-07-E-D	6a	0	N	10/20/1999	--	1.5	4.1	380	--	--	--	--	22	--	--	--	--
II	PUE-07-E-S	6a	0	N	10/20/1999	--	1.9	6.5	850	--	--	--	--	38	--	--	--	--
II	PUE-07NCD	8a	0	N	7/19/2000	--	--	180	--	--	--	--	--	--	--	--	--	--
II	PUE-07NCOM	8a	0	N	7/19/2000	--	--	200	--	--	--	--	--	--	--	--	--	--
II	PUE-07-N-D	6a	0	N	10/20/1999	--	2.6	8.5	520	--	--	--	--	40	--	--	--	--
II	PUE-07NED	8a	0	N	7/19/2000	--	--	190	--	--	--	--	--	--	--	--	--	--
II	PUE-07-N-S	6a	0	N	10/20/1999	--	3.3	7.5	1100	--	--	--	--	48	--	--	--	--
II	PUE-07NWD	8a	0	N	7/19/2000	--	--	210	--	--	--	--	--	--	--	--	--	--
II	PUE-07SCD	8a	0	N	7/19/2000	--	--	220	--	--	--	--	--	--	--	--	--	--
II	PUE-07SCOM	8a	0	N	7/19/2000	--	--	190	--	--	--	--	--	--	--	--	--	--
II	PUE-07SED	8a	0	N	7/19/2000	--	--	200	--	--	--	--	--	--	--	--	--	--
II	PUE-07SWD	8a	0	N	7/19/2000	--	--	180	--	--	--	--	--	--	--	--	--	--
II	PUF-02	6d	0	N	10/12/1999	--	0.63 J-	2.8	420	--	--	--	--	82	--	--	--	--
II	PUF-03	1a	0	N	3/28/1996	--	6.5	6.4 J-	1000	0.04	--	< 2 U	--	460	--	--	9.5	--
II	PUF-03	1a	5	N	3/28/1996	--	4.3	< 6.5 UJ	516	0.7	--	< 2.2 U	--	193	--	--	57.9	--
II	PUF-03	6d	0	N	10/12/1999	--	2.2 J-	--	--	--	--	--	--	--	--	--	--	--
II	PUF-05	1a	0	N	4/4/1996	--	17	7.3 J-	4080 J	0.6	--	--	--	2020	--	--	638.4	--
II	PUF-05	1a	5	N	4/4/1996	--	0.2	2.9 J-	365 J	0.5	--	0.27 J-	--	11.1	--	--	13.5	--
II	PUG-02	6d	0	N	10/12/1999	--	2 J-	9.1	890	--	--	--	--	240	--	--	--	--
II	PUG-03	6d	0	N	10/12/1999	--	1 J-	6	570	--	--	--	--	180	--	--	--	--
II	PUG-04	1a	0	N	4/4/1996	--	3.2	5.8 J-	755 J	0.3	--	--	--	623	--	--	88.9	--
II	PUG-04	1a	5	N	4/4/1996	--	< 0.1 U	3.5 J-	318 J	0.4	--	0.25 J-	--	10.1	--	--	11	--
II	PUG-04	6d	0	N	10/12/1999	--	0.82 J-	--	--	--	--	--	--	--	--	--	--	--
II	PUG-05	6d	0	N	10/12/1999	--	0.78 J-	4.8	550	--	--	--	--	480	--	--	--	--
II	PUG-06	1a	0	N	4/4/1996	--	7.1	12.6 J-	1450 J	0.4	--	--	--	1710	--	--	439.3	--
II	PUG-06	1a	5	N	4/4/1996	--	0.2	2.3 J-	276 J	0.3	--	0.35 J-	--	9.4	--	--	10.7	--
II	PUG-06	6d	0	N	10/12/1999	--	4.3 J-	--	--	--	--	--	--	--	--	--	--	--
II	PUG-07	1a	0	N	4/4/1996	--	11.6	35.3 J-	7010 J	0.1	--	--	--	745	--	--	730.2	--
II	PUG-07	1a	5	N	4/4/1996	--	< 0.1 U	3 J-	316 J	0.4	--	--	--	14.1	--	--	23.5	--
II	SB-16-B	27	0	N	5/23/2004	5610	< 0.2 UJ-	3.3	257 J+	0.3 J	< 0.524 U	< 0.022 U	12800	8.3 J+	1	4.4	16.2 J+	7840
II	SB-16-B	27	7	N	5/23/2004	6830	0.21 J	4.1	466	0.34 J	< 0.524 U	< 0.022 U	14700	26	0.64	8.8	20.8	11100

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals												
						Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Iron
II	SB-16-B	27	17	N	5/23/2004	6200	< 0.2 U	3.4	354	0.26 J	< 0.524 U	< 0.022 U	16900	13.6	< 0.28 U	6	13.2	9940
II	SB-16-B	27	27	N	5/23/2004	6060	< 0.2 U	5.1	251	0.27 J	< 0.524 U	< 0.022 U	56100	11.3	< 0.29 U	5.8	14.1	7550
II	SB-16-B	27	47	N	5/23/2004	3880	< 0.2 U	2.2	336	0.19 J	< 0.524 U	< 0.022 U	9750	5.5	< 0.28 U	3.7	10.4	5360
II	SB-16-B	27	67	N	5/23/2004	6400	< 0.2 U	14.2	106	0.32 J	26.9	0.27 J	135000	8.4	< 0.38 U	3.3	21.7	6920
II	SB-16-B	27	77	N	5/24/2004	6970	< 0.2 U	17.4	19.3	0.34 J	54.6	0.88	175000	7.9	< 0.37 U	3.7	26.5	9870
II	SB-16-B	27	97	N	5/24/2004	15400	< 0.2 U	7.3	166	0.91	81.5	< 0.022 U	61000	13.8	< 0.39 U	5.7	59.2	12600
II	SWB-24	33	5	N	4/12/2005	--	--	--	--	--	--	--	137	--	--	--	--	--
II	SWB-24	33	10	N	4/12/2005	--	--	--	--	--	--	--	69.9	--	--	--	--	--
II	SWB-24	33	20	N	4/12/2005	--	--	--	--	--	--	--	60.8	--	--	--	--	--
II	SWB-24	33	30	N	4/12/2005	--	--	--	--	--	--	--	37.4	--	--	--	--	--
II	SWB-24	33	40	N	4/12/2005	--	--	--	--	--	--	--	41.1	--	--	--	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals												
						Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Niobium	Palladium	Phosphorus (as P)	Platinum	Potassium	Selenium
I	PUA-03N	7a	0	N	10/20/1999	69	--	--	410	--	--	37	--	--	--	--	--	--
I	PUA-03S	7a	0	N	10/20/1999	17	--	--	460	--	--	20	--	--	--	--	--	--
I	PUA-05	1a	0	N	4/4/1996	482	--	--	1028.5	0.66 J+	--	118.8	--	--	--	--	--	< 0.61 UJ
I	PUA-05	1a	5	N	4/4/1996	11.6	--	--	294.3	< 0.1 UJ	--	19.3	--	--	--	--	--	< 0.63 UJ
I	PUA-07	1a	0	N	4/4/1996	1670	--	--	6905.2	0.88 J+	--	459.3	--	--	--	--	--	< 3 UJ
I	PUA-07	1a	5	N	4/4/1996	95.1	--	--	654.3	< 0.1 UJ	--	25.7	--	--	--	--	--	< 0.6 UJ
I	PUA-07-E-D	6a	0	N	10/19/1999	67	--	--	200	--	--	--	--	--	--	--	--	--
I	PUA-07-E-S	6a	0	N	10/19/1999	11	--	--	440	--	--	--	--	--	--	--	--	--
I	PUA-07-N-D	6a	0	N	10/19/1999	51	--	--	220	--	--	--	--	--	--	--	--	--
I	PUA-07-N-S	6a	0	N	10/19/1999	43	--	--	600	--	--	--	--	--	--	--	--	--
I	PUA-09SED	8a	0	N	7/20/2000	2300	--	--	20000	--	--	--	--	--	--	--	--	--
I	PUB-03N	7a	0	N	10/20/1999	14	--	--	870	--	--	16	--	--	--	--	--	--
I	PUB-03S	7a	0	N	10/20/1999	19	--	--	1000	--	--	20	--	--	--	--	--	--
I	PUB-04	1a	0	N	3/26/1996	130	--	--	--	< 0.1 U	--	--	--	--	--	--	--	< 0.6 U
I	PUB-04	1a	5	N	3/26/1996	13	--	--	--	< 0.1 U	--	--	--	--	--	--	--	< 0.63 U
I	PUB-05	6d	0	N	10/13/1999	--	--	--	650	--	--	--	--	--	--	--	--	--
I	PUB-06	1a	0	N	4/3/1996	2100	--	--	4154.3	0.34 J-	--	53.9	--	--	--	--	--	< 2.9 UJ
I	PUB-06	1a	5	N	4/3/1996	61.5	--	--	771.8	< 0.09 UJ	--	12.9	--	--	--	--	--	< 0.6 UJ
I	PUC-03	1a	0	N	3/26/1996	970	--	--	696.5	0.15	--	12.2	--	--	--	--	--	0.66
I	PUC-03	1a	5	N	3/26/1996	180	--	--	--	0.14	--	--	--	--	--	--	--	0.88
I	PUE-02	6d	0	N	10/12/1999	630	--	--	1800	--	--	--	--	--	--	--	--	--
I	PUF-01	1a	0	N	3/25/1996	120	--	--	2499	< 0.1 U	--	47.1	--	--	--	--	--	< 0.6 U
I	PUF-01	1a	5	N	3/25/1996	18	--	--	1068.6	< 0.1 U	--	21.8	--	--	--	--	--	< 1 U
II	BDB-15	1a	0	N	4/4/1996	99.5	--	--	956.3	< 0.09 UJ	--	13.8	--	--	--	--	--	< 0.62 UJ
II	BDB-15	1a	5	N	4/4/1996	8.9	--	--	454.2	< 0.1 UJ	--	13.8	--	--	--	--	--	< 0.62 UJ
II	PUA-09	1a	0	N	4/3/1996	5130	--	--	20493.5	1.6 J-	--	128.5	--	--	--	--	--	3.2 J-
II	PUA-09	1a	5	N	4/3/1996	92.9	--	--	462.2	< 0.1 UJ	--	15	--	--	--	--	--	< 0.61 UJ
II	PUA-09NCD	8a	0	N	7/20/2000	3400	--	--	21000	--	--	--	--	--	--	--	--	--
II	PUA-09NCOM	8a	0	N	7/20/2000	4500	--	--	34000	--	--	--	--	--	--	--	--	--
II	PUA-09NED	8a	0	N	7/20/2000	2700	--	--	16000	--	--	--	--	--	--	--	--	--
II	PUA-09NWD	8a	0	N	7/20/2000	7700	--	--	28000	--	--	--	--	--	--	--	--	--
II	PUA-09SCD	8a	0	N	7/20/2000	3000	--	--	18000	--	--	--	--	--	--	--	--	--
II	PUA-09SCOM	8a	0	N	7/20/2000	2100	--	--	14000	--	--	--	--	--	--	--	--	--
II	PUA-09SWD	8a	0	N	7/20/2000	3300	--	--	13000	--	--	--	--	--	--	--	--	--
II	PUA-10	1a	0	N	4/3/1996	4640	--	--	24922	1.5 J-	--	199.5	--	--	--	--	--	< 3.1 UJ
II	PUA-10	1a	5	N	4/3/1996	49.9	--	--	490.8	< 0.1 UJ	--	10.5	--	--	--	--	--	< 0.61 UJ
II	PUB-08	1a	0	N	4/3/1996	15400	--	--	12427.5	2.4 J-	--	129	--	--	--	--	--	5.9 J-

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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[illegible]

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals												
						Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Niobium	Palladium	Phosphorus (as P)	Platinum	Potassium	Selenium
II	PUC-07	6d	19	N	10/20/1999	23	--	--	890	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	24	N	10/20/1999	11	--	--	700	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	29	N	10/20/1999	9.1	--	--	510	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	39	N	10/20/1999	4.8	--	--	3300	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	44	N	10/20/1999	4.5	--	--	860	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	49	N	10/20/1999	< 3.6 U	--	--	300	--	--	--	--	--	--	--	--	--
II	PUC-07-E-D	6a	0	N	10/19/1999	51	--	--	3900	--	--	--	--	--	--	--	--	--
II	PUC-07-E-S	6a	0	N	10/19/1999	150	--	--	1100	--	--	--	--	--	--	--	--	--
II	PUC-07-N-D	6a	0	N	10/19/1999	24	--	--	4200	--	--	--	--	--	--	--	--	--
II	PUC-07-N-S	6a	0	N	10/19/1999	41	--	--	580	--	--	--	--	--	--	--	--	--
II	PUC-08	1a	0	N	4/2/1996	3280	--	--	15900	0.91	--	188	--	--	--	--	--	< 6.1 U
II	PUC-08	1a	5	N	4/2/1996	88.6	--	--	1951.8	0.13	--	23.4	--	--	--	--	--	< 6.3 U
II	PUD-06	1a	0	N	4/2/1996	2690	--	--	16400.9	3.4	--	355.2	--	--	--	--	--	< 6.2 U
II	PUD-06	1a	5	N	4/2/1996	14.1	--	--	569.5	< 0.1 U	--	24.1	--	--	--	--	--	< 5.9 U
II	PUD-06-E-D	6a	0	N	10/20/1999	47	--	--	880	--	--	--	--	--	--	--	--	--
II	PUD-06-E-S	6a	0	N	10/20/1999	35	--	--	580	--	--	--	--	--	--	--	--	--
II	PUD-06-N-D	6a	0	N	10/20/1999	24	--	--	1000	--	--	--	--	--	--	--	--	--
II	PUD-06-N-S	6a	0	N	10/20/1999	81	--	--	1000	--	--	--	--	--	--	--	--	--
II	PUD-08	1a	0	N	4/2/1996	2950	--	--	38423.8	3.1	--	508.4	--	--	--			

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals												
						Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Niobium	Palladium	Phosphorus (as P)	Platinum	Potassium	Selenium
II	PUE-07	6d	24	N	10/20/1999	10	--	--	380	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	29	N	10/20/1999	7.2	--	--	350	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	34	N	10/20/1999	10	--	--	360	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	39	N	10/20/1999	11	--	--	330	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	44	N	10/20/1999	8.3	--	--	300	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	49	N	10/20/1999	13	--	--	340	--	--	--	--	--	--	--	--	--
II	PUE-07-E-D	6a	0	N	10/20/1999	14	--	--	1200	--	--	--	--	--	--	--	--	--
II	PUE-07-E-S	6a	0	N	10/20/1999	73	--	--	690	--	--	--	--	--	--	--	--	--
II	PUE-07NCD	8a	0	N	7/19/2000	2900	--	--	16000	--	--	--	--	--	--	--	--	--
II	PUE-07NCOM	8a	0	N	7/19/2000	2300	--	--	22000	--	--	--	--	--	--	--	--	--
II	PUE-07-N-D	6a	0	N	10/20/1999	59	--	--	660	--	--	--	--	--	--	--	--	--
II	PUE-07NED	8a	0	N	7/19/2000	3400	--	--	24000	--	--	--	--	--	--	--	--	--
II	PUE-07-N-S	6a	0	N	10/20/1999	110	--	--	950	--	--	--	--	--	--	--	--	--
II	PUE-07NWD	8a	0	N	7/19/2000	2200	--	--	23000	--	--	--	--	--	--	--	--	--
II	PUE-07SCD	8a	0	N	7/19/2000	1300	--	--	17000	--	--	--	--	--	--	--	--	--
II	PUE-07SCOM	8a	0	N	7/19/2000	1700	--	--	16000	--	--	--	--	--	--	--	--	--
II	PUE-07SED	8a	0	N	7/19/2000	6500	--	--	12000	--	--	--	--	--	--	--	--	--
II	PUE-07SWD	8a	0	N	7/19/2000	1100	--	--	12000	--	--	--	--	--	--	--	--	--
II	PUF-02	6d	0	N	10/12/1999	100	--	--	250	--	--	--	--	--	--	--	--	--
II	PUF-03	1a	0	N	3/28/1996	333	--	--	2389.3	< 0.1 U	--	32.8	--	--	--	--	--	< 6.1 U
II	PUF-03	1a	5	N	3/28/1996	28.7	--	--	745.2	< 0.11 U	--	33.7	--	--	--	--	--	< 6.5 U
II	PUF-03	6d	0	N	10/12/1999	--	--	--	2600	--	--	--	--	--	--	--	--	--
II	PUF-05	1a	0	N	4/4/1996	1040	--	--	25458.4	2.7 J+	--	355.2	--	--	--	--	--	< 3.2 UJ
II	PUF-05	1a	5	N	4/4/1996	9.9	--	--	578.8	< 0.11 UJ	--	17.6	--	--	--	--	--	< 0.64 UJ
II	PUG-02	6d	0	N	10/12/1999	470	--	--	830	--	--	--	--	--	--	--	--	--
II	PUG-03	6d	0	N	10/12/1999	300	--	--	700	--	--	--	--	--	--	--	--	--
II	PUG-04	1a	0	N	4/4/1996	868	--	--	2720	0.09 J+	--	75.6	--	--	--	--	--	< 0.61 UJ
II	PUG-04	1a	5	N	4/4/1996	10	--	--	497.8	< 0.09 UJ	--	11.6	--	--	--	--	--	< 0.62 UJ
II	PUG-04	6d	0	N	10/12/1999	--	--	--	1400	--	--	--	--	--	--	--	--	--
II	PUG-05	6d	0	N	10/12/1999	510	--	--	2500	--	--	--	--	--	--	--	--	--
II	PUG-06	1a	0	N	4/4/1996	3270	--	--	18444.6	0.86 J+	--	344.4	--	--	--	--	--	< 3.2 UJ
II	PUG-06	1a	5	N	4/4/1996	6.7	--	--	605.2	< 0.12 UJ	--	25	--	--	--	--	--	< 0.7 UJ
II	PUG-06	6d	0	N	10/12/1999	--	--	--	28000	--	--	--	--	--	--	--	--	--
II	PUG-07	1a	0	N	4/4/1996	1390	--	--	45523.8	1.2 J+	--	353.9	--	--	--	--	--	< 6.3 UJ
II	PUG-07	1a	5	N	4/4/1996	13.3	--	--	999.4	< 0.1 UJ	--	18.8	--	--	--	--	--	< 0.63 UJ
II	SB-16-B	27	0	N	5/23/2004	7.5 J+	9.6	5060	256	0.019 J	0.89 J	9.8	< 0.224 UJ	0.42 J	739 J+	< 0.0108 U	1370	0.28
II	SB-16-B	27	7	N	5/23/2004	31.4	11.6	7260	737	0.027 J	1.1	16	18.6	0.66	1200	0.039 J	1570	< 0.301 U

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals												
						Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Niobium	Palladium	Phosphorus (as P)	Platinum	Potassium	Selenium
II	SB-16-B	27	17	N	5/23/2004	11.2	12	6560	328	< 0.0167 U	1.1	13.6	< 0.224 U	0.62	1120	< 0.0108 U	1050	< 0.301 U
II	SB-16-B	27	27	N	5/23/2004	6	11.8	7090	348	< 0.0167 U	0.25 J	17.7	< 0.224 U	0.66	1290	< 0.0108 U	797	< 0.301 U
II	SB-16-B	27	47	N	5/23/2004	4.6	13.6	5510	220	< 0.0167 U	0.22 J	6.7	< 0.224 U	0.55	922	< 0.0108 U	918	< 0.301 U
II	SB-16-B	27	67	N	5/23/2004	4.3	99.8	58800	531	< 0.0167 U	0.92 J	10.4	< 0.224 U	1.7	< 1730 U	< 0.0108 U	2470	< 0.301 U
II	SB-16-B	27	77	N	5/24/2004	4.8	64.7	45400	281	< 0.0167 U	2.4	12.8	< 0.224 U	0.76	< 1690 U	< 0.0108 U	4350	0.62 J
II	SB-16-B	27	97	N	5/24/2004	8.6	108	54800	275	< 0.0167 U	2	14.4	< 0.224 U	0.91	572	< 0.0108 U	6530	1.2
II	SWB-24	33	5	N	4/12/2005	--	--	140	--	--	--	--	--	--	--	--	21.1	--
II	SWB-24	33	10	N	4/12/2005	--	--	79	--	--	--	--	--	--	--	--	24.3	--
II	SWB-24	33	20	N	4/12/2005	--	--	65	--	--	--	--	--	--	--	--	24.1	--
II	SWB-24	33	30	N	4/12/2005	--	--	42.8	--	--	--	--	--	--	--	--	22.4	--
II	SWB-24	33	40	N	4/12/2005	--	--	48.8	--	--	--	--	--	--	--	--	15.2	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals											
						Silicon	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
I	PUA-03N	7a	0	N	10/20/1999	--	--	--	--	< 0.52 U	--	--	--	--	480	44	--
I	PUA-03S	7a	0	N	10/20/1999	--	--	--	--	< 0.51 U	--	--	--	--	63	30	--
I	PUA-05	1a	0	N	4/4/1996	--	7.5 J-	--	--	2.8	--	--	--	--	1870 J	--	--
I	PUA-05	1a	5	N	4/4/1996	--	< 0.21 UJ	--	--	< 0.1 U	--	--	--	--	94.3 J	--	--
I	PUA-07	1a	0	N	4/4/1996	--	29.4 J-	--	--	10.8	--	--	--	--	7770 J	--	--
I	PUA-07	1a	5	N	4/4/1996	--	1.2 J-	--	--	0.1	--	--	--	--	490 J	--	--
I	PUA-07-E-D	6a	0	N	10/19/1999	--	--	--	--	< 0.5 U	--	--	--	--	220	--	--
I	PUA-07-E-S	6a	0	N	10/19/1999	--	--	--	--	< 0.51 U	--	--	--	--	36	--	--
I	PUA-07-N-D	6a	0	N	10/19/1999	--	--	--	--	0.57	--	--	--	--	190	--	--
I	PUA-07-N-S	6a	0	N	10/19/1999	--	--	--	--	< 0.51 U	--	--	--	--	51	--	--
I	PUA-09SED	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
I	PUB-03N	7a	0	N	10/20/1999	--	--	--	--	1.2	--	--	--	--	66	35	--
I	PUB-03S	7a	0	N	10/20/1999	--	--	--	--	1.7	--	--	--	--	64	46	--
I	PUB-04	1a	0	N	3/26/1996	--	< 0.2 U	--	--	--	--	--	--	--	200	--	--
I	PUB-04	1a	5	N	3/26/1996	--	< 0.21 U	--	--	--	--	--	--	--	39	--	--
I	PUB-05	6d	0	N	10/13/1999	--	--	--	--	13	--	--	--	--	380	--	--
I	PUB-06	1a	0	N	4/3/1996	--	3.6	--	--	25.6	--	--	--	--	1590	--	--
I	PUB-06	1a	5	N	4/3/1996	--	< 0.2 U	--	--	< 0.1 U	--	--	--	--	56.6	--	--
I	PUC-03	1a	0	N	3/26/1996	--	3.9	--	--	4.8	--	--	--	--	1300	--	--
I	PUC-03	1a	5	N	3/26/1996	--	0.96	--	--	--	--	--	--	--	420	--	--
I	PUE-02	6d	0	N	10/12/1999	--	--	--	--	2.7	--	--	--	--	1300	--	--
I	PUF-01	1a	0	N	3/25/1996	--	0.51	--	--	9.3	--	--	--	--	240	--	--
I	PUF-01	1a	5	N	3/25/1996	--	< 0.21 U	--	--	1.9	--	--	--	--	110	--	--
II	BDB-15	1a	0	N	4/4/1996	--	< 0.21 UJ	--	--	< 0.1 U	--	--	--	--	52 J	--	--
II	BDB-15	1a	5	N	4/4/1996	--	< 0.21 UJ	--	--	< 0.1 U	--	--	--	--	24.4 J	--	--
II	PUA-09	1a	0	N	4/3/1996	--	9.5	--	--	32	--	--	--	--	6370	--	--
II	PUA-09	1a	5	N	4/3/1996	--	< 0.2 U	--	--	0.3	--	--	--	--	169	--	--
II	PUA-09NCD	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUA-09NCOM	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUA-09NED	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUA-09NWD	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUA-09SCD	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUA-09SCOM	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUA-09SWD	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUA-10	1a	0	N	4/3/1996	--	34	--	--	29.6	--	--	--	--	4170	--	--
II	PUA-10	1a	5	N	4/3/1996	--	< 0.2 U	--	--	< 0.1 U	--	--	--	--	42.1	--	--
II	PUB-08	1a	0	N	4/3/1996	--	42.9	--	--	75	--	--	--	--	7780	--	--

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals											
						Silicon	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
II	PUB-08	1a	5	N	4/3/1996	--	1.4	--	--	0.9	--	--	--	--	276	--	--
II	PUB-09	1a	0	N	4/3/1996	--	29.2	--	--	25.2	--	--	--	--	4590	--	--
II	PUB-09	1a	5	N	4/3/1996	--	6	--	--	14.7	--	--	--	--	727	--	--
II	PUB-09	6b	10	N	11/17/1998	--	< 5 U	--	--	180	--	--	--	--	1100	--	--
II	PUB-09	6b	15	N	11/17/1998	--	< 1 U	--	--	< 5 U	--	--	--	--	170	--	--
II	PUB-10	1a	0	N	4/3/1996	--	30.2	--	--	59.1	--	--	--	--	5200	--	--
II	PUB-10	1a	5	N	4/3/1996	--	30.6	--	--	74.9	--	--	--	--	4100	--	--
II	PUB-10	6b	10	N	11/17/1998	--	7.6	--	--	330	--	--	--	--	2700	--	--
II	PUB-10	6b	15	N	11/17/1998	--	5.8	--	--	290	--	--	--	--	2300	--	--
II	PUB-10	6d	0	N	10/19/1999	--	--	--	--	110	--	--	--	--	--	--	--
II	PUB-10	6d	5	N	10/19/1999	--	--	--	--	< 0.52 U	--	--	--	--	--	--	--
II	PUB-10	6d	10	N	10/19/1999	--	--	--	--	2.1	--	--	--	--	--	--	--
II	PUB-10	6d	15	N	10/19/1999	--	--	--	--	< 0.54 U	--	--	--	--	36	--	--
II	PUB-10	6d	19	N	10/19/1999	--	--	--	--	< 0.53 U	--	--	--	--	32	--	--
II	PUB-10	6d	24	N	10/19/1999	--	--	--	--	< 0.54 U	--	--	--	--	33	--	--
II	PUB-10	6d	29	N	10/19/1999	--	--	--	--	< 0.53 U	--	--	--	--	34	--	--
II	PUB-10	6d	39	N	10/19/1999	--	--	--	--	< 0.53 U	--	--	--	--	32	--	--
II	PUB-10	6d	49	N	10/19/1999	--	--	--	--	< 0.52 U	--	--	--	--	33	--	--
II	PUB-10-E-D	6a	0	N	10/19/1999	--	--	--	--	1.4	--	--	--	--	110	--	--
II	PUB-10-E-S	6a	0	N	10/19/1999	--	--	--	--	< 0.51 U	--	--	--	--	76	--	--
II	PUB-10NCD	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10NCOM	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10-N-D	6a	0	N	10/19/1999	--	--	--	--	1.1	--	--	--	--	75	--	--
II	PUB-10NED	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10-N-S	6a	0	N	10/19/1999	--	--	--	--	0.81	--	--	--	--	160	--	--
II	PUB-10NWD	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10SCD	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10SCOM	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10SWD	8a	0	N	7/20/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUC-05	1a	0	N	4/3/1996	--	38.9	--	--	4.9	--	--	--	--	3550	--	--
II	PUC-05	1a	5	N	4/3/1996	--	< 0.2 U	--	--	1.2	--	--	--	--	136	--	--
II	PUC-07	1a	0	N	4/3/1996	--	23.39	--	--	28.6	--	--	--	--	4881.31	--	--
II	PUC-07	1a	5	N	4/3/1996	--	3.4	--	--	5.3	--	--	--	--	1270	--	--
II	PUC-07	6d	0	N	10/20/1999	--	--	--	--	32	--	--	--	--	--	--	--
II	PUC-07	6d	5	N	10/20/1999	--	--	--	--	3.3	--	--	--	--	--	--	--
II	PUC-07	6d	10	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	70	--	--
II	PUC-07	6d	15	N	10/20/1999	--	--	--	--	< 0.54 U	--	--	--	--	57	--	--

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals											
						Silicon	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
II	PUC-07	6d	19	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	40	--	--
II	PUC-07	6d	24	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	39	--	--
II	PUC-07	6d	29	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	34	--	--
II	PUC-07	6d	39	N	10/20/1999	--	--	--	--	< 0.9 U	--	--	--	--	52	--	--
II	PUC-07	6d	44	N	10/20/1999	--	--	--	--	< 0.78 U	--	--	--	--	68	--	--
II	PUC-07	6d	49	N	10/20/1999	--	--	--	--	< 0.72 U	--	--	--	--	55	--	--
II	PUC-07-E-D	6a	0	N	10/19/1999	--	--	--	--	9.6	--	--	--	--	140	--	--
II	PUC-07-E-S	6a	0	N	10/19/1999	--	--	--	--	< 0.51 U	--	--	--	--	180	--	--
II	PUC-07-N-D	6a	0	N	10/19/1999	--	--	--	--	1.5	--	--	--	--	150	--	--
II	PUC-07-N-S	6a	0	N	10/19/1999	--	--	--	--	< 0.51 U	--	--	--	--	64	--	--
II	PUC-08	1a	0	N	4/2/1996	--	5.5	--	--	29.4	--	--	--	--	2840	--	--
II	PUC-08	1a	5	N	4/2/1996	--	< 2.1 U	--	--	0.5	--	--	--	--	176	--	--
II	PUD-06	1a	0	N	4/2/1996	--	< 2.1 U	--	--	6.9	--	--	--	--	3930	--	--
II	PUD-06	1a	5	N	4/2/1996	--	< 2 U	--	--	1.3	--	--	--	--	45.9	--	--
II	PUD-06-E-D	6a	0	N	10/20/1999	--	--	--	--	1	--	--	--	--	130	--	--
II	PUD-06-E-S	6a	0	N	10/20/1999	--	--	--	--	< 0.5 U	--	--	--	--	81	--	--
II	PUD-06-N-D	6a	0	N	10/20/1999	--	--	--	--	2.9	--	--	--	--	160	--	--
II	PUD-06-N-S	6a	0	N	10/20/1999	--	--	--	--	< 0.5 U	--	--	--	--	140	--	--
II	PUD-08	1a	0	N	4/2/1996	--	16.8	--	--	< 0.1 U	--	--	--	--	3100	--	--
II	PUD-08	1a	5	N	4/2/1996	--	< 2 U	--	--	1.6	--	--	--	--	132	--	--
II	PUD-09	1a	0	N	4/2/1996	--	20.8	--	--	31.8	--	--	--	--	2320	--	--
II	PUD-09	1a	5	N	4/2/1996	--	< 2 U	--	--	2.1	--	--	--	--	158	--	--
II	PUE-03	1a	0	N	4/1/1996	--	2.7	--	--	4.6	--	--	--	--	883	--	--
II	PUE-03	1a	5	N	4/1/1996	--	< 2.1 U	--	--	3.2	--	--	--	--	44.5	--	--
II	PUE-03	6d	0	N	10/12/1999	--	--	--	--	1	--	--	--	--	--	--	--
II	PUE-05	1a	0	N	4/1/1996	--	22.4	--	--	< 0.1 U	--	--	--	--	2060	--	--
II	PUE-05	1a	5	N	4/1/1996	--	< 2.1 U	--	--	2.2	--	--	--	--	165	--	--
II	PUE-06	1a	0	N	4/1/1996	--	30.1	--	--	19.2	--	--	--	--	2200	--	--
II	PUE-06	1a	5	N	4/1/1996	--	< 2.1 U	--	--	1.2	--	--	--	--	139	--	--
II	PUE-07	1a	0	N	4/2/1996	--	14.5	--	--	44.7	--	--	--	--	2740	--	--
II	PUE-07	1a	5	N	4/2/1996	--	5.2	--	--	18.5	--	--	--	--	936	--	--
II	PUE-07	6b	15	N	11/17/1998	--	< 1 U	--	--	16	--	--	--	--	330	--	--
II	PUE-07	6d	0	N	10/20/1999	--	--	--	--	44	--	--	--	--	--	--	--
II	PUE-07	6d	5	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	--	--	--
II	PUE-07	6d	10	N	10/20/1999	--	--	--	--	< 0.52 U	--	--	--	--	--	--	--
II	PUE-07	6d	15	N	10/20/1999	--	--	--	--	< 0.52 U	--	--	--	--	30	--	--
II	PUE-07	6d	19	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	41	--	--

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals											
						Silicon	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
II	PUE-07	6d	24	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	39	--	--
II	PUE-07	6d	29	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	32	--	--
II	PUE-07	6d	34	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	32	--	--
II	PUE-07	6d	39	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	46	--	--
II	PUE-07	6d	44	N	10/20/1999	--	--	--	--	< 0.53 U	--	--	--	--	31	--	--
II	PUE-07	6d	49	N	10/20/1999	--	--	--	--	< 0.52 U	--	--	--	--	30	--	--
II	PUE-07-E-D	6a	0	N	10/20/1999	--	--	--	--	0.69	--	--	--	--	98	--	--
II	PUE-07-E-S	6a	0	N	10/20/1999	--	--	--	--	< 0.5 U	--	--	--	--	86	--	--
II	PUE-07NCD	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07NCOM	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07-N-D	6a	0	N	10/20/1999	--	--	--	--	1	--	--	--	--	100	--	--
II	PUE-07NED	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07-N-S	6a	0	N	10/20/1999	--	--	--	--	< 0.51 U	--	--	--	--	110	--	--
II	PUE-07NWD	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07SCD	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07SCOM	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07SED	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07SWD	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--	--	--	--
II	PUF-02	6d	0	N	10/12/1999	--	--	--	--	< 0.51 U	--	--	--	--	150	--	--
II	PUF-03	1a	0	N	3/28/1996	--	3	--	--	3	--	--	--	--	1420	--	--
II	PUF-03	1a	5	N	3/28/1996	--	2.2	--	--	< 0.1 U	--	--	--	--	294	--	--
II	PUF-03	6d	0	N	10/12/1999	--	--	--	--	0.51	--	--	--	--	--	--	--
II	PUF-05	1a	0	N	4/4/1996	--	28.4 J-	--	--	1.6	--	--	--	--	2940 J	--	--
II	PUF-05	1a	5	N	4/4/1996	--	< 0.21 UJ	--	--	< 0.1 U	--	--	--	--	25.8 J	--	--
II	PUG-02	6d	0	N	10/12/1999	--	--	--	--	< 0.51 U	--	--	--	--	390	--	--
II	PUG-03	6d	0	N	10/12/1999	--	--	--	--	< 0.51 U	--	--	--	--	390	--	--
II	PUG-04	1a	0	N	4/4/1996	--	1.8 J-	--	--	< 0.1 U	--	--	--	--	708 J	--	--
II	PUG-04	1a	5	N	4/4/1996	--	< 0.21 UJ	--	--	< 0.1 U	--	--	--	--	29.7 J	--	--
II	PUG-04	6d	0	N	10/12/1999	--	--	--	--	< 0.51 U	--	--	--	--	--	--	--
II	PUG-05	6d	0	N	10/12/1999	--	--	--	--	< 0.51 U	--	--	--	--	610	--	--
II	PUG-06	1a	0	N	4/4/1996	--	11.5 J-	--	--	0.4	--	--	--	--	2780 J	--	--
II	PUG-06	1a	5	N	4/4/1996	--	< 0.23 UJ	--	--	< 0.1 U	--	--	--	--	40.3 J	--	--
II	PUG-06	6d	0	N	10/12/1999	--	--	--	--	2.2	--	--	--	--	--	--	--
II	PUG-07	1a	0	N	4/4/1996	--	20.8 J-	--	--	3.6	--	--	--	--	2910 J	--	--
II	PUG-07	1a	5	N	4/4/1996	--	< 0.21 UJ	--	--	< 0.1 U	--	--	--	--	31.5 J	--	--
II	SB-16-B	27	0	N	5/23/2004	837	< 0.581 U	141	146 J+	< 0.317 U	2.1 J+	207 J+	< 0.0175 U	0.53 J	19.9	27.9 J+	3.6 J
II	SB-16-B	27	7	N	5/23/2004	604	0.44	227	155	< 0.317 U	4	786	5.4	1.4	68.8	39.8	64.8

TABLE B-1
SOIL METALS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals											
						Silicon	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Tungsten	Uranium	Vanadium	Zinc	Zirconium
II	SB-16-B	27	17	N	5/23/2004	518	< 0.581 U	478	171	< 0.317 U	1.6	318	< 0.0175 U	0.79 J	26.1	28.2	16.5
II	SB-16-B	27	27	N	5/23/2004	325	< 0.581 U	759	205	< 0.317 U	0.64 J	228	< 0.0175 U	0.89 J	21.9	35	1.5 J
II	SB-16-B	27	47	N	5/23/2004	412	< 0.581 U	260	72.1	< 0.317 U	0.73 J	178	< 0.0175 U	1.2	23.1	21.6	1.7 J
II	SB-16-B	27	67	N	5/23/2004	799 J	0.33	724 J	2150	< 0.317 U	0.73 J	190	< 0.0175 U	8.7	26.6	39.4	8.9 J
II	SB-16-B	27	77	N	5/24/2004	726 J	0.68 J	907 J	837	< 0.317 U	0.74 J	258	< 0.0175 U	15.7	17.9	44.8	12.9 J
II	SB-16-B	27	97	N	5/24/2004	622	< 0.581 U	890	774	< 0.317 U	1.2 J	339	< 0.0175 U	6.2	24.7	72.6	20.8
II	SWB-24	33	5	N	4/12/2005	--	--	177	--	--	--	--	--	--	--	--	--
II	SWB-24	33	10	N	4/12/2005	--	--	161	--	--	--	--	--	--	--	--	--
II	SWB-24	33	20	N	4/12/2005	--	--	213	--	--	--	--	--	--	--	--	--
II	SWB-24	33	30	N	4/12/2005	--	--	202	--	--	--	--	--	--	--	--	--
II	SWB-24	33	40	N	4/12/2005	--	--	223	--	--	--	--	--	--	--	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 10)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organochlorine Pesticides											
						2,4-DDD	2,4-DDE	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	delta-BHC	Dieldrin
I	PUA-03N	7a	0	N	10/20/1999	--	--	< 0.005 U	0.022	0.023	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.06 U	< 0.005 U	< 0.005 U
I	PUA-03S	7a	0	N	10/20/1999	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.06 U	< 0.005 U	< 0.005 U
I	PUA-05	1a	0	N	4/4/1996	--	--	< 0.33 U	2.5	< 0.33 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 4 U	< 0.17 U	< 0.33 U
I	PUA-05	1a	5	N	4/4/1996	--	--	< 0.0033 U	0.0061	< 0.33 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.04 U	< 0.0017 U	< 0.0033 U
I	PUA-07	1a	0	N	4/4/1996	--	--	< 0.83 U	32	< 0.83 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 10 U	< 0.43 U	< 0.83 U
I	PUA-07	1a	5	N	4/4/1996	--	--	< 0.33 U	0.69	< 0.33 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 4 U	< 0.17 U	< 0.33 U
I	PUA-07-E-D	6a	0	N	10/19/1999	--	--	< 0.005 U	0.12	0.023	< 0.005 U	< 0.005 U	0.01	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
I	PUA-07-E-S	6a	0	N	10/19/1999	--	--	< 0.005 U	< 0.005 U	< 0.33 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
I	PUA-07-N-D	6a	0	N	10/19/1999	--	--	< 0.005 U	0.16	0.015	< 0.005 U	< 0.005 U	0.0088	0.025	< 0.005 U	< 0.005 U	< 0.005 U
I	PUA-07-N-S	6a	0	N	10/19/1999	--	--	< 0.005 U	0.045	0.0082	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
I	PUA-09SED	8a	0	N	7/20/2000	--	--	< 1.08 U	9.1	1.7	< 1.08 U	< 1.08 U	< 1.08 U	< 1.08 U	< 4.32 U	< 1.08 U	< 1.08 U
I	PUB-03N	7a	0	N	10/20/1999	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.06 U	< 0.005 U	< 0.005 U
I	PUB-03S	7a	0	N	10/20/1999	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.06 U	< 0.005 U	< 0.005 U
I	PUB-04	1a	0	N	3/26/1996	--	--	< 0.0033 U	0.0084	< 0.0033 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.04 U	< 0.0017 U	< 0.0033 U
I	PUB-04	1a	5	N	3/26/1996	--	--	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.044 U	< 0.0019 U	< 0.0036 U
I	PUB-05	6d	0	N	10/13/1999	--	--	< 0.005 U	0.17	0.04	< 0.005 U	< 0.005 U	0.2	< 0.005 U	< 0.06 U	< 0.005 U	< 0.005 U
I	PUB-06	1a	0	N	4/3/1996	--	--	< 0.065 U	0.28	< 0.065 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.79 U	< 0.034 U	< 0.065 U
I	PUB-06	1a	5	N	4/3/1996	--	--	< 0.065 U	0.083	< 0.065 U	< 0.033 U	< 0.033 U	< 0.033 U	< 0.033 U	< 0.78 U	< 0.033 U	< 0.065 U
I	PUC-03	1a	0	N	3/26/1996	--	--	< 0.066 U	0.55	0.1	< 0.0019 U	0.01	< 0.034 U	< 0.034 U	< 0.04 U	< 0.034 U	< 0.066 U
I	PUC-03	1a	5	N	3/26/1996	--	--	< 0.0036 U									

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 3 of 10)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organochlorine Pesticides											
						2,4-DDD	2,4-DDE	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	delta-BHC	Dieldrin
II	PUC-07	6d	15	N	10/20/1999	--	--	< 0.005 U	0.012	0.0061	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUC-07	6d	19	N	10/20/1999	--	--	< 0.005 U	0.0075	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUC-07	6d	24	N	10/20/1999	--	--	< 0.005 U	0.013	0.0053	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUC-07	6d	29	N	10/20/1999	--	--	< 0.005 U	0.056	0.0086	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUC-07	6d	39	N	10/20/1999	--	--	< 0.005 U	< 0.006 U	< 0.006 U	< 0.005 U	< 0.005 U	< 0.005 U	0.093	< 0.005 U	0.018	< 0.005 U
II	PUC-07	6d	44	N	10/20/1999	--	--	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ
II	PUC-07	6d	49	N	10/20/1999	--	--	< 0.005 U	0.012	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUC-07-E-D	6a	0	N	10/19/1999	--	--	< 0.005 U	0.4	0.095	< 0.005 U	< 0.005 U	0.07	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUC-07-E-S	6a	0	N	10/19/1999	--	--	< 0.005 U	0.73 J+	0.12 J+	< 0.005 U	< 0.005 U	0.068 J+	0.0068 J+	< 0.005 U	< 0.005 U	< 0.005 U
II	PUC-07-N-D	6a	0	N	10/19/1999	--	--	< 0.005 U	0.023	0.012	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUC-07-N-S	6a	0	N	10/19/1999	--	--	< 0.005 U	0.16	0.017	< 0.005 U	< 0.005 U	0.019	0.0081	< 0.005 U	< 0.005 U	< 0.005 U
II	PUC-08	1a	0	N	4/2/1996	--	--	< 0.5 U	12	0.88	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U	6	< 0.26 U	< 0.5 U
II	PUC-08	1a	5	N	4/2/1996	--	--	< 0.0036 U	0.052 J+	< 0.0036 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	0.0008 J+	< 0.044 U	0.0007 J+	0.0043 J+
II	PUD-06	1a	0	N	4/2/1996	--	--	< 3.3 U	70	< 3.3 UJ	< 1.7 UJ	< 1.7 U	< 1.7 U	< 1.7 U	< 40 U	< 1.7 U	< 3.3 UJ
II	PUD-06	1a	5	N	4/2/1996	--	--	< 0.0033 U	0.034	< 0.0033 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.04 U	< 0.0017 U	< 0.0033 U
II	PUD-06-E-D	6a	0	N	10/20/1999	--	--	< 0.005 U	0.3	0.047	< 0.005 U	< 0.005 U	0.037	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUD-06-E-S	6a	0	N	10/20/1999	--	--	< 0.005 U	0.2	0.031	< 0.005 U	< 0.005 U	0.02	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUD-06-N-D	6a	0	N	10/20/1999	--	--	< 0.005 U	0.46	0.047	< 0.005 U	< 0.005 U	0.034	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUD-06-N-S	6a	0	N	10/20/1999	--	--	< 0.005 U	1.3	0.11	< 0.005 U	< 0.005 U	0.094	0.012	< 0.005 U	< 0.005 U	< 0.005 U
II	PUD-08	1a	0	N	4/2/1996	--	--	< 7.3 U	97	12	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 88 U	< 3.7 U	< 7.3 U
II	PUD-08	1a	5	N	4/2/1996	--	--	< 0.17 U	0.58	< 0.17 U	< 0.085 U	< 0.085 U	< 0.085 U	< 0.085 U	< 2 U	< 0.085 U	< 0.17 U
II	PUD-09	1a	0	N	4/2/1996	--	--	< 6.6 U	46	17	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	80	< 3.4 U	< 6.6 U
II	PUD-09	1a	5	N	4/2/1996	--	--	< 0.33 U	0.82	< 0.33 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 4 U	< 0.17 U	< 0.33 U
II	PUE-03	1a	0	N	4/1/1996	--	--	< 0.083 U	3.3	0.16	< 0.043 U	< 0.043 U	< 0.043 U	< 0.043 U	< 0.04 U	< 0.043 U	< 0.083 U
II	PUE-03	1a	5	N	4/1/1996	--	--	< 0.0036 U	0.0013 J+	< 0.0036 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0037 U	< 0.044 U	< 0.0037 U	< 0.0036 U
II	PUE-05	1a	0	N	4/1/1996	--	--	< 3.6 U	63	< 3.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	4.4	< 1.9 U	< 3.6 U
II	PUE-05	1a	5	N	4/1/1996	--	--	< 0.0036 U	0.016	0.029	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.044 U	< 0.0019 U	< 0.0036 U
II	PUE-06	1a	0	N	4/1/1996	--	--	< 0.36 U	78	16	< 0.19 U	1.1	< 0.19 U	< 0.19 U	< 4.4 U	< 0.19 U	< 0.36 U
II	PUE-06	1a	5	N	4/1/1996	--	--	--	--	0.024 J-	--	0.0024 J-	--	--	--	--	--
II	PUE-07	1a	0	N	4/2/1996	--	--	< 0.27 U	1.8	< 0.27 U	< 0.14 U	< 0.14 U	0.24	< 0.14 U	< 3.3 U	< 0.14 U	< 0.27 U
II	PUE-07	1a	5	N	4/2/1996	--	--	< 1.1 U	7.8	1.2	< 0.56 U	< 0.56 U	< 0.56 U	< 0.56 U	< 13 U	< 0.56 U	< 1.1 U
II	PUE-07	6b	15	N	11/17/1998	--	--	< 0.05 U	1.4 J+	0.27 J+	< 0.05 U	< 0.05 U	< 0.05 U	0.18 J+	< 0.2 U	< 0.05 U	< 0.05 U
II	PUE-07	6d	15	N	10/20/1999	--	--	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.02 UJ	< 0.005 UJ	< 0.005 UJ
II	PUE-07	6d	19	N	10/20/1999	--	--	< 0.04 U	< 0.04 U	< 0.005 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	<		

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organochlorine Pesticides											
						2,4-DDD	2,4-DDE	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	delta-BHC	Dieldrin
II	PUE-07	6d	39	N	10/20/1999	--	--	< 0.0033 U	0.019	0.0054	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.02 U	< 0.0017 U	< 0.0033 U
II	PUE-07	6d	44	N	10/20/1999	--	--	< 0.06 U	0.01	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.005 U	< 0.005 U
II	PUE-07	6d	49	N	10/20/1999	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.005 U	< 0.005 U
II	PUE-07-E-D	6a	0	N	10/20/1999	--	--	< 0.005 U	0.076	0.016	< 0.005 U	< 0.005 U	0.0065	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUE-07-E-S	6a	0	N	10/20/1999	--	--	< 0.005 U	0.17	0.027	< 0.005 U	< 0.005 U	0.02	0.0058	< 0.005 U	< 0.005 U	< 0.005 U
II	PUE-07NCD	8a	0	N	7/19/2000	--	--	< 0.79 U	11 J+	3.5 J+	< 0.0079 U	< 0.0079 U	< 0.79 U	0.12 J+	< 3.16 U	< 0.0079 U	< 0.79 U
II	PUE-07NCOM	8a	0	N	7/19/2000	--	--	< 0.625 U	6.1 J+	1.8 J+	< 0.00625 U	< 0.00625 U	< 0.625 U	0.155 J+	< 2.5 U	< 0.00625 U	< 0.625 U
II	PUE-07-N-D	6a	0	N	10/20/1999	--	--	< 0.005 U	0.055 J+	0.018 J+	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U
II	PUE-07NED	8a	0	N	7/19/2000	--	--	< 0.785 U	19 J+	4.3 J+	< 0.00785 U	< 0.00785 U	< 0.785 U	< 0.00785 U	< 3.14 U	< 0.00785 U	< 0.785 U
II	PUE-07-N-S	6a	0	N	10/20/1999	--	--	< 0.005 UJ	0.22 J-	0.033 J-	< 0.005 UJ	< 0.005 UJ	0.03 J-	0.0065 J-	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ
II	PUE-07NWD	8a	0	N	7/19/2000	--	--	< 0.519 U	3.5 J+	1 J+	< 0.00519 U	< 0.00519 U	< 0.519 U	0.14 J+	< 2.076 U	< 0.00519 U	< 0.519 U
II	PUE-07SCD	8a	0	N	7/19/2000	--	--	< 0.00508 U	3.2 J+	0.88 J+	< 0.00508 U	< 0.00508 U	< 0.00508 U	0.088 J+	< 0.02034 U	< 0.00508 U	< 0.00508 U
II	PUE-07SCOM	8a	0	N	7/19/2000	--	--	< 0.00506 U	5 J+	1.4 J+	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.02026 U	< 0.00506 U	< 0.00506 U
II	PUE-07SED	8a	0	N	7/19/2000	--	--	< 9.44 U	36	11	< 9.44 U	< 9.44 U	< 9.44 U	< 9.44 U	< 37.76 U	< 9.44 U	< 9.44 U
II	PUE-07SWD	8a	0	N	7/19/2000	--	--	< 0.504 U	9 J+	1.9 J+	< 0.00504 U	0.12 J+	< 0.504 U	0.093 J+	< 2.016 U	< 0.00504 U	< 0.504 U
II	PUF-02	6d	0	N	10/12/1999	--	--	< 0.05 U	1.3	0.14	< 0.05 U	< 0.05 U	0.53	< 0.05 U	< 0.6 U	< 0.05 U	< 0.05 U
II	PUF-03	1a	0	N	3/28/1996	--	--	< 0.2 U	3.8 J+	< 0.22 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.04 U	< 0.1 U	< 0.2 U
II	PUF-03	1a	5	N	3/28/1996	--	--	< 0.0036 U	0.18	< 0.0036 U	< 0.0018 U	0.0082	< 0.0019 U	< 0.0019 U	< 0.044 U	< 0.0019 U	< 0.0036 U
II	PUF-05	1a	0	N	4/4/1996	--	--	< 7.3 U	190	7.5	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 88 U	< 3.7 U	< 7.3 U
II	PUF-05	1a	5	N	4/4/1996	--	--	< 0.0036 U	0.013	< 0.0036 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	0.0013	< 0.044 U	< 0.0019 U	< 0.0036 U
II	PUG-02	6d	0	N	10/12/1999	--	--	< 0.05 U	0.87	0.085	< 0.05 U	< 0.05 U	0.16	< 0.05 U	< 0.6 U	< 0.05 U	< 0.05 U
II	PUG-03	6d	0	N	10/12/1999	--	--	< 0.025 U	0.35	0.063	< 0.025 U	< 0.025 U	0.063	< 0.025 U	< 0.3 U	< 0.025 U	< 0.025 U
II	PUG-04	1a	0	N	4/4/1996	--	--	< 0.83 U	2.2	< 0.83 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 10 U	< 0.43 U	< 0.83 U
II	PUG-04	1a	5	N	4/4/1996	--	--	< 0.0036 U	0.02	0.0039	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.044 U	< 0.0019 U	< 0.0036 U
II	PUG-05	6d	0	N	10/12/1999	--	--	< 0.05 U	1.9	0.26	< 0.05 U	< 0.05 U	0.068	< 0.05 U	< 0.6 U	< 0.05 U	< 0.05 U
II	PUG-06	1a	0	N													

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organochlorine Pesticides											
						2,4-DDD	2,4-DDE	4,4-DDD	4,4-DDE	4,4-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	delta-BHC	Dieldrin
II	WC-BD02	39	0	N	8/2/2006	0.0023 J+	0.059	< 0.0001 U	0.034	0.011 J+	< 0.0001 U	< 0.00063 U	< 0.00012 U	0.0057 J	--	< 0.00011 U	< 0.00028 U
II	WC-IM04	39	0	N	8/2/2006	0.27	12	< 0.0099 U	6.3	1.9	< 0.011 U	< 0.064 U	< 0.012 U	1.1	--	< 0.012 U	< 0.029 U
II	WC-UP01	39	0	N	7/28/2006	0.31 J	< 0.11 U	0.42 J	6.3	0.46 J	0.004 J	< 0.00064 U	< 0.00012 U	0.072	--	< 0.00012 U	< 0.00029 U
II	WC-UP02	39	0	N	7/31/2006	0.38	15	< 0.0097 U	6.9	1.9	< 0.01 U	< 0.063 U	< 0.012 U	< 0.012 U	--	< 0.012 U	< 0.028 U
II	WC-UP03	39	0	N	7/31/2006	< 0.075 U	16	< 0.01 U	12	2.3	< 0.011 U	< 0.065 U	< 0.013 U	< 0.012 U	--	< 0.012 U	< 0.029 U
II	WC-UP04	39	0	N	7/28/2006	0.3	< 0.1 U	0.18 J	8.3	2.4	< 0.0001 UJ	< 0.00063 U	< 0.00012 U	0.074	--	< 0.00011 U	< 0.00028 U
II	WC-UP05	39	0	N	7/27/2006	< 0.00072 U	7.7	0.072 J	5.4	0.39 J	< 0.0001 UJ	< 0.00062 U	< 0.00012 U	0.022 J	--	< 0.00011 U	< 0.00028 U
II	WC-UP06	39	0	N	7/27/2006	< 0.00072 U	10	< 0.0001 UJ	8.5	0.58 J	< 0.0001 UJ	0.0033 J	< 0.00012 U	0.026 J-	--	< 0.00011 U	< 0.00028 U
II	WC-UP07	39	0	N	7/28/2006	< 0.00073 U	< 0.1 U	< 0.0001 UJ	6.7	2.8	< 0.0001 UJ	0.0037 J	< 0.00012 U	0.033 J	--	< 0.00011 U	< 0.00028 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organochlorine Pesticides											
						Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-Chlordane	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
I	PUA-03N	7a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
I	PUA-03S	7a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
I	PUA-05	1a	0	N	4/4/1996	0.76	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 1.7 U	< 0.016 U
I	PUA-05	1a	5	N	4/4/1996	0.0045	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	--	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.017 U	< 0.016 U
I	PUA-07	1a	0	N	4/4/1996	10	< 0.83 U	< 0.83 U	< 0.83 U	< 0.83 U	--	0.7	< 0.43 U	< 0.43 U	< 0.43 U	< 4.3 U	< 0.016 U
I	PUA-07	1a	5	N	4/4/1996	0.69	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 1.7 U	< 0.016 U
I	PUA-07-E-D	6a	0	N	10/19/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
I	PUA-07-E-S	6a	0	N	10/19/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
I	PUA-07-N-D	6a	0	N	10/19/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
I	PUA-07-N-S	6a	0	N	10/19/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
I	PUA-09SED	8a	0	N	7/20/2000	< 1.08 U	< 1.08 U	< 1.08 U	< 1.08 U	< 1.08 U	< 1.08 U	< 1.08 U	< 1.08 U	< 1.08 U	< 1.08 U	< 4.32 U	< 12.96 U
I	PUB-03N	7a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
I	PUB-03S	7a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
I	PUB-04	1a	0	N	3/26/1996	0.0036	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	--	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.017 U	< 0.017 U
I	PUB-04	1a	5	N	3/26/1996	0.0019	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	--	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.019 U	< 0.017 U
I	PUB-05	6d	0	N	10/13/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
I	PUB-06	1a	0	N	4/3/1996	1.4	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	0.092	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.016 U
I	PUB-06	1a	5	N	4/3/1996	0.16	< 0.065 U										

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organochlorine Pesticides											
						Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-Chlordane	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
II	PUA-09SCD	8a	0	N	7/20/2000	< 0.1035 U	< 0.1035 U	< 0.1035 U	< 0.1035 U	< 0.1035 U	< 0.1035 U	< 0.1035 U	< 0.1035 U	< 0.1035 U	< 0.1035 U	< 0.414 U	< 1.242 U
II	PUA-09SCOM	8a	0	N	7/20/2000	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 4.4 U	< 13.2 U
II	PUA-09SWD	8a	0	N	7/20/2000	< 1.575 U	< 1.575 U	< 1.575 U	< 1.575 U	< 1.575 U	< 1.575 U	< 1.575 U	< 1.575 U	< 1.575 U	< 1.575 U	< 6.3 U	< 18.9 U
II	PUA-10	1a	0	N	4/3/1996	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	--	13	< 1.7 U	< 1.7 U	< 1.7 U	110	< 0.016 U
II	PUA-10	1a	5	N	4/3/1996	0.15 J+	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	--	< 0.0017 U	0.063 J+/-	< 0.0033 U	< 0.0017 U	< 0.017 U	< 0.016 U
II	PUB-08	1a	0	N	4/3/1996	36	< 0.99 U	< 0.99 U	< 0.99 U	< 0.99 U	--	3	< 0.51 U	< 0.51 U	< 0.51 U	< 5.1 U	< 0.016 U
II	PUB-08	1a	5	N	4/3/1996	1.6	< 0.065 U	< 0.065 U	< 0.065 U	< 0.065 U	--	0.13	< 0.034 U	< 0.034 U	< 0.034 U	< 0.34 U	< 0.016 U
II	PUB-09	1a	0	N	4/3/1996	270	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	--	22	< 1.7 U	< 1.7 U	< 1.7 U	< 17 U	< 0.016 U
II	PUB-09	1a	5	N	4/3/1996	18	< 0.66 U	< 0.66 U	0.72	< 0.66 U	--	1.2	< 0.34 U	< 0.34 U	< 0.34 U	< 3.4 U	< 0.016 U
II	PUB-09	6b	10	N	11/17/1998	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 6 U
II	PUB-09	6b	15	N	11/17/1998	< 0.062 U	< 0.062 U	< 0.062 U	< 0.062 U	< 0.062 U	--	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.017 U	< 0.17 U
II	PUB-10	1a	0	N	4/3/1996	120	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	--	10	< 1.7 U	< 1.7 U	< 1.7 U	< 17 U	< 0.016 U
II	PUB-10	1a	5	N	4/3/1996	89	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	--	4.8	3.1	< 0.85 U	< 0.85 U	< 8.5 U	< 0.016 U
II	PUB-10	6b	10	N	11/17/1998	< 0.51 U	< 0.099 U	< 0.099 U	< 0.099 U	< 0.099 U	--	< 0.051 U	< 0.051 U	< 0.051 U	< 0.051 U	< 0.51 U	< 5.1 U
II	PUB-10	6b	15	N	11/17/1998	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	--	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.017 U	< 0.17 U
II	PUB-10	6d	15	N	10/19/1999	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.5 U
II	PUB-10	6d	19	N	10/19/1999	< 1.7 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	--	< 0.043 U	< 0.043 U	< 0.043 U	< 0.043 U	< 0.43 U	< 0.17 U
II	PUB-10	6d	24	N	10/19/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUB-1																

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 8 of 10)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organochlorine Pesticides											
						Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-Chlordane	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
II	PUC-07	6d	15	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.2 U
II	PUC-07	6d	19	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.2 U
II	PUC-07	6d	24	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.2 U
II	PUC-07	6d	29	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.02 U	< 0.2 U
II	PUC-07	6d	39	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	0.049	0.24	< 0.2 U
II	PUC-07	6d	44	N	10/20/1999	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	--	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.02 UJ	< 0.2 UJ
II	PUC-07	6d	49	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.2 U
II	PUC-07-E-D	6a	0	N	10/19/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUC-07-E-S	6a	0	N	10/19/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUC-07-N-D	6a	0	N	10/19/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUC-07-N-S	6a	0	N	10/19/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUC-08	1a	0	N	4/2/1996	6.1	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	0.4	< 0.26 U	< 0.26 U	< 0.26 U	< 2.6 U	< 2.5 U
II	PUC-08	1a	5	N	4/2/1996	0.032 J+	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	--	0.0021 J+	< 0.0019 U	< 0.0019 U	< 0.0019 U	< 0.019 U	< 0.017 U
II	PUD-06	1a	0	N	4/2/1996	< 3 U	< 3.3 U	< 3.3 U	< 3.3 UJ	< 3.3 U	--	< 3 U	< 1.7 UJ	< 1.7 U	< 1.7 UJ	< 17 U	< 15 U
II	PUD-06	1a	5	N	4/2/1996	< 0.062 U	0.0046	< 0.062 U	< 0.062 U	< 0.062 U	--	0.006	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.017 U	< 0.016 U
II	PUD-06-E-D	6a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUD-06-E-S	6a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUD-06-N-D	6a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUD-06-N-S	6a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	&				

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 9 of 10)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organochlorine Pesticides											
						Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-Chlordane	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
II	PUE-07	6d	39	N	10/20/1999	< 0.0019 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	--	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.0017 U	< 0.017 U	< 0.17 U
II	PUE-07	6d	44	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.05 U
II	PUE-07	6d	49	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUE-07-E-D	6a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUE-07-E-S	6a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUE-07NCD	8a	0	N	7/19/2000	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.0079 U	< 3.16 U	< 9.48 U
II	PUE-07NCOM	8a	0	N	7/19/2000	< 0.625 U	< 0.625 U	< 0.625 U	< 0.625 U	< 0.625 U	< 0.625 U	< 0.625 U	< 0.625 U	< 0.625 U	< 0.00625 U	< 2.5 U	< 7.5 U
II	PUE-07-N-D	6a	0	N	10/20/1999	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.02 U	< 0.06 U
II	PUE-07NED	8a	0	N	7/19/2000	< 0.785 U	< 0.785 U	< 0.785 U	< 0.785 U	< 0.785 U	< 0.785 U	< 0.785 U	< 0.785 U	< 0.785 U	< 0.00785 U	< 3.14 U	< 9.42 U
II	PUE-07-N-S	6a	0	N	10/20/1999	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	--	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.02 UJ	< 0.06 UJ
II	PUE-07NWD	8a	0	N	7/19/2000	< 0.519 U	< 0.519 U	< 0.519 U	< 0.519 U	< 0.519 U	< 0.519 U	< 0.519 U	< 0.519 U	< 0.519 U	< 0.00519 U	< 2.076 U	< 6.228 U
II	PUE-07SCD	8a	0	N	7/19/2000	< 0.00508 U	< 0.00508 U	< 0.00508 U	< 0.00508 U	< 0.00508 U	< 0.00508 U	< 0.00508 U	< 0.00508 U	< 0.00508 U	< 0.00508 U	< 0.02034 U	< 0.06102 U
II	PUE-07SCOM	8a	0	N	7/19/2000	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.00506 U	< 0.02026 U	< 0.06078 U
II	PUE-07SED	8a	0	N	7/19/2000	< 9.44 U	< 9.44 U	< 9.44 U	< 9.44 U	< 9.44 U	< 9.44 U	< 9.44 U	< 9.44 U	< 9.44 U	< 9.44 U	< 37.76 U	< 113.28 U
II	PUE-07SWD	8a	0	N	7/19/2000	< 0.504 U	< 0.504 U	< 0.504 U	< 0.504 U	< 0.504 U	< 0.504 U	< 0.504 U	< 0.504 U	< 0.504 U	< 0.00504 U	< 2.016 U	< 6.048 U
II	PUF-02	6d	0	N	10/12/1999	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.2 U	< 0.6 U
II	PUF-03	1a	0	N	3/28/1996	3 J+	<										

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 10 of 10)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organochlorine Pesticides											
						Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-Chlordane	Heptachlor	Heptachlor epoxide	Lindane	Methoxychlor	Toxaphene
II	WC-BD02	39	0	N	8/2/2006	< 0.00013 U	< 0.0001 U	< 0.00024 U	< 0.0002 U	< 0.00017 U	--	0.0024 J	< 0.0001 U	< 0.00014 U	< 0.00026 U	0.011 J	< 0.0068 U
II	WC-IM04	39	0	N	8/2/2006	< 0.013 U	< 0.0099 U	< 0.024 U	< 0.02 U	< 0.017 U	--	< 0.0093 U	< 0.011 U	< 0.014 U	< 0.026 U	< 0.019 UJ	< 0.69 U
II	WC-UP01	39	0	N	7/28/2006	0.0084 J	< 0.0001 UJ	< 0.00025 U	< 0.00021 U	< 0.00017 U	--	0.0089 J	< 0.00011 U	< 0.00015 U	< 0.00027 U	0.49 J	< 0.0069 UJ
II	WC-UP02	39	0	N	7/31/2006	< 0.013 U	0.25 J	< 0.024 U	< 0.02 U	< 0.017 U	--	< 0.0091 U	< 0.01 U	< 0.014 U	< 0.026 U	< 0.018 U	< 0.68 U
II	WC-UP03	39	0	N	7/31/2006	< 0.013 U	0.41 J	< 0.025 U	< 0.021 U	< 0.018 U	--	< 0.0094 U	< 0.011 U	< 0.015 U	< 0.027 U	< 0.019 U	< 0.7 U
II	WC-UP04	39	0	N	7/28/2006	0.019 J	< 0.0001 UJ	< 0.00024 U	< 0.0002 UJ	< 0.00017 U	--	< 0.00009 U	< 0.0001 UJ	< 0.00014 U	< 0.00026 U	< 0.0018 U	< 0.0068 UJ
II	WC-UP05	39	0	N	7/27/2006	0.032 J	< 0.0001 UJ	< 0.00024 U	< 0.0002 UJ	< 0.00017 U	--	< 0.00009 U	< 0.0001 UJ	< 0.00014 U	< 0.00026 U	< 0.00018 U	< 0.0067 UJ
II	WC-UP06	39	0	N	7/27/2006	0.06 J	< 0.0001 UJ	< 0.00024 U	< 0.0002 UJ	< 0.00017 U	--	< 0.00009 U	< 0.0001 UJ	< 0.00014 U	< 0.00026 U	< 0.00018 U	< 0.0067 UJ
II	WC-UP07	39	0	N	7/28/2006	0.11 J	< 0.00097 U	< 0.00024 U	< 0.0002 UJ	< 0.00017 U	--	< 0.00009 U	< 0.0001 UJ	< 0.00014 U	< 0.00026 U	< 0.00018 U	< 0.0068 UJ

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane (DBCP)
I	PUA-05	1a	0	N	4/4/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.68 U	--	--
I	PUA-05	1a	5	N	4/4/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.69 U	--	--
I	PUA-07	1a	0	N	4/4/1996	--	< 0.001 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	--	--	--	< 0.66 U	--	--
I	PUA-07	1a	5	N	4/4/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.65 U	--	--
I	PUB-04	1a	0	N	3/26/1996	--	< 0.0012 U	< 0.0012 U	< 0.0024 U	< 0.0012 U	< 0.0012 U	--	--	--	< 0.69 U	--	--
I	PUB-04	1a	5	N	3/26/1996	--	< 0.0012 U	< 0.0012 U	< 0.0023 U	< 0.0012 U	< 0.0012 U	--	--	--	--	--	--
I	PUB-06	1a	0	N	4/3/1996	--	< 0.001 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	--	--	--	< 0.66 U	--	--
I	PUB-06	1a	5	N	4/3/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.64 U	--	--
I	PUC-03	1a	0	N	3/26/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.67 U	--	--
I	PUC-03	1a	5	N	3/26/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	--	--	--
I	PUF-01	1a	0	N	3/25/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.67 U	--	--
I	PUF-01	1a	5	N	3/25/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	--	--	--
I	WC-IM01	39	0	N	8/3/2006	< 0.00025 U	< 0.00016 U	< 0.00015 U	< 0.00031 U	< 0.001 U	< 0.0006 U	--	--	< 0.00061 U	< 0.0008 U	--	< 0.00097 U
I	WC-IM02	39	0	N	8/3/2006	< 0.00025 U	< 0.00016 U	< 0.00016 U	< 0.00031 U	< 0.001 U	< 0.00061 U	--	--	< 0.00061 U	< 0.00081 U	--	< 0.00098 U
I	WC-IM03	39	0	N	8/3/2006	< 0.00024 U	< 0.00016 U	< 0.00015 U	< 0.0003 U	< 0.001 U	< 0.00059 U	--	--	< 0.0006 U	0.0051 J	--	< 0.00095 U
I	WC-IM05	39	0	N	8/3/2006	< 0.00023 U	< 0.00015 U	< 0.00015 U	< 0.0003 U	< 0.00099 U	< 0.00057 U	--	--	< 0.00058 U	< 0.00077 U	--	< 0.00093 U
I	WC-IM06	39	0	N	8/3/2006	< 0.00023 U	< 0.00015 U	< 0.00015 U	< 0.0003 U	< 0.001 U	< 0.00058 U	--	--	< 0.00058 U	0.0048 J	--	< 0.00093 U
I	WC-IM07	39	0	N	8/3/2006	< 0.00024 U	< 0.00016 U	< 0.00015 U	< 0.0003 U	< 0.001 U	< 0.00059 U	--	--	< 0.0006 U	< 0.00079 U	--	< 0.00096 U
II	BDB-15	1a	0	N	4/4/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.68 U	--	--
II	BDB-15	1a	5	N	4/4/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	--	--	--
II	PUA-09	1a	0	N	4/3/1996	--	< 0.0011 UJ	< 0.0011 UJ	< 0.0023 UJ	< 0.0011 UJ	< 0.0011 UJ	--	--	--	0.72	--	--
II	PUA-09	1a	5	N	4/3/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.69 U	--	--
II	PUA-10	1a	0	N	4/3/1996	--	< 0.0013 UJ	< 0.0013 UJ	< 0.0025 UJ	< 0.0013 UJ	< 0.0013 UJ	--	--	--	2.7	--	--
II	PUA-10	1a	5	N	4/3/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.69 U	--	--
II	PUB-08	1a	0	N	4/3/1996	--	< 0.0011 U	< 0.0011 U	< 0.0023 U	< 0.0011 U	< 0.0011 U	--	--	--	0.63	--	--
II	PUB-08	1a	5	N	4/3/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.66 U	--	--
II	PUB-09	1a	0	N	4/3/1996	--	< 0.0012 UJ	< 0.0012 UJ	< 0.0024 UJ	< 0.0012 UJ	< 0.0012 UJ	--	--	--	0.71	--	--
II	PUB-09	1a	5	N	4/3/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.69 U	--	--
II	PUB-10	1a	0	N	4/3/1996	--	< 0.0015 U	< 0.0015 U	< 0.0029 U	< 0.0015 U	< 0.0015 U	--	--	--	1.1	--	--
II	PUB-10	1a	5	N	4/3/1996	--	< 0.0012 U	< 0.0012 U	< 0.0024 U	< 0.0012 U	< 0.0012 U	--	--	--	< 26 U	--	--
II	PUC-05	1a	0	N	4/3/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	0.67	--	--
II	PUC-05	1a	5	N	4/3/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.65 U	--	--
II	PUC-07	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--	< 0.66 U	--	--
II	PUC-07	1a	5	N	4/3/1996	--	< 0.001 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	--	--	--	< 0.66 U	--	--
II	PUC-08	1a	0	N	4/2/1996	--	< 0.001 UJ	< 0.001 UJ	< 0.002 UJ	< 0.001 UJ	< 0.001 UJ	--	--	--	< 0.68 U	--	--
II	PUC-08	1a	5	N	4/2/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.68 U	--	--
II	PUD-06	1a	0	N	4/2/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.7 U		

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane (DBCP)
II	PUD-06	1a	5	N	4/2/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.64 U	--	--
II	PUD-08	1a	0	N	4/2/1996	--	< 0.0012 U	< 0.0012 UJ	< 0.0023 U	< 0.0012 U	< 0.0012 U	--	--	--	0.53	--	--
II	PUD-08	1a	5	N	4/2/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.65 U	--	--
II	PUD-09	1a	0	N	4/2/1996	--	< 0.0011 UJ	< 0.0011 UJ	< 0.0021 UJ	< 0.0011 UJ	< 0.0011 UJ	--	--	--	1.2	--	--
II	PUD-09	1a	5	N	4/2/1996	--	< 0.001 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	--	--	--	< 0.68 U	--	--
II	PUE-03	1a	0	N	4/1/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.67 U	--	--
II	PUE-03	1a	5	N	4/1/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	--	--	--
II	PUE-05	1a	0	N	4/1/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.7 U	--	--
II	PUE-05	1a	5	N	4/1/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.69 U	--	--
II	PUE-06	1a	0	N	4/1/1996	--	< 0.0012 UJ	< 0.0012 UJ	< 0.0024 UJ	< 0.0012 UJ	< 0.0012 UJ	--	--	--	0.68	--	--
II	PUE-06	1a	5	N	4/1/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.69 U	--	--
II	PUE-07	1a	0	N	4/2/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.71 U	--	--
II	PUE-07	1a	5	N	4/2/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.69 U	--	--
II	PUF-03	1a	0	N	3/28/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.67 U	--	--
II	PUF-03	1a	5	N	3/28/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.71 U	--	--
II	PUF-05	1a	0	N	4/4/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.7 U	--	--
II	PUF-05	1a	5	N	4/4/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.7 U	--	--
II	PUG-04	1a	0	N	4/4/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.67 U	--	--
II	PUG-04	1a	5	N	4/4/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.7 U	--	--
II	PUG-06	1a	0	N	4/4/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.7 U	--	--
II	PUG-06	1a	5	N	4/4/1996	--	< 0.0011 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	--	--	--	< 0.77 U	--	--
II	PUG-07	1a	0	N	4/4/1996	--	< 0.001 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	--	--	--	< 0.69 U	--	--
II	PUG-07	1a	5	N	4/4/1996	--	< 0.001 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	--	--	--	< 0.69 U	--	--
II	SB-16-B	27	0	N	5/23/2004	< 0.00015 U	< 0.00011 U	< 0.00075 U	< 0.00079 U	< 0.00022 U	< 0.0007 U	< 0.00018 U	< 0.0018 UJ	< 0.00091 U	< 0.00082 UJ	< 0.00056 U	< 0.00099 U
II	SB-16-B	27	7	N	5/23/2004	< 0.00015 U	< 0.00011 U	< 0.00075 U									

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 3 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane (DBCP)
II	WC-UP04	39	0	N	7/28/2006	< 0.00023 U	0.00061 J	< 0.00015 U	< 0.00029 U	< 0.00098 U	< 0.00057 U	-	-	< 0.00057 U	< 0.00075 U	-	< 0.00092 U
II	WC-UP05	39	0	N	7/27/2006	< 0.00023 U	0.00054 J	< 0.00014 U	< 0.00029 U	< 0.00097 U	< 0.00056 U	-	-	< 0.00057 U	< 0.00075 U	-	< 0.00091 U
II	WC-UP06	39	0	N	7/27/2006	< 0.00023 U	< 0.00015 U	< 0.00014 U	< 0.00029 U	< 0.00098 U	< 0.00056 U	-	-	< 0.00057 U	< 0.00075 U	-	< 0.00091 U
II	WC-UP07	39	0	N	7/28/2006	< 0.00023 U	0.00057 J	< 0.00015 U	< 0.00029 U	< 0.00098 U	< 0.00057 U	-	-	< 0.00057 U	< 0.00075 U	-	< 0.00092 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 4 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethylene	1,2-Dichloropropane	1,3,5-Trichlorobenzene	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chloroethyl vinyl ether	2-Chlorotoluene
I	PUA-05	1a	0	N	4/4/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
I	PUA-05	1a	5	N	4/4/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
I	PUA-07	1a	0	N	4/4/1996	< 0.001 U	< 0.001 U	--	< 0.001 U	--	--	< 0.001 U	--	< 0.001 U	--	< 0.001 U	--
I	PUA-07	1a	5	N	4/4/1996	< 0.001 U	< 0.001 U	--	< 0.001 U	--	--	< 0.001 U	--	< 0.001 U	--	< 0.001 U	--
I	PUB-04	1a	0	N	3/26/1996	< 0.0012 U	< 0.0012 U	--	< 0.0012 U	--	--	< 0.0012 U	--	< 0.0012 U	--	< 0.0012 U	--
I	PUB-04	1a	5	N	3/26/1996	< 0.0012 U	< 0.0012 U	--	< 0.0012 U	--	--	< 0.0012 U	--	< 0.0012 U	--	< 0.0012 U	--
I	PUB-06	1a	0	N	4/3/1996	< 0.001 U	< 0.001 U	--	< 0.001 U	--	--	< 0.001 U	--	< 0.001 U	--	< 0.001 U	--
I	PUB-06	1a	5	N	4/3/1996	< 0.0011 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0011 U	--	< 0.0011 U	--	< 0.0011 U	--
I	PUC-03	1a	0	N	3/26/1996	< 0.001 U	< 0.001 U	--	< 0.001 U	--	--	< 0.001 U	--	< 0.001 U	--	< 0.001 U	--
I	PUC-03	1a	5	N	3/26/1996	< 0.0011 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0011 U	--	< 0.0011 U	--	< 0.0011 U	--
I	PUF-01	1a	0	N	3/25/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
I	PUF-01	1a	5	N	3/25/1996	< 0.0051 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0051 U	--	< 0.0051 U	--	< 0.001 U	--
I	WC-IM01	39	0	N	8/3/2006	< 0.00016 U	< 0.00048 U	--	< 0.00041 U	--	--	< 0.00014 U	--	0.00046 J	--	--	--
I	WC-IM02	39	0	N	8/3/2006	< 0.00017 U	< 0.00048 U	--	< 0.00041 U	--	--	< 0.00014 U	--	0.00045 J	--	--	--
I	WC-IM03	39	0	N	8/3/2006	0.0029 J	< 0.00047 U	--	< 0.0004 U	--	--	< 0.00014 U	--	0.0035 J	--	--	--
I	WC-IM05	39	0	N	8/3/2006	< 0.00016 U	< 0.00046 U	--	< 0.00039 U	--	--	< 0.00014 U	--	< 0.00011 U	--	--	--
I	WC-IM06	39	0	N	8/3/2006	0.003 J	< 0.00046 U	--	< 0.00039 U	--	--	< 0.00014 U	--	0.0032 J	--	--	--
I	WC-IM07	39	0	N	8/3/2006	< 0.00016 U	< 0.00047 U	--	< 0.0004 U	--	--	< 0.00014 U	--	< 0.00012 U	--	--	--
II	BDB-15	1a	0	N	4/4/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
II	BDB-15	1a	5	N	4/4/1996	< 0.0053 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0053 U	--	< 0.0053 U	--	< 0.0011 U	--
II	PUA-09	1a	0	N	4/3/1996	0.0026 J-	< 0.0011 UJ	--	< 0.0011 UJ	--	--	0.0012 J-	--	0.0055 J-	--	< 0.0011 UJ	--
II	PUA-09	1a	5	N	4/3/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
II	PUA-10	1a	0	N	4/3/1996	0.015 J-	< 0.0013 UJ	--	< 0.0013 UJ	--	--	0.0059 J-	--	0.069 J-	--	< 0.0013 UJ	--
II	PUA-10	1a	5	N	4/3/1996	< 0.0053 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0053 U	--	< 0.0053 U	--	< 0.0011 U	--
II	PUB-08	1a	0	N	4/3/1996	< 0.0011 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0011 U	--	0.0018	--	< 0.0011 U	--
II	PUB-08	1a	5	N	4/3/1996	< 0.001 U	< 0.001 U	--	< 0.001 U	--	--	< 0.001 U	--	< 0.001 U	--	< 0.001 U	--
II	PUB-09	1a	0	N	4/3/1996	0.0025 J-	< 0.0012 UJ	--	< 0.0012 UJ	--	--	< 0.0061 UJ	--	0.0077 J-	--	< 0.0012 UJ	--
II	PUB-09	1a	5	N	4/3/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
II	PUB-10	1a	0	N	4/3/1996	< 0.0074 U	< 0.0015 U	--	< 0.0015 U	--	--	< 0.0074 U	--	< 0.0074 U	--	< 0.0015 U	--
II	PUB-10	1a	5	N	4/3/1996	< 0.0061 UJ	< 0.0012 U	--	< 0.0012 U	--	--	< 0.0061 UJ	--	< 0.0061 UJ	--	< 0.0012 U	--
II	PUC-05	1a	0	N	4/3/1996	< 0.0011 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0011 U	--	0.0013	--	< 0.0011 U	--
II	PUC-05	1a	5	N	4/3/1996	< 0.0011 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0011 U	--	< 0.0011 U	--	< 0.0011 U	--
II	PUC-07	1a	0	N	4/3/1996	< 0.66 U	--	--	--	--	--	< 0.66 U	--	0.42	--	--	--
II	PUC-07	1a	5	N	4/3/1996	< 0.001 U	< 0.001										

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 5 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethylene	1,2-Dichloropropane	1,3,5-Trichlorobenzene	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chloroethyl vinyl ether	2-Chlorotoluene
II	PUD-06	1a	5	N	4/2/1996	< 0.0011 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0011 U	--	< 0.0011 U	--	< 0.0011 U	--
II	PUD-08	1a	0	N	4/2/1996	0.0037 J-	< 0.0012 U	--	< 0.0012 U	--	--	< 0.0012 UJ	--	0.0056 J-	--	< 0.0012 U	--
II	PUD-08	1a	5	N	4/2/1996	< 0.001 U	< 0.001 U	--	< 0.001 U	--	--	< 0.001 U	--	< 0.001 U	--	< 0.001 U	--
II	PUD-09	1a	0	N	4/2/1996	< 0.0054 UJ	< 0.0011 UJ	--	< 0.0011 UJ	--	--	< 0.0054 UJ	--	0.0016 J-	--	< 0.0011 UJ	--
II	PUD-09	1a	5	N	4/2/1996	< 0.0051 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0051 U	--	< 0.0051 U	--	< 0.001 U	--
II	PUE-03	1a	0	N	4/1/1996	< 0.0051 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0051 U	--	< 0.0051 U	--	< 0.001 U	--
II	PUE-03	1a	5	N	4/1/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
II	PUE-05	1a	0	N	4/1/1996	< 0.001 U	< 0.001 U	--	< 0.001 U	--	--	< 0.001 U	--	< 0.001 U	--	< 0.001 U	--
II	PUE-05	1a	5	N	4/1/1996	< 0.001 U	< 0.001 U	--	< 0.001 U	--	--	< 0.001 U	--	< 0.001 U	--	< 0.001 U	--
II	PUE-06	1a	0	N	4/1/1996	0.0017 J-	< 0.0012 UJ	--	< 0.0012 UJ	--	--	< 0.006 UJ	--	0.0031 J-	--	< 0.0012 UJ	--
II	PUE-06	1a	5	N	4/1/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
II	PUE-07	1a	0	N	4/2/1996	< 0.0054 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0054 U	--	< 0.0054 U	--	< 0.0011 U	--
II	PUE-07	1a	5	N	4/2/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
II	PUF-03	1a	0	N	3/28/1996	< 0.0053 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0053 U	--	< 0.0053 U	--	< 0.0011 U	--
II	PUF-03	1a	5	N	3/28/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
II	PUF-05	1a	0	N	4/4/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
II	PUF-05	1a	5	N	4/4/1996	< 0.0054 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0054 U	--	< 0.0054 U	--	< 0.0011 U	--
II	PUG-04	1a	0	N	4/4/1996	< 0.0053 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0053 U	--	< 0.0053 U	--	< 0.0011 U	--
II	PUG-04	1a	5	N	4/4/1996	< 0.0053 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0053 U	--	< 0.0053 U	--	< 0.0011 U	--
II	PUG-06	1a	0	N	4/4/1996	< 0.0052 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0052 U	--	< 0.0052 U	--	< 0.001 U	--
II	PUG-06	1a	5	N	4/4/1996	< 0.0053 U	< 0.0011 U	--	< 0.0011 U	--	--	< 0.0053 U	--	< 0.0053 U	--	< 0.0011 U	--
II	PUG-07	1a	0	N	4/4/1996	< 0.0051 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0051 U	--	< 0.0051 U	--	< 0.001 U	--
II	PUG-07	1a	5	N	4/4/1996	< 0.0051 U	< 0.001 U	--	< 0.001 U	--	--	< 0.0051 U	--	< 0.0051 U	--	< 0.001 U	--
II	SB-16-B	27	0	N	5/23/2004	< 0.00089 U	< 0.00014 U	< 0.00063 U	< 0.0001 U	< 0.0051 U	< 0.00051 U	< 0.00053 U	< 0.00066 U	< 0.0004 UJ	< 0.00018 U	--	< 0.0011 U
II	SB-16-B	27	7	N	5/23/2004	< 0.00089 U	&										

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 6 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloroethylene	1,2-Dichloropropane	1,3,5-Trichlorobenzene	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chloroethyl vinyl ether	2-Chlorotoluene
II	WC-UP04	39	0	N	7/28/2006	0.00054 J	< 0.00045 U	--	< 0.00038 U	--	--	< 0.00013 U	--	< 0.00011 U	--	--	--
II	WC-UP05	39	0	N	7/27/2006	0.00088 J	< 0.00045 U	--	< 0.00038 U	--	--	< 0.00013 U	--	< 0.00011 U	--	--	--
II	WC-UP06	39	0	N	7/27/2006	0.00033 J	< 0.00045 U	--	< 0.00038 U	--	--	< 0.00013 U	--	< 0.00011 U	--	--	--
II	WC-UP07	39	0	N	7/28/2006	< 0.00015 U	< 0.00045 U	--	< 0.00038 U	--	--	< 0.00013 U	--	< 0.00011 U	--	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 7 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						2-Phenylbutane	4-Chlorotoluene	Acetone	Acetonitrile	Benzene	Bromobenzene	Bromodichloromethane	Bromomethane	Carbon disulfide	Carbon tetrachloride	CFC-11	CFC-12
I	PUA-05	1a	0	N	4/4/1996	--	--	< 0.01 U	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
I	PUA-05	1a	5	N	4/4/1996	--	--	< 0.01 U	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
I	PUA-07	1a	0	N	4/4/1996	--	--	< 0.003 U	--	< 0.001 U	--	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	< 0.001 U	--
I	PUA-07	1a	5	N	4/4/1996	--	--	< 0.0031 U	--	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	--
I	PUB-04	1a	0	N	3/26/1996	--	--	< 0.0035 U	--	< 0.0012 U	--	< 0.0012 U	< 0.0024 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	--
I	PUB-04	1a	5	N	3/26/1996	--	--	< 0.0035 U	--	< 0.0012 U	--	< 0.0012 U	< 0.0023 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	--
I	PUB-06	1a	0	N	4/3/1996	--	--	< 0.0031 U	--	< 0.001 U	--	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	< 0.001 U	--
I	PUB-06	1a	5	N	4/3/1996	--	--	< 0.0032 U	--	< 0.0011 U	--	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	--
I	PUC-03	1a	0	N	3/26/1996	--	--	< 0.0031 U	--	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	--
I	PUC-03	1a	5	N	3/26/1996	--	--	< 0.0032 U	--	< 0.0011 U	--	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	--
I	PUF-01	1a	0	N	3/25/1996	--	--	< 0.01 U	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
I	PUF-01	1a	5	N	3/25/1996	--	--	< 0.01 U	--	< 0.0051 U	--	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.0051 U	< 0.0051 U	--
I	WC-IM01	39	0	N	8/3/2006	--	--	< 0.0042 U	< 0.0022 UJ	< 0.00018 U	--	< 0.00037 U	< 0.00034 U	< 0.0006 U	< 0.00099 U	< 0.00055 U	< 0.00041 UJ
I	WC-IM02	39	0	N	8/3/2006	--	--	< 0.0042 U	< 0.0022 UJ	< 0.00019 U	--	< 0.00037 U	< 0.00034 U	< 0.00061 U	< 0.001 U	< 0.00055 U	< 0.00041 UJ
I	WC-IM03	39	0	N	8/3/2006	--	--	< 0.0041 U	< 0.0021 UJ	< 0.00018 U	--	< 0.00036 U	< 0.00033 U	< 0.00059 U	< 0.00097 U	< 0.00054 U	< 0.0004 UJ
I	WC-IM05	39	0	N	8/3/2006	--	--	< 0.004 U	< 0.0021 UJ	< 0.00018 U	--	< 0.00035 U	< 0.00033 U	< 0.00057 U	< 0.00094 U	< 0.00053 U	< 0.00039 UJ
I	WC-IM06	39	0	N	8/3/2006	--	--	< 0.004 U	< 0.0021 UJ	< 0.00018 U	--	< 0.00035 U	< 0.00033 U	< 0.00058 U	< 0.00095 U	< 0.00053 U	< 0.00039 UJ
I	WC-IM07	39	0	N	8/3/2006	--	--	< 0.0041 U	< 0.0021 UJ	< 0.00018 U	--	< 0.00036 U	< 0.00034 U	< 0.00059 U	< 0.00097 U	< 0.00054 U	< 0.0004 UJ
II	BDB-15	1a	0	N	4/4/1996	--	--	< 0.01 U	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
II	BDB-15	1a	5	N	4/4/1996	--	--	< 0.011 U	--	< 0.0053 U	--	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0053 U	< 0.0053 U	--
II	PUA-09	1a	0	N	4/3/1996	--	--	< 0.011 UJ	--	< 0.0057 UJ	--	< 0.0011 UJ	< 0.0057 UJ	< 0.0011 UJ	< 0.0057 UJ	< 0.0057 UJ	--
II	PUA-09	1a	5	N	4/3/1996	--	--	< 0.01 UJ	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
II	PUA-10	1a	0	N	4/3/1996	--	--	< 0.017 UJ	--	< 0.0064 UJ	--	< 0.0013 UJ	< 0.0064 UJ	< 0.0013 UJ	< 0.0064 UJ	< 0.0064 UJ	--
II	PUA-10	1a	5	N	4/3/1996	--	--	< 0.013 UJ	--	< 0.0053 U	--	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0053 U	< 0.0053 U	--
II	PUB-08	1a	0	N	4/3/1996	--	--	< 0.0034 U	--	< 0.0011 U	--	< 0.0011 U	< 0.0023 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	--
II	PUB-08	1a	5	N	4/3/1996	--	--	< 0.0031 U	--	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	--
II	PUB-09	1a	0	N	4/3/1996	--	--	< 0.012 UJ	--	< 0.0061 UJ	--	< 0.00					

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 8 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						2-Phenylbutane	4-Chlorotoluene	Acetone	Acetonitrile	Benzene	Bromobenzene	Bromodichloromethane	Bromomethane	Carbon disulfide	Carbon tetrachloride	CFC-11	CFC-12
II	PUD-06	1a	5	N	4/2/1996	--	--	< 0.0032 U	--	< 0.0011 U	--	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	--
II	PUD-08	1a	0	N	4/2/1996	--	--	< 0.0035 UJ	--	< 0.0012 U	--	< 0.0012 U	< 0.0023 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	--
II	PUD-08	1a	5	N	4/2/1996	--	--	< 0.0031 UJ	--	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	--
II	PUD-09	1a	0	N	4/2/1996	--	--	< 0.011 UJ	--	< 0.0054 UJ	--	< 0.0011 UJ	< 0.0054 UJ	< 0.0011 UJ	< 0.0054 UJ	< 0.0054 UJ	--
II	PUD-09	1a	5	N	4/2/1996	--	--	< 0.01 U	--	< 0.0051 U	--	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.0051 U	< 0.0051 U	--
II	PUE-03	1a	0	N	4/1/1996	--	--	0.0042	--	< 0.0051 U	--	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.0051 U	< 0.0051 U	--
II	PUE-03	1a	5	N	4/1/1996	--	--	0.0036	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
II	PUE-05	1a	0	N	4/1/1996	--	--	0.0038	--	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	--
II	PUE-05	1a	5	N	4/1/1996	--	--	0.0035	--	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	--
II	PUE-06	1a	0	N	4/1/1996	--	--	0.0068 J-	--	< 0.006 UJ	--	< 0.0012 UJ	< 0.006 UJ	< 0.0012 UJ	< 0.006 UJ	< 0.006 UJ	--
II	PUE-06	1a	5	N	4/1/1996	--	--	0.0045	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
II	PUE-07	1a	0	N	4/2/1996	--	--	< 0.011 U	--	< 0.0054 U	--	< 0.0011 U	< 0.0054 U	< 0.0011 U	< 0.0054 U	< 0.0054 U	--
II	PUE-07	1a	5	N	4/2/1996	--	--	< 0.01 U	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
II	PUF-03	1a	0	N	3/28/1996	--	--	< 0.011 U	--	< 0.0053 U	--	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0053 U	< 0.0053 U	--
II	PUF-03	1a	5	N	3/28/1996	--	--	< 0.01 U	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
II	PUF-05	1a	0	N	4/4/1996	--	--	< 0.01 U	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
II	PUF-05	1a	5	N	4/4/1996	--	--	< 0.011 U	--	< 0.0054 U	--	< 0.0011 U	< 0.0054 U	< 0.0011 U	< 0.0054 U	< 0.0054 U	--
II	PUG-04	1a	0	N	4/4/1996	--	--	< 0.011 U	--	< 0.0053 U	--	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0053 U	< 0.0053 U	--
II	PUG-04	1a	5	N	4/4/1996	--	--	< 0.011 U	--	< 0.0053 U	--	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0053 U	< 0.0053 U	--
II	PUG-06	1a	0	N	4/4/1996	--	--	< 0.01 U	--	< 0.0052 U	--	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0052 U	< 0.0052 U	--
II	PUG-06	1a	5	N	4/4/1996	--	--	< 0.011 U	--	< 0.0053 U	--	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0053 U	< 0.0053 U	--
II	PUG-07	1a	0	N	4/4/1996	--	--	< 0.01 U	--	< 0.0051 U	--	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.0051 U	< 0.0051 U	--
II	PUG-07	1a	5	N	4/4/1996	--	--	< 0.01 U	--	< 0.0051 U	--	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.0051 U	< 0.0051 U	--
II	SB-16-B	27	0	N	5/23/2004	< 0.00087 U	< 0.00067 U	0.038	< 0.0054 U	< 0.00011 U	< 0.00021 U	< 0.00007 U	< 0.00091 U	< 0.00028 U	< 0.00014 U	< 0.00023 U	< 0.00053 U
II	SB-16-B	27	7	N	5/23/2004	< 0.00087 U	< 0.00067 U	< 0.0013 U	< 0.0054 U	< 0.00011 U	< 0.00021 U	< 0.00007 U	< 0.00091 U	< 0.00028 U	< 0.00014 U	< 0.00023 U	< 0.00053 U
II	SB-16-B	27	17	N	5/23/2004	< 0.00087 U	< 0.00067 U	0.084	< 0.0054 U	0.0013 J	< 0.0002 U	< 0.00007 U	< 0.00091 U	< 0.00028 U	< 0.00014 U	< 0.00023 U	< 0.00053 U
II	SB-16-B	27	27	N	5/23/2004	< 0.00089 U	< 0.00068 U	< 0.0014 U	< 0.0056 U	0.00059 J	< 0.00021 U	< 0.00007 U	< 0.00093 U	< 0.00028 U	< 0.00015 U	< 0.00023 U	< 0.00055 U
II	SB-16-B	27	47	N	5/23/2004	< 0.00087 U	< 0.00066 U	< 0.0013 U	< 0.0054 U	< 0.00011 U	< 0.0002 U	< 0.00007 U	< 0.00091 U	< 0.00028 U	< 0.00014 U	< 0.00022 U	< 0.00053 U
II	SB-16-B	27	67	N	5/23/2004	< 0.0012 U	< 0.0009 U	< 0.0018 U	< 0.0073 U	< 0.00015 U	< 0.00028 U	< 0.0001 U	< 0.0012 U	< 0.00037 U	< 0.00019 U	< 0.0003 U	< 0.00072 U
II	SB-16-B	27	77	N	5/24/2004	< 0.0011 U	< 0.00088 U	< 0.0018 U	< 0.0072 U	< 0.00015 U	< 0.00027 U	< 0.0001 U	< 0.0012 U	< 0.00036 U	< 0.00019 U	< 0.0003 U	< 0.0007 U
II	SB-16-B	27	97	N	5/24/2004	< 0.0012 U	< 0.00092 U	0.047	< 0.0075 U	< 0.00016 U	< 0.00028 U	< 0.0001 U	< 0.0013 U	< 0.00038 U	< 0.0002 U	< 0.00031 U	< 0.00073 U
II	SB-16-B	27	247	N	5/25/2004	< 0.02 U	< 0.02 U	< 0.2 U	--	< 0.02 U	< 0.02 U	< 0.1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
II	WC-BD02	39	0	N	8/2/2006	--	--	< 0.0039 U	< 0.002 UJ	< 0.00017 U	--	< 0.00034 U	< 0.00032 U	< 0.00057 U	< 0.00093 U	< 0.00052 U	< 0.00038 U
II	WC-IM04	39	0	N	8/2/2006	--	--	< 0.004 U	< 0.0021 UJ	< 0.00018 U	--	< 0.00035 U	< 0.00033 U	< 0.00058 U	< 0.00095 U	< 0.00053 U	< 0.00039 U
II	WC-UP01	39	0	N	7/28/2006	--	--	0.012 J+	< 0.0021 UJ	< 0.00018 U	--	< 0.00035 U	< 0.00033 U	< 0.00058 U	< 0.00095 U	< 0.00053 U	< 0.00039 U
II	WC-UP02	39	0	N	7/31/2006	--	--	< 0.0039 UJ	< 0.002 UJ	< 0.00017 U	--	< 0.00035 U	< 0.00032 U	< 0.00057 U	< 0.00093 U	< 0.00052 U	< 0.00039 U
II	WC-UP03	39	0	N	7/31/2006	--	--	< 0.0041 UJ	< 0.0021 UJ	< 0.00018 U	--	< 0.00036 U	< 0.00033 U	< 0.00059 U	< 0.00097 U	< 0.00054 U	< 0.0004 U

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 9 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						2-Phenylbutane	4-Chlorotoluene	Acetone	Acetonitrile	Benzene	Bromobenzene	Bromodichloromethane	Bromomethane	Carbon disulfide	Carbon tetrachloride	CFC-11	CFC-12
II	WC-UP04	39	0	N	7/28/2006	--	--	< 0.0039 U	< 0.002 UJ	< 0.00017 U	--	< 0.00034 U	< 0.00032 U	< 0.00057 U	< 0.00093 U	< 0.00052 U	< 0.00038 U
II	WC-UP05	39	0	N	7/27/2006	--	--	0.0058 J+	< 0.002 UJ	< 0.00017 U	--	< 0.00034 U	< 0.00032 U	< 0.00056 U	< 0.00092 U	< 0.00051 U	< 0.00038 U
II	WC-UP06	39	0	N	7/27/2006	--	--	0.017 J+	< 0.002 UJ	< 0.00017 U	--	< 0.00034 U	< 0.00032 U	< 0.00056 U	< 0.00093 U	< 0.00052 U	< 0.00038 U
II	WC-UP07	39	0	N	7/28/2006	--	--	0.0061 J+	< 0.002 UJ	< 0.00017 U	--	< 0.00034 U	< 0.00032 U	< 0.00057 U	< 0.00093 U	< 0.00052 U	< 0.00039 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 10 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						Chlorinated fluorocarbon (Freon 113)	Chlorobenzene	Chlorobromomethane	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropylene	Cymene	Dibromomethane	Dichloromethane
I	PUA-05	1a	0	N	4/4/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
I	PUA-05	1a	5	N	4/4/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
I	PUA-07	1a	0	N	4/4/1996	--	< 0.001 U	--	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	--	--	< 0.001 U
I	PUA-07	1a	5	N	4/4/1996	--	< 0.001 U	--	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.001 U
I	PUB-04	1a	0	N	3/26/1996	--	< 0.0012 U	--	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0024 U	--	--	< 0.0012 U
I	PUB-04	1a	5	N	3/26/1996	--	< 0.0012 U	--	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0023 U	--	--	< 0.0012 U
I	PUB-06	1a	0	N	4/3/1996	--	< 0.001 U	--	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	--	--	< 0.001 U
I	PUB-06	1a	5	N	4/3/1996	--	< 0.0011 U	--	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0011 U
I	PUC-03	1a	0	N	3/26/1996	--	< 0.001 U	--	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.001 U
I	PUC-03	1a	5	N	3/26/1996	--	< 0.0011 U	--	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0011 U
I	PUF-01	1a	0	N	3/25/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
I	PUF-01	1a	5	N	3/25/1996	--	< 0.0051 U	--	< 0.001 U	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0051 U
I	WC-IM01	39	0	N	8/3/2006	< 0.00059 U	< 0.00014 U	--	< 0.00032 U	< 0.00038 U	< 0.00016 U	< 0.00049 U	--	< 0.0008 U	--	< 0.00038 U	< 0.0027 U
I	WC-IM02	39	0	N	8/3/2006	< 0.00059 U	< 0.00014 U	--	< 0.00032 U	< 0.00039 U	< 0.00016 U	< 0.00049 U	--	< 0.0008 U	--	< 0.00039 U	< 0.0028 U
I	WC-IM03	39	0	N	8/3/2006	< 0.00057 U	< 0.00013 U	--	< 0.00031 U	< 0.00038 U	< 0.00015 U	< 0.00048 U	--	< 0.00078 U	--	< 0.00038 U	< 0.0027 U
I	WC-IM05	39	0	N	8/3/2006	< 0.00056 U	< 0.00013 U	--	< 0.0003 U	< 0.00037 U	< 0.00015 U	< 0.00046 U	--	< 0.00076 U	--	< 0.00037 U	< 0.0026 U
I	WC-IM06	39	0	N	8/3/2006	< 0.00056 U	< 0.00013 U	--	< 0.0003 U	< 0.00037 U	< 0.00015 U	< 0.00047 U	--	< 0.00076 U	--	< 0.00037 U	< 0.0026 U
I	WC-IM07	39	0	N	8/3/2006	< 0.00058 U	< 0.00013 U	--	< 0.00031 U	< 0.00038 U	< 0.00015 U	< 0.00048 U	--	< 0.00078 U	--	< 0.00038 U	< 0.0027 U
II	BDB-15	1a	0	N	4/4/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
II	BDB-15	1a	5	N	4/4/1996	--	< 0.0053 U	--	< 0.0011 U	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0053 U
II	PUA-09	1a	0	N	4/3/1996	--	< 0.0057 UJ	--	< 0.0011 UJ	< 0.0011 UJ	0.003 J-	< 0.0011 UJ	< 0.0011 UJ	< 0.0023 UJ	--	--	0.0019 J-
II	PUA-09	1a	5	N	4/3/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
II	PUA-10	1a	0	N	4/3/1996	--	0.0016 J-	--	< 0.0013 UJ	< 0.0013 UJ	0.0031 J-	< 0.0013 UJ	< 0.0013 UJ	< 0.0025 UJ	--	--	0.0029 J-
II	PUA-10	1a	5	N	4/3/1996	--	< 0.0053 U	--	< 0.0011 U	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0053 U
II	PUB-08	1a	0	N	4/3/1996	--	< 0.0011 U	--	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0023 U	--	--	< 0.0011 U
II	PUB-08	1a	5	N	4/3/1996	--	< 0.001 U	--	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.001 U
II	PUB-09	1a	0	N	4/3/1996	--	0.0013 J-	--	< 0.0012 UJ	< 0.0012 UJ	0.0019 J-	< 0.0012 UJ	< 0.0012 UJ	< 0.0024 UJ	--	--	0.003 J-
II	PUB-09	1a	5	N	4/3/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
II	PUB-10	1a	0	N	4/3/1996	--	< 0.0074 U	--	< 0.0015 U	< 0.0015 U	0.0046	< 0.0015 U	< 0.0015 U	< 0.0029 U	--	--	0.0045
II	PUB-10	1a	5	N	4/3/1996	--	< 0.0061 U	--	< 0.0012 U	< 0.0012 U	0.005	< 0.0012 U	< 0.0012 U	< 0.0024 U	--	--	< 0.0061 U
II	PUC-05	1a	0	N	4/3/1996	--	< 0.0011 U	--	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0011 U
II	PUC-05	1a	5	N	4/3/1996	--	< 0.0011 U	--	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0011 U
II	PUC-07	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	1a	5	N	4/3/1996	--	< 0.001 U	--	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	--	--	< 0.001 U
II	PUC-08	1a	0	N	4/2/1996	--	0.0028 J-	--	< 0.001 UJ	< 0.001 UJ	0.005 J-	< 0.001 UJ	< 0.001 UJ	< 0.002 UJ	--	--	0.0026 J-
II	PUC-08	1a	5	N	4/2/1996	--	< 0.0051 U	--	< 0.001 U	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0051 U
II	PUD-06	1a	0	N	4/2/1996	--	< 0.0011 U	--	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	0.0012

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 11 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						Chlorinated fluorocarbon (Freon 113)	Chlorobenzene	Chlorobromomethane	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropylene	Cymene	Dibromomethane	Dichloromethane
II	PUD-06	1a	5	N	4/2/1996	--	< 0.0011 U	--	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0011 U
II	PUD-08	1a	0	N	4/2/1996	--	0.0024 J-	--	< 0.0012 UJ	< 0.0012 U	0.0016	< 0.0012 U	< 0.0012 U	< 0.0023 U	--	--	0.0014
II	PUD-08	1a	5	N	4/2/1996	--	< 0.001 U	--	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.001 U
II	PUD-09	1a	0	N	4/2/1996	--	< 0.0054 UJ	--	< 0.0011 UJ	< 0.0011 UJ	< 0.0038 UJ	< 0.0011 UJ	< 0.0011 UJ	< 0.0021 UJ	--	--	< 0.0016 UJ
II	PUD-09	1a	5	N	4/2/1996	--	< 0.0051 U	--	< 0.001 U	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.001 U	< 0.002 U	--	--	< 0.0051 U
II	PUE-03	1a	0	N	4/1/1996	--	< 0.0051 U	--	< 0.001 U	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0051 U
II	PUE-03	1a	5	N	4/1/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
II	PUE-05	1a	0	N	4/1/1996	--	< 0.001 U	--	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.001 U
II	PUE-05	1a	5	N	4/1/1996	--	< 0.001 U	--	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.001 U
II	PUE-06	1a	0	N	4/1/1996	--	< 0.006 UJ	--	< 0.0012 UJ	< 0.0012 UJ	< 0.006 UJ	< 0.0012 UJ	< 0.0012 UJ	< 0.0024 UJ	--	--	< 0.0052 UJ
II	PUE-06	1a	5	N	4/1/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
II	PUE-07	1a	0	N	4/2/1996	--	< 0.0054 U	--	< 0.0011 U	< 0.0011 U	< 0.0054 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0054 U
II	PUE-07	1a	5	N	4/2/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
II	PUF-03	1a	0	N	3/28/1996	--	< 0.0053 U	--	< 0.0011 U	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0053 U
II	PUF-03	1a	5	N	3/28/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
II	PUF-05	1a	0	N	4/4/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
II	PUF-05	1a	5	N	4/4/1996	--	< 0.0054 U	--	< 0.0011 U	< 0.0011 U	< 0.0054 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0054 U
II	PUG-04	1a	0	N	4/4/1996	--	< 0.0053 U	--	< 0.0011 U	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0053 U
II	PUG-04	1a	5	N	4/4/1996	--	< 0.0053 U	--	< 0.0011 U	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0053 U
II	PUG-06	1a	0	N	4/4/1996	--	< 0.0052 U	--	< 0.001 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0052 U
II	PUG-06	1a	5	N	4/4/1996	--	< 0.0053 U	--	< 0.0011 U	< 0.0011 U	< 0.0053 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--	--	< 0.0053 U
II	PUG-07	1a	0	N	4/4/1996	--	< 0.0051 U	--	< 0.001 U	< 0.001 U	0.0018	< 0.001 U	< 0.001 U	< 0.002 U	--	--	< 0.0051 U
II	PUG-07	1a	5	N	4/4/1996	--	< 0.0051 U	--	< 0.001 U	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.001 U	< 0.0021 U	--	--	< 0.0051 U
II	SB-16-B	27	0	N	5/23/2004	< 0.00059 U	< 0.00012 U	< 0.00009 U	< 0.00061 U	< 0.00058 U	< 0.00012 U	0.00035 J	< 0.00021 U	< 0.00015 U	< 0.00074 U	< 0.0006 U	< 0.0027 UJ
II	SB-16-B	27	7	N	5/23/2004	< 0.00058 U	< 0.00012 U	< 0.00009 U	< 0.0006 U	< 0.00057 U	< 0.00012 U	< 0.00024 U	< 0.00021 U	< 0.00015 U	< 0.00074 U	< 0.00059 U	< 0.0027 UJ
II	SB-16-B	27	17	N	5/23/2004	< 0.00058 U	0.002 J	< 0.00009 U	< 0.0006 U	< 0.00057 U	0.00034 J	< 0.00024 U	< 0.0002 U	< 0.00015 U	< 0.00074 U	< 0.00059 U	< 0.0027 UJ
II	SB-16-B	27	27	N	5/23/2004	< 0.0006 U	< 0.00013 U	< 0.00009 U	< 0.00062 U	< 0.00059 U	0.00035 J	< 0.00024 U	< 0.00021 U	< 0.00016 U	< 0.00076 U	< 0.00061 U	< 0.0028 UJ
II	SB-16-B	27	47	N	5/23/2004	< 0.00058 U	< 0.00012 U	< 0.00009 U	< 0.0006 U	< 0.00057 U	0.00065 J	< 0.00023 U	< 0.0002 U	< 0.00015 U	< 0.00074 U	< 0.00059 U	< 0.0027 UJ
II	SB-16-B	27	67	N	5/23/2004	< 0.00079 U	< 0.00017 U	< 0.00012 U	< 0.00082 U	< 0.00078 U	0.024	< 0.00032 U	< 0.00028 U	< 0.00021 U	< 0.001 U	< 0.0008 U	< 0.0037 UJ
II	SB-16-B	27	77	N	5/24/2004	< 0.00077 U	< 0.00016 U	< 0.00012 U	< 0.0008 U	< 0.00076 U	0.0092	< 0.00031 U	< 0.00027 U	< 0.0002 U	< 0.00097 U	< 0.00078 U	< 0.0036 UJ
II	SB-16-B	27	97	N	5/24/2004	0.0013 J	< 0.00017 U	< 0.00013 U	< 0.00083 U	< 0.00079 U	< 0.00017 U	< 0.00032 U	< 0.00028 U	< 0.00021 U	< 0.001 U	< 0.00082 U	< 0.0037 U
II	SB-16-B	27	247	N	5/25/2004	--	< 0.02 U	< 0.1 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.2 U
II	WC-BD02	39	0	N	8/2/2006	< 0.00055 U	< 0.00013 U	--	< 0.0003 U	< 0.00036 U	< 0.00015 U	< 0.00046 U	--	< 0.00075 U	--	< 0.00036 U	< 0.0026 U
II	WC-IM04	39	0	N	8/2/2006	< 0.00056 U	0.0017 J	--	< 0.0003 U	< 0.00037 U	< 0.00015 U	< 0.00047 U	--	< 0.00076 U	--	< 0.00037 U	< 0.0026 U
II	WC-UP01	39	0	N	7/28/2006	< 0.00056 U	< 0.00013 U	--	< 0.0003 U	< 0.00037 U	0.00021 J	< 0.00047 U	--	< 0.00077 U	--	< 0.00037 U	< 0.0026 U
II	WC-UP02	39	0	N	7/31/2006	< 0.00055 U	< 0.00013 U	--	< 0.0003 U	< 0.00036 U	< 0.00015 U	< 0.00046 U	--	< 0.00075 U	--	< 0.00036 U	< 0.0026 UJ
II	WC-UP03	39	0	N	7/31/2006	< 0.00057 U	< 0.00013 U	--	< 0.00031 U	< 0.00038 U	< 0.00015 U	< 0.00047 U	--	< 0.00078 U	--	< 0.00038 U	< 0.0027 UJ

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 12 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						Chlorinated fluorocarbon (Freon 113)	Chlorobenzene	Chlorobromomethane	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloropropylene	Cymene	Dibromomethane	Dichloromethane
II	WC-UP04	39	0	N	7/28/2006	< 0.00055 U	< 0.00013 U	--	< 0.0003 U	< 0.00036 U	< 0.00015 U	< 0.00046 U	--	< 0.00075 U	--	< 0.00036 U	0.003 J
II	WC-UP05	39	0	N	7/27/2006	< 0.00055 U	< 0.00013 U	--	< 0.00029 U	< 0.00036 U	< 0.00015 U	< 0.00045 U	--	< 0.00074 U	--	< 0.00036 U	< 0.0026 U
II	WC-UP06	39	0	N	7/27/2006	< 0.00055 U	< 0.00013 U	--	< 0.0003 U	< 0.00036 U	< 0.00015 U	< 0.00046 U	--	< 0.00075 U	--	< 0.00036 U	< 0.0026 U
II	WC-UP07	39	0	N	7/28/2006	< 0.00055 U	< 0.00013 U	--	< 0.0003 U	< 0.00036 U	0.00027 J	< 0.00046 U	--	< 0.00075 U	--	< 0.00036 U	< 0.0026 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 13 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl disulfide	Methyl ethyl ketone	Methyl iodide	Methyl isobutyl ketone	Methyl n-butyl ketone	MTBE (Methyl tert-butyl ether)	n-Butyl benzene	n-Propyl benzene	o-Xylene
I	PUA-05	1a	0	N	4/4/1996	< 0.001 U	--	< 0.0021 U	--	0.0026	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
I	PUA-05	1a	5	N	4/4/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
I	PUA-07	1a	0	N	4/4/1996	< 0.001 U	--	< 0.002 U	--	< 0.002 U	--	< 0.0051 U	< 0.003 U	--	--	--	< 0.001 U
I	PUA-07	1a	5	N	4/4/1996	< 0.001 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
I	PUB-04	1a	0	N	3/26/1996	< 0.0012 U	--	< 0.0024 U	--	< 0.0024 U	--	< 0.0059 U	< 0.0035 U	--	--	--	< 0.0012 U
I	PUB-04	1a	5	N	3/26/1996	< 0.0012 U	--	< 0.0023 U	--	< 0.0023 U	--	< 0.0058 U	< 0.0035 U	--	--	--	< 0.0012 U
I	PUB-06	1a	0	N	4/3/1996	< 0.001 U	--	< 0.002 U	--	< 0.002 U	--	< 0.0051 U	< 0.0031 U	--	--	--	< 0.001 U
I	PUB-06	1a	5	N	4/3/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
I	PUC-03	1a	0	N	3/26/1996	< 0.001 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
I	PUC-03	1a	5	N	3/26/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
I	PUF-01	1a	0	N	3/25/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0051 U	< 0.0031 U	--	--	--	< 0.001 U
I	PUF-01	1a	5	N	3/25/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
I	WC-IM01	39	0	N	8/3/2006	< 0.0002 U	--	--	--	< 0.0015 U	< 0.00028 U	< 0.0018 U	--	--	--	--	--
I	WC-IM02	39	0	N	8/3/2006	< 0.00021 U	--	--	--	< 0.0015 U	< 0.00028 U	< 0.0018 U	--	--	--	--	--
I	WC-IM03	39	0	N	8/3/2006	< 0.0002 U	--	--	--	< 0.0015 U	< 0.00028 U	< 0.0017 U	--	--	--	--	--
I	WC-IM05	39	0	N	8/3/2006	< 0.00019 U	--	--	--	< 0.0014 U	< 0.00027 U	< 0.0017 U	--	--	--	--	--
I	WC-IM06	39	0	N	8/3/2006	< 0.00019 U	--	--	--	< 0.0014 U	< 0.00027 U	< 0.0017 U	--	--	--	--	--
I	WC-IM07	39	0	N	8/3/2006	< 0.0002 U	--	--	--	< 0.0015 U	< 0.00028 U	< 0.0017 U	--	--	--	--	--
II	BDB-15	1a	0	N	4/4/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	BDB-15	1a	5	N	4/4/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.011 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUA-09	1a	0	N	4/3/1996	< 0.0011 UJ	--	< 0.0023 UJ	--	< 0.0059 UJ	--	< 0.0057 UJ	< 0.0034 UJ	--	--	--	< 0.0011 UJ
II	PUA-09	1a	5	N	4/3/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUA-10	1a	0	N	4/3/1996	< 0.0013 UJ	--	< 0.0025 UJ	--	< 0.013 UJ	--	< 0.0064 UJ	< 0.0038 UJ	--	--	--	< 0.0013 UJ
II	PUA-10	1a	5	N	4/3/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.011 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUB-08	1a	0	N	4/3/1996	< 0.0011 U	--	< 0.0023 U	--	< 0.0023 U	--	< 0.0057 U	< 0.0034 U	--	--	--	< 0.0011 U
II	PUB-08	1a	5	N	4/3/1996	< 0.001 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUB-09	1a	0	N	4/3/1996	< 0.0012 UJ	--	< 0.0024 UJ	--	< 0.012 UJ	--	< 0.0061 UJ	< 0.0036 UJ	--	--	--	< 0.0012 UJ
II	PUB-09	1a	5	N	4/3/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUB-10	1a	0	N	4/3/1996	< 0.0015 U	--	< 0.0029 U	--	< 0.015 U	--	< 0.0074 U	< 0.0044 U	--	--	--	< 0.0015 U
II	PUB-10	1a	5	N	4/3/1996	< 0.0012 U	--	< 0.0024 U	--	< 0.012 U	--	< 0.0061 U	< 0.0037 U	--	--	--	< 0.0012 U
II	PUC-05	1a	0	N	4/3/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUC-05	1a	5	N	4/3/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0054 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUC-07	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	1a	5	N	4/3/1996	< 0.001 U	--	< 0.002 U	--	< 0.002 U	--	< 0.0051 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUC-08	1a	0	N	4/2/1996	< 0.001 UJ	--	< 0.002 UJ	--	< 0.01 UJ	--	< 0.0051 UJ	< 0.003 UJ	--	--	--	< 0.001 UJ
II	PUC-08	1a	5	N	4/2/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0051 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUD-06	1a	0	N	4/2/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 14 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl disulfide	Methyl ethyl ketone	Methyl iodide	Methyl isobutyl ketone	Methyl n-butyl ketone	MTBE (Methyl tert-butyl ether)	n-Butyl benzene	n-Propyl benzene	o-Xylene
II	PUD-06	1a	5	N	4/2/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUD-08	1a	0	N	4/2/1996	< 0.0012 UJ	--	< 0.0023 UJ	--	< 0.0023 U	--	< 0.0058 U	< 0.0035 U	--	--	--	< 0.0012 UJ
II	PUD-08	1a	5	N	4/2/1996	< 0.001 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUD-09	1a	0	N	4/2/1996	< 0.0011 UJ	--	< 0.0021 UJ	--	< 0.01 UJ	--	< 0.0054 UJ	< 0.0032 UJ	--	--	--	< 0.0011 UJ
II	PUD-09	1a	5	N	4/2/1996	< 0.001 U	--	< 0.002 U	--	< 0.01 U	--	< 0.0051 U	< 0.003 U	--	--	--	< 0.001 U
II	PUE-03	1a	0	N	4/1/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0051 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUE-03	1a	5	N	4/1/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUE-05	1a	0	N	4/1/1996	< 0.001 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUE-05	1a	5	N	4/1/1996	< 0.001 U	--	< 0.0021 U	--	< 0.0021 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUE-06	1a	0	N	4/1/1996	< 0.0012 UJ	--	< 0.0024 UJ	--	< 0.012 UJ	--	< 0.006 UJ	< 0.0036 UJ	--	--	--	< 0.0012 UJ
II	PUE-06	1a	5	N	4/1/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUE-07	1a	0	N	4/2/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.011 U	--	< 0.0054 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUE-07	1a	5	N	4/2/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUF-03	1a	0	N	3/28/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.011 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUF-03	1a	5	N	3/28/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUF-05	1a	0	N	4/4/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUF-05	1a	5	N	4/4/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.011 U	--	< 0.0054 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUG-04	1a	0	N	4/4/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.011 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUG-04	1a	5	N	4/4/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.011 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUG-06	1a	0	N	4/4/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0052 U	< 0.0031 U	--	--	--	< 0.001 U
II	PUG-06	1a	5	N	4/4/1996	< 0.0011 U	--	< 0.0021 U	--	< 0.011 U	--	< 0.0053 U	< 0.0032 U	--	--	--	< 0.0011 U
II	PUG-07	1a	0	N	4/4/1996	< 0.001 U	--	< 0.002 U	--	< 0.01 U	--	< 0.0051 U	< 0.003 U	--	--	--	< 0.001 U
II	PUG-07	1a	5	N	4/4/1996	< 0.001 U	--	< 0.0021 U	--	< 0.01 U	--	< 0.0051 U	< 0.0031 U	--	--	--	< 0.001 U
II	SB-16-B	27	0	N	5/23/2004	< 0.00039 U	< 0.00012 U	< 0.00056 U	< 0.0051 U	< 0.0011 U	< 0.0014 U	< 0.00092 U	--	< 0.00028 U	< 0.00077 U	< 0.00053 UJ	< 0.00022 U
II	SB-16-B	27	7	N	5/23/2004	< 0.00039 U	< 0.00012 U	< 0.00056 U	< 0.0051 U	< 0.0011 U	< 0.0014 U	< 0.00092 U	--	< 0.00028 U	< 0.00077 U	< 0.00053 UJ	< 0.00022 U
II	SB-16-B	27	17	N	5/23/2004	< 0.00039 U	< 0.00012 U	< 0.00056 U	< 0.0051 U	< 0.0011 U	< 0.0014 U	< 0.00092 U	--	< 0.00028 U	< 0.00077 U	< 0.00053 UJ	< 0.00022 U
II	SB-16-B	27	27	N	5/23/2004	< 0.0004 U	< 0.00013 U	< 0.00058 U	< 0.0052 U	< 0.0012 U	< 0.0014 U	< 0.00094 U	--	< 0.00028 U	< 0.00079 U	< 0.00055 UJ	< 0.00022 U
II	SB-16-B	27	47	N	5/23/2004	< 0.00039 U	< 0.00012 U	< 0.00056 U	< 0.0051 U	< 0.0011 U	< 0.0014 U	< 0.00092 U	--	< 0.00028 U	< 0.00077 U	< 0.00053 UJ	< 0.00021 U
II	SB-16-B	27	67	N	5/23/2004	< 0.00053 U	< 0.00017 U	< 0.00076 U	< 0.0069 U	< 0.0015 U	< 0.0019 U	< 0.0012 U	--	< 0.00037 U	< 0.001 U	< 0.00072 UJ	< 0.00029 U
II	SB-16-B	27	77	N	5/24/2004	< 0.00051 U	< 0.00016 U	< 0.00074 U	< 0.0068 U	< 0.0015 U	< 0.0018 U	< 0.0012 U	--	< 0.00036 U	< 0.001 U	< 0.0007 UJ	< 0.00028 U
II	SB-16-B	27	97	N	5/24/2004	< 0.00054 U	< 0.00017 UJ	< 0.00078 UJ	< 0.007 U	< 0.0016 U	< 0.0019 U	< 0.0013 U	--	< 0.00038 U	< 0.0011 U	< 0.00073 U	< 0.0003 UJ
II	SB-16-B	27	247	N	5/25/2004	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.02 U	< 0.02 U	< 0.02 U
II	WC-BD02	39	0	N	8/2/2006	< 0.00019 U	--	--	--	< 0.0014 U	< 0.00026 U	< 0.0017 U	--	--	--	--	--
II	WC-IM04	39	0	N	8/2/2006	< 0.0002 U	--	--	--	< 0.0014 U	< 0.00027 U	< 0.0017 U	--	--	--	--	--
II	WC-UP01	39	0	N	7/28/2006	< 0.0002 U	--	--	--	< 0.0014 U	< 0.00027 U	< 0.0017 U	--	--	--	--	--
II	WC-UP02	39	0	N	7/31/2006	< 0.00019 U	--	--	--	< 0.0014 U	< 0.00027 U	< 0.0017 U	--	--	--	--	--
II	WC-UP03	39	0	N	7/31/2006	< 0.0002 U	--	--	--	< 0.0015 U	< 0.00027 U	< 0.0017 U	--	--	--	--	--

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 15 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)											
						Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl disulfide	Methyl ethyl ketone	Methyl iodide	Methyl isobutyl ketone	Methyl n-butyl ketone	MTBE (Methyl tert-butyl ether)	n-Butyl benzene	n-Propyl benzene	o-Xylene
II	WC-UP04	39	0	N	7/28/2006	< 0.00019 U	--	--	--	< 0.0014 U	< 0.00026 U	< 0.0017 U	--	--	--	--	--
II	WC-UP05	39	0	N	7/27/2006	< 0.00019 U	--	--	--	0.002 J	< 0.00026 U	< 0.0016 U	--	--	--	--	--
II	WC-UP06	39	0	N	7/27/2006	< 0.00019 U	--	--	--	< 0.0014 U	< 0.00026 U	< 0.0017 U	--	--	--	--	--
II	WC-UP07	39	0	N	7/28/2006	< 0.00019 U	--	--	--	< 0.0014 U	< 0.00026 U	< 0.0017 U	--	--	--	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 16 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)										
						Styrene (monomer)	tert-Butyl benzene	Tetrachloroethylene	Toluene	trans-1,2-Dichloro-ethylene	trans-1,3-Dichloro-propylene	Tribromomethane	Trichloroethylene	Vinyl acetate	Vinyl chloride	Xylenes (total)
I	PUA-05	1a	0	N	4/4/1996	< 0.001 U	--	< 0.0052 U	< 0.0052 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0021 U	--
I	PUA-05	1a	5	N	4/4/1996	< 0.001 U	--	< 0.0052 U	< 0.0052 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0021 U	--
I	PUA-07	1a	0	N	4/4/1996	< 0.001 U	--	< 0.001 U	< 0.002 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	--
I	PUA-07	1a	5	N	4/4/1996	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--
I	PUB-04	1a	0	N	3/26/1996	< 0.0012 U	--	< 0.0012 U	< 0.0024 U	< 0.0012 U	< 0.0024 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0024 U	--
I	PUB-04	1a	5	N	3/26/1996	< 0.0012 U	--	< 0.0012 U	< 0.0023 U	< 0.0012 U	< 0.0023 U	< 0.0012 U	< 0.0012 U	< 0.0012 U	< 0.0023 U	--
I	PUB-06	1a	0	N	4/3/1996	< 0.001 U	--	< 0.001 U	< 0.002 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.002 U	--
I	PUB-06	1a	5	N	4/3/1996	< 0.0011 U	--	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--
I	PUC-03	1a	0	N	3/26/1996	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--
I	PUC-03	1a	5	N	3/26/1996	< 0.0011 U	--	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	< 0.0021 U	--
I	PUF-01	1a	0	N	3/25/1996	< 0.001 U	--	< 0.0052 U	< 0.0052 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0021 U	--
I	PUF-01	1a	5	N	3/25/1996	< 0.001 U	--	< 0.0051 U	< 0.0051 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.0021 U	--
I	WC-IM01	39	0	N	8/3/2006	--	--	< 0.0003 U	< 0.00014 U	< 0.00024 U	< 0.00022 U	< 0.00027 U	< 0.00039 U	--	< 0.00026 U	< 0.00094 U
I	WC-IM02	39	0	N	8/3/2006	--	--	< 0.0003 U	< 0.00014 U	< 0.00024 U	< 0.00022 U	< 0.00027 U	< 0.00039 U	--	< 0.00026 U	< 0.00094 U
I	WC-IM03	39	0	N	8/3/2006	--	--	< 0.00029 U	< 0.00014 U	< 0.00024 U	< 0.00022 U	< 0.00026 U	< 0.00038 U	--	< 0.00025 U	< 0.00092 U
I	WC-IM05	39	0	N	8/3/2006	--	--	< 0.00029 U	< 0.00014 U	< 0.00023 U	< 0.00021 U	< 0.00025 U	< 0.00037 U	--	< 0.00025 U	< 0.0009 U
I	WC-IM06	39	0	N	8/3/2006	--	--	< 0.00029 U	< 0.00014 U	< 0.00023 U	< 0.00021 U	< 0.00026 U	< 0.00038 U	--	< 0.00025 U	< 0.0009 U
I	WC-IM07	39	0	N	8/3/2006	--	--									

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 17 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)										
						Styrene (monomer)	tert-Butyl benzene	Tetrachloroethylene	Toluene	trans-1,2-Dichloro-ethylene	trans-1,3-Dichloro-propylene	Tribromomethane	Trichloroethylene	Vinyl acetate	Vinyl chloride	Xylenes (total)
II	PUD-06	1a	5	N	4/2/1996	< 0.0011 U	--	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	0.0011	< 0.0011 U	< 0.0021 U	--
II	PUD-08	1a	0	N	4/2/1996	< 0.0012 UJ	--	< 0.0012 UJ	< 0.0023 U	< 0.0012 U	< 0.0023 U	< 0.0012 UJ	< 0.0012 U	< 0.0012 U	< 0.0023 U	--
II	PUD-08	1a	5	N	4/2/1996	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--
II	PUD-09	1a	0	N	4/2/1996	< 0.0011 UJ	--	< 0.0054 UJ	< 0.0054 UJ	< 0.0011 UJ	< 0.0021 UJ	< 0.0011 UJ	< 0.0054 UJ	< 0.0011 UJ	< 0.0021 UJ	--
II	PUD-09	1a	5	N	4/2/1996	< 0.001 U	--	< 0.0051 U	< 0.0051 U	< 0.001 U	< 0.002 U	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.002 U	--
II	PUE-03	1a	0	N	4/1/1996	< 0.001 U	--	< 0.0051 U	< 0.0051 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0051 U	< 0.001 U	< 0.0021 U	--
II	PUE-03	1a	5	N	4/1/1996	< 0.001 U	--	< 0.0052 U	< 0.0052 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0021 U	--
II	PUE-05	1a	0	N	4/1/1996	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--
II	PUE-05	1a	5	N	4/1/1996	< 0.001 U	--	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.001 U	< 0.001 U	< 0.0021 U	--
II	PUE-06	1a	0	N	4/1/1996	< 0.0012 UJ	--	< 0.006 UJ	< 0.006 UJ	< 0.0012 UJ	< 0.0024 UJ	< 0.0012 UJ	< 0.006 UJ	< 0.0012 UJ	< 0.0024 UJ	--
II	PUE-06	1a	5	N	4/1/1996	< 0.001 U	--	< 0.0052 U	< 0.0052 U	< 0.001 U	< 0.0021 U	< 0.001 U	< 0.0052 U	< 0.001 U	< 0.0021 U	--
II	PUE-07	1a	0	N	4/2/1996	< 0.0011 U	--	< 0.0054 U	< 0.0054 U	< 0.0011 U	< 0.0021 U	< 0.0011 U	< 0.0054 U	< 0.0011 U	< 0.0021 U	--
II	PUE-07	1a	5	N	4/2/1996	< 0.001 U	--	< 0.0052 U	< 0.0052 U							

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 18 of 18)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Volatile Organic Compounds (VOCs)										
						Styrene (monomer)	tert-Butyl benzene	Tetrachloroethylene	Toluene	trans-1,2-Dichloro-ethylene	trans-1,3-Dichloro-propylene	Tribromomethane	Trichloroethylene	Vinyl acetate	Vinyl chloride	Xylenes (total)
II	WC-UP04	39	0	N	7/28/2006	--	--	< 0.00028 U	< 0.00013 U	< 0.00023 U	< 0.00021 U	< 0.00025 U	0.0045 J	--	< 0.00024 U	< 0.00088 U
II	WC-UP05	39	0	N	7/27/2006	--	--	< 0.00028 U	< 0.00013 U	< 0.00023 U	< 0.00021 U	< 0.00025 U	0.0025 J	--	< 0.00024 U	< 0.00088 U
II	WC-UP06	39	0	N	7/27/2006	--	--	< 0.00028 U	< 0.00013 U	< 0.00023 U	< 0.00021 U	< 0.00025 U	0.00072 J	--	< 0.00024 U	< 0.00088 U
II	WC-UP07	39	0	N	7/28/2006	--	--	< 0.00028 U	0.0011 J	< 0.00023 U	< 0.00021 U	< 0.00025 U	0.0039 J	--	< 0.00024 U	< 0.00088 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						1,2,4,5-Tetrachloro- benzene	1,2-Diphenylhydrazine	1,4-Dioxane	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene
I	PUA-05	1a	0	N	4/4/1996	--	--	--	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 3.4 U	< 0.68 U	< 0.68 U
I	PUA-05	1a	5	N	4/4/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 0.69 U
I	PUA-07	1a	0	N	4/4/1996	--	--	--	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 0.66 U
I	PUA-07	1a	5	N	4/4/1996	--	--	--	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 3.3 U	< 0.65 U	< 0.65 U
I	PUB-04	1a	0	N	3/26/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 0.69 U
I	PUB-06	1a	0	N	4/3/1996	--	--	--	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 0.66 U
I	PUB-06	1a	5	N	4/3/1996	--	--	--	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U	< 3.2 U	< 0.64 U	< 0.64 U
I	PUC-03	1a	0	N	3/26/1996	--	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 3.4 U	6.5	< 0.67 U
I	PUF-01	1a	0	N	3/25/1996	--	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 3.3 U	< 0.67 U	< 0.67 U
I	WC-IM01	39	0	N	8/3/2006	0.04 J	--	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.36 U	< 0.036 U	< 0.036 U
I	WC-IM02	39	0	N	8/3/2006	0.049 J	--	< 0.037 U	< 0.037 U	< 0.037 U	< 0.037 U	< 0.037 U	< 0.36 U	< 0.037 U	< 0.037 U
I	WC-IM03	39	0	N	8/3/2006	0.039 J	--	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.35 U	< 0.036 U	< 0.036 U
I	WC-IM05	39	0	N	8/3/2006	< 0.035 U	--	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.34 U	< 0.035 U	< 0.035 U
I	WC-IM06	39	0	N	8/3/2006	0.26 J	--	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.35 U	< 0.035 U	< 0.035 U
I	WC-IM07	39	0	N	8/3/2006	< 0.036 U	--	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.36 U	< 0.036 U	< 0.036 U
II	BDB-15	1a	0	N	4/4/1996	--	--	--	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 3.4 U	< 0.68 U	< 0.68 U
II	PUA-09	1a	0	N	4/3/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 0.69 U
II	PUA-09	1a	5	N	4/3/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 0.69 U
II	PUA-10	1a	0	N	4/3/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 0.69 U
II	PUA-10	1a	5	N	4/3/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 0.69 U
II	PUB-08	1a	0	N	4/3/1996	--	--	--	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	< 4.1 U	< 0.81 U	< 0.81 U
II	PUB-08	1a	5	N	4/3/1996	--	--	--	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 0.66 U
II	PUB-09	1a	0	N	4/3/1996	--	--	--	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 3.4 U	< 0.68 U	< 0.68 U
II	PUB-09	1a	5	N	4/3/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 0.69 U
II	PUB-10	1a	0	N	4/3/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 0.69 U
II	PUB-10	1a	5	N	4/3/1996	--	--	--	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 13 U	< 2.6 U	< 2.6 U
II	PUC-05	1a	0	N	4/3/1996	--	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 3.3 U	< 0.67 U	< 0.67 U
II	PUC-05	1a	5	N	4/3/1996	--	--	--	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 3.3 U	< 0.65 U	< 0.65 U
II	PUC-07	1a	0	N	4/3/1996	--	--	--	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 0.66 U
II	PUC-07	1a	5	N	4/3/1996	--	--	--	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 0.66 U

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						1,2,4,5-Tetrachloro- benzene	1,2-Diphenylhydrazine	1,4-Dioxane	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene
II	PUE-05	1a	5	N	4/1/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 0.69 U
II	PUE-06	1a	0	N	4/1/1996	--	--	--	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	< 3.6 U	< 0.71 U	< 0.71 U
II	PUE-06	1a	5	N	4/1/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 0.69 U
II	PUE-07	1a	0	N	4/2/1996	--	--	--	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	< 3.6 U	< 0.71 U	< 0.71 U
II	PUE-07	1a	5	N	4/2/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 0.69 U
II	PUF-03	1a	0	N	3/28/1996	--	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 3.4 U	< 0.67 U	< 0.67 U
II	PUF-03	1a	5	N	3/28/1996	--	--	--	--	--	--	--	--	--	--
II	PUF-05	1a	0	N	4/4/1996	--	--	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 0.7 U
II	PUF-05	1a	5	N	4/4/1996	--	--	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 0.7 U
II	PUG-04	1a	0	N	4/4/1996	--	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 3.3 U	< 0.67 U	< 0.67 U
II	PUG-04	1a	5	N	4/4/1996	--	--	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 0.7 U
II	PUG-06	1a	0	N	4/4/1996	--	--	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 0.7 U
II	PUG-06	1a	5	N	4/4/1996	--	--	--	< 0.77 U	< 0.77 U	< 0.77 U	< 0.77 U	< 3.8 U	< 0.77 U	< 0.77 U
II	PUG-07	1a	0	N	4/4/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 0.69 U
II	PUG-07	1a	5	N	4/4/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 0.69 U
II	SB-16-B	27	0	N	5/23/2004	< 0.011 U	--	--	< 0.031 U	< 0.032 U	< 0.026 U	< 0.029 U	< 0.066 U	< 0.018 U	< 0.021 U
II	SB-16-B	27	7	N	5/23/2004	< 0.011 U	--	--	< 0.031 U	< 0.032 U	< 0.026 U	< 0.029 U	< 0.066 U	< 0.018 U	< 0.021 U
II	SB-16-B	27	17	N	5/23/2004	< 0.011 U	--	--	< 0.031 U	< 0.032 U	< 0.026 U	< 0.029 U	< 0.066 U	< 0.018 U	< 0.021 U
II	SB-16-B	27	27	N	5/23/2004	< 0.011 U	--	--	< 0.032 U	< 0.033 U	< 0.027 U	< 0.03 U	< 0.067 U	< 0.019 U	< 0.021 U
II	SB-16-B	27	47	N	5/23/2004	< 0.011 U	--	--	< 0.031 U	< 0.032 U	< 0.026 U	< 0.029 U	< 0.065 U	< 0.018 U	< 0.021 U
II	SB-16-B	27	67	N	5/23/2004	< 0.014 U	--	--	< 0.042 U	< 0.043 U	< 0.035 U	< 0.039 U	< 0.089 U	< 0.025 U	< 0.028 U
II	SB-16-B	27	77	N	5/24/2004	< 0.014 U	--	--	< 0.041 U	< 0.042 U	< 0.034 U	< 0.038 U	< 0.087 U	< 0.024 U	< 0.027 U
II	SB-16-B	27	97	N	5/24/2004	< 0.015 U	--	--	< 0.043 U	< 0.044 U	< 0.036 U	< 0.04 U	< 0.09 U	< 0.025 U	< 0.028 U
II	SB-16-B	27	247	N	5/25/2004	--	--	--	--	--	--	--	--	--	--
II	WC-BD02	39	0	N	8/2/2006	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.34 U	< 0.034 U	< 0.034 U
II	WC-IM04	39	0	N	8/2/2006	0.073 J	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	0.087 J	< 0.035 U	< 0.035 U	< 0.35 U	< 0.035 U
II	WC-UP01	39	0	N	7/28/2006	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.35 U	< 0.035 U	< 0.035 U
II	WC-UP02	39	0	N	7/31/2006	0.057 J	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.34 UJ	< 0.034 U	< 0.034 U
II	WC-UP03	39	0	N	7/31/2006	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.35 UJ	< 0.036 U	< 0.036 U
II	WC-UP04	39	0	N	7/28/2006	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.34 U	< 0.034 U	< 0.034 U
II	WC-UP05	39	0	N	7/27/2006	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.34 U	< 0.034 U	< 0.034 U
II	WC-UP06	39	0	N	7/27/2006	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.34 U	< 0.034 U	< 0.034 U
II	WC-UP07	39	0	N	7/28/2006	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.34 U	< 0.034 U	< 0.034 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Nitroaniline	2-Nitrophenol	3,3'-Dichlorobenzidine	3-Methylphenol & 4-Methylphenol	3-Nitroaniline	4,6-Dinitro-o-cresol	4-Bromophenyl phenyl ether
I	PUA-05	1a	0	N	4/4/1996	< 0.68 U	< 0.68 U	< 0.68 U	< 3.4 U	< 0.68 U	< 1.3 U	--	< 3.4 U	< 3.4 U	< 0.68 U
I	PUA-05	1a	5	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.69 U
I	PUA-07	1a	0	N	4/4/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 1.3 U	--	< 3.3 U	< 3.3 U	< 0.66 U
I	PUA-07	1a	5	N	4/4/1996	< 0.65 U	< 0.65 U	< 0.65 U	< 3.3 U	< 0.65 U	< 1.3 U	--	< 3.3 U	< 3.3 U	< 0.65 U
I	PUB-04	1a	0	N	3/26/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 1.4 U	--	< 3.4 U	< 3.4 U	< 0.69 U
I	PUB-06	1a	0	N	4/3/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 1.3 U	--	< 3.3 U	< 3.3 U	< 0.66 U
I	PUB-06	1a	5	N	4/3/1996	< 0.64 U	< 0.64 U	< 0.64 U	< 3.2 U	< 0.64 U	< 1.3 U	--	< 3.2 U	< 3.2 U	< 0.64 U
I	PUC-03	1a	0	N	3/26/1996	< 0.67 U	7.8	< 0.67 U	< 3.4 U	< 0.67 U	< 1.3 U	--	< 3.4 U	< 3.4 U	< 0.67 U
I	PUF-01	1a	0	N	3/25/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 3.3 U	< 0.67 U	< 1.3 U	--	< 3.3 U	< 3.3 U	< 0.67 U
I	WC-IM01	39	0	N	8/3/2006	< 0.036 U	< 0.036 U	--	< 0.036 U	< 0.036 U	--	< 0.073 U	--	--	< 0.036 U
I	WC-IM02	39	0	N	8/3/2006	< 0.037 U	< 0.037 U	--	< 0.037 U	< 0.037 U	--	< 0.073 U	--	--	< 0.037 U
I	WC-IM03	39	0	N	8/3/2006	< 0.036 U	< 0.036 U	--	< 0.036 U	< 0.036 U	--	< 0.071 U	--	--	< 0.036 U
I	WC-IM05	39	0	N	8/3/2006	< 0.035 U	< 0.035 U	--	< 0.035 U	< 0.035 U	--	< 0.07 U	--	--	< 0.035 U
I	WC-IM06	39	0	N	8/3/2006	< 0.035 U	< 0.035 U	--	< 0.035 U	< 0.035 U	--	< 0.07 U	--	--	< 0.035 U
I	WC-IM07	39	0	N	8/3/2006	< 0.036 U	< 0.036 U	--	< 0.036 U	< 0.036 U	--	< 0.072 U	--	--	< 0.036 U
II	BDB-15	1a	0	N	4/4/1996	< 0.68 U	< 0.68 U	< 0.68 U	< 3.4 U	< 0.68 U	< 1.3 U	--	< 3.4 U	< 3.4 U	< 0.68 U
II	PUA-09	1a	0	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 1.4 U	--	< 3.4 U	< 3.4 U	< 0.69 U
II	PUA-09	1a	5	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 1.4 U	--	< 3.4 U	< 3.4 U	< 0.69 U
II	PUA-10	1a	0	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 1.4 U	--	< 3.4 U	< 3.4 U	< 0.69 U
II	PUA-10	1a	5	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 1.4 U	--	< 3.4 U	< 3.4 U	< 0.69 U
II	PUB-08	1a	0	N	4/3/1996	< 0.81 U	< 0.81 U	< 0.81 U	< 4.1 U	< 0.81 U	< 1.6 U	--	< 4.1 U	< 4.1 U	< 0.81 U
II	PUB-08	1a	5	N	4/3/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 1.3 U	--	< 3.3 U	< 3.3 U	< 0.66 U
II	PUB-09	1a	0	N	4/3/1996	< 0.68 U	< 0.68 U	< 0.68 U	< 3.4 U	< 0.68 U	&				

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Nitroaniline	2-Nitrophenol	3,3'-Dichlorobenzidine	3-Methylphenol & 4-Methylphenol	3-Nitroaniline	4,6-Dinitro-o-cresol	4-Bromophenyl phenyl ether
II	PUE-05	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.69 U
II	PUE-06	1a	0	N	4/1/1996	< 0.71 U	< 0.71 U	< 0.71 U	< 3.6 U	< 0.71 U	< 1.4 U	--	< 3.6 U	< 3.6 U	< 0.71 U
II	PUE-06	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.4 U	< 0.69 U	< 1.4 U	--	< 3.4 U	< 3.4 U	< 0.69 U
II	PUE-07	1a	0	N	4/2/1996	< 0.71 U	< 0.71 U	< 0.71 U	< 3.6 U	< 0.71 U	< 1.4 U	--	< 3.6 U	< 3.6 U	< 0.71 U
II	PUE-07	1a	5	N	4/2/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.69 U
II	PUF-03	1a	0	N	3/28/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 3.4 U	< 0.67 U	< 1.3 U	--	< 3.4 U	< 3.4 U	< 0.67 U
II	PUF-03	1a	5	N	3/28/1996	--	--	--	--	--	--	--	--	--	< 0.71 U
II	PUF-05	1a	0	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.7 U
II	PUF-05	1a	5	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.7 U
II	PUG-04	1a	0	N	4/4/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 3.3 U	< 0.67 U	< 1.3 U	--	< 3.3 U	< 3.3 U	< 0.67 U
II	PUG-04	1a	5	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.7 U
II	PUG-06	1a	0	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.7 U
II	PUG-06	1a	5	N	4/4/1996	< 0.77 U	< 0.77 U	< 0.77 U	< 3.8 U	< 0.77 U	< 1.5 U	--	< 3.8 U	< 3.8 U	< 0.77 U
II	PUG-07	1a	0	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.69 U
II	PUG-07	1a	5	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.69 U
II	SB-16-B	27	0	N	5/23/2004	< 0.016 U	< 0.014 U	< 0.015 U	< 0.039 U	< 0.02 U	< 0.024 U	< 0.04 U	< 0.026 U	--	< 0.023 U
II	SB-16-B	27	7	N	5/23/2004	< 0.016 U	< 0.014 U	< 0.015 U	< 0.039 U	< 0.02 U	< 0.024 U	< 0.04 U	< 0.026 U	--	< 0.023 U
II	SB-16-B	27	17	N	5/23/2004	< 0.016 U	< 0.014 U	< 0.015 U	< 0.039 U	< 0.02 U	< 0.023 U	< 0.04 U	< 0.026 U	--	< 0.023 U
II	SB-16-B	27	27	N	5/23/2004	< 0.016 U	< 0.014 U	< 0.016 U	< 0.04 U	< 0.02 U	< 0.024 U	< 0.041 U	< 0.027 U	--	< 0.023 U
II	SB-16-B	27	47	N	5/23/2004	< 0.016 U	< 0.014 U	< 0.015 U	< 0.038 U	< 0.02 U	< 0.023 U	< 0.04 U	< 0.026 U	--	< 0.023 U
II	SB-16-B	27	67	N	5/23/2004	< 0.022 U	< 0.019 U	< 0.021 U	< 0.052 U	< 0.027 U	< 0.032 U	< 0.054 U	< 0.036 U	--	< 0.031 U
II	SB-16-B	27	77	N	5/24/2004	< 0.021 U	< 0.019 U	< 0.02 U	< 0.051 U	< 0.026 U	< 0.031 U	< 0.053 U	< 0.035 U	--	< 0.03 U
II	SB-16-B	27	97	N	5/24/2004	< 0.022 U	< 0.019 U	< 0.021 U	< 0.053 U	< 0.027 U	< 0.032 U	< 0.055 U	< 0.036 U	--	< 0.032 U
II	SB-16-B	27	247	N	5/25/2004	--	--	--	--	--	--	--	--	--	--
II	WC-BD02	39	0	N	8/2/2006	< 0.034 U	< 0.034 U	--	< 0.034 U	< 0.034 U	--	< 0.068 U	--	--	< 0.034 U
II	WC-IM04	39	0	N	8/2/2006	< 0.035 U	< 0.035 U	--	< 0.035 U	< 0.035 U	--	< 0.07 U	--	--	< 0.035 U
II	WC-UP01	39	0	N	7/28/2006	< 0.035 U	< 0.035 U	--	< 0.035 U	< 0.035 U	--	< 0.07 U	--	--	< 0.035 U
II	WC-UP02	39	0	N	7/31/2006	< 0.034 U	< 0.034 U	--	< 0.034 U	< 0.034 U	--	< 0.069 U	--	--	< 0.034 U
II	WC-UP03	39	0	N	7/31/2006	< 0.036 U	< 0.036 U	--	< 0.036 U	< 0.036 U	--	< 0.071 U	--	--	< 0.036 U
II	WC-UP04	39	0	N	7/28/2006	< 0.034 U	< 0.034 U	--	< 0.034 U	< 0.034 U	--	< 0.069 U	--	--	< 0.034 U
II	WC-UP05	39	0	N	7/27/2006	< 0.034 U	< 0.034 U	--	< 0.034 U	< 0.034 U	--	< 0.068 U	--	--	< 0.034 U
II	WC-UP06	39	0	N	7/27/2006	< 0.034 U	< 0.034 U	--	< 0.034 U	< 0.034 U	--	< 0.068 U	--	--	< 0.034 U
II	WC-UP07	39	0	N	7/28/2006	< 0.034 U	< 0.034 U	--	< 0.034 U	< 0.034 U	--	< 0.069 U	--	--	< 0.034 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 5 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						4-Chloro-3-Methylphenol	4-Chlorophenyl phenyl ether	4-Nitrophenol	Acetophenone	Aniline	Azobenzene	Benzenethiol	Benzoic acid	Benzyl alcohol	Benzyl butyl phthalate
I	PUA-05	1a	0	N	4/4/1996	< 1.3 U	< 0.68 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.3 U	< 0.68 U
I	PUA-05	1a	5	N	4/4/1996	< 1.4 U	< 0.69 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.69 U
I	PUA-07	1a	0	N	4/4/1996	< 1.3 U	< 0.66 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.66 U
I	PUA-07	1a	5	N	4/4/1996	< 1.3 U	< 0.65 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.65 U
I	PUB-04	1a	0	N	3/26/1996	< 1.4 U	< 0.69 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.4 U	< 0.69 U
I	PUB-06	1a	0	N	4/3/1996	< 1.3 U	< 0.66 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.66 U
I	PUB-06	1a	5	N	4/3/1996	< 1.3 U	< 0.64 U	< 3.2 U	--	--	--	--	< 3.2 U	< 1.3 U	< 0.64 U
I	PUC-03	1a	0	N	3/26/1996	9	< 0.67 U	13	--	--	--	--	< 3.4 U	< 1.3 U	< 0.67 U
I	PUF-01	1a	0	N	3/25/1996	< 1.3 U	< 0.67 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.67 U
I	WC-IM01	39	0	N	8/3/2006	< 0.036 U	--	< 0.36 U	< 0.036 U	< 0.036 U	< 0.036 U	--	--	--	< 0.036 U
I	WC-IM02	39	0	N	8/3/2006	< 0.037 U	--	< 0.36 U	< 0.037 U	< 0.037 U	< 0.037 U	--	--	--	< 0.037 U
I	WC-IM03	39	0	N	8/3/2006	< 0.036 U	--	< 0.35 U	< 0.036 U	< 0.036 U	< 0.036 U	--	--	--	< 0.036 U
I	WC-IM05	39	0	N	8/3/2006	< 0.035 U	--	< 0.34 U	< 0.035 U	< 0.035 U	< 0.035 U	--	--	--	< 0.035 U
I	WC-IM06	39	0	N	8/3/2006	< 0.035 U	--	< 0.35 U	< 0.035 U	< 0.035 U	0.048 J	--	--	--	< 0.035 U
I	WC-IM07	39	0	N	8/3/2006	< 0.036 U	--	< 0.36 U	< 0.036 U	< 0.036 U	< 0.036 U	--	--	--	< 0.036 U
II	BDB-15	1a	0	N	4/4/1996	< 1.3 U	< 0.68 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.3 U	< 0.68 U
II	PUA-09	1a	0	N	4/3/1996	< 1.4 U	< 0.69 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.4 U	< 0.69 U
II	PUA-09	1a	5	N	4/3/1996	< 1.4 U	< 0.69 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.4 U	< 0.69 U
II	PUA-10	1a	0	N	4/3/1996	< 1.4 U	< 0.69 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.4 U	< 0.69 U
II	PUA-10	1a	5	N	4/3/1996	< 1.4 U	< 0.69 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.4 U	< 0.69 U
II	PUB-08	1a	0	N	4/3/1996	< 1.6 U	< 0.81 U	< 4.1 U	--	--	--	--	< 4.1 U	< 1.6 U	< 0.81 U
II	PUB-08	1a	5	N	4/3/1996	< 1.3 U	< 0.66 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.66 U
II	PUB-09	1a	0	N	4/3/1996	< 1.3 U	< 0.68 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.3 U	< 0.68 U
II	PUB-09	1a	5	N	4/3/1996	< 1.4 U	< 0.69 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.69 U
II	PUB-10	1a	0	N	4/3/1996	< 1.4 U	< 0.69 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.69 U
II	PUB-10	1a	5	N	4/3/1996	< 5.2 U	< 2.6 U	< 13 U	--	--	--	--	< 130 U	< 5.2 U	< 26 U
II	PUC-05	1a	0	N	4/3/1996	< 1.3 U	< 0.67 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.67 U
II	PUC-05	1a	5	N	4/3/1996	< 1.3 U	< 0.65 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.65 U
II	PUC-07	1a	0	N	4/3/1996	< 1.3 U	< 0.66 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.66 U
II	PUC-07	1a	5	N	4/3/1996	< 1.3 U	< 0.66 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.66 U
II	PUC-08	1a	0	N	4/2/1996	< 1.3 U	< 0.68 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.3 U	0.53
II	PUC-08	1a	5	N	4/2/1996	< 1.3 U	< 0.68 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.3 U	< 0.68 U
II	PUD-06	1a	0	N	4/2/1996	< 1.4 U	< 0.7 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.7 U
II	PUD-06	1a	5	N	4/2/19										

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 6 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						4-Chloro-3-Methylphenol	4-Chlorophenyl phenyl ether	4-Nitrophenol	Acetophenone	Aniline	Azobenzene	Benzenethiol	Benzoic acid	Benzyl alcohol	Benzyl butyl phthalate
II	PUE-05	1a	5	N	4/1/1996	< 1.4 U	< 0.69 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.69 U
II	PUE-06	1a	0	N	4/1/1996	< 1.4 U	< 0.71 U	< 3.6 U	--	--	--	--	< 3.6 U	< 1.4 U	< 0.71 U
II	PUE-06	1a	5	N	4/1/1996	< 1.4 U	< 0.69 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.4 U	< 0.69 U
II	PUE-07	1a	0	N	4/2/1996	< 1.4 U	< 0.71 U	< 3.6 U	--	--	--	--	< 3.6 U	< 1.4 U	< 0.71 U
II	PUE-07	1a	5	N	4/2/1996	< 1.4 U	< 0.69 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.69 U
II	PUF-03	1a	0	N	3/28/1996	< 1.3 U	< 0.67 U	< 3.4 U	--	--	--	--	< 3.4 U	< 1.3 U	< 0.67 U
II	PUF-03	1a	5	N	3/28/1996	--	--	--	--	--	--	--	< 3.6 U	--	< 0.71 U
II	PUF-05	1a	0	N	4/4/1996	< 1.4 U	< 0.7 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.7 U
II	PUF-05	1a	5	N	4/4/1996	< 1.4 U	< 0.7 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.7 U
II	PUG-04	1a	0	N	4/4/1996	< 1.3 U	< 0.67 U	< 3.3 U	--	--	--	--	< 3.3 U	< 1.3 U	< 0.67 U
II	PUG-04	1a	5	N	4/4/1996	< 1.4 U	< 0.7 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.7 U
II	PUG-06	1a	0	N	4/4/1996	< 1.4 U	< 0.7 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.7 U
II	PUG-06	1a	5	N	4/4/1996	< 1.5 U	< 0.77 U	< 3.8 U	--	--	--	--	< 3.8 U	< 1.5 U	< 0.77 U
II	PUG-07	1a	0	N	4/4/1996	< 1.4 U	< 0.69 U	< 3.5 U	--	--	--	--	2.8	< 1.4 U	< 0.69 U
II	PUG-07	1a	5	N	4/4/1996	< 1.4 U	< 0.69 U	< 3.5 U	--	--	--	--	< 3.5 U	< 1.4 U	< 0.69 U
II	SB-16-B	27	0	N	5/23/2004	< 0.027 U	< 0.019 U	< 0.043 U	< 0.049 U	< 0.039 U	< 0.1 U	< 0.34 U	< 0.12 U	< 0.034 U	< 0.027 U
II	SB-16-B	27	7	N	5/23/2004	< 0.027 U	< 0.019 U	< 0.043 U	< 0.049 U	< 0.039 U	< 0.1 U	< 0.34 U	< 0.12 U	< 0.034 U	< 0.027 U
II	SB-16-B	27	17	N	5/23/2004	< 0.027 U	< 0.019 U	< 0.043 U	< 0.049 U	< 0.039 U	< 0.099 U	< 0.34 U	< 0.12 U	< 0.034 U	< 0.027 U
II	SB-16-B	27	27	N	5/23/2004	< 0.028 U	< 0.019 U	< 0.044 U	< 0.05 U	< 0.04 U	< 0.1 U	< 0.35 U	< 0.12 U	< 0.034 U	< 0.027 U
II	SB-16-B	27	47	N	5/23/2004	< 0.027 U	< 0.019 U	< 0.043 U	< 0.049 U	< 0.039 U	< 0.099 U	< 0.34 U	< 0.12 U	< 0.034 U	< 0.027 U
II	SB-16-B	27	67	N	5/23/2004	< 0.037 U	< 0.025 U	< 0.058 U	< 0.066 U	< 0.053 U	< 0.13 U	< 0.46 U	< 0.16 U	< 0.045 U	< 0.036 U
II	SB-16-B	27	77	N	5/24/2004	< 0.036 U	< 0.024 U	< 0.057 U	< 0.064 U	< 0.052 U	< 0.13 U	< 0.45 U	< 0.16 U	< 0.044 U	< 0.035 U
II	SB-16-B	27	97	N	5/24/2004	< 0.037 U	< 0.026 U	< 0.059 U	< 0.067 U	< 0.054 U	< 0.14 U	< 0.47 U	< 0.17 U	< 0.046 U	< 0.037 U
II	SB-16-B	27	247	N	5/25/2004	--	--	--	--	--	--	--	--	--	--
II	WC-BD02	39	0	N	8/2/2006	< 0.034 U	--	< 0.34 U	< 0.034 U	< 0.034 U	--	--	--	--	< 0.034 U
II	WC-IM04	39	0	N	8/2/2006	< 0.035 U	--	< 0.35 U	< 0.035 U	< 0.035 U	--	--	--	--	< 0.035 U
II	WC-UP01	39	0	N	7/28/2006	< 0.035 U	--	< 0.35 U	< 0.035 U	< 0.035 U	--	--	--	--	< 0.035 U
II	WC-UP02	39	0	N	7/31/2006	< 0.034 U	--	< 0.34 U	< 0.034 U	< 0.034 U	--	--	--	--	< 0.034 U
II	WC-UP03	39	0	N	7/31/2006	< 0.036 U	--	< 0.35 U	< 0.036 U	< 0.036 U	--	--	--	--	< 0.036 U
II	WC-UP04	39	0	N	7/28/2006	< 0.034 U	--	< 0.34 U	< 0.034 U	< 0.034 U	--	--	--	--	< 0.034 U
II	WC-UP05	39	0	N	7/27/2006	< 0.034 U	--	< 0.34 U	< 0.034 U	< 0.034 U	--	--	--	--	< 0.034 U
II	WC-UP06	39	0	N	7/27/2006	< 0.034 U	--	< 0.34 U	< 0.034 U	< 0.034 U	--	--	--	--	< 0.034 U
II	WC-UP07	39	0	N	7/28/2006	< 0.034 U	--	< 0.34 U	< 0.034 U	< 0.034 U	--	--	--	--	< 0.034 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 7 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						bis(2-Chloroethoxy) methane	bis(2-Chloroethyl) ether	bis(2-Chloroisopropyl) ether	bis(2-Ethylhexyl) phthalate	bis(p-Chlorophenyl) disulfide	bis(p-Chlorophenyl) sulfone	Carbazole	Dibenzofuran	Dibutyl phthalate	Diethyl phthalate
I	PUA-05	1a	0	N	4/4/1996	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	--	--	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U
I	PUA-05	1a	5	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
I	PUA-07	1a	0	N	4/4/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	--	--	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U
I	PUA-07	1a	5	N	4/4/1996	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	--	--	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U
I	PUB-04	1a	0	N	3/26/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
I	PUB-06	1a	0	N	4/3/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	--	--	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U
I	PUB-06	1a	5	N	4/3/1996	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U	--	--	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U
I	PUC-03	1a	0	N	3/26/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U
I	PUF-01	1a	0	N	3/25/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U
I	WC-IM01	39	0	N	8/3/2006	< 0.036 U	< 0.036 U	< 0.036 U	--	--	--	--	--	< 0.036 U	< 0.036 U
I	WC-IM02	39	0	N	8/3/2006	< 0.037 U	< 0.037 U	< 0.037 U	--	--	--	--	--	< 0.037 U	< 0.037 U
I	WC-IM03	39	0	N	8/3/2006	< 0.036 U	< 0.036 U	< 0.036 U	--	--	--	--	--	< 0.036 U	< 0.036 U
I	WC-IM05	39	0	N	8/3/2006	< 0.035 U	< 0.035 U	< 0.035 U	--	--	--	--	--	< 0.035 U	< 0.035 U
I	WC-IM06	39	0	N	8/3/2006	< 0.035 U	< 0.035 U	< 0.035 U	--	--	--	--	--	< 0.035 U	< 0.035 U
I	WC-IM07	39	0	N	8/3/2006	< 0.036 U	< 0.036 U	< 0.036 U	--	--	--	--	--	< 0.036 U	< 0.036 U
II	BDB-15	1a	0	N	4/4/1996	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	--	--	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U
II	PUA-09	1a	0	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUA-09	1a	5	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUA-10	1a	0	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUA-10	1a	5	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUB-08	1a	0	N	4/3/1996	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	--	--	< 0			

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						bis(2-Chloroethoxy) methane	bis(2-Chloroethyl) ether	bis(2-Chloroisopropyl) ether	bis(2-Ethylhexyl) phthalate	bis(p-Chlorophenyl) disulfide	bis(p-Chlorophenyl) sulfone	Carbazole	Dibenzofuran	Dibutyl phthalate	Diethyl phthalate
II	PUE-05	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUE-06	1a	0	N	4/1/1996	< 0.71 U	< 0.71 U	< 0.71 U	0.45	--	--	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U
II	PUE-06	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUE-07	1a	0	N	4/2/1996	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	--	--	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U
II	PUE-07	1a	5	N	4/2/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUF-03	1a	0	N	3/28/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U
II	PUF-03	1a	5	N	3/28/1996	--	--	--	< 0.71 U	--	--	--	--	< 0.71 U	--
II	PUF-05	1a	0	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	--	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U
II	PUF-05	1a	5	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	--	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U
II	PUG-04	1a	0	N	4/4/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U
II	PUG-04	1a	5	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	--	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U
II	PUG-06	1a	0	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	--	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U
II	PUG-06	1a	5	N	4/4/1996	< 0.77 U	< 0.77 U	< 0.77 U	< 0.77 U	--	--	< 0.77 U	< 0.77 U	7.5	< 0.77 U
II	PUG-07	1a	0	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUG-07	1a	5	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	SB-16-B	27	0	N	5/23/2004	< 0.021 U	< 0.014 U	< 0.016 U	< 0.035 U	< 0.34 U	< 0.34 U	< 0.021 U	< 0.023 U	< 0.029 U	< 0.042 U
II	SB-16-B	27	7	N	5/23/2004	< 0.021 U	< 0.014 U	< 0.016 U	0.079 J	< 0.34 U	< 0.34 U	< 0.021 U	< 0.023 U	< 0.029 U	< 0.042 U
II	SB-16-B	27	17	N	5/23/2004	< 0.021 U	< 0.014 U	< 0.016 U	< 0.035 U	< 0.34 U	< 0.34 U	< 0.021 U	< 0.023 U	< 0.029 U	< 0.042 U
II	SB-16-B	27	27	N	5/23/2004	< 0.022 U	< 0.014 U	< 0.016 U	< 0.036 U	< 0.35 U	< 0.35 U	< 0.021 U	< 0.023 U	< 0.029 U	< 0.043 U
II	SB-16-B	27	47	N	5/23/2004	< 0.021 U	< 0.014 U	< 0.016 U	< 0.035 U	< 0.34 U	< 0.34 U	< 0.021 U	< 0.023 U	< 0.028 U	< 0.042 U
II	SB-16-B	27	67	N	5/23/2004	< 0.028 U	< 0.018 U	< 0.021 U	0.1 J	< 0.46 U	< 0.46 U	< 0.028 U	< 0.031 U	< 0.039 U	< 0.057 U
II	SB-16-B	27	77	N	5/24/2004	< 0.028 U	< 0.018 U	< 0.021 U	< 0.046 U	< 0.45 U	< 0.45 U	< 0.027 U	< 0.03 U	< 0.038 U	< 0.055 U
II	SB-16-B	27	97	N	5/24/2004	< 0.029 U	< 0.019 U	< 0.021 U	< 0.048 U	< 0.47 U	< 0.47 U	< 0.028 U	< 0.031 U	< 0.039 U	< 0.058 U
II	SB-16-B	27	247	N	5/25/2004	--	--	--	--	--	--	--	--	--	--
II	WC-BD02	39	0	N	8/2/2006	< 0.034 U	< 0.034 U	< 0.034 U	--	--	--	--	--	< 0.034 U	< 0.034 U
II	WC-IM04	39	0	N	8/2/2006	< 0.035 U	< 0.035 U	< 0.035 U	--	--	--	--	--	< 0.035 U	< 0.035 U
II	WC-UP01	39	0	N	7/28/2006	< 0.035 U	< 0.035 U	< 0.035 U	--	--	--	--	--	< 0.035 U	< 0.035 U
II	WC-UP02	39	0	N	7/31/2006	< 0.034 U	< 0.034 U	< 0.034 U	--	--	--	--	--	< 0.034 U	< 0.034 U
II	WC-UP03	39	0	N	7/31/2006	< 0.036 U	< 0.036 U	< 0.036 U	--	--	--	--	--	< 0.036 U	< 0.036 U
II	WC-UP04	39	0	N	7/28										

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 9 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						Dimethyl phthalate	Di-n-octyl phthalate	Diphenyl sulfone	Fluoranthene	Fluorene	Hexachloro-1,3-butadiene	Hexachlorobenzene	Hexachlorocyclopentadiene	Hexachloroethane	Hydroxymethyl phthalimide
I	PUA-05	1a	0	N	4/4/1996	< 0.68 U	< 0.68 U	--	< 0.68 U	< 0.68 U	< 0.68 U	0.39	< 0.68 U	< 0.68 U	--
I	PUA-05	1a	5	N	4/4/1996	< 0.69 U	< 0.69 U	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--
I	PUA-07	1a	0	N	4/4/1996	< 0.66 U	< 0.66 U	--	< 0.66 U	< 0.66 U	< 0.66 U	3.2	< 0.66 U	< 0.66 U	--
I	PUA-07	1a	5	N	4/4/1996	< 0.65 U	< 0.65 U	--	< 0.65 U	< 0.65 U	< 0.65 U	0.69	< 0.65 U	< 0.65 U	--
I	PUB-04	1a	0	N	3/26/1996	< 0.69 U	< 1.4 U	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--
I	PUB-06	1a	0	N	4/3/1996	< 0.66 U	< 0.66 U	--	< 0.66 U	< 0.66 U	< 0.66 U	0.35	< 0.66 U	< 0.66 U	--
I	PUB-06	1a	5	N	4/3/1996	< 0.64 U	< 0.64 U	--	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U	--
I	PUC-03	1a	0	N	3/26/1996	< 0.67 U	< 0.67 U	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	--
I	PUF-01	1a	0	N	3/25/1996	< 0.67 U	< 0.67 U	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	--
I	WC-IM01	39	0	N	8/3/2006	< 0.036 U	< 0.016 U	--	< 0.036 U	< 0.036 U	< 0.036 U	1.2	< 0.36 U	< 0.036 U	--
I	WC-IM02	39	0	N	8/3/2006	< 0.037 U	< 0.016 U	--	< 0.037 U	< 0.037 U	< 0.037 U	1.5	< 0.36 U	< 0.037 U	--
I	WC-IM03	39	0	N	8/3/2006	< 0.036 U	< 0.016 U	--	< 0.036 U	< 0.036 U	< 0.036 U	1	< 0.35 U	< 0.036 U	--
I	WC-IM05	39	0	N	8/3/2006	< 0.035 U	< 0.015 U	--	< 0.035 U	< 0.035 U	< 0.035 U	0.052 J	< 0.34 U	< 0.035 U	--
I	WC-IM06	39	0	N	8/3/2006	< 0.035 U	< 0.015 U	--	0.071 J	< 0.035 U	< 0.035 U	1.2	< 0.35 U	< 0.035 U	--
I	WC-IM07	39	0	N	8/3/2006	< 0.036 U	< 0.016 U	--	< 0.036 U	< 0.036 U	< 0.036 U	0.47	< 0.36 U	< 0.036 U	--
II	BDB-15	1a	0	N	4/4/1996	< 0.68 U	< 0.68 U	--	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	--
II	PUA-09	1a	0	N	4/3/1996	< 0.69 U	< 0.69 U	--	0.75	< 0.69 U	< 0.69 U	3	< 0.69 U	< 0.69 U	--
II	PUA-09	1a	5	N	4/3/1996	< 0.69 U	< 0.69 U	--	< 0.69 U	< 0.69 U	< 0.69 U	3.4	< 0.69 U	< 0.69 U	--
II	PUA-10	1a	0	N	4/3/1996	< 0.69 U	< 0.69 U	--	1.2	< 0.69 U	1.4	6.6	< 0.69 U	< 0.69 U	--
II	PUA-10	1a	5	N	4/3/1996	< 0.69 U	< 0.69 U	--	< 0.69 U	< 0.69 U	< 0.69 U	0.57	< 0.69 U	< 0.69 U	--
II	PUB-08	1a	0	N	4/3/1996	< 0.81 U	< 0.81 U	--	0.85	< 0.81					

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 10 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						Dimethyl phthalate	Di-n-octyl phthalate	Diphenyl sulfone	Fluoranthene	Fluorene	Hexachloro-1,3-butadiene	Hexachlorobenzene	Hexachlorocyclopentadiene	Hexachloroethane	Hydroxymethyl phthalimide
II	PUE-05	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--
II	PUE-06	1a	0	N	4/1/1996	< 0.71 U	< 0.71 U	--	2.2	< 0.71 U	< 0.71 U	16	< 0.71 U	< 0.71 U	--
II	PUE-06	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--
II	PUE-07	1a	0	N	4/2/1996	< 0.71 U	< 0.71 U	--	0.95	< 0.71 U	< 0.71 U	1.9	< 0.71 U	< 0.71 U	--
II	PUE-07	1a	5	N	4/2/1996	< 0.69 U	< 0.69 U	--	0.67	< 0.69 U	< 0.69 U	1.6	< 0.69 U	< 0.69 U	--
II	PUF-03	1a	0	N	3/28/1996	< 0.67 U	< 0.67 U	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	--
II	PUF-03	1a	5	N	3/28/1996	--	--	--	< 0.71 U	--	< 0.71 U	< 0.71 U	--	--	--
II	PUF-05	1a	0	N	4/4/1996	< 0.7 U	< 0.7 U	--	0.68	< 0.7 U	< 0.7 U	2.5	< 0.7 U	< 0.7 U	--
II	PUF-05	1a	5	N	4/4/1996	< 0.7 U	< 0.7 U	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	--
II	PUG-04	1a	0	N	4/4/1996	< 0.67 U	< 0.67 U	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	--
II	PUG-04	1a	5	N	4/4/1996	< 0.7 U	< 0.7 U	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	--
II	PUG-06	1a	0	N	4/4/1996	< 0.7 U	< 0.7 U	--	0.35	< 0.7 U	< 0.7 U	1.1	< 0.7 U	< 0.7 U	--
II	PUG-06	1a	5	N	4/4/1996	< 0.77 U	< 0.77 U	--	< 0.77 U	< 0.77 U	< 0.77 U	< 0.77 U	< 0.77 U	< 0.77 U	--
II	PUG-07	1a	0	N	4/4/1996	< 0.69 U	< 0.69 U	--	1.6	< 0.69 U	< 0.69 U	4.3	< 0.69 U	< 0.69 U	--
II	PUG-07	1a	5	N	4/4/1996	< 0.69 U	< 0.69 U	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	--
II	SB-16-B	27	0	N	5/23/2004	< 0.02 U	< 0.15 U	< 0.34 U	< 0.024 U	< 0.019 U	< 0.013 U	< 0.018 U	< 0.073 U	< 0.017 U	< 0.34 U
II	SB-16-B	27	7	N	5/23/2004	< 0.02 U	< 0.15 U	< 0.34 U	< 0.024 U	< 0.019 U	< 0.013 U	< 0.018 U	< 0.073 U	< 0.017 U	< 0.34 U
II	SB-16-B	27	17	N	5/23/2004	< 0.02 U	< 0.15 U	< 0.34 U	< 0.024 U	< 0.019 U	< 0.013 U	< 0.018 U	< 0.073 U	< 0.016 U	< 0.34 U
II	SB-16-B	27	27	N	5/23/2004	< 0.021 U	< 0.15 U	< 0.35 U	< 0.024 U	< 0.02 U	< 0.013 U	< 0.019 U	< 0.075 U	< 0.017 U	< 0.35 U
II	SB-16-B	27	47	N	5/23/2004	< 0.02 U	< 0.14 U	< 0.34 U	< 0.023 U	< 0.019 U	< 0.013 U	< 0.018 U	< 0.073 U	< 0.016 U	< 0.34 U
II	SB-16-B	27	67	N	5/23/2004	< 0.027 U	< 0.2 U	< 0.46 U	< 0.032 U	< 0.026 U	< 0.017 U	< 0.025 U	< 0.099 U	< 0.022 U	< 0.46 U
II	SB-16-B	27	77	N	5/24/2004	< 0.027 U	< 0.19 U	< 0.45 U	< 0.031 U	< 0.026 U	< 0.017 U	< 0.024 U	< 0.096 U	< 0.022 U	< 0.45 U
II	SB-16-B	27	97	N	5/24/2004	< 0.028 U	< 0.2 U	< 0.47 U	< 0.032 U	< 0.027 U	< 0.017 U	< 0.025 U	< 0.1 U	< 0.023 U	< 0.47 U
II	SB-16-B	27	247	N	5/25/2004	--	--	--	--	--	< 0.02 U	--	--	--	--
II	WC-BD02	39	0	N	8/2/2006	< 0.034 U	< 0.015 U	--	< 0.034 U	< 0.034 U	< 0.034 U	0.16 J	< 0.34 U	< 0.034 U	--
II	WC-IM04	39	0	N	8/2/2006	< 0.035 U	< 0.016 U	--	0.32 J	< 0.035 U	< 0.035 U	20	< 0.35 U	< 0.035 U	--
II	WC-UP01	39	0	N	7/28/2006	< 0.035 U	< 0.016 U	--	0.07 J	< 0.035 U	< 0.035 U	1.1	< 0.35 U	< 0.035 U	--
II	WC-UP02	39	0	N	7/31/2006	< 0.034 U	< 0.015 U	--	0.2 J	< 0.034 U	< 0.034 U	1.8	< 0.34 U	< 0.034 U	--
II	WC-UP03	39	0</												

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 11 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						Isophorone	Naphthalene	Nitrobenzene	N-nitrosodi-n-propylamin	N-nitrosodiphenylamine	o-Cresol	p-Chloroaniline	p-Chlorothiophenol	p-Cresol	Pentachlorobenzene
I	PUA-05	1a	0	N	4/4/1996	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 1.3 U	--	< 0.68 U	--
I	PUA-05	1a	5	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 1.4 U	--	< 0.69 U	--
I	PUA-07	1a	0	N	4/4/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 1.3 U	--	< 0.66 U	--
I	PUA-07	1a	5	N	4/4/1996	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 1.3 U	--	< 0.65 U	--
I	PUB-04	1a	0	N	3/26/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 1.4 U	--	< 0.69 U	--
I	PUB-06	1a	0	N	4/3/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 1.3 U	--	< 0.66 U	--
I	PUB-06	1a	5	N	4/3/1996	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U	< 0.64 U	< 1.3 U	--	< 0.64 U	--
I	PUC-03	1a	0	N	3/26/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 1.3 U	--	< 0.67 U	--
I	PUF-01	1a	0	N	3/25/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 3.3 U	< 0.67 U	< 1.3 U	--	< 0.67 U	--
I	WC-IM01	39	0	N	8/3/2006	--	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.13 U	< 0.036 UJ	--	--	1.4
I	WC-IM02	39	0	N	8/3/2006	--	< 0.037 U	< 0.037 U	< 0.037 U	< 0.037 U	< 0.13 U	< 0.037 UJ	--	--	1.5
I	WC-IM03	39	0	N	8/3/2006	--	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.13 U	< 0.036 UJ	--	--	0.96
I	WC-IM05	39	0	N	8/3/2006	--	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.12 U	< 0.035 UJ	--	--	< 0.035 U
I	WC-IM06	39	0	N	8/3/2006	--	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.12 U	< 0.035 UJ	--	--	1.2
I	WC-IM07	39	0	N	8/3/2006	--	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.13 U	< 0.036 UJ	--	--	0.2 J
II	BDB-15	1a	0	N	4/4/1996	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 1.3 U	--	< 0.68 U	--
II	PUA-09	1a	0	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 1.4 U	--	< 0.69 U	--
II	PUA-09	1a	5	N	4/3/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	&			

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 12 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)									
						Isophorone	Naphthalene	Nitrobenzene	N-nitrosodi-n-propylamin	N-nitrosodiphenylamine	o-Cresol	p-Chloroaniline	p-Chlorothiophenol	p-Cresol	Pentachlorobenzene
II	PUE-05	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 1.4 U	--	< 0.69 U	--
II	PUE-06	1a	0	N	4/1/1996	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	< 1.4 U	--	< 0.71 U	--
II	PUE-06	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 1.4 U	--	< 0.69 U	--
II	PUE-07	1a	0	N	4/2/1996	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	< 1.4 U	--	< 0.71 U	--
II	PUE-07	1a	5	N	4/2/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 1.4 U	--	< 0.69 U	--
II	PUF-03	1a	0	N	3/28/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 1.3 U	--	< 0.67 U	--
II	PUF-03	1a	5	N	3/28/1996	--	--	--	--	--	--	< 1.4 U	--	--	--
II	PUF-05	1a	0	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 1.4 U	--	< 0.7 U	--
II	PUF-05	1a	5	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 1.4 U	--	< 0.7 U	--
II	PUG-04	1a	0	N	4/4/1996	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 0.67 U	< 1.3 U	--	< 0.67 U	--
II	PUG-04	1a	5	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 1.4 U	--	< 0.7 U	--
II	PUG-06	1a	0	N	4/4/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 1.4 U	--	< 0.7 U	--
II	PUG-06	1a	5	N	4/4/1996	< 0.77 U	< 0.77 U	< 0.77 U	< 0.77 U	< 0.77 U	< 0.77 U	< 1.5 U	--	< 0.77 U	--
II	PUG-07	1a	0	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 1.4 U	--	< 0.69 U	--
II	PUG-07	1a	5	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 1.4 U	--	< 0.69 U	--
II	SB-16-B	27	0	N	5/23/2004	< 0.019 U	< 0.015 U	< 0.018 U	< 0.02 U	< 0.021 U	< 0.02 U	< 0.031 U	< 0.34 U	--	< 0.022 U
II	SB-16-B	27	7	N	5/23/2004	< 0.019 U	< 0.015 U	< 0.018 U	< 0.02 U	< 0.021 U	< 0.02 U	< 0.031 U	< 0.34 U	--	< 0.022 U
II	SB-16-B	27	17	N	5/23/2004	< 0.019 U	< 0.015 U	< 0.019 U	< 0.021 U	< 0.022 U	< 0.02 U	< 0.032 U	< 0.35 U	--	< 0.023 U
II	SB-16-B	27	47	N	5/23/2004	< 0.019 U	< 0.015 U	< 0.018 U	< 0.02 U	< 0.021 U	< 0.02 U	< 0.031 U	< 0.34 U	--	< 0.022 U
II	SB-16-B	27	67	N	5/23/2004	< 0.025 U	< 0.02 U	< 0.025 U	< 0.027 U	< 0.029 U	< 0.027 U	< 0.042 U	< 0.46 U	--	< 0.03 U
II	SB-16-B	27	77	N	5/24/2004	< 0.025 U	< 0.02 U	< 0.024 U	< 0.027 U	< 0.028 U	< 0.026 U	< 0.041 U	< 0.45 U	--	< 0.029 U
II	SB-16-B	27	97	N	5/24/2004	< 0.026 U	< 0.021 U	< 0.025 U	< 0.028 U	< 0.029 U	< 0.027 U	< 0.043 U	< 0.47 U	--	< 0.031 U
II	SB-16-B	27	247	N	5/25/2004	--	< 0.2 U	--	--	--	--	--	--	--	--
II	WC-BD02	39	0	N	8/2/2006	--	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 UJ	--	--	< 0.034 U
II	WC-IM04	39	0	N	8/2/2006	--	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 UJ	--	--	2.1
II	WC-UP01	39	0	N	7/28/2006	--	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 U	< 0.035 UJ	--	--	0.052 J
II	WC-UP02	39	0	N	7/31/2006	--	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 UJ	--	--	0.28 J
II	WC-UP03	39	0	N	7/31/2006	--	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 U	< 0.036 UJ	--	--	0.078 J
II	WC-UP04	39	0	N	7/28/2006	--	< 0.034 U	< 0.034 U	< 0.034 U	< 0.034 U					

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 13 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)						
						Pentachlorophenol	Phenol	Phenyl Disulfide	Phenyl Sulfide	Phthalic acid	p-Nitroaniline	Pyridine
I	PUA-05	1a	0	N	4/4/1996	< 3.4 U	< 0.68 U	--	--	--	< 3.4 U	--
I	PUA-05	1a	5	N	4/4/1996	< 3.5 U	< 0.69 U	--	--	--	< 3.5 U	--
I	PUA-07	1a	0	N	4/4/1996	< 3.3 U	< 0.66 U	--	--	--	< 3.3 U	--
I	PUA-07	1a	5	N	4/4/1996	< 3.3 U	< 0.65 U	--	--	--	< 3.3 U	--
I	PUB-04	1a	0	N	3/26/1996	< 3.4 U	< 0.69 U	--	--	--	< 3.4 U	--
I	PUB-06	1a	0	N	4/3/1996	< 3.3 U	< 0.66 U	--	--	--	< 3.3 U	--
I	PUB-06	1a	5	N	4/3/1996	< 3.2 U	< 0.64 U	--	--	--	< 3.2 U	--
I	PUC-03	1a	0	N	3/26/1996	< 3.4 U	< 0.67 U	--	--	--	< 3.4 U	--
I	PUF-01	1a	0	N	3/25/1996	< 3.3 U	< 0.67 U	--	--	--	< 0.67 U	--
I	WC-IM01	39	0	N	8/3/2006	< 0.36 U	< 0.036 U	--	--	< 0.27 U	< 0.36 U	< 0.036 U
I	WC-IM02	39	0	N	8/3/2006	< 0.36 U	< 0.037 U	--	--	< 0.28 U	< 0.36 U	< 0.037 U
I	WC-IM03	39	0	N	8/3/2006	< 0.35 U	< 0.036 U	--	--	< 0.27 U	< 0.35 U	< 0.036 U
I	WC-IM05	39	0	N	8/3/2006	< 0.34 U	< 0.035 U	--	--	< 0.26 U	< 0.34 U	< 0.035 U
I	WC-IM06	39	0	N	8/3/2006	< 0.35 U	< 0.035 U	--	--	< 0.26 U	< 0.35 U	< 0.035 U
I	WC-IM07	39	0	N	8/3/2006	< 0.36 U	< 0.036 U	--	--	< 0.27 U	< 0.36 U	< 0.036 U
II	BDB-15	1a	0	N	4/4/1996	< 3.4 U	< 0.68 U	--	--	--	< 3.4 U	--
II	PUA-09	1a	0	N	4/3/1996	< 3.4 U	< 0.69 U	--	--	--	< 3.4 U	--
II	PUA-09	1a	5	N	4/3/1996	< 3.4 U	< 0.69 U	--	--	--	< 3.4 U	--
II	PUA-10	1a	0	N	4/3/1996	< 3.4 U	< 0.69 U	--	--	--	< 3.4 U	--
II	PUA-10	1a	5	N	4/3/1996	< 3.4 U	< 0.69 U	--	--	--	< 3.4 U	--
II	PUB-08	1a	0	N	4/3/1996	< 4.1 U	< 0.81 U	--	--	--	< 4.1 U	--
II	PUB-08	1a	5	N	4/3/1996	< 3.3 U	< 0.66 U	--	--	--	< 3.3 U	--
II	PUB-09	1a	0	N	4/3/1996	1.5	< 0.68 U	--	--	--	< 3.4 U	--
II	PUB-09	1a	5	N	4/3/1996	< 3.5 U	< 0.69 U	--	--	--	< 3.5 U	--
II	PUB-10	1a	0	N	4/3/1996	1.3	< 0.69 U	--	--	--	< 3.5 U	--
II	PUB-10	1a	5	N	4/3/1996	< 130 U	< 26 U	--	--	--	< 13 U	--
II	PUC-05	1a	0	N	4/3/1996	< 3.3 U	< 0.67 U	--	--	--	< 3.3 U	--
II	PUC-05	1a	5	N	4/3/1996	< 3.3 U	< 0.65 U	--	--	--	< 3.3 U	--
II	PUC-07	1a	0	N	4/3/1996	< 3.3 U	< 0.66 U	--	--	--	< 3.3 U	--
II	PUC-07	1a	5	N	4/3/1996	< 3.3 U	< 0.66 U	--	--	--	< 3.3 U	--
II	PUC-08	1a	0	N	4/2/1996	< 3.4 U	< 0.68 U	--	--	--	< 3.4 U	--
II	PUC-08	1a	5	N	4/2/1996	< 3.4 U	< 0.68 U	--	--	--	< 3.4 U	--
II	PUD-06	1a	0	N	4/2/1996	< 3.5 U	< 0.7 U	--	--	--	< 3.5 U	--
II	PUD-06	1a	5	N	4/2/1996	< 3.2 U	< 0.64 U	--	--	--	< 3.2 U	--
II	PUD-08	1a	0	N	4/2/1996	< 3.5 U	< 0.7 U	--	--	--	< 3.5 U	--
II	PUD-08	1a	5	N	4/2/1996	< 3.3 U	< 0.65 U	--	--	--	< 3.3 U	--
II	PUD-09	1a	0	N	4/2/1996	< 3.5 U	< 0.69 U	--	--	--	< 3.5 U	--
II	PUD-09	1a	5	N	4/2/1996	< 3.4 U	< 0.68 U	--	--	--	< 3.4 U	--
II	PUE-03	1a	0	N	4/1/1996	< 3.4 U	< 0.67 U	--	--	--	< 3.4 U	--
II	PUE-05	1a	0	N	4/1/1996	< 3.5 U	< 0.7 U	--	--	--	< 3.5 U	--

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 14 of 14)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Semi-Volatile Organic Compounds (SVOCs)						
						Pentachlorophenol	Phenol	Phenyl Disulfide	Phenyl Sulfide	Phthalic acid	p-Nitroaniline	Pyridine
II	PUE-05	1a	5	N	4/1/1996	< 3.5 U	< 0.69 U	--	--	--	< 3.5 U	--
II	PUE-06	1a	0	N	4/1/1996	0.48	< 0.71 U	--	--	--	< 3.6 U	--
II	PUE-06	1a	5	N	4/1/1996	< 3.4 U	< 0.69 U	--	--	--	< 3.4 U	--
II	PUE-07	1a	0	N	4/2/1996	< 3.6 U	< 0.71 U	--	--	--	< 3.6 U	--
II	PUE-07	1a	5	N	4/2/1996	< 3.5 U	< 0.69 U	--	--	--	< 3.5 U	--
II	PUF-03	1a	0	N	3/28/1996	< 3.4 U	< 0.67 U	--	--	--	< 3.4 U	--
II	PUF-03	1a	5	N	3/28/1996	< 3.6 U	< 0.71 U	--	--	--	--	--
II	PUF-05	1a	0	N	4/4/1996	< 3.5 U	< 0.7 U	--	--	--	< 3.5 U	--
II	PUF-05	1a	5	N	4/4/1996	< 3.5 U	< 0.7 U	--	--	--	< 3.5 U	--
II	PUG-04	1a	0	N	4/4/1996	< 3.3 U	< 0.67 U	--	--	--	< 3.3 U	--
II	PUG-04	1a	5	N	4/4/1996	< 3.5 U	< 0.7 U	--	--	--	< 3.5 U	--
II	PUG-06	1a	0	N	4/4/1996	< 3.5 U	< 0.7 U	--	--	--	< 3.5 U	--
II	PUG-06	1a	5	N	4/4/1996	< 3.8 U	< 0.77 U	--	--	--	< 3.8 U	--
II	PUG-07	1a	0	N	4/4/1996	1.3	< 0.69 U	--	--	--	< 3.5 U	--
II	PUG-07	1a	5	N	4/4/1996	< 3.5 U	< 0.69 U	--	--	--	< 3.5 U	--
II	SB-16-B	27	0	N	5/23/2004	< 0.12 U	< 0.09 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.022 U	< 0.068 U
II	SB-16-B	27	7	N	5/23/2004	< 0.12 U	< 0.089 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.022 U	< 0.068 U
II	SB-16-B	27	17	N	5/23/2004	< 0.12 U	< 0.089 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.022 U	< 0.068 U
II	SB-16-B	27	27	N	5/23/2004	< 0.12 U	< 0.091 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.023 U	< 0.069 U
II	SB-16-B	27	47	N	5/23/2004	< 0.12 U	< 0.089 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.022 U	< 0.068 U
II	SB-16-B	27	67	N	5/23/2004	< 0.16 U	< 0.12 U	< 0.46 U	< 0.46 U	< 0.46 U	< 0.03 U	< 0.092 U
II	SB-16-B	27	77	N	5/24/2004	< 0.16 U	< 0.12 U	< 0.45 U	< 0.45 U	< 0.45 U	< 0.03 U	< 0.089 U
II	SB-16-B	27	97	N	5/24/2004	< 0.16 U	< 0.12 U	< 0.47 U	< 0.47 U	< 0.47 U	< 0.031 U	< 0.093 U
II	SB-16-B	27	247	N	5/25/2004	--	--	--	--	--	--	--
II	WC-BD02	39	0	N	8/2/2006	< 0.34 U	< 0.034 U	--	--	< 0.26 U	< 0.34 U	< 0.34 U
II	WC-IM04	39	0	N	8/2/2006	< 0.35 U	< 0.035 U	--	--	< 0.26 U	< 0.35 U	< 0.35 U
II	WC-UP01	39	0	N	7/28/2006	< 0.35 U	< 0.035 U	--	--	< 1.7 U	< 0.35 U	< 0.35 U
II	WC-UP02	39	0	N	7/31/2006	< 0.34 U	< 0.034 U	--	--	< 1.7 U	< 0.34 U	< 0.34 U
II	WC-UP03	39	0	N	7/31/2006	< 0.35 U	< 0.036 U	--	--	< 1.7 U	< 0.35 U	< 0.35 U
II	WC-UP04	39	0	N	7/28/2006	< 0.34 U	< 0.034 U	--	--	< 1.6 U	< 0.34 U	< 0.34 U
II	WC-UP05	39	0	N	7/27/2006	< 0.34 U	< 0.034 U	--	--	< 1.6 U	< 0.34 U	< 0.34 U
II	WC-UP06	39	0	N	7/27/2006	< 0.34 U	< 0.034 U	--	--	< 1.6 U	< 0.34 U	< 0.34 U
II	WC-UP07	39	0	N	7/28/2006	< 0.34 U	< 0.034 U	--	--	< 1.6 U	< 0.34 U	< 0.34 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-5
SOIL DIOXINS/FURANS DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 2)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Dioxins/Furans								
						1,2,3,4,6,7,8-HpCDF	1,2,3,4,6,7,8-HpCDD	1,2,3,4,7,8,9-HpCDF	1,2,3,4,7,8-HxCDF	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDF	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDF	1,2,3,7,8,9-HxCDD
I	WC-IM01	39	0	N	8/3/2006	1600	220	1100	--	--	--	--	--	--
I	WC-IM02	39	0	N	8/3/2006	3700	300	3000	--	--	--	--	--	--
I	WC-IM03	39	0	N	8/3/2006	2000	190	1500	--	--	--	--	--	--
I	WC-IM05	39	0	N	8/3/2006	280	240	110	--	--	--	--	--	--
I	WC-IM06	39	0	N	8/3/2006	830	300	540	--	--	--	--	--	--
I	WC-IM07	39	0	N	8/3/2006	670	370	300	--	--	--	--	--	--
II	SB-16-B	27	0	N	5/23/2004	19	45	8.4	11	< 1.8 U	6.4	4.4	< 1.8 U	< 1.8 U
II	SB-16-B	27	7	N	5/23/2004	< 1.4 U	< 1 U	< 0.62 U	< 1.1 U	< 0.097 U	< 0.57 U	< 0.12 U	< 0.087 U	< 0.14 U
II	SB-16-B	27	17	N	5/23/2004	< 1 U	< 1.4 U	< 0.85 U	< 0.58 U	< 0.38 U	< 0.42 U	< 0.46 U	< 0.63 U	< 0.47 U
II	SB-16-B	27	27	N	5/23/2004	2.9	2.7	< 1.5 U	< 1.4 U	< 0.37 U	< 0.8 U	< 0.63 U	< 0.66 U	< 0.59 U
II	SB-16-B	27	47	N	5/23/2004	< 0.4 U	< 0.41 U	< 0.36 U	< 0.28 U	< 0.19 U	< 0.25 U	< 0.26 U	< 0.28 U	< 0.26 U
II	WC-BD02	39	0	N	8/2/2006	1100	110	530	--	--	--	--	--	--
II	WC-IM04	39	0	N	8/2/2006	420000 J	68000 J+	160000 J+	--	--	--	--	--	--
II	WC-UP01	39	0	N	7/28/2006	32000	3700	13000	--	--	--	--	--	--
II	WC-UP02	39	0	N	7/31/2006	10000	2200	3700	--	--	--	--	--	--
II	WC-UP03	39	0	N	7/31/2006	7300	5500	2500	--	--	--	--	--	--
II	WC-UP04	39	0	N	7/28/2006	2400	3500	640	--	--	--	--	--	--
II	WC-UP05	39	0	N	7/27/2006	270	100	89	--	--	--	--	--	--
II	WC-UP06	39	0	N	7/27/2006	910	1500	210	--	--	--	--	--	--
II	WC-UP07	39	0	N	7/28/2006	760	4500	240	--	--	--	--	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in pg/g.

-- = no sample data.

TABLE B-5
SOIL DIOXINS/FURANS DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 2)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Dioxins/Furans								
						1,2,3,7,8-PeCDF	1,2,3,7,8-PeCDD	2,3,4,6,7,8-HxCDF	2,3,4,7,8-PeCDF	2,3,7,8-TCDF	2,3,7,8-TCDD	OCDD	OCDF	TCDD TEQ
I	WC-IM01	39	0	N	8/3/2006	--	--	--	--	--	--	340	5100	29.7
I	WC-IM02	39	0	N	8/3/2006	--	--	--	--	--	--	630	17000	71.8
I	WC-IM03	39	0	N	8/3/2006	--	--	--	--	--	--	360	9700	37.9
I	WC-IM05	39	0	N	8/3/2006	--	--	--	--	--	--	450	3300	6.7
I	WC-IM06	39	0	N	8/3/2006	--	--	--	--	--	--	580	5500	17.3
I	WC-IM07	39	0	N	8/3/2006	--	--	--	--	--	--	1200	2600	13.8
II	SB-16-B	27	0	N	5/23/2004	6.2	< 1.9 U	< 1.9 U	4.4	3.2	< 1 U	96	230	7.6
II	SB-16-B	27	7	N	5/23/2004	< 0.51 U	< 0.1 U	< 0.16 U	< 0.31 U	< 0.68 U	< 0.056 U	< 2.3 U	9.5	0.33
II	SB-16-B	27	17	N	5/23/2004	< 0.4 U	< 0.33 U	< 0.35 U	< 0.33 U	< 0.28 U	< 0.15 U	8.7	< 4.8 U	0.53
II	SB-16-B	27	27	N	5/23/2004	< 0.88 U	< 0.26 U	< 0.47 U	< 0.57 U	< 0.37 U	< 0.17 U	7.7	42	0.71
II	SB-16-B	27	47	N	5/23/2004	< 0.23 U	< 0.17 U	< 0.23 U	< 0.19 U	< 0.15 U	< 0.11 U	< 1.2 U	< 1.8 U	0.29
II	WC-BD02	39	0	N	8/2/2006	--	--	--	--	--	--	89	3400	17.7
II	WC-IM04	39	0	N	8/2/2006	--	--	--	--	--	--	77000 J+	1700000 J	6657.7

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in pg/g.

-- = no sample data.

TABLE B-6
SOIL ALDEHYDES, GENERAL CHEMISTRY AND IONS DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 10)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions								
						Ammonia	Bicarbonate alkalinity	Bromide	Carbonate alkalinity	Chlorate	Chloride	Cyanide (Total)	Fluoride	Iodide
II	PUA-10	1a	0	N	4/3/1996	--	--	--	--	< 0.52 U	--	3	--	--
II	PUA-10	1a	5	N	4/3/1996	--	--	--	--	< 0.052 U	--	< 1 U	--	--
II	PUB-08	1a	0	N	4/3/1996	--	--	--	--	0.94	--	1.8	--	--
II	PUB-08	1a	5	N	4/3/1996	--	--	--	--	< 0.05 U	--	< 1 U	--	--
II	PUB-09	1a	0	N	4/3/1996	--	--	--	--	< 0.052 U	--	1.3	--	--

TABLE B-6
SOIL ALDEHYDES, GENERAL CHEMISTRY AND IONS DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 3 of 10)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions								
						Ammonia	Bicarbonate alkalinity	Bromide	Carbonate alkalinity	Chlorate	Chloride	Cyanide (Total)	Fluoride	Iodide
II	PUC-07	6d	39	N	10/20/1999	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	44	N	10/20/1999	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	49	N	10/20/1999	--	--	--	--	--	--	--	--	--
II	PUC-07-E-D	6a	0	N	10/19/1999	--	--	--	--	--	--	--	--	--
II	PUC-07-E-S	6a	0	N	10/19/1999	--	--	--	--	--	--	--	--	--
II	PUC-07-N-D	6a	0	N	10/19/1999	--	--	--	--	--	--	--	--	--
II	PUC-07-N-S	6a	0	N	10/19/1999	--	--	--	--	--	--	--	--	--
II	PUC-08	1a	0	N	4/2/1996	--	--	--	--	< 0.52 U	--	1	--	--
II	PUC-08	1a	5	N	4/2/1996	--	--	--	--	< 0.053 U	--	< 1.1 U	--	--
II	PUD-06	1a	0	N	4/2/1996	--	--	--	--	< 0.053 U	200	1.8	--	--
II	PUD-06	1a	5	N	4/2/1996	--	--	--	--	< 0.05 U	--	< 1 U	--	--

TABLE B-6
SOIL ALDEHYDES, GENERAL CHEMISTRY AND IONS DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 4 of 10)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions								
						Ammonia	Bicarbonate alkalinity	Bromide	Carbonate alkalinity	Chlorate	Chloride	Cyanide (Total)	Fluoride	Iodide
II	PUE-07-E-D	6a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--
II	PUE-07-E-S	6a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--
II	PUE-07NCD	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--
II	PUE-07NCOM	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--
II	PUE-07-N-D	6a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--
II	PUE-07NED	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--
II	PUE-07-N-S	6a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--
II	PUE-07NWD	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--
II	PUE-07SCD	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--
II	PUE-07SCOM	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--
II	PUE-07SED	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--
II	PUE-07SWD	8a	0	N	7/19/2000	--	--	--	--	--	--	--	--	--
II	PUF-02	6d	0	N	10/12/1999									

TABLE B-6
SOIL ALDEHYDES, GENERAL CHEMISTRY AND IONS DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 5 of 10)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions								
						Ammonia	Bicarbonate alkalinity	Bromide	Carbonate alkalinity	Chlorate	Chloride	Cyanide (Total)	Fluoride	Iodide
II	SB-16-B	27	125	N	5/24/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	131	N	5/24/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	155.5	N	5/25/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	184	N	5/25/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	209.5	N	5/25/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	225.5	N	5/25/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	247	N	5/25/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	266.5	N	5/26/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	285	N	5/26/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	313	N	5/26/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	342	N	5/27/2004	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	362.5	N	5/27/2004	--	--	--	--	--	--	--	--	--
II	SWB-24	33	5	N	4/12/2005	--	360	--	< 25 U	--	300	--	--	--
II	SWB-24	33	10	N	4/12/2005	--	430	--	< 25 U	--	134	--	--	--
II	SWB-24	33	20	N	4/12/2005	--	450	--	< 25 U	--	136	--	--	--
II	SWB-24	33	30	N	4/12/2005	--	440	--	30	--	35	--	--	--
II	SWB-24	33	40	N	4/12/2005	--	580	--	< 25 U	--	28	--	--	--
II	WC-BD02	39	0	N	8/2/2006	--	--	--	--	--	--	< 0.12 U	--	--
II	WC-IM04	39	0	N	8/2/2006	--	--	--	--	--	--	0.66	--	--
II	WC-UP01	39	0	N	7/28/2006	--	--	--	--	--	--	< 0.13 U	--	--
II	WC-UP02	39	0	N	7/31/2006	--	--	--	--	--	--	0.87	--	--
II	WC-UP03	39	0	N	7/31/2006	--	--	--	--	--	--	1.7	--	--
II	WC-UP04	39	0	N	7/28/2006	--	--	--	--	--	--	0.68	--	--
II	WC-UP05	39	0	N	7/27/2006	--	--	--	--	--	--	< 0.12 U	--	--
II	WC-UP06	39	0	N	7/27/2006	--	--	--	--	--	--	0.55	--	--
II	WC-UP07	39	0	N	7/28/2006	--	--	--	--	--	--	0.42 J	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-6
SOIL ALDEHYDES, GENERAL CHEMISTRY AND IONS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions							Aldehydes	
						Nitrate (as N)	Nitrite (as N)	Orthophosphate as P	Perchlorate	Sulfate	Sulfide	Total Kjeldahl Nitrogen (TKN)	Acetaldehyde	Formaldehyde
I	PUA-03N	7a	0	N	10/20/1999	--	--	--	0.19	--	--	--	--	--
I	PUA-03S	7a	0	N	10/20/1999	--	--	--	0.23	--	--	--	--	--
I	PUA-05	1a	0	N	4/4/1996	--	--	--	--	--	--	--	--	--
I	PUA-05	1a	5	N	4/4/1996	--	--	--	--	--	--	--	--	--
I	PUA-07	1a	0	N	4/4/1996	--	--	--	--	--	--	--	--	--
I	PUA-07	1a	5	N	4/4/1996	--	--	--	--	--	--	--	--	--
I	PUA-07-E-D	6a	0	N	10/19/1999	--	--	--	0.42	--	--	--	--	--
I	PUA-07-E-S	6a	0	N	10/19/1999	--	--	--	0.19	--	--	--	--	--
I	PUA-07-N-D	6a	0	N	10/19/1999	--	--	--	0.51	--	--	--	--	--
I	PUA-07-N-S	6a	0	N	10/19/1999	--	--	--	0.11	--	--	--	--	--
I	PUA-09SED	8a	0	N	7/20/2000	--	--	--	0.83	--	--	--	--	--
I	PUB-03N	7a	0	N	10/20/1999	--	--	--	0.31	--	--	--	--	--
I	PUB-03S	7a	0	N	10/20/1999	--	--	--	0.086	--	--	--	--	--
I	PUB-04	1a	0	N	3/26/1996	--	--	--	--	--	--	--	--	--
I	PUB-05	6d	0	N	10/13/1999	--	--	--	0.58	--	--	--	--	--
I	PUB-06	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--
I	PUB-06	1a	5	N	4/3/1996	--	--	--	--	--	--	--	--	--
I	PUC-03	1a	0	N	3/26/1996	--	--	--	--	--	--	--	--	--
I	PUC-03	1a	5	N	3/26/1996	--	--	--	--	--	--	--	--	--
I	PUE-02	6d	0	N	10/12/1999	--	--	--	< 0.04 U	--	--	--	--	--
I	PUF-01	1a	0	N	3/25/1996	--	--	--	--	--	--	--	--	--
I	PUF-01	1a	5	N	3/25/1996	--	--	--	--	--	--	--	--	--
I	WC-IM01	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM02	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM03	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM05	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM06	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM07	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
II	BDB-15	1a	0	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	BDB-15	1a	5	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	PUA-09	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUA-09	1a	5	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUA-09NCD	8a	0	N	7/20/2000	--	--	--	0.42	--	--	--	--	--
II	PUA-09NCOM	8a	0	N	7/20/2000	--	--	--	1.2	--	--	--	--	--
II	PUA-09NED	8a	0	N	7/20/2000	--	--	--	0.4	--	--	--	--	--
II	PUA-09NWD	8a	0	N	7/20/2000	--	--	--	1.7	--	--	--	--	--
II	PUA-09SCD	8a	0	N	7/20/2000	--	--	--	0.82	--	--	--	--	--
II	PUA-09SCOM	8a	0	N	7/20/2000	--	--	--	0.45	--	--	--	--	--
II	PUA-09SWD	8a	0	N	7/20/2000	--	--	--	2	--	--	--	--	--

TABLE B-6
SOIL ALDEHYDES, GENERAL CHEMISTRY AND IONS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions							Aldehydes	
						Nitrate (as N)	Nitrite (as N)	Orthophosphate as P	Perchlorate	Sulfate	Sulfide	Total Kjeldahl Nitrogen (TKN)	Acetaldehyde	Formaldehyde
II	PUA-10	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUA-10	1a	5	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUB-08	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUB-08	1a	5	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUB-09	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUB-09	1a	5	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUB-10	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUB-10	1a	5	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	0	N	10/19/1999	--	--	--	8.4	--	--	--	--	--
II	PUB-10	6d	5	N	10/19/1999	--	--	--	0.06	--	--	--	--	--
II	PUB-10	6d	10	N	10/19/1999	--	--	--	0.11	--	--	--	--	--
II	PUB-10	6d	15	N	10/19/1999	--	--	--	0.16	--	--	--	--	--
II	PUB-10	6d	19	N	10/19/1999	--	--	--	0.16	--	--	--	--	--
II	PUB-10	6d	24	N	10/19/1999	--	--	--	0.18	--	--	--	--	--
II	PUB-10	6d	29	N	10/19/1999	--	--	--	0.22	--	--	--	--	--
II	PUB-10	6d	39	N	10/19/1999	--	--	--	0.14	--	--	--	--	--
II	PUB-10	6d	49	N	10/19/1999	--	--	--	0.21	--	--	--	--	--
II	PUB-10-E-D	6a	0	N	10/19/1999	--	--	--	1.5	--	--	--	--	--
II	PUB-10-E-S	6a	0	N	10/19/1999	--	--	--	0.06	--	--	--	--	--
II	PUB-10NCD	8a	0	N	7/20/2000	--	--	--	11	--	--	--	--	--
II	PUB-10NCOM	8a	0	N	7/20/2000	--	--	--	26	--	--	--	--	--
II	PUB-10-N-D	6a	0	N	10/19/1999	--	--	--	4.7	--	--	--	--	--
II	PUB-10NED	8a	0	N	7/20/2000	--	--	--	3.2	--	--	--	--	--
II	PUB-10-N-S	6a	0	N	10/19/1999	--	--	--	0.41	--	--	--	--	--
II	PUB-10NWD	8a	0	N	7/20/2000	--	--	--	5.1	--	--	--	--	--
II	PUB-10SCD	8a	0	N	7/20/2000	--	--	--	4	--	--	--	--	--
II	PUB-10SCOM	8a	0	N	7/20/2000	--	--	--	< 8.32 U	--	--	--	--	--
II	PUB-10SWD	8a	0	N	7/20/2000	--	--	--	9.1	--	--	--	--	--
II	PUC-05	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUC-05	1a	5	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUC-07	1a	0	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUC-07	1a	5	N	4/3/1996	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	0	N	10/20/1999	--	--	--	5.7	--	--	--	--	--
II	PUC-07	6d	5	N	10/20/1999	--	--	--	< 0.04 U	--	--	--	--	--
II	PUC-07	6d	10	N	10/20/1999	--	--	--	< 0.04 U	--	--	--	--	--
II	PUC-07	6d	15	N	10/20/1999	--	--	--	< 0.04 U	--	--	--	--	--
II	PUC-07	6d	19	N	10/20/1999	--	--	--	< 0.04 U	--	--	--	--	--
II	PUC-07	6d	24	N	10/20/1999	--	--	--	< 0.04 U	--	--	--	--	--
II	PUC-07	6d	29	N	10/20/1999	--	--	--	< 0.04 U	--	--	--	--	--

TABLE B-6
SOIL ALDEHYDES, GENERAL CHEMISTRY AND IONS DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions							Aldehydes	
						Nitrate (as N)	Nitrite (as N)	Orthophosphate as P	Perchlorate	Sulfate	Sulfide	Total Kjeldahl Nitrogen (TKN)	Acetaldehyde	Formaldehyde
II	PUC-07	6d	39	N	10/20/1999	--	--	--	0.13	--	--	--	--	--
II	PUC-07	6d	44	N	10/20/1999	--	--	--	0.42	--	--	--	--	--
II	PUC-07	6d	49	N	10/20/1999	--	--	--	0.21	--	--	--	--	--
II	PUC-07-E-D	6a	0	N	10/19/1999	--	--	--	9.9	--	--	--	--	--
II	PUC-07-E-S	6a	0	N	10/19/1999	--	--	--	0.42	--	--	--	--	--
II	PUC-07-N-D	6a	0	N	10/19/1999	--	--	--	19	--	--	--	--	--
II	PUC-07-N-S	6a	0	N	10/19/1999	--	--	--	0.16	--	--	--	--	--
II	PUC-08	1a	0	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUC-08	1a	5	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUD-06	1a	0	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUD-06	1a	5	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUD-06-E-D	6a	0	N	10/20/1999	--	--	--	0.05	--	--	--	--	--
II	PUD-06-E-S	6a	0	N	10/20/1999	--	--	--	0.07	--	--	--	--	--
II	PUD-06-N-D	6a	0	N	10/20/1999	--	--	--	0.13	--	--	--	--	--
II	PUD-06-N-S	6a	0	N	10/20/1999	--	--	--	0.08	--	--	--	--	--
II	PUD-08	1a	0	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUD-08	1a	5	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUD-09	1a	0	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUD-09	1a	5	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUE-03	1a	0	N	4/1/1996	--	--	--	--	--	--	--	--	--
II	PUE-03	1a	5	N	4/1/1996	--	--	--	--	--	--	--	--	--
II	PUE-03	6d	0	N	10/12/1999	--	--	--	0.065	--	--	--	--	--
II	PUE-05	1a	0	N	4/1/1996	--	--	--	--	--	--	--	--	--
II	PUE-05	1a	5	N	4/1/1996	--	--	--	--	--	--	--	--	--
II	PUE-06	1a	0	N	4/1/1996	--	--	--	--	--	--	--	--	--
II	PUE-06	1a	5	N	4/1/1996	--	--	--	--	--	--	--	--	--
II	PUE-07	1a	0	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUE-07	1a	5	N	4/2/1996	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	0	N	10/20/1999	--	--	--	3.6	--	--	--	--	--
II	PUE-07	6d	5	N	10/20/1999	--	--	--	0.54	--	--	--	--	--
II	PUE-07	6d	10	N	10/20/1999	--	--	--	0.56	--	--	--	--	--
II	PUE-07	6d	15	N	10/20/1999	--	--	--	0.36	--	--	--	--	--
II	PUE-07	6d	19	N	10/20/1999	--	--	--	0.62	--	--	--	--	--
II	PUE-07	6d	24	N	10/20/1999	--	--	--	0.47	--	--	--	--	--
II	PUE-07	6d	29	N	10/20/1999	--	--	--	0.45	--	--	--	--	--
II	PUE-07	6d	34	N	10/20/1999	--	--	--	0.41	--	--	--	--	--
II	PUE-07	6d	39	N	10/20/1999	--	--	--	0.45	--	--	--	--	--
II	PUE-07	6d	44	N	10/20/1999	--	--	--	0.54	--	--	--	--	--
II	PUE-07	6d	49	N	10/20/1999	--	--	--	< 0.04 U	--	--	--	--	--

TABLE B-6
SOIL ALDEHYDES, GENERAL CHEMISTRY AND IONS DATA
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions							Aldehydes	
						Nitrate (as N)	Nitrite (as N)	Orthophosphate as P	Perchlorate	Sulfate	Sulfide	Total Kjeldahl Nitrogen (TKN)	Acetaldehyde	Formaldehyde
II	PUE-07-E-D	6a	0	N	10/20/1999	--	--	--	3.9	--	--	--	--	--
II	PUE-07-E-S	6a	0	N	10/20/1999	--	--	--	0.52	--	--	--	--	--
II	PUE-07NCD	8a	0	N	7/19/2000	--	--	--	9.3	--	--	--	--	--
II	PUE-07NCOM	8a	0	N	7/19/2000	--	--	--	< 0.0408 U	--	--	--	--	--
II	PUE-07-N-D	6a	0	N	10/20/1999	--	--	--	3.8	--	--	--	--	--
II	PUE-07NED	8a	0	N	7/19/2000	--	--	--	20	--	--	--	--	--
II	PUE-07-N-S	6a	0	N	10/20/1999	--	--	--	3.7	--	--	--	--	--
II	PUE-07NWD	8a	0	N	7/19/2000	--	--	--	8.4	--	--	--	--	--
II	PUE-07SCD	8a	0	N	7/19/2000	--	--	--	12	--	--	--	--	--
II	PUE-07SCOM	8a	0	N	7/19/2000	--	--	--	26	--	--	--	--	--
II	PUE-07SED	8a	0	N	7/19/2000	--	--	--	22	--	--	--	--	--
II	PUE-07SWD	8a	0	N	7/19/2000	--	--	--	23	--	--	--	--	--
II	PUF-02	6d	0	N	10/12/1999	--	--	--	0.21	--	--	--	--	--
II	PUF-03	1a	0	N	3/28/1996	--	--	--	--	--	--	--	--	--
II	PUF-03	1a	5	N	3/28/1996	--	--	--	--	--	--	--	--	--
II	PUF-03	6d	0	N	10/12/1999	--	--	--	0.15	--	--	--	--	--
II	PUF-05	1a	0	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	PUF-05	1a	5	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	PUG-02	6d	0	N	10/12/1999	--	--	--	0.043	--	--	--	--	--
II	PUG-03	6d	0	N	10/12/1999	--	--	--	< 0.04 U	--	--	--	--	--
II	PUG-04	1a	0	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	PUG-04	1a	5	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	PUG-04	6d	0	N	10/12/1999	--	--	--	1.4	--	--	--	--	--
II	PUG-05	6d	0	N	10/12/1999	--	--	--	2.8	--	--	--	--	--
II	PUG-06	1a	0	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	PUG-06	1a	5	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	PUG-06	6d	0	N	10/12/1999	--	--	--	5.8	--	--	--	--	--
II	PUG-07	1a	0	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	PUG-07	1a	5	N	4/4/1996	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	0	N	5/23/2004	0.4	< 0.03 U	< 0.24 U	0.135	81.7	< 7.2 U	< 1.6 U	< 0.22 U	< 0.11 U
II	SB-16-B	27	7	N	5/23/2004	2	< 0.03 U	2.8 J	0.138	155	< 7.2 U	< 1.6 U	< 0.2 U	< 0.1 U
II	SB-16-B	27	17	N	5/23/2004	12.7	0.2	0.95 J	0.0975	129	< 7.2 U	< 1.6 U	< 0.21 U	0.13
II	SB-16-B	27	27	N	5/23/2004	2	0.63	< 0.24 U	0.453	134	< 7.3 U	< 1.6 U	0.056	0.31
II	SB-16-B	27	47	N	5/23/2004	2.6	0.15 J	1.1 J	0.0761	108	< 7.1 U	< 1.5 U	< 0.21 U	0.37
II	SB-16-B	27	57.5	N	5/23/2004	--	--	--	3.9	--	--	--	--	--
II	SB-16-B	27	67	N	5/23/2004	8.7	0.75	< 0.32 U	4.55	11300	< 9.7 U	< 2.1 U	< 0.27 U	< 0.14 U
II	SB-16-B	27	69	N	5/23/2004	--	--	--	5	--	--	--	--	--
II	SB-16-B	27	77	N	5/24/2004	< 0.054 U	< 0.04 U	< 0.31 U	0.0922	15000	< 9.4 U	< 2 U	< 0.27 U	< 0.13 U
II	SB-16-B	27	97	N	5/24/2004	0.35	< 0.042 U	< 0.33 U	0.086	20000	< 9.9 U	< 2.1 U	< 0.3 U	0.18

TABLE B-6
SOIL ALDEHYDES, GENERAL CHEMISTRY AND IONS DATA
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions							Aldehydes	
						Nitrate (as N)	Nitrite (as N)	Orthophosphate as P	Perchlorate	Sulfate	Sulfide	Total Kjeldahl Nitrogen (TKN)	Acetaldehyde	Formaldehyde
II	SB-16-B	27	125	N	5/24/2004	--	--	--	< 0.04 U	--	--	--	--	--
II	SB-16-B	27	131	N	5/24/2004	--	--	--	< 0.04 U	--	--	--	--	--
II	SB-16-B	27	155.5	N	5/25/2004	--	--	--	< 0.04 U	--	--	--	--	--
II	SB-16-B	27	184	N	5/25/2004	--	--	--	< 0.04 U	--	--	--	--	--
II	SB-16-B	27	209.5	N	5/25/2004	--	--	--	< 0.04 U	--	--	--	--	--
II	SB-16-B	27	225.5	N	5/25/2004	--	--	--	< 0.04 U	--	--	--	--	--
II	SB-16-B	27	247	N	5/25/2004	--	--	--	< 0.1 U	--	--	--	--	--
II	SB-16-B	27	266.5	N	5/26/2004	--	--	--	< 0.02 U	--	--	--	--	--
II	SB-16-B	27	285	N	5/26/2004	--	--	--	< 0.02 U	--	--	--	--	--
II	SB-16-B	27	313	N	5/26/2004	--	--	--	< 0.02 U	--	--	--	--	--
II	SB-16-B	27	342	N	5/27/2004	--	--	--	< 0.02 U	--	--	--	--	--
II	SB-16-B	27	362.5	N	5/27/2004	--	--	--	< 0.02 U	--	--	--	--	--
II	SWB-24	33	5	N	4/12/2005	--	--	--	--	--	--	--	--	--
II	SWB-24	33	10	N	4/12/2005	--	--	--	--	--	--	--	--	--
II	SWB-24	33	20	N	4/12/2005	--	--	--	--	--	--	--	--	--
II	SWB-24	33	30	N	4/12/2005	--	--	--	--	--	--	--	--	--
II	SWB-24	33	40	N	4/12/2005	--	--	--	--	--	--	--	--	--
II	WC-BD02	39	0	N	8/2/2006	--	--	--	--	--	--	--	--	--
II	WC-IM04	39	0	N	8/2/2006	--	--	--	--	--	--	--	--	--
II	WC-UP01	39	0	N	7/28/2006	--	--	--	--	--	--	--	--	--
II	WC-UP02	39	0	N	7/31/2006	--	--	--	--	--	--	--	--	--
II	WC-UP03	39	0	N	7/31/2006	--	--	--	--	--	--	--	--	--
II	WC-UP04	39	0	N	7/28/2006	--	--	--	--	--	--	--	--	--
II	WC-UP05	39	0	N	7/27/2006	--	--	--	--	--	--	--	--	--
II	WC-UP06	39	0	N	7/27/2006	--	--	--	--	--	--	--	--	--
II	WC-UP07	39	0	N	7/28/2006	--	--	--	--	--	--	--	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-7
SOIL ORGANOPHOSPHORUS PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 3)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organophosphorus Pesticides								
						Azinphos-ethyl	Azinphos-methyl	Carbophenothion	Carbophenothion-methyl	Chlorpyrifos	Coumaphos	Demeton-O	Demeton-S	Diazinon
I	WC-IM01	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM02	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM03	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM05	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM06	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
I	WC-IM07	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	0	N	5/23/2004	< 0.0089 U	< 0.0029 U	< 0.0073 U	< 0.0084 U	< 0.001 U	< 0.0028 U	< 0.0038 U	< 0.0038 U	< 0.002 U
II	SB-16-B	27	7	N	5/23/2004	< 0.0089 U	< 0.0029 U	< 0.0073 U	< 0.0084 U	< 0.001 U	< 0.0028 U	< 0.0038 U	< 0.0038 U	< 0.0019 U
II	SB-16-B	27	17	N	5/23/2004	< 0.0089 U	< 0.0029 U	< 0.0073 U	< 0.0084 U	< 0.001 U	< 0.0028 U	< 0.0038 U	< 0.0038 U	< 0.0019 U
II	SB-16-B	27	27	N	5/23/2004	< 0.0091 U	< 0.0029 U	< 0.0074 U	< 0.0086 U	< 0.001 U	< 0.0028 U	< 0.0039 U	< 0.0039 U	< 0.002 U
II	SB-16-B	27	47	N	5/23/2004	< 0.0089 U	< 0.0029 U	< 0.0073 U	< 0.0084 U	< 0.001 U	< 0.0028 U	< 0.0038 U	< 0.0038 U	< 0.0019 U
II	SB-16-B	27	67	N	5/23/2004	< 0.012 U	< 0.0039 U	< 0.0098 U	< 0.011 U	< 0.0014 U	< 0.0037 U	< 0.0051 U	< 0.0051 U	< 0.0026 U
II	SB-16-B	27	77	N	5/24/2004	< 0.012 U	< 0.0038 U	< 0.0096 U	< 0.011 U	< 0.0014 U	< 0.0036 U	< 0.005 U	< 0.005 U	< 0.0026 U
II	SB-16-B	27	97	N	5/24/2004	< 0.012 U	< 0.0039 U	< 0.01 U	< 0.012 U	< 0.0014 U	< 0.0038 U	< 0.0052 U	< 0.0052 U	< 0.0027 U
II	WC-BD02	39	0	N	8/2/2006	--	--	--	--	--	--	--	--	--
II	WC-IM04	39	0	N	8/2/2006	--	--	--	--	--	--	--	--	--
II	WC-UP01	39	0	N	7/28/2006	--	--	--	--	--	--	--	--	--
II	WC-UP02	39	0	N	7/31/2006	--	--	--	--	--	--	--	--	--
II	WC-UP03	39	0	N	7/31/2006	--	--	--	--	--	--	--	--	--
II	WC-UP04	39	0	N	7/28/2006	--	--	--	--	--	--	--	--	--
II	WC-UP05	39	0	N	7/27/2006	--	--	--	--	--	--	--	--	--
II	WC-UP06	39	0	N	7/27/2006	--	--	--	--	--	--	--	--	--
II	WC-UP07	39	0	N	7/28/2006	--	--	--	--	--	--	--	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-7
SOIL ORGANOPHOSPHORUS PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 3)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organophosphorus Pesticides								
						Dichlorvos	Dimethoate	Disulfoton	Ethoprophos	Ethyl p-nitrophenyl phenylphosphorothioate	Famphur	Fenthion	Malathion	Methyl parathion
I	WC-IM01	39	0	N	8/3/2006	--	--	< 0.0085 U	--	--	< 0.0035 U	--	--	< 0.007 U
I	WC-IM02	39	0	N	8/3/2006	--	--	< 0.0085 U	--	--	< 0.0036 U	--	--	< 0.007 U
I	WC-IM03	39	0	N	8/3/2006	--	--	< 0.0083 U	--	--	< 0.0035 U	--	--	< 0.0068 U
I	WC-IM05	39	0	N	8/3/2006	--	--	< 0.0081 U	--	--	< 0.0034 U	--	--	< 0.0067 U
I	WC-IM06	39	0	N	8/3/2006	--	--	< 0.0081 UJ	--	--	< 0.0034 UJ	--	--	< 0.0067 UJ
I	WC-IM07	39	0	N	8/3/2006	--	--	< 0.0083 U	--	--	< 0.0035 U	--	--	< 0.0069 U
II	SB-16-B	27	0	N	5/23/2004	< 0.0017 U	< 0.0021 U	< 0.0018 U	< 0.001 U	< 0.0017 U	< 0.0023 U	< 0.0013 U	< 0.001 U	< 0.001 U
II	SB-16-B	27	7	N	5/23/2004	< 0.0017 U	< 0.0021 U	< 0.0018 U	< 0.001 U	< 0.0017 U	< 0.0023 U	< 0.0013 U	< 0.001 U	< 0.001 U
II	SB-16-B	27	17	N	5/23/2004	< 0.0017 U	< 0.002 U	< 0.0018 U	< 0.001 U	< 0.0017 U	< 0.0023 U	< 0.0013 U	< 0.001 U	< 0.001 U
II	SB-16-B	27	27	N	5/23/2004	< 0.0018 U	< 0.0021 U	< 0.0019 U	< 0.001 U	< 0.0018 U	< 0.0023 U	< 0.0014 U	< 0.001 U	< 0.001 U
II	SB-16-B	27	47	N	5/23/2004	< 0.0017 U	< 0.002 U	< 0.0018 U	< 0.001 U	< 0.0017 U	< 0.0022 U	< 0.0013 U	< 0.001 U	< 0.001 U
II	SB-16-B	27	67	N	5/23/2004	< 0.0024 U	< 0.0028 U	< 0.0025 U	< 0.0014 U	< 0.0024 U	< 0.003 U	< 0.0018 U	< 0.0014 U	< 0.0014 U
II	SB-16-B	27	77	N	5/24/2004	< 0.0023 U	< 0.0027 U	< 0.0024 U	< 0.0014 U	< 0.0023 U	< 0.003 U	< 0.0018 U	< 0.0014 U	< 0.0014 U
II	SB-16-B	27	97	N	5/24/2004	< 0.0024 U	< 0.0028 U	< 0.0025 U	< 0.0014 U	< 0.0024 U	< 0.0031 U	< 0.0018 U	< 0.0014 U	< 0.0014 U
II	WC-BD02	39	0	N	8/2/2006	--	--	< 0.0079 U	--	--	< 0.0033 U	--	--	< 0.0065 U
II	WC-IM04	39	0	N	8/2/2006	--	--	< 0.0081 U	--	--	< 0.0034 U	--	--	< 0.0067 U
II	WC-UP01	39	0	N	7/28/2006	--	--	< 0.0082 U	--	--	< 0.0034 UJ	--	--	< 0.0067 U
II	WC-UP02	39	0	N	7/31/2006	--	--	< 0.008 U	--	--	< 0.0033 UJ	--	--	< 0.0066 U
II	WC-UP03	39	0	N	7/31/2006	--	--	< 0.0083 U	--	--	< 0.0034 UJ	--	--	< 0.0068 U
II	WC-UP04	39	0	N	7/28/2006	--	--	< 0.008 U	--	--	< 0.0033 UJ	--	--	< 0.0066 U
II	WC-UP05	39	0	N	7/27/2006	--	--	< 0.0079 U	--	--	< 0.0033 U	--	--	< 0.0065 U
II	WC-UP06	39	0	N	7/27/2006	--	--	< 0.0079 U	--	--	< 0.0033 U	--	--	< 0.0065 U
II	WC-UP07	39	0	N	7/28/2006	--	--	< 0.008 U	--	--	< 0.0033 UJ	--	--	< 0.0066 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses

reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-7
SOIL ORGANOPHOSPHORUS PESTICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 3 of 3)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organophosphorus Pesticides								
						Mevinphos	Naled	O,O,O-Triethyl phosphorothioate	Parathion	Phorate	Phosmet	Ronnel	Sulfotep	Tetrachlorvinphos (Stirophos)
I	WC-IM01	39	0	N	8/3/2006	--	--	--	< 0.0058 U	< 0.0062 U	--	--	--	--
I	WC-IM02	39	0	N	8/3/2006	--	--	--	< 0.0058 U	< 0.0063 U	--	--	--	--
I	WC-IM03	39	0	N	8/3/2006	--	--	--	< 0.0057 U	< 0.0061 U	--	--	--	--
I	WC-IM05	39	0	N	8/3/2006	--	--	--	< 0.0055 U	< 0.006 U	--	--	--	--
I	WC-IM06	39	0	N	8/3/2006	--	--	--	< 0.0055 UJ	< 0.006 UJ	--	--	--	--
I	WC-IM07	39	0	N	8/3/2006	--	--	--	< 0.0057 U	< 0.0061 U	--	--	--	--
II	SB-16-B	27	0	N	5/23/2004	< 0.0044 U	< 0.0027 U	< 0.0017 U	< 0.0027 U	< 0.002 U	< 0.015 U	< 0.0018 U	< 0.0011 U	< 0.0018 U
II	SB-16-B	27	7	N	5/23/2004	< 0.0044 U	< 0.0027 U	< 0.0017 U	< 0.0027 U	< 0.0019 U	< 0.015 U	< 0.0018 U	< 0.0011 U	< 0.0018 U
II	SB-16-B	27	17	N	5/23/2004	< 0.0044 U	< 0.0027 U	< 0.0017 U	< 0.0027 U	< 0.0019 U	< 0.015 U	< 0.0018 U	< 0.0011 U	0.005 J
II	SB-16-B	27	27	N	5/23/2004	< 0.0045 U	< 0.0027 U	< 0.0018 U	< 0.0027 U	< 0.002 U	< 0.016 U	< 0.0019 U	< 0.0012 U	< 0.0019 U
II	SB-16-B	27	47	N	5/23/2004	< 0.0044 U	< 0.0027 U	< 0.0017 U	< 0.0027 U	< 0.0019 U	< 0.015 U	< 0.0018 U	< 0.0011 U	0.005 J
II	SB-16-B	27	67	N	5/23/2004	< 0.006 U	< 0.0036 U	< 0.0024 U	< 0.0036 U	< 0.0026 U	< 0.021 U	< 0.0025 U	< 0.0015 U	0.0068 J
II	SB-16-B	27	77	N	5/24/2004	< 0.0058 U	< 0.0035 U	< 0.0023 U	< 0.0035 U	< 0.0026 U	< 0.02 U	< 0.0024 U	< 0.0015 U	< 0.0024 U
II	SB-16-B	27	97	N	5/24/2004	< 0.0061 U	< 0.0037 U	< 0.0024 U	< 0.0037 U	< 0.0027 U	< 0.021 U	< 0.0025 U	< 0.0016 U	< 0.0025 U
II	WC-BD02	39	0	N	8/2/2006	--	--	--	< 0.0054 U	< 0.0059 U	--	--	--	--
II	WC-IM04	39	0	N	8/2/2006	--	--	--	< 0.0056 U	< 0.006 U	--	--	--	--
II	WC-UP01	39	0	N	7/28/2006	--	--	--	< 0.0056 U	< 0.006 U	--	--	--	--
II	WC-UP02	39	0	N	7/31/2006	--	--	--	< 0.0055 U	< 0.0059 U	--	--	--	--
II	WC-UP03	39	0	N	7/31/2006	--	--	--	< 0.0057 U	< 0.0061 U	--	--	--	--
II	WC-UP04	39	0	N	7/28/2006	--	--	--	< 0.0054 U	< 0.0059 U	--	--	--	--
II	WC-UP05	39	0	N	7/27/2006	--	--	--	< 0.0054 U	< 0.0058 U	--	--	--	--
II	WC-UP06	39	0	N	7/27/2006	--	--	--	< 0.0054 U	< 0.0058 U	--	--	--	--
II	WC-UP07	39	0	N	7/28/2006	--	--	--	< 0.0054 U	< 0.0059 U	--	--	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-8
SOIL POLYCHLORINATED BIPHENYLS (PCBs) DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 2)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Polychlorinated Biphenyls (PCBs)						
						Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
II	PUE-03	1a	5	N	4/1/1996	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U
II	PUE-05	1a	0	N	4/1/1996	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U
II	PUE-05	1a	5	N	4/1/1996	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U
II	PUE-06	1a	0	N	4/1/1996	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U
II	PUE-07	1a	5	N	4/2/1996	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
II	PUF-03	1a	0	N	3/28/1996	< 0.013 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.013 U	< 0.013 U
II	PUF-03	1a	5	N	3/28/1996	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U
II	PUF-05	1a	0	N	4/4/1996	< 29 U	< 29 U	< 29 U	< 29 U	< 29 U	< 29 U	< 29 U
II	PUF-05	1a	5	N	4/4/1996	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U
II	PUG-04	1a	0	N	4/4/1996	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
II	PUG-04	1a	5	N	4/4/1996	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U	< 0.014 U
II	PUG-06	1a	0	N	4/4/1996	< 14 U	< 14 U	< 14 U	< 14 U	< 14 U	< 14 U	< 14 U
II	PUG-06	1a	5	N	4/4/1996	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
II	PUG-07	1a	0	N	4/4/1996	< 29 U	< 29 U	< 29 U	< 29 U	< 29 U	< 29 U	< 29 U
II	PUG-07	1a	5	N	4/4/1996	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U
II	SB-16-B	27	0	N	5/23/2004	< 0.0066 U	< 0.0073 U	< 0.0083 U	< 0.0078 U	< 0.0098 U	< 0.0081 U	< 0.0077 UJ
II	SB-16-B	27	7	N	5/23/2004	< 0.0065 U	< 0.0073 U	< 0.0083 U	< 0.0077 U	< 0.0098 U	< 0.0081 U	< 0.0077 U
II	SB-16-B	27	17	N	5/23/2004	< 0.0065 U	< 0.0072 U	< 0.0083 U	< 0.0077 U	< 0.0098 U	< 0.0081 U	< 0.0077 U
II	SB-16-B	27	27	N	5/23/2004	< 0.0067 U	< 0.0074 U	< 0.0085 U	< 0.0079 U	< 0.01 U	< 0.0083 U	< 0.0079 U
II	SB-16-B	27	47	N	5/23/2004	< 0.0065 U	< 0.0072 U	< 0.0082 U	< 0.0077 U	< 0.0097 U	< 0.0081 U	< 0.0077 U
II	SB-16-B	27	67	N	5/23/2004	< 0.0089 U	< 0.0098 U	< 0.011 U	< 0.01 U	< 0.013 U	< 0.011 U	< 0.01 U
II	SB-16-B	27	77	N	5/24/2004	< 0.0086 U	< 0.0096 U	< 0.011 U	< 0.01 U	< 0.013 U	< 0.011 U	< 0.01 U
II	SB-16-B	27	97	N	5/24/2004	< 0.009 U	< 0.01 U	< 0.011 U	< 0.011 U	< 0.013 U	< 0.011 U	< 0.011 U

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-9
SOIL RADIONUCLIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 6)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Radionuclides										
						Actinium-228	Bismuth-210	Bismuth-212	Bismuth-214	Cesium 134	Cesium-137	Cobalt-57	Cobalt-60	Gross alpha	Gross beta	Lead-210
I	PUA-03N	7a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
I	PUA-03S	7a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
I	PUA-07	1a	0	N	4/4/1996	5	--	--	35.6	< 0.02 U	< 0.19 U	0.065	< 0.06 U	--	--	--
I	PUA-07	1a	5	N	4/4/1996	2.31	--	--	1.24	0.041	0.012	< 0.004 U	0.005	--	--	--
I	PUB-03N	7a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
I	PUB-03S	7a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
I	PUB-04	1a	0	N	3/26/1996	1.46	--	--	0.84	0.014	0.077	< 0.001 U	< 0.009 U	--	--	--
I	PUB-04	1a	5	N	3/26/1996	1.47	--	--	0.87	0.014	0.01	< 0.01 U	< 0.006 U	--	--	--
I	PUB-06	1a	0	N	4/3/1996	1.82	--	--	4.93	< 0.01 U	0.089	< 0.002 U	< 0 U	--	--	--
I	PUB-06	1a	5	N	4/3/1996	1.42	--	--	0.79	0.003	< 0.01 U	< 0.004 U	0.007	--	--	--
I	PUC-03	1a	0	N	3/26/1996	2.04	--	--	5.8	0.012	0.079	< 0.008 U	0.005	--	--	--
I	PUC-03	1a	5	N	3/26/1996	1.71	--	--	1.61	< 0 U	0.007	< 0.006 U	0.003	--	--	--
II	PUB-08	1a	0	N	4/3/1996	3.2	--	--	34.5	< 0.02 U	< 0.27 U	0.059	0.05	--	--	--
II	PUB-08	1a	5	N	4/3/1996	1.83	--	--	2.08	0.01	0.008	< 0.002 U	0.002	--	--	--
II	PUB-09	6b	10	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	--
II	PUB-09	6b	15	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6b	10	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6b	15	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	15	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	19	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	24	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	29	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	39	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUB-10	6d	49	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUC-05	1a	0	N	4/3/1996	5.8	--	--	20.5	< 0.09 U	< 0.19 U	0.032	0.021	--	--	--
II	PUC-05	1a	5	N	4/3/1996	1.76	--	--	1.02	< 0.008 U	0.008	0.012	0.016	--	--	--
II	PUC-07	1a	0	N	4/3/1996	12.1	--	--	11.3	0.07	0.05	0.022	< 0.02 U	--	--	--
II	PUC-07	1a	5	N	4/3/1996	2.22	--	--	3.7	0.03	< 0.01 U	0.013	0.06	--	--	--
II	PUC-07	6d	10	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	15	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	19	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	24	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	29	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	39	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUC-07	6d	44	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUD-06	1a	0	N	4/2/1996	2.93	--	--	11	< 0.04 U	< 0.07 U	0.02	< 0.001 U	--	--	--
II	PUD-06	1a	5	N	4/2/1996	1.79	--	--	0.8	< 0.01 U	< 0.01 U	0.008	0.01	--	--	--

TABLE B-9
SOIL RADIONUCLIDES DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Radionuclides										
						Actinium-228	Bismuth-210	Bismuth-212	Bismuth-214	Cesium 134	Cesium-137	Cobalt-57	Cobalt-60	Gross alpha	Gross beta	Lead-210
II	PUD-08	1a	0	N	4/2/1996	4.7	--	--	15.6	0.01	< 0.1 U	0.01	< 0.01 U	--	--	--
II	PUD-08	1a	5	N	4/2/1996	1.63	--	--	1.04	0.02	< 0.005 U	0.004	< 0.002 U	--	--	--
II	PUE-05	1a	0	N	4/1/1996	3.64	--	--	13	0.062	< 0.03 U	0.02	0.055	--	--	--
II	PUE-05	1a	5	N	4/1/1996	1.47	--	--	0.65	< 0.001 U	< 0.001 U	< 0.009 U	< 0.01 U	--	--	--
II	PUE-07	6b	15	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	15	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	19	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	24	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	29	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	34	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	39	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	44	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUE-07	6d	49	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	--
II	PUG-05	6d	0	N	10/12/1999	--	--	--	--	--	--	--	--	--	--	--
II	SB-16-B	27	0	N	5/23/2004	1.58	< 2.3 U	1.35	0.82	--	--	< 0.053 U	< 0.1 U	33	43.3	< 2.3 U
II	SB-16-B	27	7	N	5/23/2004	1.62	< 2 U	< 0.66 U	0.93	--	--	< 0.041 U	< 0.096 U	42.5	43.8	< 2 U
II	SB-16-B	27	17	N	5/23/2004	1.79	< 2.7 U	1.43	0.86	--	--	< 0.053 U	< 0.1 U	34	44	< 2.7 U
II	SB-16-B	27	27	N	5/23/2004	1.3	< 1.2 U	0.82	0.93	--	--	< 0.04 U	< 0.099 U	30.2	39.2	< 1.2 U
II	SB-16-B	27	47	N	5/23/2004	1.34	< 1.4 U	1.01	0.85	--	--	< 0.044 U	< 0.099 U	30.6	40.1	< 1.4 U
II	SB-16-B	27	67	N	5/23/2004	< 1 U	3.6	< 1.1 U	2.02	--	--	< 0.063 U	< 0.13 U	40	< 5.6 U	3.6
II	SB-16-B	27	77	N	5/24/2004	< 0.86 U	4.3	< 1.2 U	3.33	--	--	< 0.065 U	< 0.21 U	52	< 5.6 U	4.3
II	SB-16-B	27	97	N	5/24/2004	1.5	2.6	< 1.3 U	1.79	--	--	< 0.059 U	< 0.21 U	46	38.3	2.6

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in pCi/g.

-- = no sample data.

TABLE B-9
SOIL RADIONUCLIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 3 of 6)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Radionuclides										
						Lead-212	Lead-214	Polonium-210	Polonium-212	Polonium-214	Polonium-216	Potassium-40	Protactinium-234	Radium-223	Radium-224	Radium-226
I	PUA-03N	7a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	1.37
I	PUA-03S	7a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.13 U
I	PUA-07	1a	0	N	4/4/1996	4.48	41.5	--	--	--	--	8.6	--	--	--	15.7
I	PUA-07	1a	5	N	4/4/1996	1.85	1.5	--	--	--	--	29.9	--	--	--	2.28
I	PUB-03N	7a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.11 U
I	PUB-03S	7a	0	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.11 U
I	PUB-04	1a	0	N	3/26/1996	1.44	0.99	--	--	--	--	27.9	--	--	--	0.85
I	PUB-04	1a	5	N	3/26/1996	1.65	1.1	--	--	--	--	31.6	--	--	--	0.65
I	PUB-06	1a	0	N	4/3/1996	1.72	6.27	--	--	--	--	25.8	--	--	--	5.19
I	PUB-06	1a	5	N	4/3/1996	1.38	0.99	--	--	--	--	28	--	--	--	1.28
I	PUC-03	1a	0	N	3/26/1996	1.74	6.6	--	--	--	--	26.6	--	--	--	7
I	PUC-03	1a	5	N	3/26/1996	1.83	1.87	--	--	--	--	33.8	--	--	--	1.59
II	PUB-08	1a	0	N	4/3/1996	3.45	43.3	--	--	--	--	7	--	--	--	36.5
II	PUB-08	1a	5	N	4/3/1996	1.7	2.2	--	--	--	--	28.1	--	--	--	2.31
II	PUB-09	6b	10	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	6.06
II	PUB-09	6b	15	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	4.64
II	PUB-10	6b	10	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	5
II	PUB-10	6b	15	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	5.86
II	PUB-10	6d	15	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	0.75
II	PUB-10	6d	19	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	0.2
II	PUB-10	6d	24	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	0.44
II	PUB-10	6d	29	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	0.72
II	PUB-10	6d	39	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	0.08
II	PUB-10	6d	49	N	10/19/1999	--	--	--	--	--	--	--	--	--	--	< 0.11 U
II	PUC-05	1a	0	N	4/3/1996	5.79	26.7	--	--	--	--	5.4	--	--	--	31.5
II	PUC-05	1a	5	N	4/3/1996	1.72	1.33	--	--	--	--	32.2	--	--	--	1.44
II	PUC-07	1a	0	N	4/3/1996	11.9	13.8	--	--	--	--	13.4	--	--	--	27.7
II	PUC-07	1a	5	N	4/3/1996	1.74	4.8	--	--	--	--	28.5	--	--	--	4.94
II	PUC-07	6d	10	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	0.03
II	PUC-07	6d	15	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	0.52
II	PUC-07	6d	19	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.13 U
II	PUC-07	6d	24	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.11 U
II	PUC-07	6d	29	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.17 U
II	PUC-07	6d	39	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.16 U
II	PUC-07	6d	44	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	0.4
II	PUD-06	1a	0	N	4/2/1996	2.81	13.9	--	--	--	--	11.9	--	--	--	18.9
II	PUD-06	1a	5	N	4/2/1996	1.75	1.09	--	--	--	--	32.2	--	--	--	1.54

TABLE B-9
SOIL RADIONUCLIDES DATA
FIRST EIGHT ROWS SUB-AREAS
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Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Radionuclides										
						Lead-212	Lead-214	Polonium-210	Polonium-212	Polonium-214	Polonium-216	Potassium-40	Protactinium-234	Radium-223	Radium-224	Radium-226
II	PUD-08	1a	0	N	4/2/1996	5.74	19.6	--	--	--	--	5.8	--	--	--	20.9
II	PUD-08	1a	5	N	4/2/1996	1.68	1.25	--	--	--	--	28.4	--	--	--	1.75
II	PUE-05	1a	0	N	4/1/1996	3.34	15.6	--	--	--	--	10.8	--	--	--	11.3
II	PUE-05	1a	5	N	4/1/1996	1.36	0.8	--	--	--	--	25.7	--	--	--	0.78
II	PUE-07	6b	15	N	11/17/1998	--	--	--	--	--	--	--	--	--	--	4.81
II	PUE-07	6d	15	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.18 U
II	PUE-07	6d	19	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.19 U
II	PUE-07	6d	24	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	0.74
II	PUE-07	6d	29	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.14 U
II	PUE-07	6d	34	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.2 U
II	PUE-07	6d	39	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.2 U
II	PUE-07	6d	44	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.17 U
II	PUE-07	6d	49	N	10/20/1999	--	--	--	--	--	--	--	--	--	--	< 0.15 U
II	PUG-05	6d	0	N	10/12/1999	--	--	--	--	--	--	--	--	--	--	5.42
II	SB-16-B	27	0	N	5/23/2004	1.52	0.95	< 2.3 U	0.87	0.82	3.2	30.3	< 0.28 U	< 0.95 U	3.2	1.21
II	SB-16-B	27	7	N	5/23/2004	1.36	0.85	< 2 U	< 0.42 U	0.93	3.06	25.7	< 0.2 U	0.86	3.1	1.56
II	SB-16-B	27	17	N	5/23/2004	1.45	1.19	< 2.7 U	0.92	0.86	3.6	33.7	< 0.27 U	< 0.95 U	3.6	0.69
II	SB-16-B	27	27	N	5/23/2004	1.48	1.02	< 1.2 U	0.53	0.93	2.42	31.6	< 0.21 U	< 0.7 U	2.4	1.26
II	SB-16-B	27	47	N	5/23/2004	1.53	1.04	< 1.4 U	0.65	0.85	4.1	30	< 0.22 U	< 0.82 U	4.1	0.96
II	SB-16-B	27	67	N	5/23/2004	0.54	2.2	3.6	< 0.73 U	2.02	4.3	9.5	< 0.3 U	< 1.3 U	4.3	2.48
II	SB-16-B	27	77	N	5/24/2004	0.44	3.66	4.3	< 0.78 U	3.33	8.3	7.2	< 0.3 U	< 1.3 U	8.3	4
II	SB-16-B	27	97	N	5/24/2004	1.06	1.89	2.6	< 0.85 U	1.79	4	17.3	< 0.3 U	< 1 U	4	2.6

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in pCi/g.

-- = no sample data.

TABLE B-9
SOIL RADIONUCLIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 5 of 6)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Radionuclides								
						Radium-228	Thallium-208	Thorium-228	Thorium-230	Thorium-232	Thorium-234	Uranium-233/234	Uranium-235/236	Uranium-238
I	PUA-03N	7a	0	N	10/20/1999	3.13	--	1.8	2.11	1.47	--	0.79	0.02	0.6
I	PUA-03S	7a	0	N	10/20/1999	2.25	--	1.27	1.29	0.95	--	0.8	0.16	0.88
I	PUA-07	1a	0	N	4/4/1996	8.44	1.51	9.58	35.7	10.81	27.6	27.3	1.34	25.5
I	PUA-07	1a	5	N	4/4/1996	2.91	0.624	2.46	5.84	2	3.3	4.9	0.243	5.01
I	PUB-03N	7a	0	N	10/20/1999	1.3	--	2.08	1.34	1.02	--	0.51	0.03	0.73
I	PUB-03S	7a	0	N	10/20/1999	1.17	--	1.52	1.12	--	--	0.62	0.07	0.62
I	PUB-04	1a	0	N	3/26/1996	2.25 J+	0.447	1.86 J+	1.03 J+	1.74 J+	2.6	1.43 J+	0.081 J+	1.26 J+
I	PUB-04	1a	5	N	3/26/1996	2.63	0.434 J+	1.81	0.86	--	0.93	0.85 J+	0.072 J+	0.73 J+
I	PUB-06	1a	0	N	4/3/1996	2.34	0.553	1.84	4.3	1.78	7.8	7.6	0.392	7.33
I	PUB-06	1a	5	N	4/3/1996	1.77	0.438	1.45	1.06	1.44	0.79	0.8	0.068	0.74
I	PUC-03	1a	0	N	3/26/1996	3.32 J+	0.656	1.64	6.97	1.98	4.1	3.64 J+	0.268 J+	3.63 J+
I	PUC-03	1a	5	N	3/26/1996	2.26 J+	0.549	1.61	2.79	1.53	1.7	2.33	0.141	2.37
II	PUB-08	1a	0	N	4/3/1996	2.85	1.09	2.99	31.7	2.72	18.1	23.6	1.13	23
II	PUB-08	1a	5	N	4/3/1996	1.99	0.584	1.81	2.7	1.67	3.1	1.99	0.144	1.92
II	PUB-09	6b	10	N	11/17/1998	1.61	--	1.78	6.93	1.49	--	8.58	0.51	8.93
II	PUB-09	6b	15	N	11/17/1998	1.79	--	2.18	6.58	1.58	--	1.67	0.14	2.26
II	PUB-10	6b	10	N	11/17/1998	0.2	--	1.73	23.9	2.08	--	17.3	1.06	16.3
II	PUB-10	6b	15	N	11/17/1998	< 0.85 U	--	1.44	20.1	1.71	--	18.8	1.04	17.4
II	PUB-10	6d	15	N	10/19/1999	1.01	--	1.92	1.64	1.57	--	0.55	< 0.06 U	0.84
II	PUB-10	6d	19	N	10/19/1999	0.9	--	1.65	1.89	1.37	--	0.81	0.1	1.1
II	PUB-10	6d	24	N	10/19/1999	1.33	--	1.31	2.83	1.19	--	1.55	0.07	1.52
II	PUB-10	6d	29	N	10/19/1999	0.88	--	1.65	0.97	1.47	--	0.85	0.06	0.72
II	PUB-10	6d	39	N	10/19/1999	1.37	--	1.55	1.28	1.37	--	0.71	0.06	0.79
II	PUB-10	6d	49	N	10/19/1999	1.58	--	1.53	1	1.27	--	0.6	0.04	0.7
II	PUC-05	1a	0	N	4/3/1996	5.65	1.75	5.9	46.7	6.26	31.5	33.3	1.76	33.5
II	PUC-05	1a	5	N	4/3/1996	1.88	0.517	1.56	1.13	1.31	2.2	0.81	0.094	0.93
II	PUC-07	1a	0	N	4/3/1996	3.69	3.93	3.4	36.8	4.1	39	30.7	1.51	30.3
II	PUC-07	1a	5	N	4/3/1996	2.84	0.56	1.85	7.43	1.81	3.3	6.81	0.501	6.84
II	PUC-07	6d	10	N	10/20/1999	1.25	--	1.8	1.9	1.69	--	1.16	0.09	0.89
II	PUC-07	6d	15	N	10/20/1999	1.11	--	1.77	1.31	1.43	--	1	0.09	0.95
II	PUC-07	6d	19	N	10/20/1999	1.11	--	1.38	1.76	1.75	--	0.92	0.09	0.91
II	PUC-07	6d	24	N	10/20/1999	1.25	--	2.13	1.46	1.56	--	0.86	0.07	0.78
II	PUC-07	6d	29	N	10/20/1999	1.53	--	1.21	1.65	1.2	--	0.73	< 0.1 U	0.76
II	PUC-07	6d	39	N	10/20/1999	1.5	--	1.54	1.35	1.35	--	0.87	0.1	0.84
II	PUC-07	6d	44	N	10/20/1999	0.94	--	0.52	2.05	0.37	--	1.21	0.02	1.33
II	PUD-06	1a	0	N	4/2/1996	2.57	0.87	3.11	18.5	3.55	17.5	20.5	1.08	19
II	PUD-06	1a	5	N	4/2/1996	2.03	0.6	1.39	1.15	1.67	1.8	0.99	0.06	0.98

TABLE B-9
SOIL RADIONUCLIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 6 of 6)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Radionuclides								
						Radium-228	Thallium-208	Thorium-228	Thorium-230	Thorium-232	Thorium-234	Uranium-233/234	Uranium-235/236	Uranium-238
II	PUD-08	1a	0	N	4/2/1996	3.87	1.51	5.21	37.4	5.08	26.7	29	1.56	26.7
II	PUD-08	1a	5	N	4/2/1996	2.11	0.52	1.92	1.58	1.67	1.66	1.46	0.15	1.59
II	PUE-05	1a	0	N	4/1/1996	3.91 J+	1.03	2.86	21.6	2.7	18.1	15.33	0.93	15.28
II	PUE-05	1a	5	N	4/1/1996	2.54 J+	0.378	1.87	0.87	1.57	1.85	2.95	0.157	2.8
II	PUE-07	6b	15	N	11/17/1998	101	--	1.31	2.5	1.4	--	2.01	0.09	1.97
II	PUE-07	6d	15	N	10/20/1999	1.82	--	1.63	1.68	1.5	--	0.91	0.01	0.94
II	PUE-07	6d	19	N	10/20/1999	1.82	--	1.23	1.58	1.13	--	1.02	< 0.07 U	0.76
II	PUE-07	6d	24	N	10/20/1999	1.4	--	1.54	2.49	1.64	--	1.25	0.04	1.14
II	PUE-07	6d	29	N	10/20/1999	1.41	--	1.72	1.55	2.02	--	0.88	0.02	0.88
II	PUE-07	6d	34	N	10/20/1999	1.18	--	1.37	1.28	1.72	--	0.84	0.06	0.7
II	PUE-07	6d	39	N	10/20/1999	3.5	--	1.43	1.16	1.36	--	0.58	0.01	0.87
II	PUE-07	6d	44	N	10/20/1999	1.27	--	1.71	1.02	1.23	--	0.82	0.03	0.86
II	PUE-07	6d	49	N	10/20/1999	1.29	--	1.62	1.27	1.45	--	0.8	0.07	0.96
II	PUG-05	6d	0	N	10/12/1999	1.86	--	1.92	2.17	1.46	--	3.48	0.26	3.29
II	SB-16-B	27	0	N	5/23/2004	1.06	0.37	1.6	1.17	1.39	< 1.2 U	0.83	< 0.1 U	0.9
II	SB-16-B	27	7	N	5/23/2004	2.63	0.45	1.86	1.5	1.59	1.44	0.92	< 0.07 U	0.9
II	SB-16-B	27	17	N	5/23/2004	1.69	0.51	1.45	1.27	1.06	< 1.3 U	1.05	< 0.073 U	0.65
II	SB-16-B	27	27	N	5/23/2004	1.33	0.49	1.49	1.1	1.54	1.61	0.81	< 0.072 U	0.69
II	SB-16-B	27	47	N	5/23/2004	1.52	0.51	1.71	1.18	1.28	1.26	0.83	< 0.062 U	0.86
II	SB-16-B	27	67	N	5/23/2004	0.78	< 0.21 U	0.47	2.9	0.49	2.7	2.6	0.18	2.62
II	SB-16-B	27	77	N	5/24/2004	1.16	< 0.21 U	0.38	5	0.35	4.2	4.58	0.36	4.57
II	SB-16-B	27	97	N	5/24/2004	0.82	0.33	0.97	2.93	0.81	3.62	2.91	0.115	2.44

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in pCi/g.

-- = no sample data.

TABLE B-10
SOIL GLYCOL/ALCOHOLS, ORGANIC ACIDS, TPH, AND CHLORINATED HERBICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 2)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Alcohols/Glycols				Organic Acids			
						Ethanol	Ethylene glycol	Methanol	Propylene glycol	4-Chlorobenzene- sulfonic acid	Benzenesulfonic acid	Diethyl phosphoro- dithioic acid	Dimethyl phosphorodithioic acid
I	WC-IM01	39	0	N	8/3/2006	--	--	--	--	--	--	--	--
I	WC-IM02	39	0	N	8/3/2006	--	--	--	--	--	--	--	--
I	WC-IM03	39	0	N	8/3/2006	--	--	--	--	--	--	--	--
I	WC-IM05	39	0	N	8/3/2006	--	--	--	--	--	--	--	--
I	WC-IM06	39	0	N	8/3/2006	--	--	--	--	--	--	--	--
I	WC-IM07	39	0	N	8/3/2006	--	--	--	--	--	--	--	--
II	SB-16-B	27	0	N	5/23/2004	< 1.8 UJ-	< 2.6 UJ-	< 1.3 UJ-	< 51 UJ-	< 1 U	< 1 U	< 1 U	< 1 U
II	SB-16-B	27	7	N	5/23/2004	< 1.8 UJ-	< 2.6 UJ-	< 1.3 UJ-	< 51 UJ-	< 1 U	< 1 U	< 1 U	< 1 U
II	SB-16-B	27	17	N	5/23/2004	< 1.8 UJ-	< 2.6 UJ-	< 1.3 UJ-	< 51 UJ-	< 1 U	< 1 U	< 1 U	< 1 U
II	SB-16-B	27	27	N	5/23/2004	< 1.9 UJ-	< 2.6 UJ-	< 1.3 UJ-	< 52 UJ-	< 1 U	< 1 U	< 1 U	< 1 U
II	SB-16-B	27	47	N	5/23/2004	< 1.8 UJ-	< 2.6 UJ-	< 1.3 UJ-	< 51 UJ-	< 1 U	< 1 U	< 1 U	< 1 U
II	SB-16-B	27	67	N	5/23/2004	< 2.5 UJ-	< 3.5 UJ-	< 1.7 UJ-	< 69 UJ-	< 1 U	< 1 U	< 1 U	< 1 U
II	SB-16-B	27	77	N	5/24/2004	< 2.4 UJ-	< 3.4 UJ-	< 1.7 UJ-	< 68 UJ-	< 1 U	< 1 U	< 1 U	< 1 U
II	SB-16-B	27	97	N	5/24/2004	< 2.5 UJ-	< 3.5 UJ-	< 1.8 UJ-	< 70 UJ-	< 1 U	< 1 U	< 1 U	< 1 U
II	WC-BD02	39	0	N	8/2/2006	--	--	--	--	--	--	--	--
II	WC-IM04	39	0	N	8/2/2006	--	--	--	--	--	--	--	--
II	WC-UP01	39	0	N	7/28/2006	--	--	--	--	--	--	--	--
II	WC-UP02	39	0	N	7/31/2006	--	--	--	--	--	--	--	--
II	WC-UP03	39	0	N	7/31/2006	--	--	--	--	--	--	--	--
II	WC-UP04	39	0	N	7/28/2006	--	--	--	--	--	--	--	--
II	WC-UP05	39	0	N	7/27/2006	--	--	--	--	--	--	--	--
II	WC-UP06	39	0	N	7/27/2006	--	--	--	--	--	--	--	--
II	WC-UP07	39	0	N	7/28/2006	--	--	--	--	--	--	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-10
SOIL GLYCOL/ALCOHOLS, ORGANIC ACIDS, TPH, AND CHLORINATED HERBICIDES DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 2)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Chlorinated Herbicides									
						2,2-Dichloro- propionic acid	2,4,5-T	2,4,5-TP	2,4-D	4-(2,4-Dichlorophenoxy) butyric acid	Dicamba	Dichlorprop	Dinitrobutyl phenol	MCPA (2-Methyl-4- chlorophenoxyacetic acid)	Mecoprop
I	WC-IM01	39	0	N	8/3/2006	--	< 0.0054 U	< 0.0035 U	< 0.032 U	--	--	--	< 0.0065 U	--	--
I	WC-IM02	39	0	N	8/3/2006	--	< 0.0055 U	< 0.0036 U	< 0.032 U	--	--	--	< 0.0065 U	--	--
I	WC-IM03	39	0	N	8/3/2006	--	< 0.0053 U	< 0.0035 U	< 0.031 U	--	--	--	< 0.0063 U	--	--
I	WC-IM05	39	0	N	8/3/2006	--	< 0.0052 U	< 0.0034 U	< 0.031 U	--	--	--	< 0.0062 U	--	--
I	WC-IM06	39	0	N	8/3/2006	--	< 0.0052 U	< 0.0034 U	< 0.031 U	--	--	--	< 0.0062 U	--	--
I	WC-IM07	39	0	N	8/3/2006	--	< 0.0054 U	< 0.0035 U	< 0.032 U	--	--	--	< 0.0064 U	--	--
II	SB-16-B	27	0	N	5/23/2004	< 0.022 U	< 0.0027 U	< 0.0012 U	< 0.012 U	< 0.022 U	< 0.0018 U	< 0.011 U	< 0.0044 U	< 0.79 U	< 1.2 U
II	SB-16-B	27	7	N	5/23/2004	< 0.022 U	< 0.0027 U	< 0.0012 U	< 0.012 U	< 0.022 U	< 0.0018 U	< 0.011 U	< 0.0043 U	< 0.79 U	< 1.2 U
II	SB-16-B	27	17	N	5/23/2004	< 0.022 U	< 0.0027 U	< 0.0012 U	< 0.012 U	< 0.022 U	< 0.0018 U	< 0.011 U	< 0.0043 U	< 0.79 U	< 1.2 U
II	SB-16-B	27	27	N	5/23/2004	< 0.022 U	< 0.0028 U	< 0.0013 U	< 0.012 U	< 0.023 U	< 0.0018 U	< 0.012 U	< 0.0044 U	< 0.81 U	< 1.2 U
II	SB-16-B	27	47	N	5/23/2004	< 0.022 U	< 0.0027 U	< 0.0012 U	< 0.012 U	< 0.022 U	< 0.0018 U	< 0.011 U	< 0.0043 U	< 0.79 U	< 1.2 U
II	SB-16-B	27	67	N	5/23/2004	< 0.03 U	< 0.0036 U	< 0.0017 U	< 0.016 U	< 0.03 U	< 0.0024 U	< 0.015 U	< 0.0059 U	< 1.1 U	< 1.6 U
II	SB-16-B	27	77	N	5/24/2004	< 0.029 U	< 0.0036 U	< 0.0016 U	< 0.015 U	< 0.03 U	< 0.0024 U	< 0.015 U	< 0.0057 U	< 1 U	< 1.6 U
II	SB-16-B	27	97	N	5/24/2004	< 0.03 U	< 0.0037 U	< 0.0017 U	< 0.016 U	< 0.031 U	< 0.0025 U	< 0.016 U	< 0.006 U	< 1.1 U	< 1.7 U
II	WC-BD02	39	0	N	8/2/2006	--	< 0.0051 U	< 0.0033 U	< 0.03 U	--	--	--	< 0.0061 U	--	--
II	WC-IM04	39	0	N	8/2/2006	--	< 0.0052 U	< 0.0034 U	< 0.031 U	--	--	--	< 0.0062 U	--	--
II	WC-UP01	39	0	N	7/28/2006	--	< 0.0053 U	< 0.0034 U	< 0.031 U	--	--	--	< 0.0062 U	--	--
II	WC-UP02	39	0	N	7/31/2006	--	< 0.0051 U	< 0.0033 U	< 0.03 U	--	--	--	< 0.0061 U	--	--
II	WC-UP03	39	0	N	7/31/2006	--	< 0.0053 UJ	< 0.0035 UJ	< 0.031 UJ	--	--	--	< 0.0063 UJ	--	--
II	WC-UP04	39	0	N	7/28/2006	--	< 0.0051 U	< 0.0033 U	< 0.03 U	--	--	--	< 0.0061 U	--	--
II	WC-UP05	39	0	N	7/27/2006	--	< 0.0051 U	< 0.0033 U	< 0.03 U	--	--	--	< 0.0061 U	--	--
II	WC-UP06	39	0	N	7/27/2006	--	< 0.0051 U	< 0.0033 U	< 0.03 U	--	--	--	< 0.0061 U	--	--
II	WC-UP07	39	0	N	7/28/2006	--	< 0.0051 U	< 0.0033 U	< 0.03 U	--	--	--	< 0.0061 U	--	--

Note: This table includes all data, regardless of depth. Because of this, the total number of analyses does not always coincide with the total number of analyses reported in Table 1, which includes data only to 10 feet bgs.

All units in mg/kg.

-- = no sample data.

TABLE B-11
SOIL POLYAROMATIC HYDROCARBON DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 1 of 2)

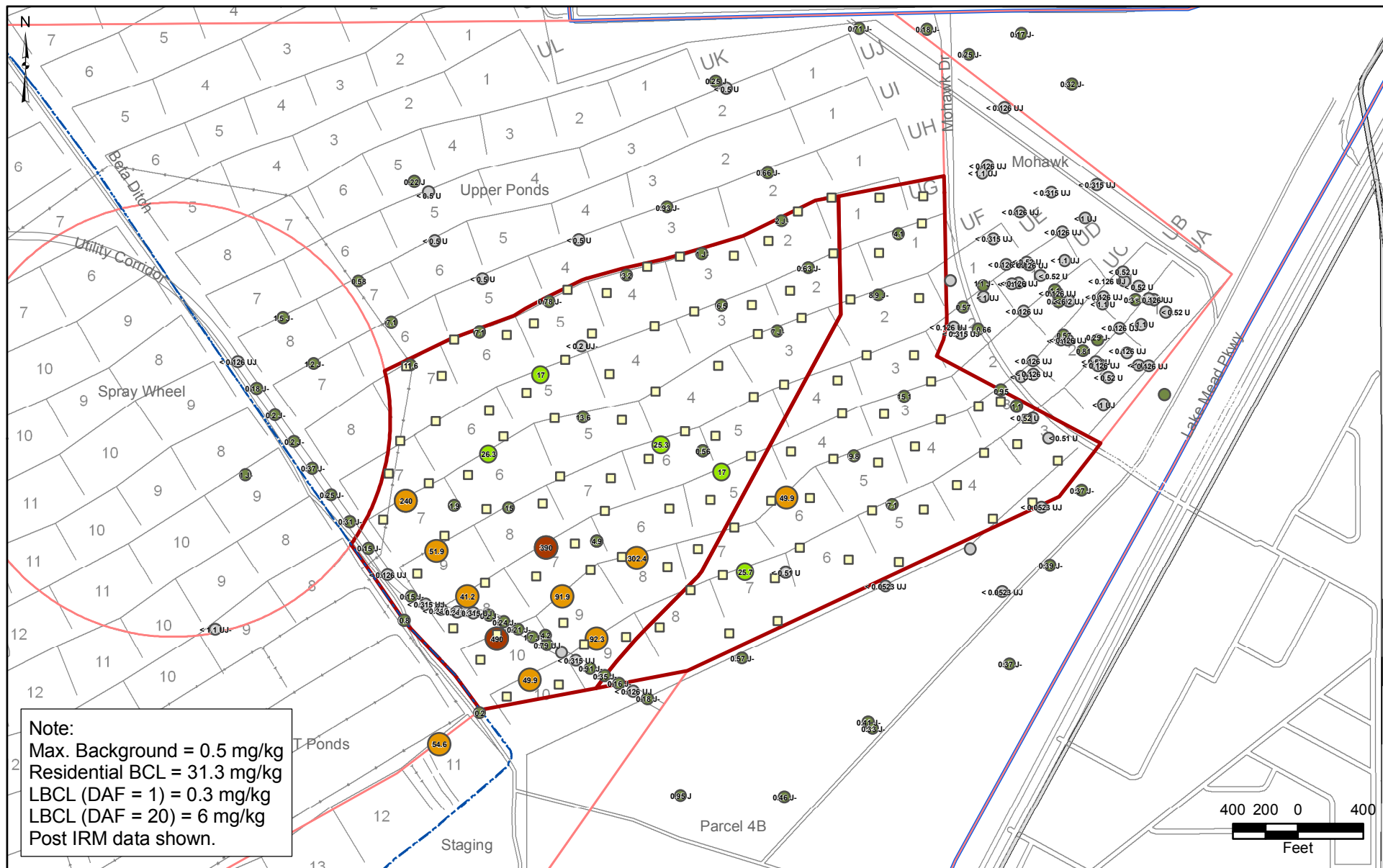
Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Polynuclear Aromatic Hydrocarbons (PAHs)												
						Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene
I	PUA-05	1a	0	N	4/4/1996	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U	< 0.68 U
I	PUA-05	1a	5	N	4/4/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
I	PUA-07	1a	0	N	4/4/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	0.18	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U
I	PUA-07	1a	5	N	4/4/1996	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U	< 0.65 U
I	PUB-04	1a	0	N	3/26/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
I	PUB-06	1a	0	N														

TABLE B-11
SOIL POLYAROMATIC HYDROCARBON DATA
FIRST EIGHT ROWS SUB-AREAS
(Page 2 of 2)

Phase	Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Polynuclear Aromatic Hydrocarbons (PAHs)												
						Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene
II	PUE-05	1a	0	N	4/1/1996	< 0.7 U	< 0.7 U	< 0.7 U	0.19	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	0.64	< 0.7 U	< 0.7 U	0.64	0.49
II	PUE-05	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUE-06	1a	0	N	4/1/1996	< 0.71 U	< 0.71 U	< 0.71 U	0.27	< 0.71 U	< 0.71 U	< 0.71 U	< 0.71 U	0.67	< 0.71 U	< 0.71 U	1.8	0.93
II	PUE-06	1a	5	N	4/1/1996	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U
II	PUE-07	1a	0	N	4/2/1996	< 0.71 U	< 0.71 U	< 0.71 U	0.24	< 0.71 U	0.31	< 0.71 U	< 0.71 U	0.66	< 0.71 U	< 0.71 U	0.24	0.4
II	PUE-07	1a	5	N	4/2/1996	< 0.69 U	< 0.69 U	< 0.69 U	0.18	< 0.69 U	0.24	< 0.69 U	< 0.69 U	0.54	< 0.69 U	< 0.69 U	0.38	0.43
II	PUF-03	1a	0															

APPENDIX C

SOIL CONCENTRATION DISTRIBUTION FIGURES



- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

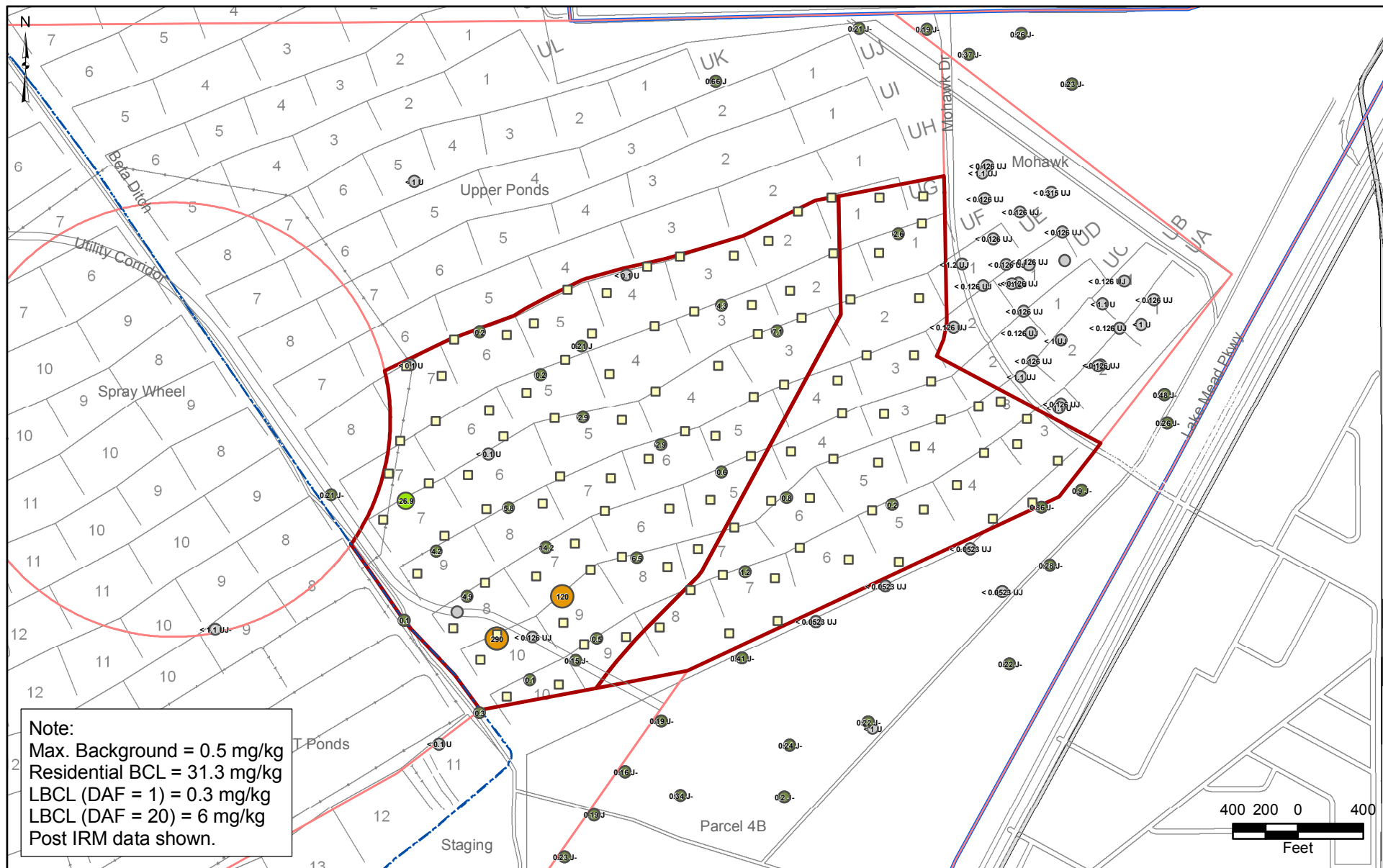
- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-1

ANTIMONY
RESULTS IN FIRST 8 ROWS
SUB-AREAS AND ADJACENT
1,000 FT - 0 to 2 FT BGS



Prepared by MKJ (ERM) Date 11/17/09 JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

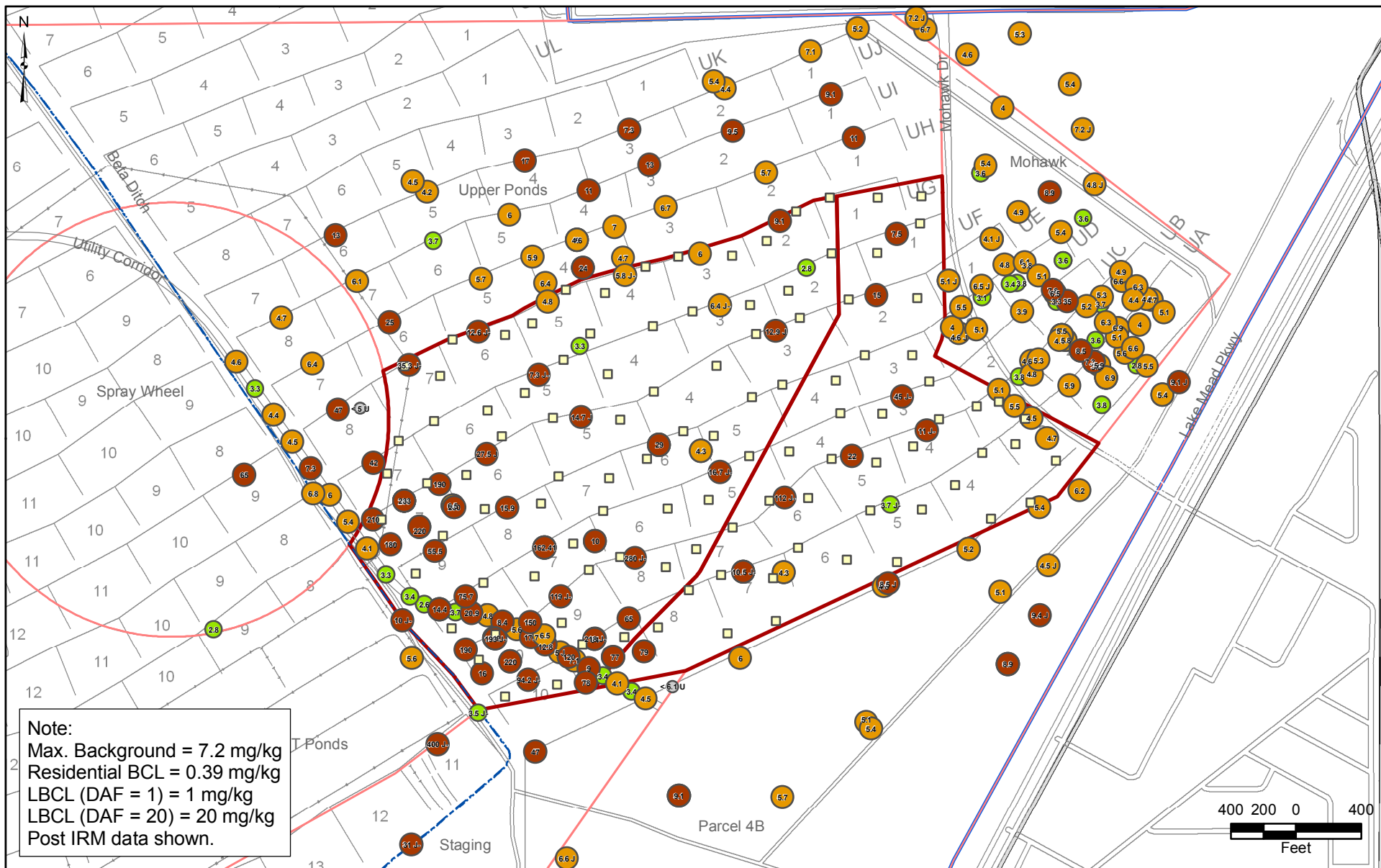
BMI Common Areas (Eastside)
 Clark County, Nevada

FIGURE C-2

ANTIMONY
RESULTS IN FIRST 8 ROWS
SUB-AREAS AND ADJACENT
1,000 FT - 3 to 10 FT BGS



Prepared by: MKJ (ERM) Date: 11/17/09 JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



- | | |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < Residential BCL |
| Eastside Soil Sub-Areas | ● >= BCL and < 10x BCL |
| □ SAP Proposed Soil Sample Location | ● >= 10x BCL and < Max. Background |
| | ● >= Max. Background |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-3

**ARSENIC RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**

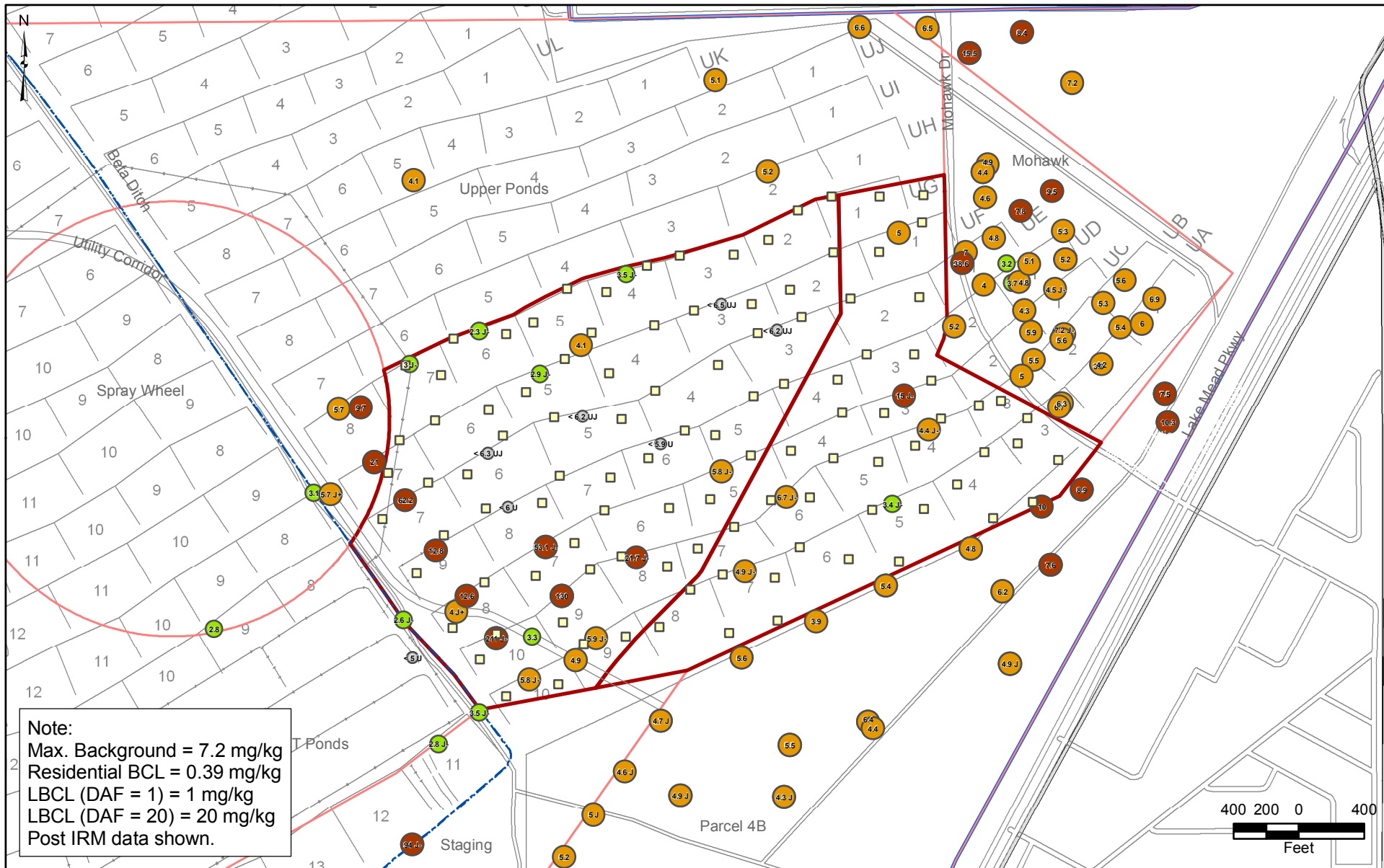


Prepared by
 MKJ (ERM)



Date
 11/17/09

JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location
- Non-Detect
- Detect < Residential BCL
- >= BCL and < 10x BCL
- >= 10x BCL and < Max. Background
- >= Max. Background

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-4

**ARSENIC RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**

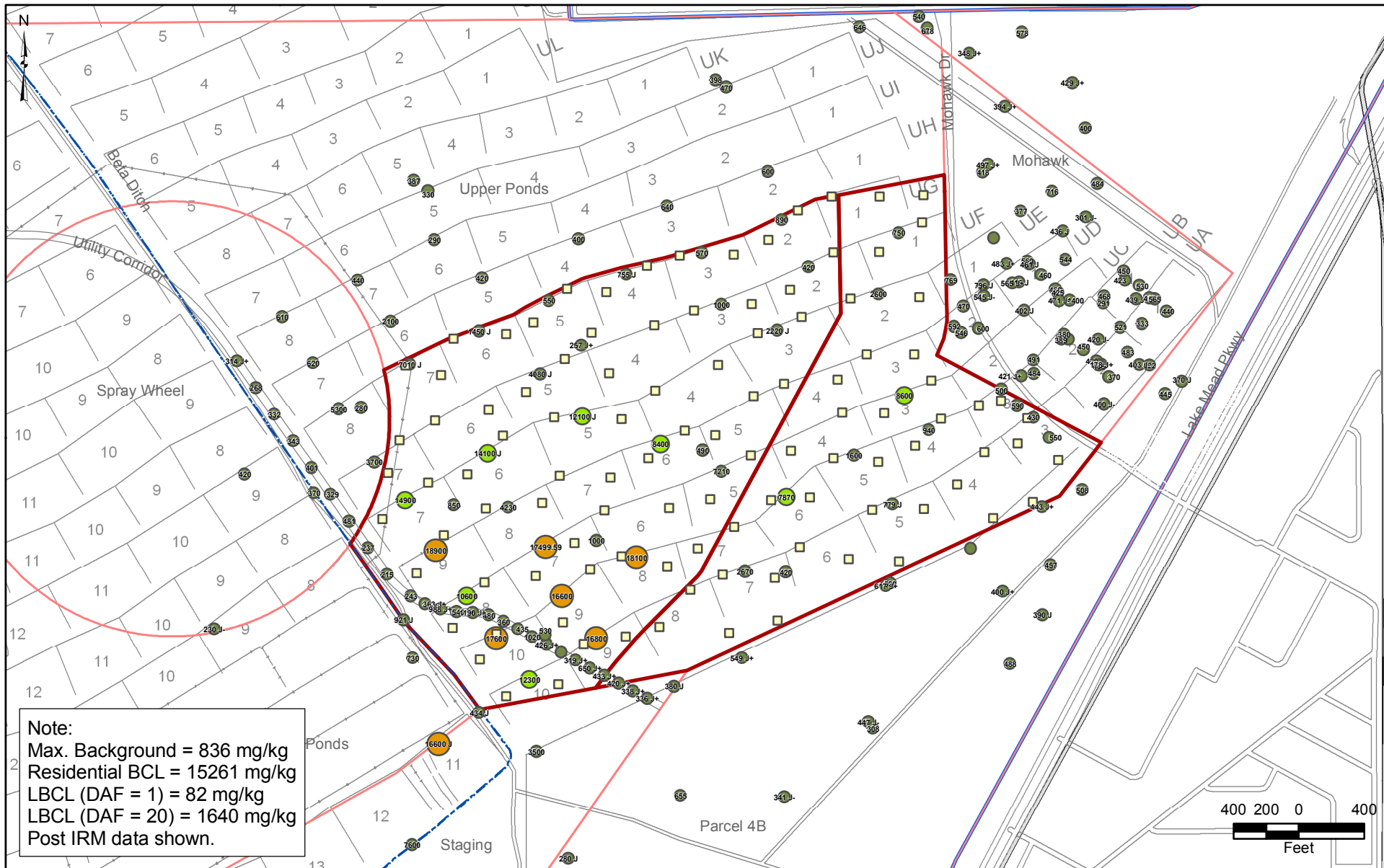


Prepared by
 MKJ (ERM)



Date
 11/17/09

JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



Note:
 Max. Background = 836 mg/kg
 Residential BCL = 15261 mg/kg
 LBCL (DAF = 1) = 82 mg/kg
 LBCL (DAF = 20) = 1640 mg/kg
 Post IRM data shown.

- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada

FIGURE C-5

**BARIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**

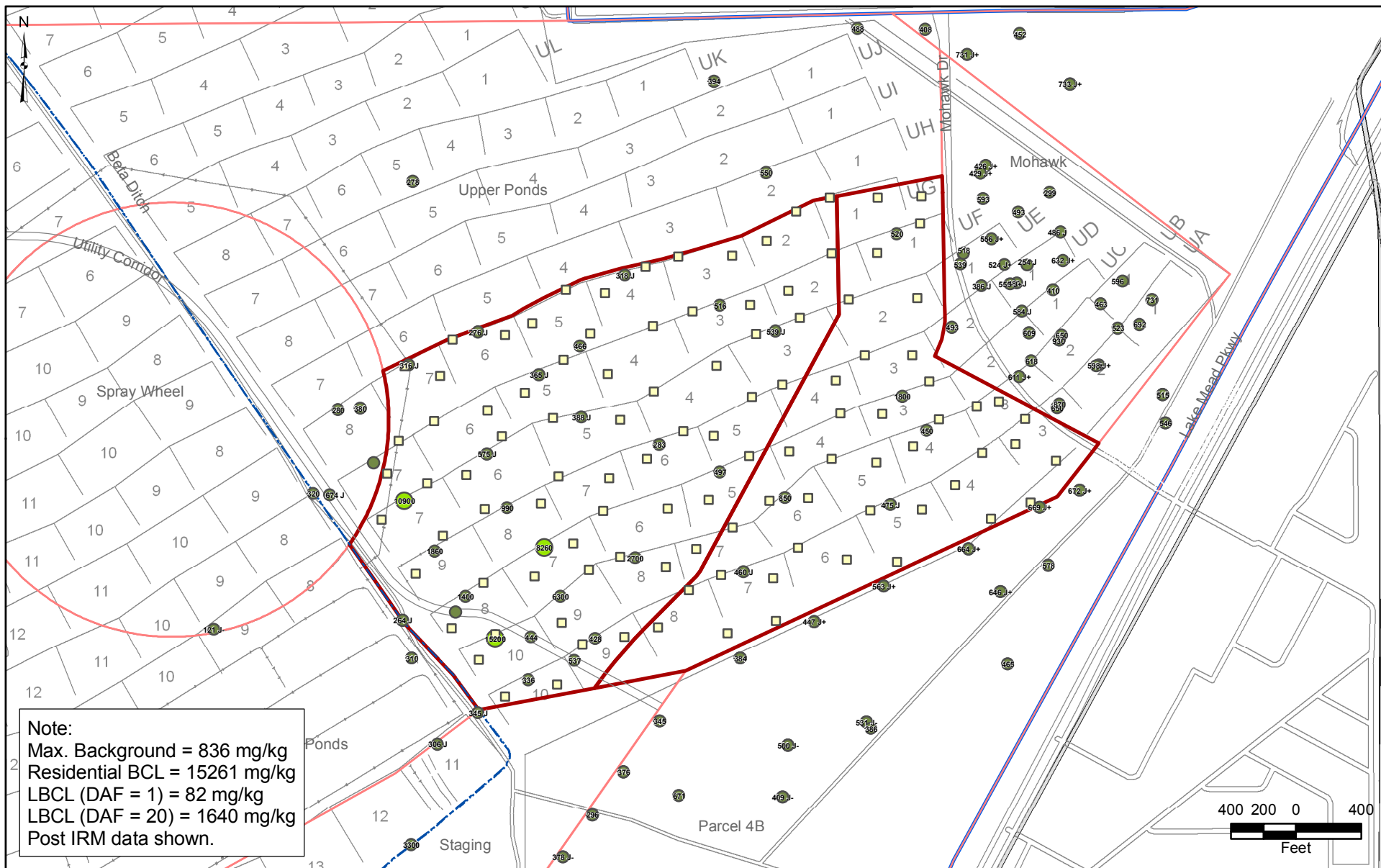


Prepared by
 MKJ (ERM)



Date
 11/17/09

JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada

FIGURE C-6

**BARIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**

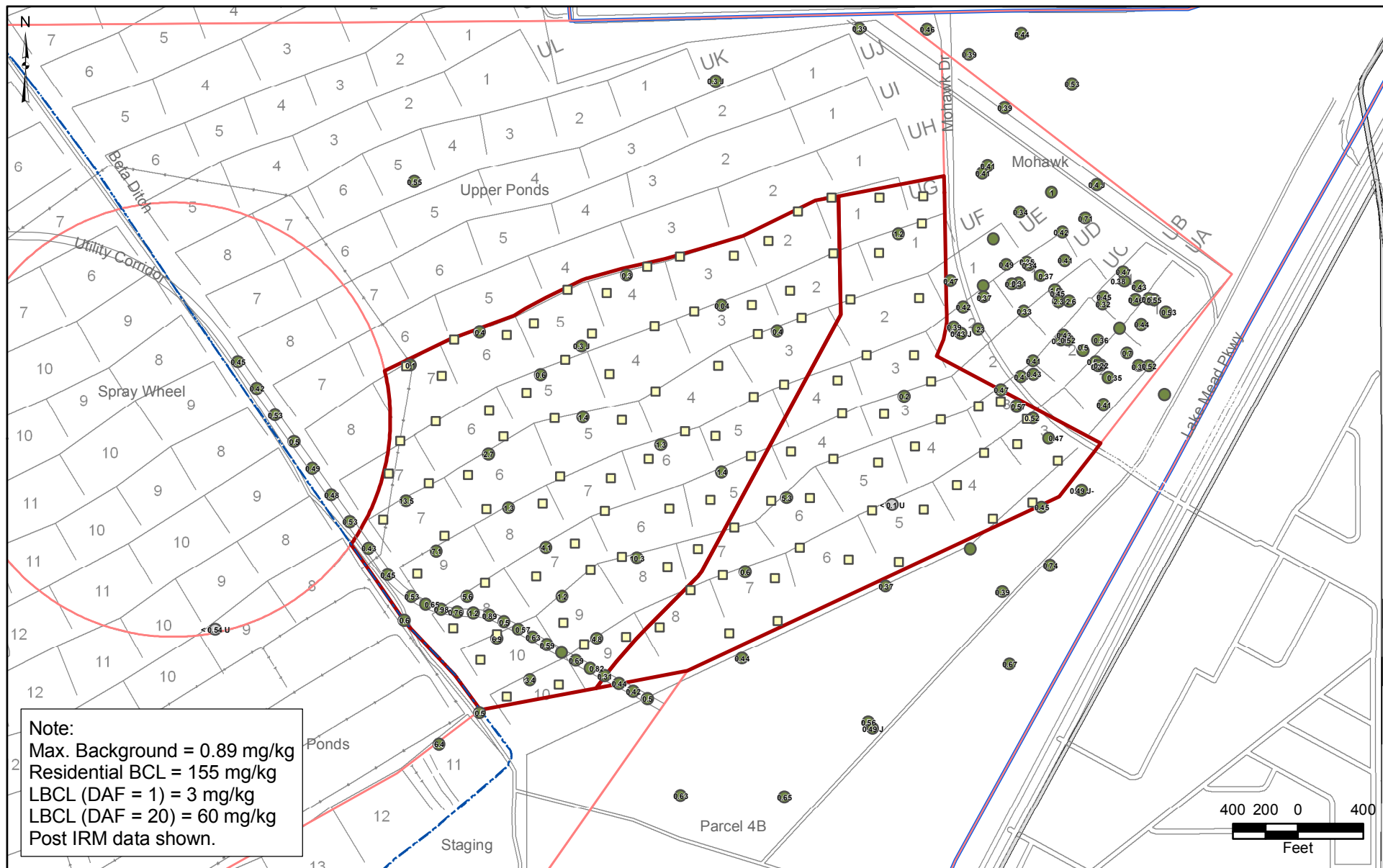


Prepared by
 MKJ (ERM)



Date
 11/17/09

JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD

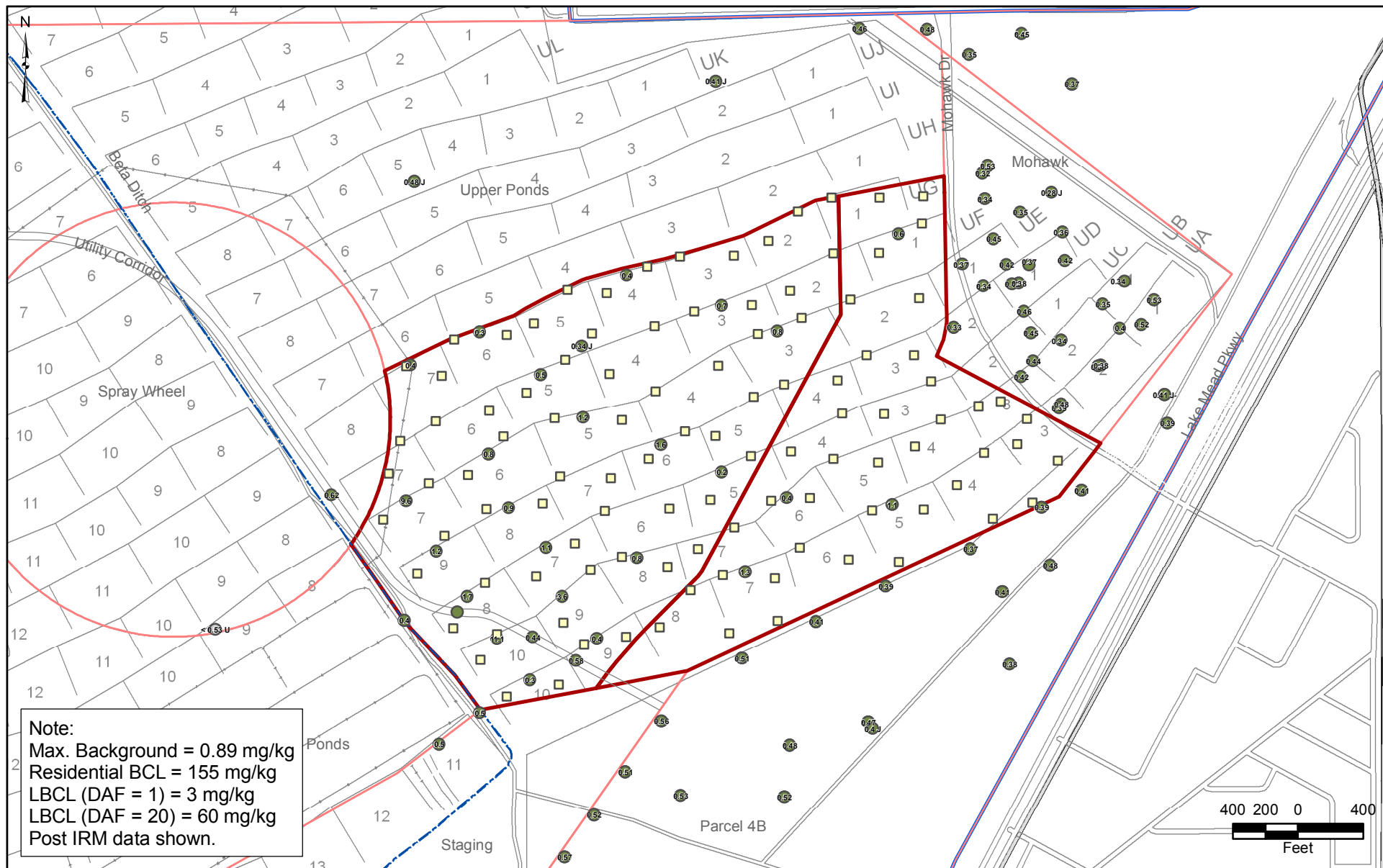


- | | |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < 1/2-Residential BCL |
| Eastside Soil Sub-Areas | ● >= 1/2-BCL and < BCL |
| SAP Proposed Soil Sample Location | ● >= BCL and < 10x BCL |
| | ● >= 10x BCL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-7

**BERYLLIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**





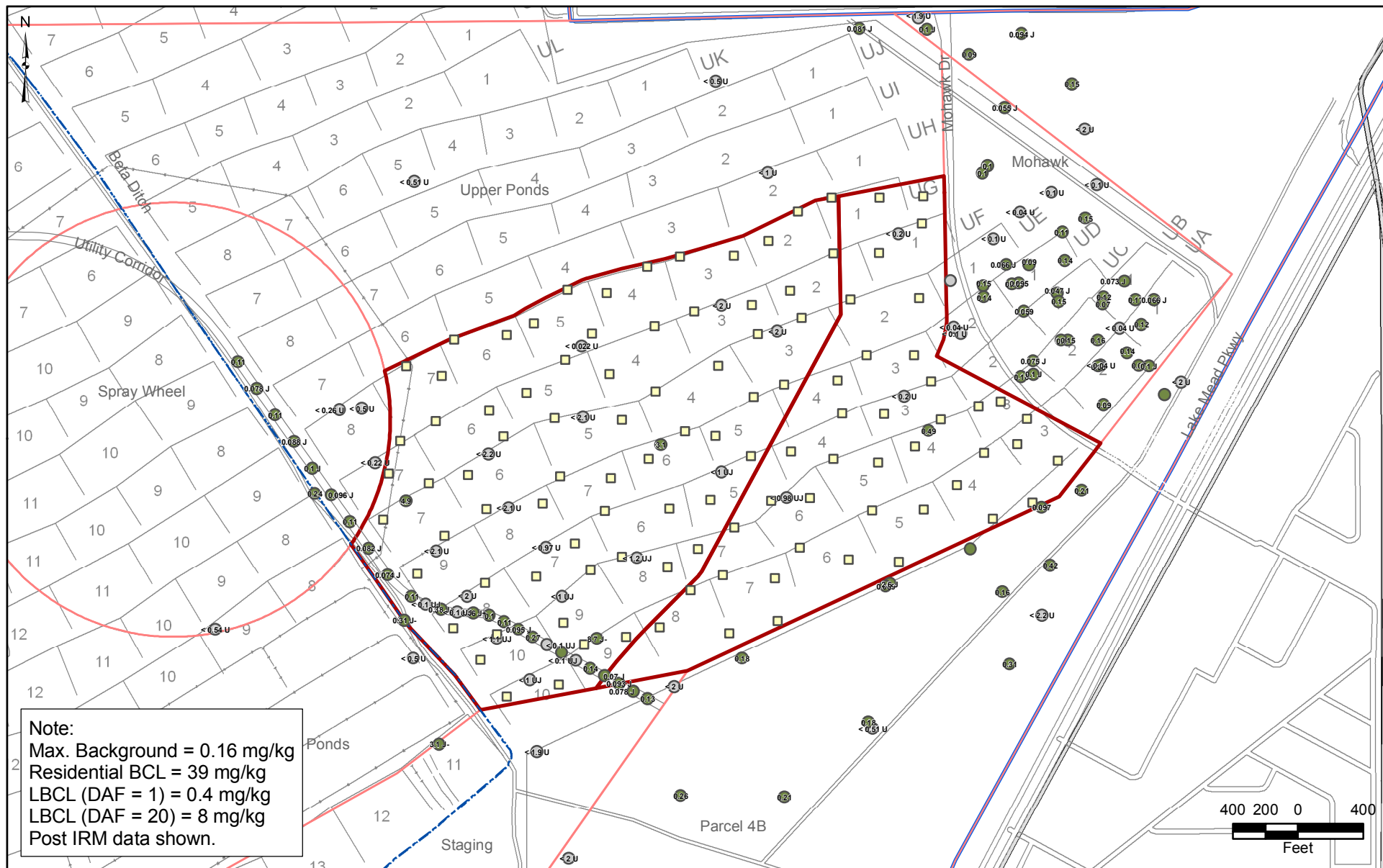
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-8

**BERYLLIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**





BMI Common Areas (Eastside)
 Clark County, Nevada

FIGURE C-9

**CADMIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**

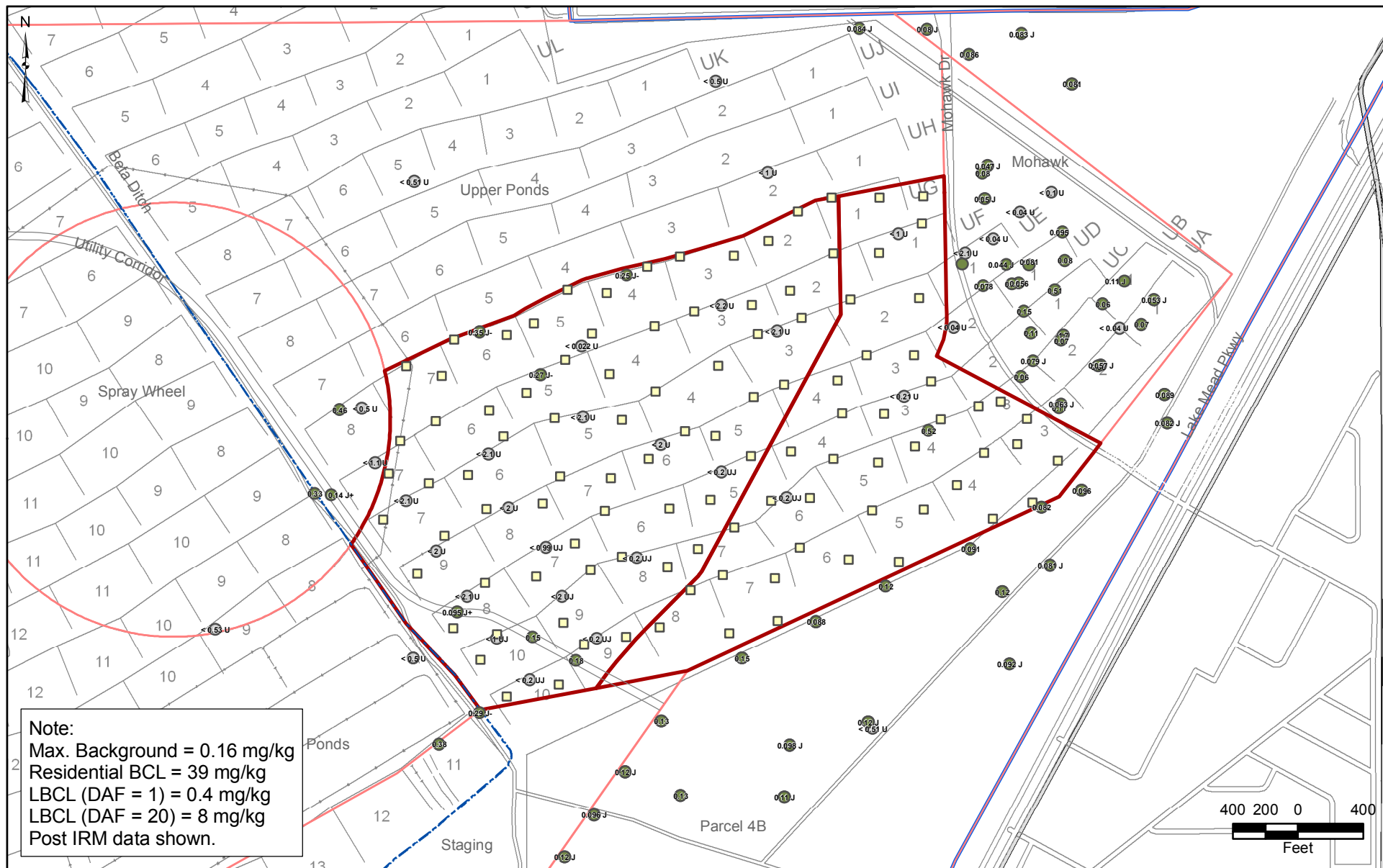


Prepared by
 MKJ (ERM)



Date
 11/17/09

JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



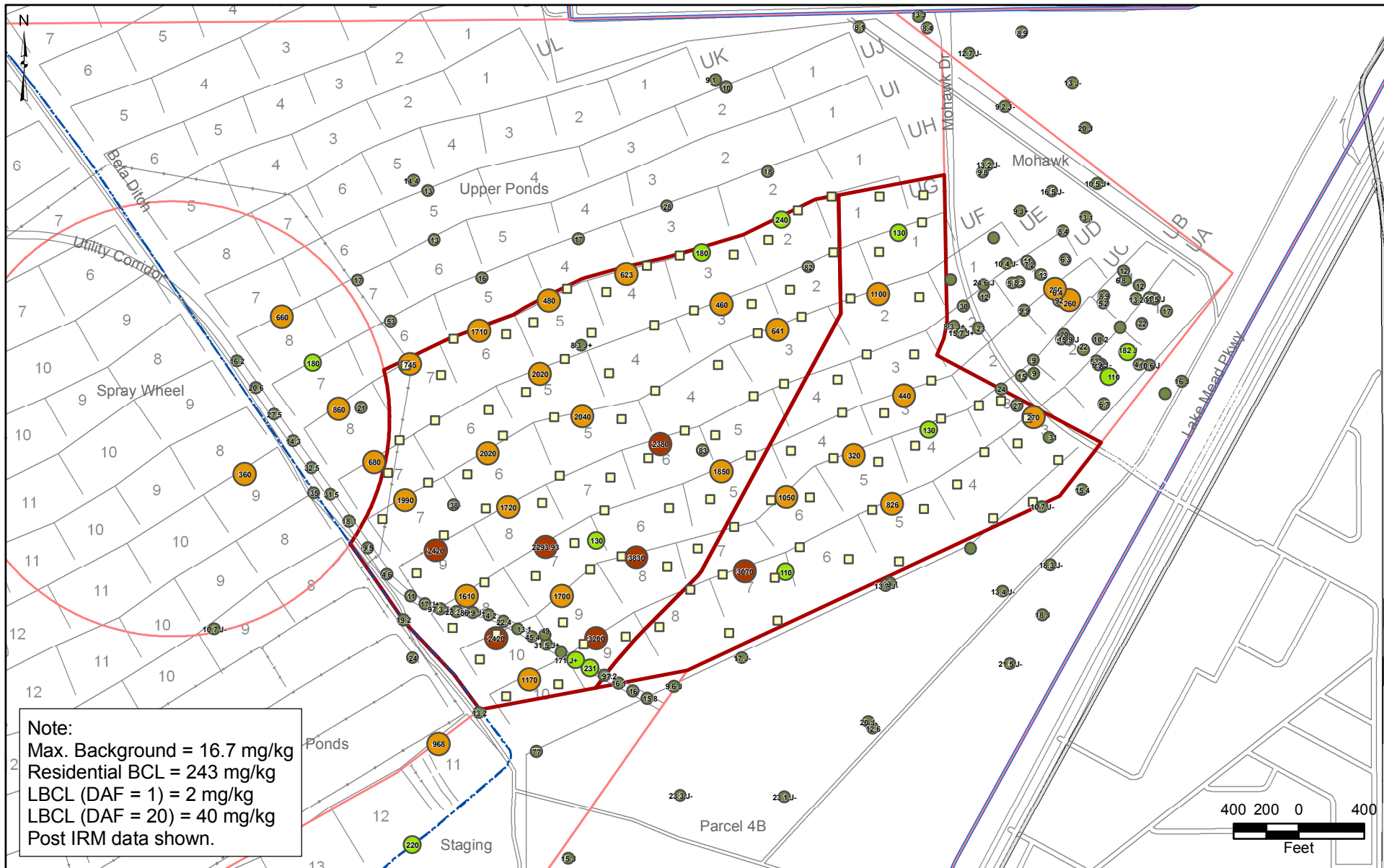
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-10

**CADMIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**





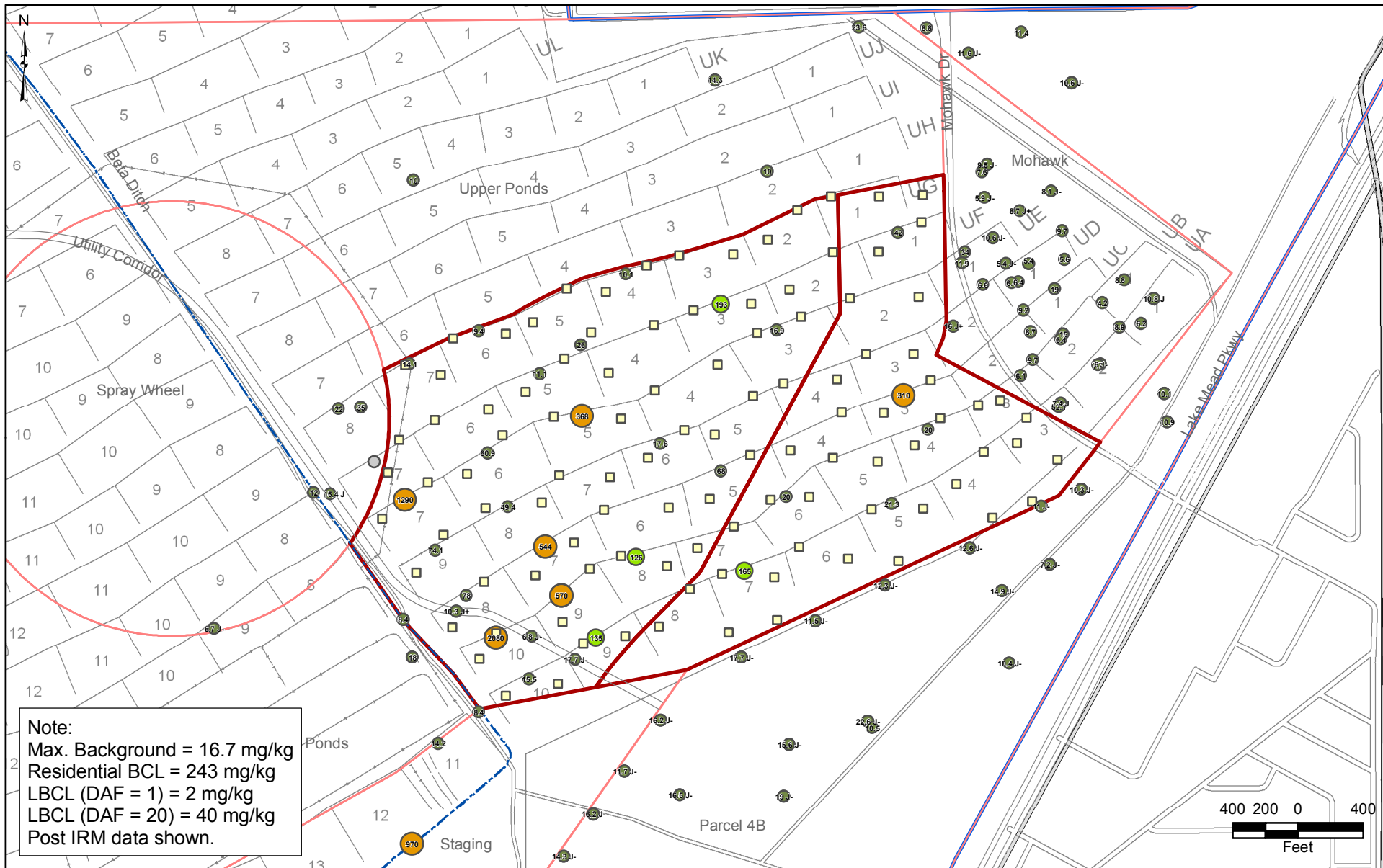
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-11

**TOTAL CHROMIUM RESULTS
 IN FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**





- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-12

**TOTAL CHROMIUM RESULTS
 IN FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**

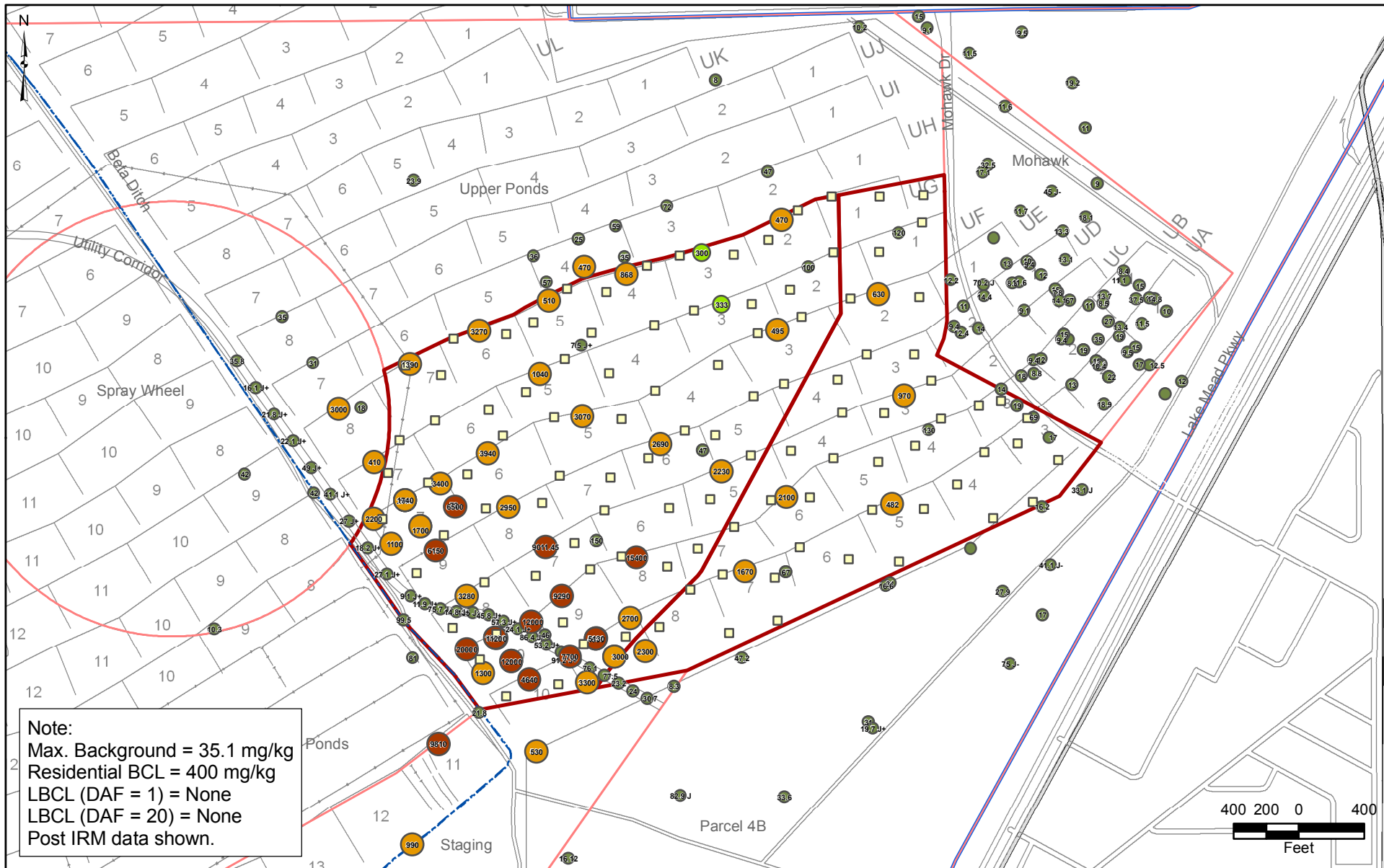


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- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL


BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-13

**LEAD RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**

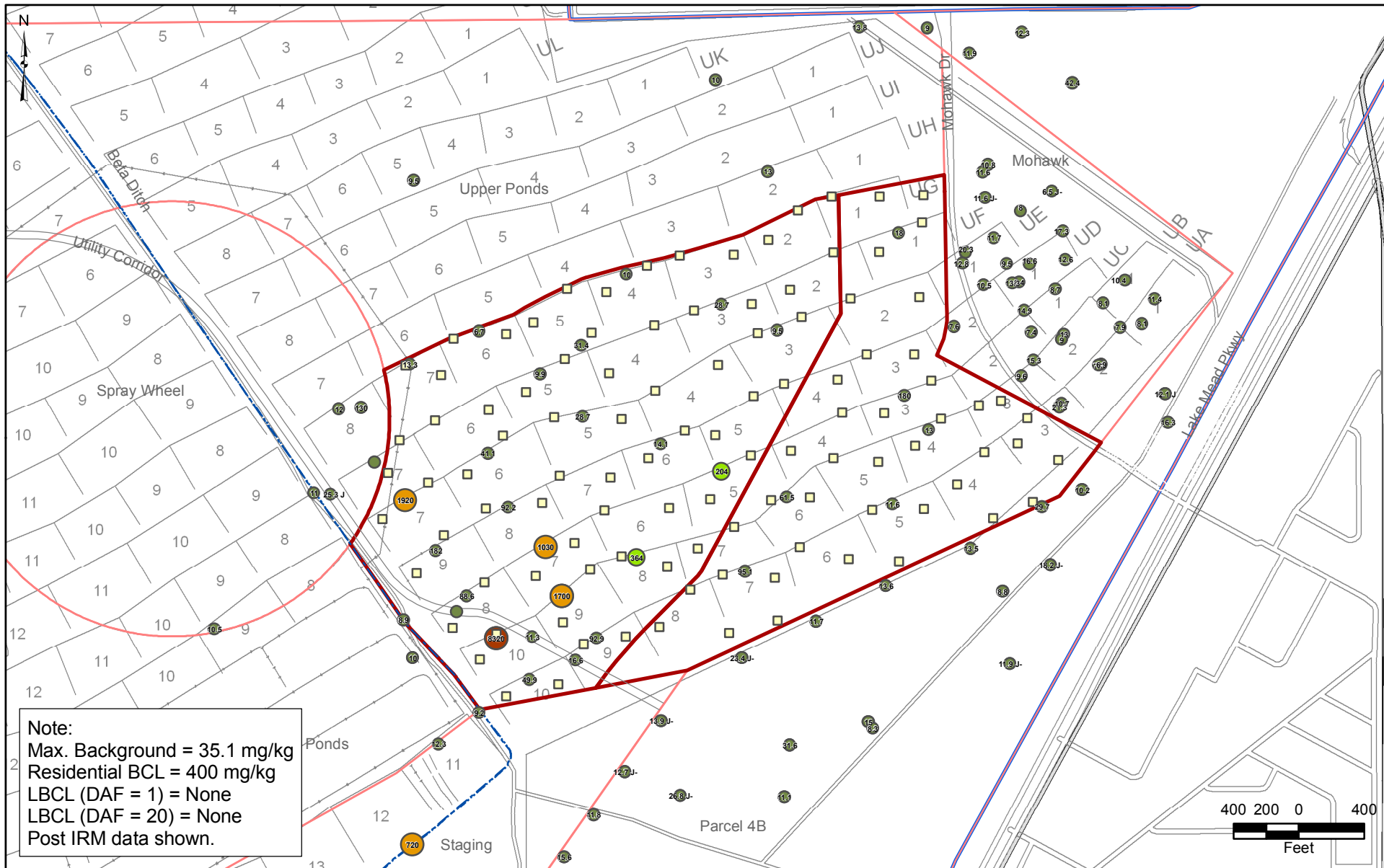
Prepared by
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Basic Remediation
COMPANY



- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL


BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-14

**LEAD RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**

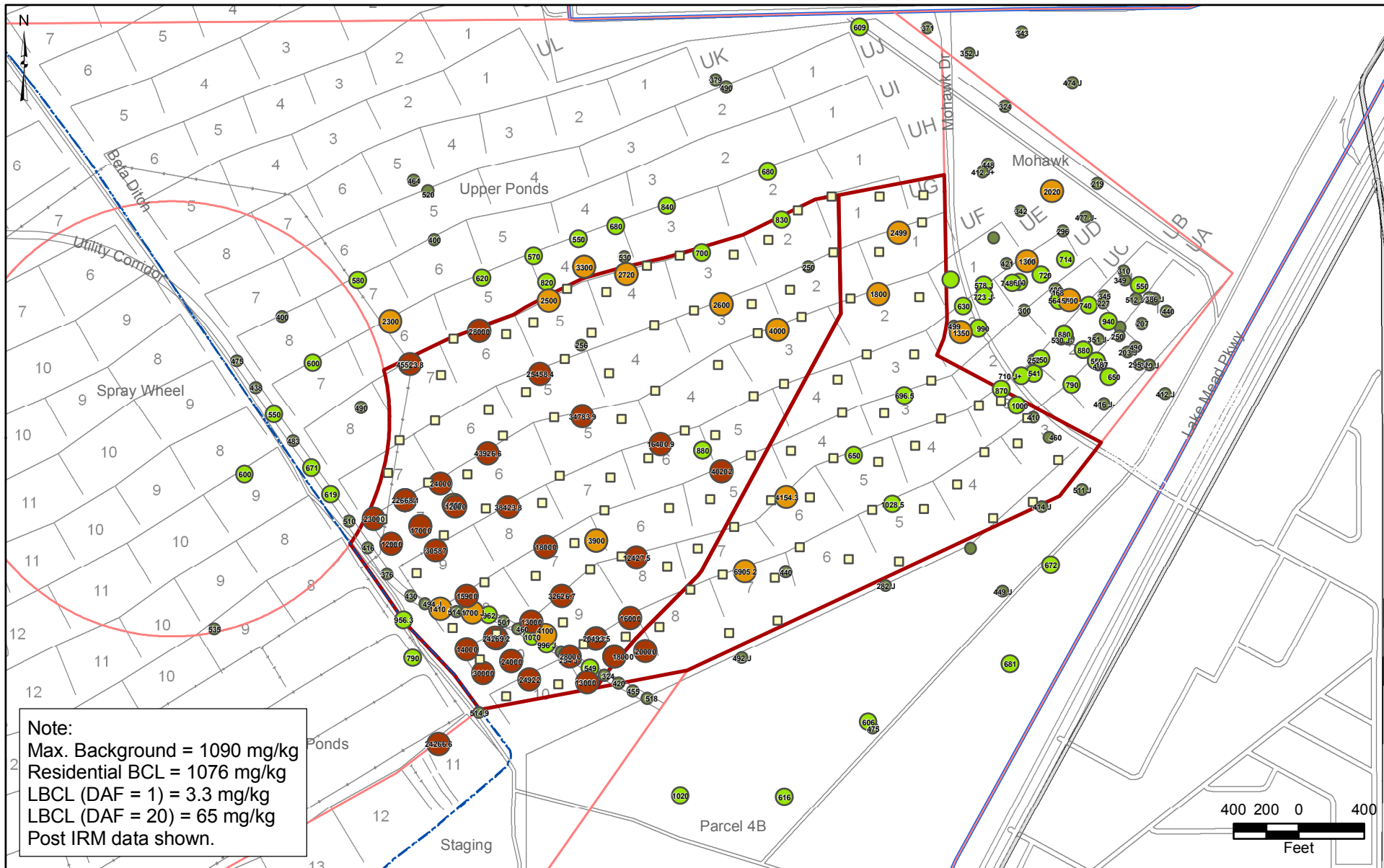
Prepared by
MKJ (ERM)

Date
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JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



Basic Remediation
COMPANY



- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- $\geq 1/2$ -BCL and < BCL
- \geq BCL and < 10x BCL
- ≥ 10 x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-15

**MANGANESE RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**

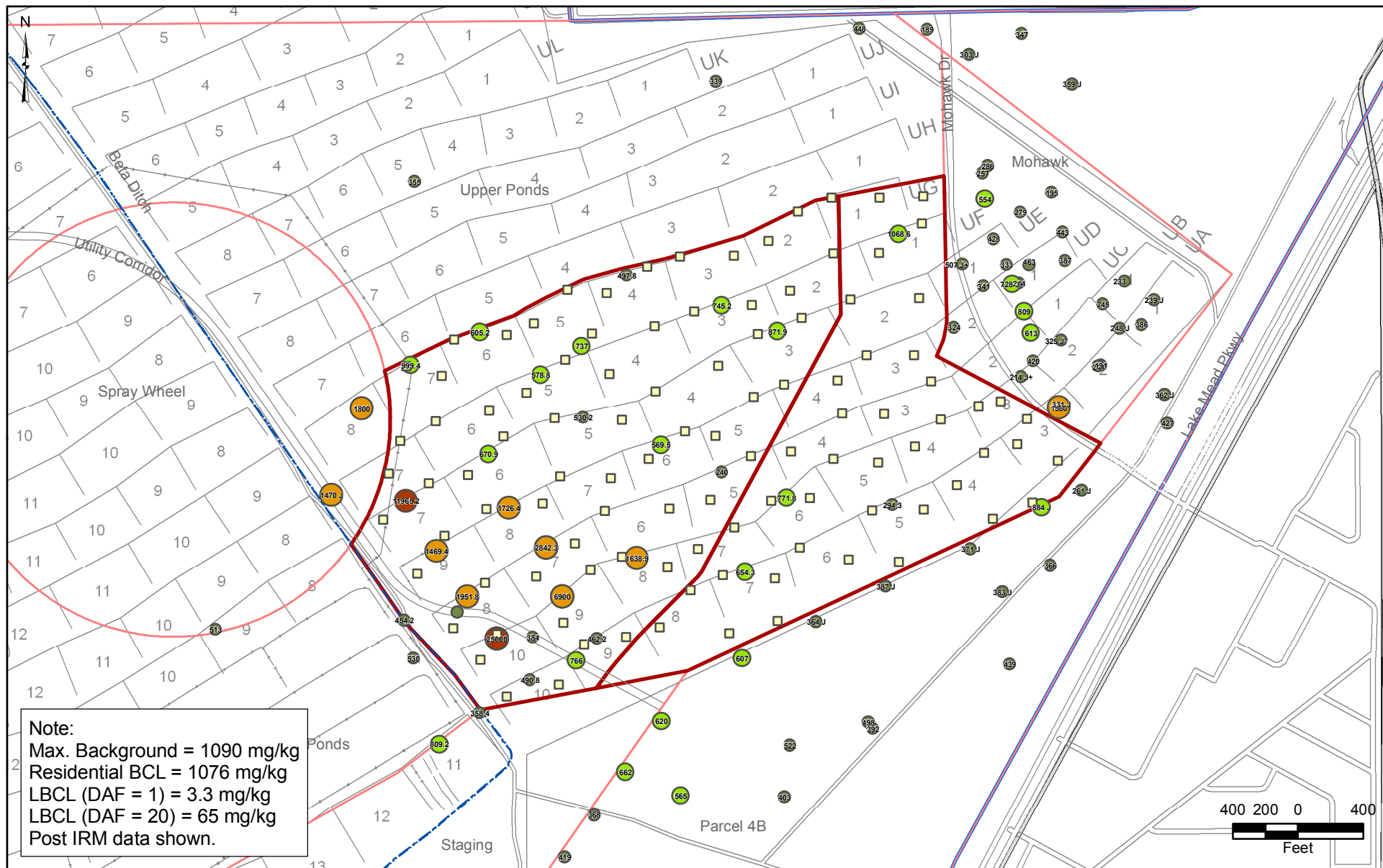


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JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



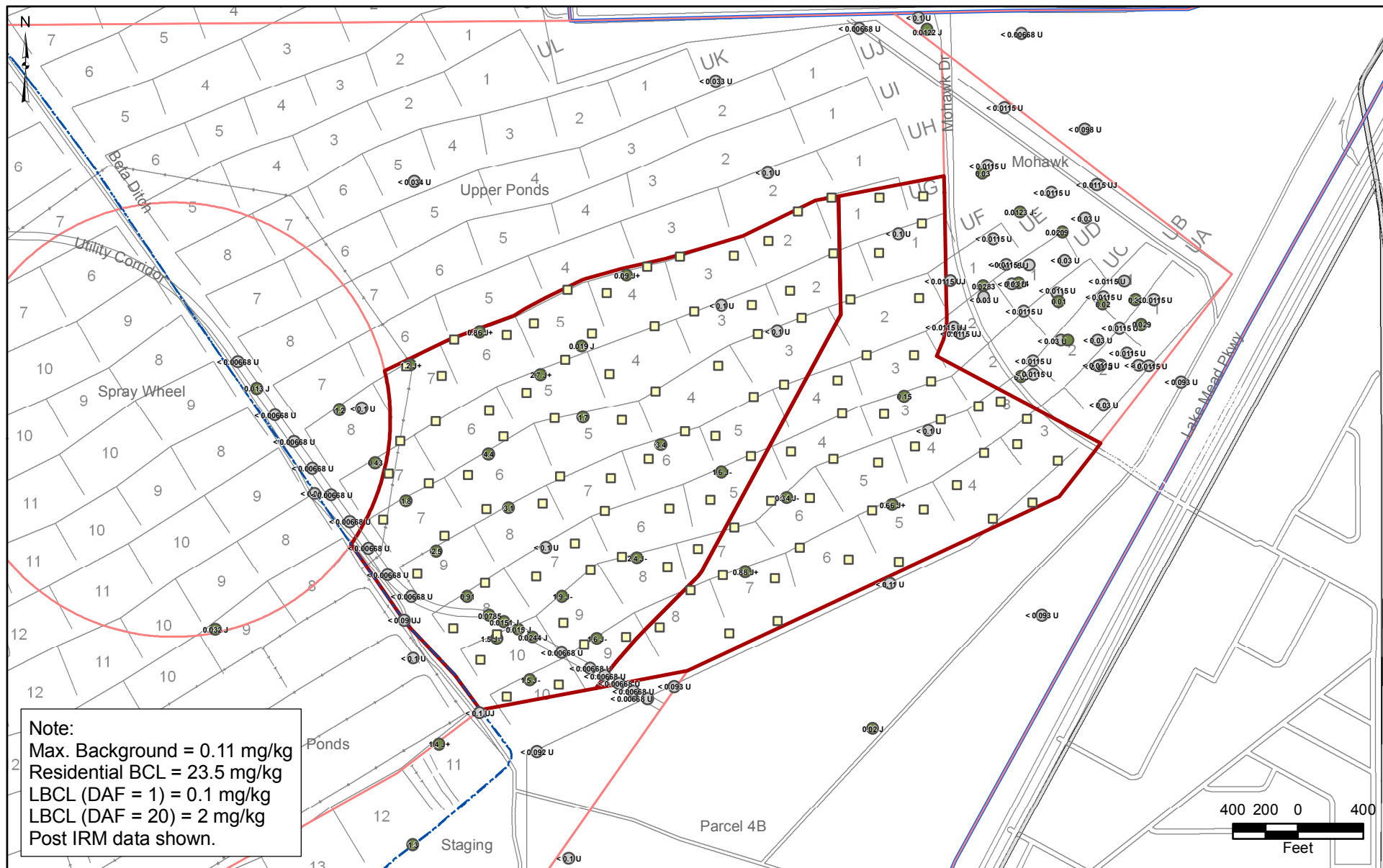
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-16

**MANGANESE RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**





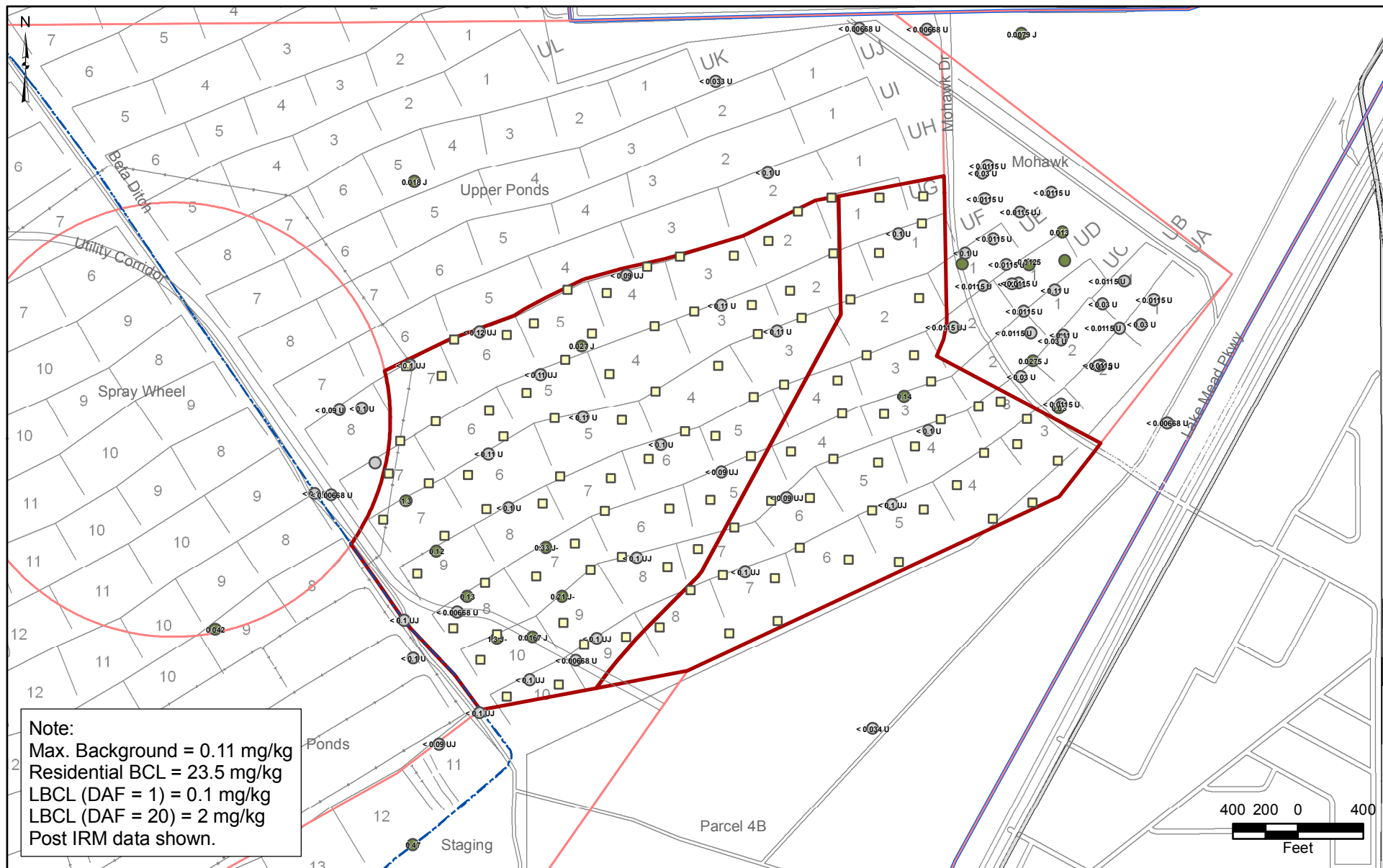
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-17

**MERCURY RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**



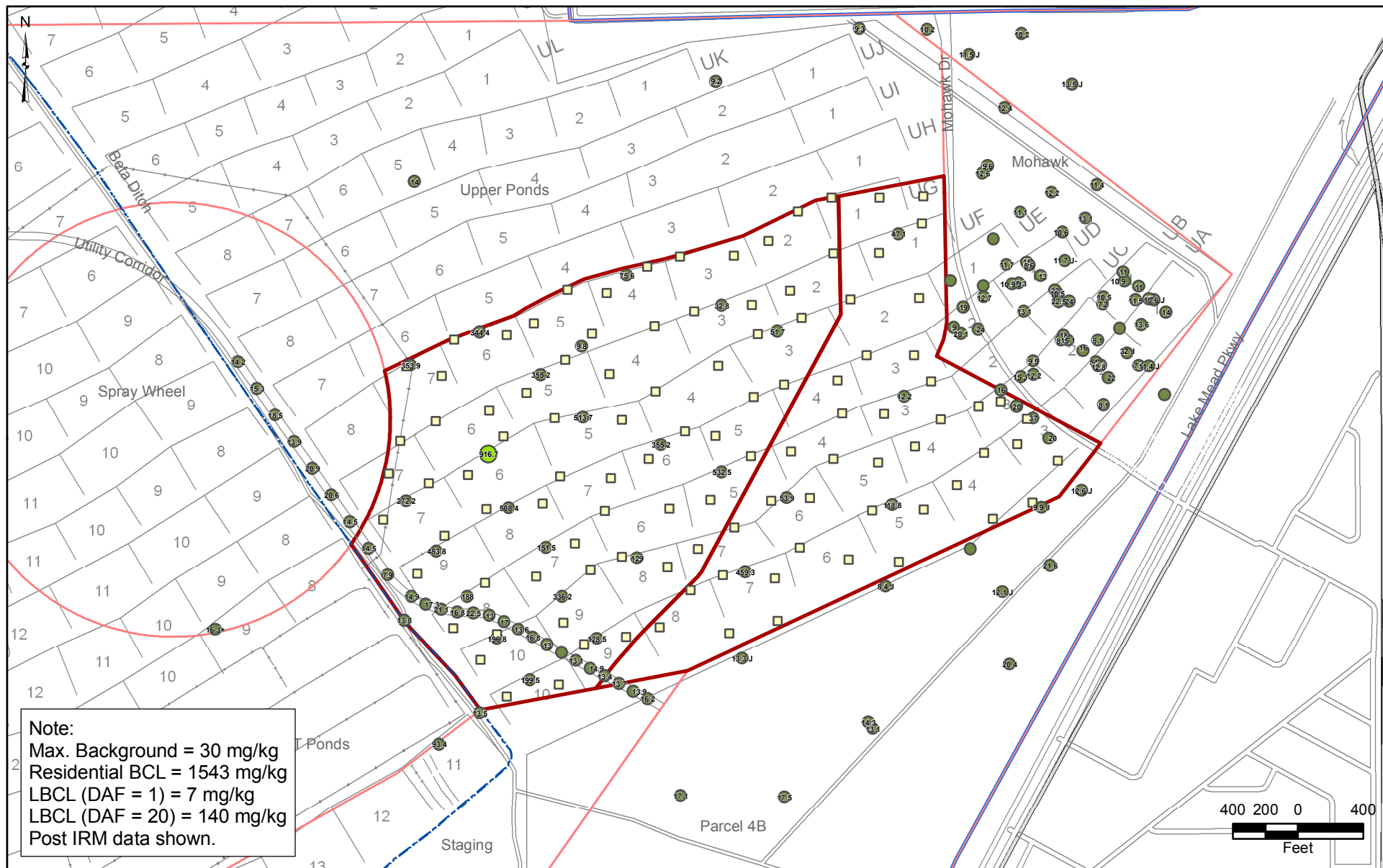


- | | |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < 1/2-Residential BCL |
| Eastside Soil Sub-Areas | ● >= 1/2-BCL and < BCL |
| □ SAP Proposed Soil Sample Location | ● >= BCL and < 10x BCL |
| | ● >= 10x BCL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-18

**MERCURY RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**



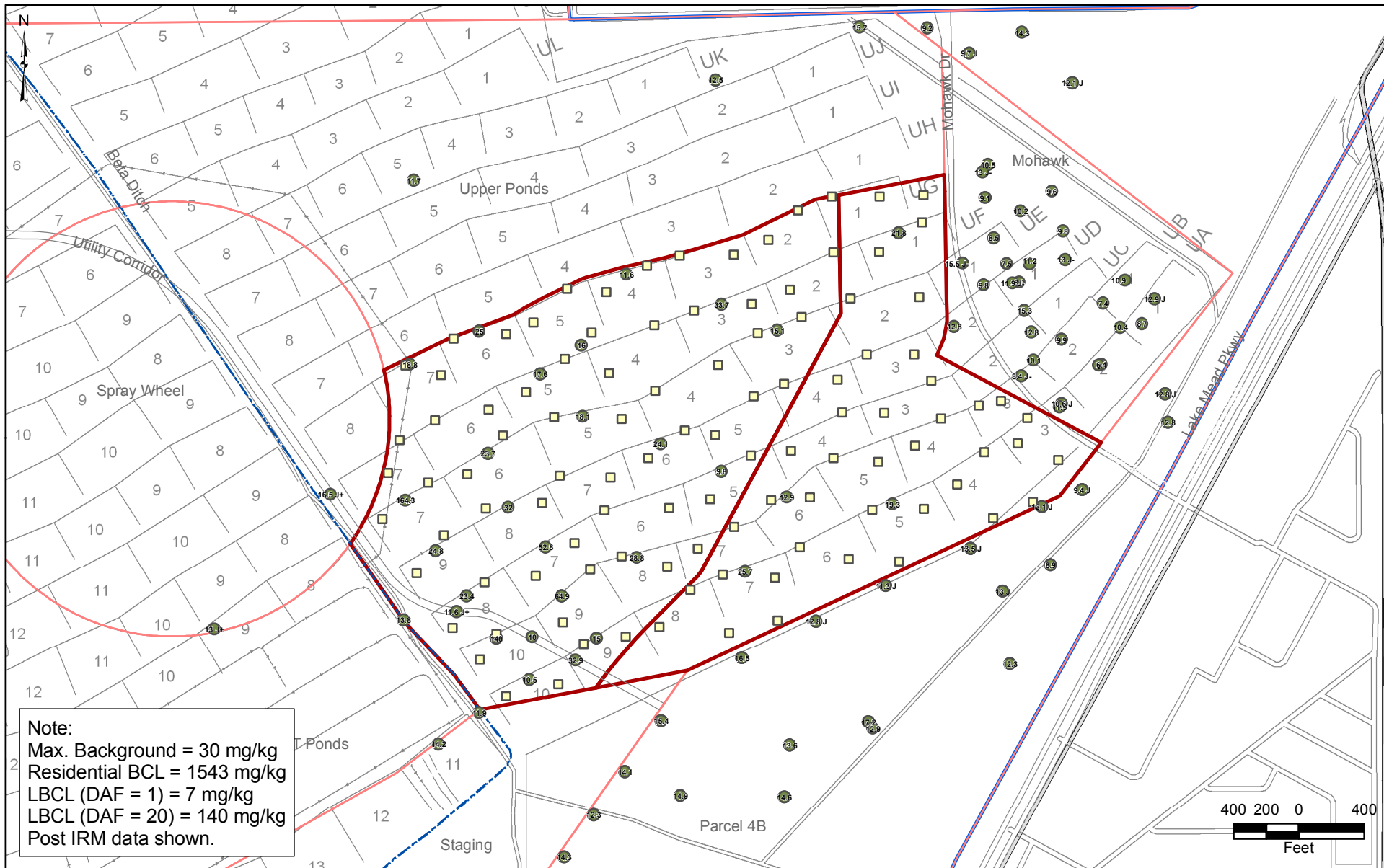


- | | |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < 1/2-Residential BCL |
| Eastside Soil Sub-Areas | ● >= 1/2-BCL and < BCL |
| □ SAP Proposed Soil Sample Location | ● >= BCL and < 10x BCL |
| | ● >= 10x BCL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-19

**NICKEL RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**





Note:
 Max. Background = 30 mg/kg
 Residential BCL = 1543 mg/kg
 LBCL (DAF = 1) = 7 mg/kg
 LBCL (DAF = 20) = 140 mg/kg
 Post IRM data shown.

- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- ≥ 1/2-BCL and < BCL
- ≥ BCL and < 10x BCL
- ≥ 10x BCL


BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-20

**NICKEL RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**

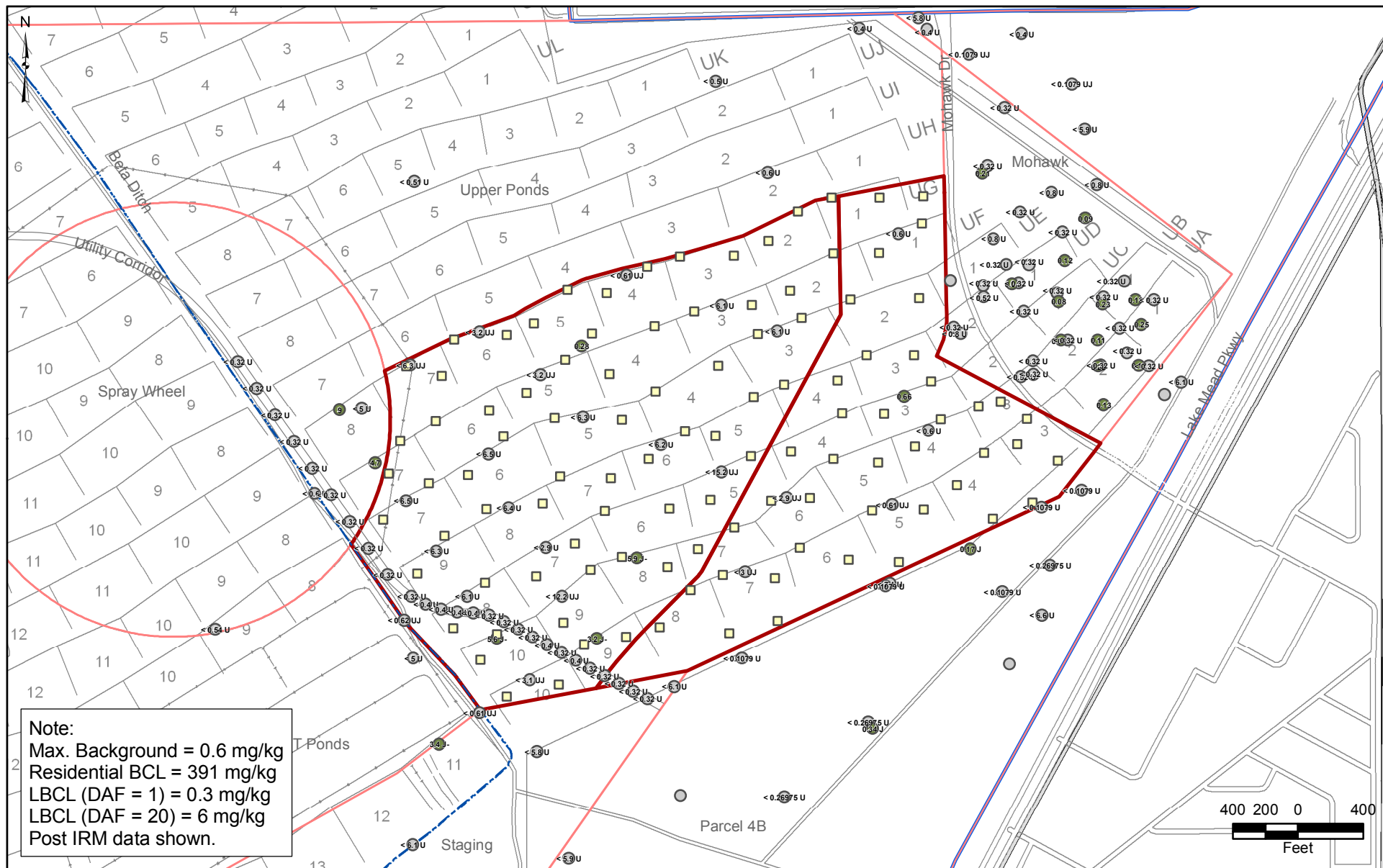
Prepared by
MKJ (ERM)

Date
11/17/09

JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



Basic Remediation
COMPANY

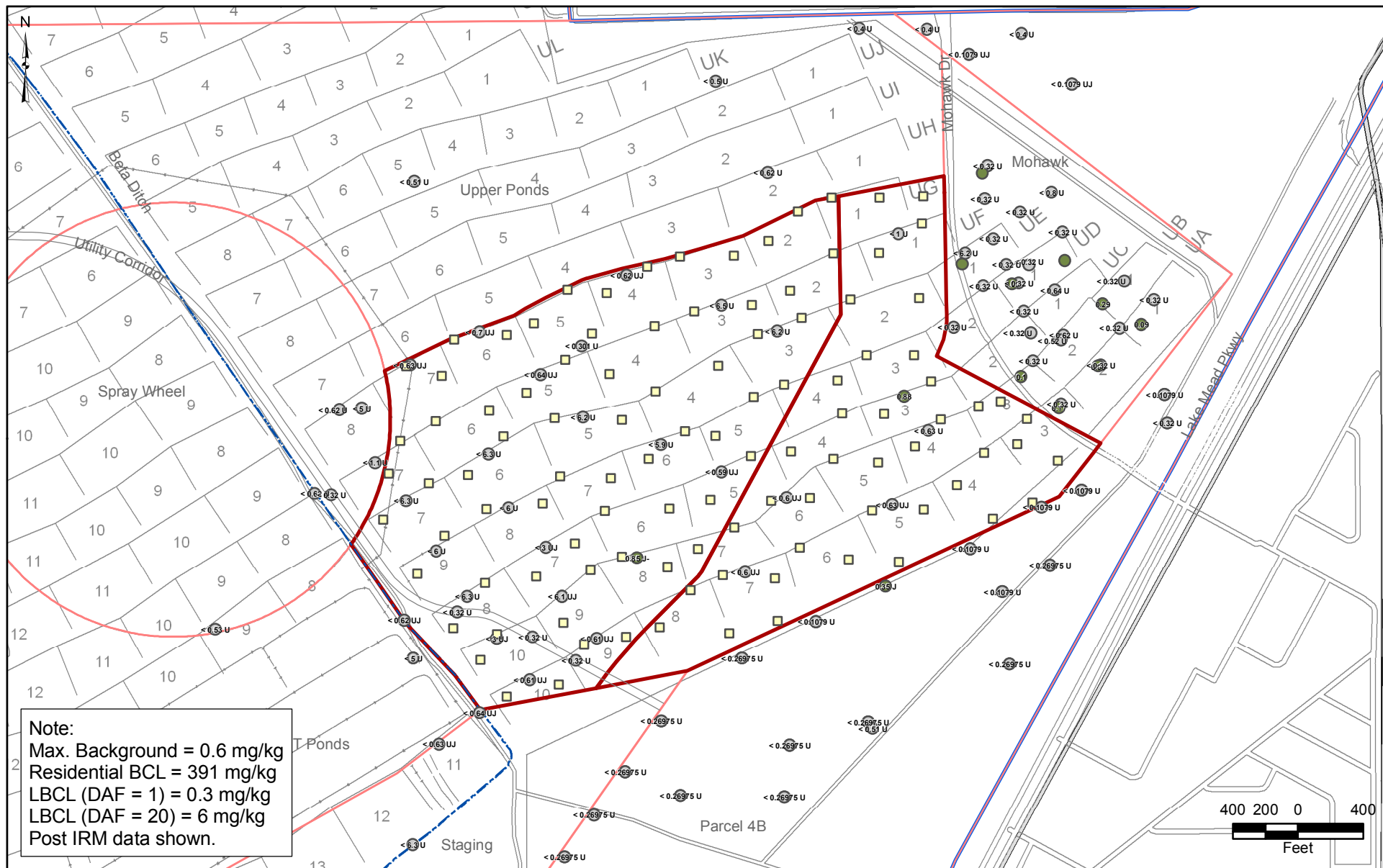


- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < 1/2-Residential BCL |
| Eastside Soil Sub-Areas | ● >= 1/2-BCL and < BCL |
| SAP Proposed Soil Sample Location | ● >= BCL and < 10x BCL |
| | ● >= 10x BCL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-21

**SELENIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**





- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-22

**SELENIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**

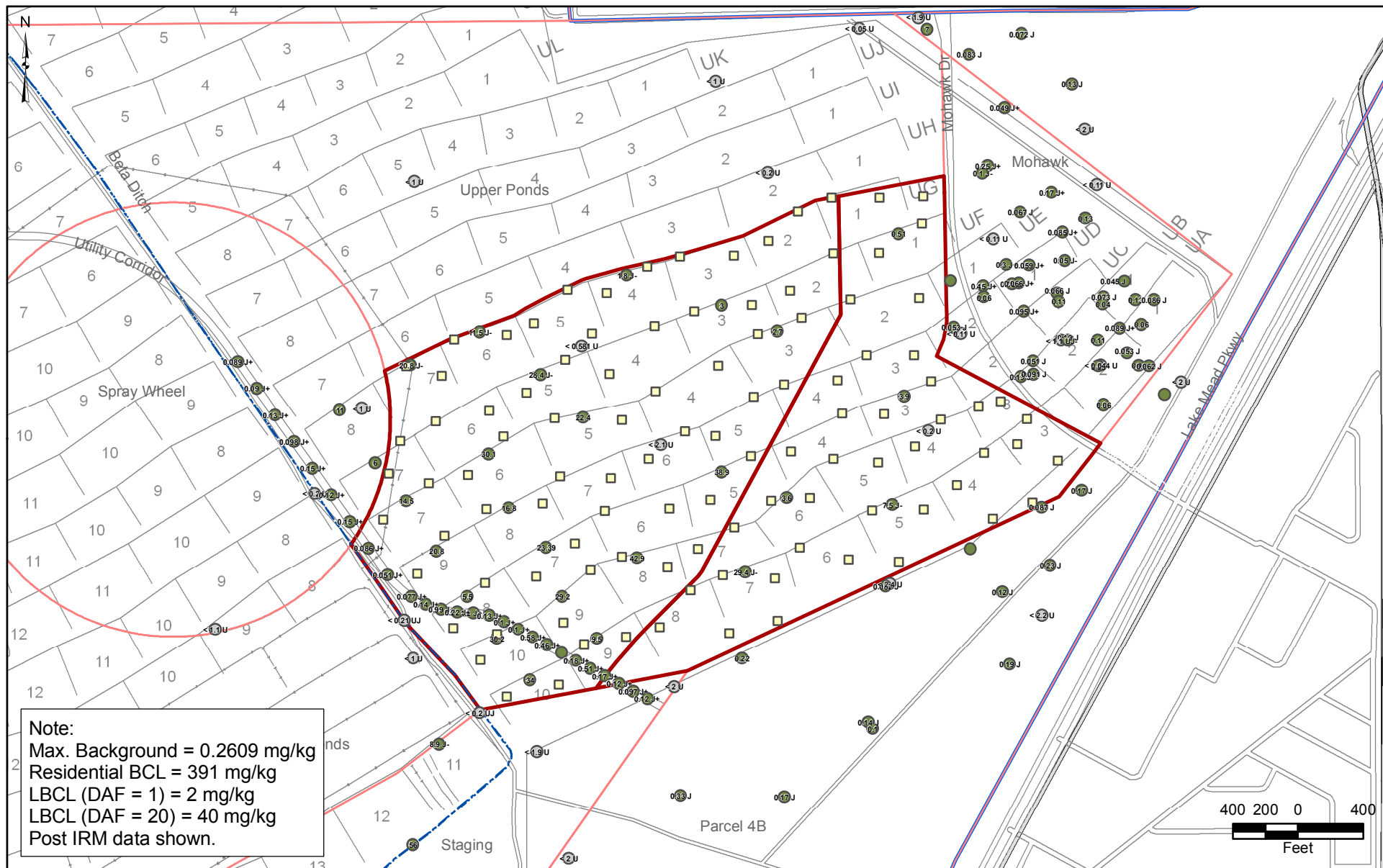


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 MKJ (ERM)



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 11/17/09

JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD

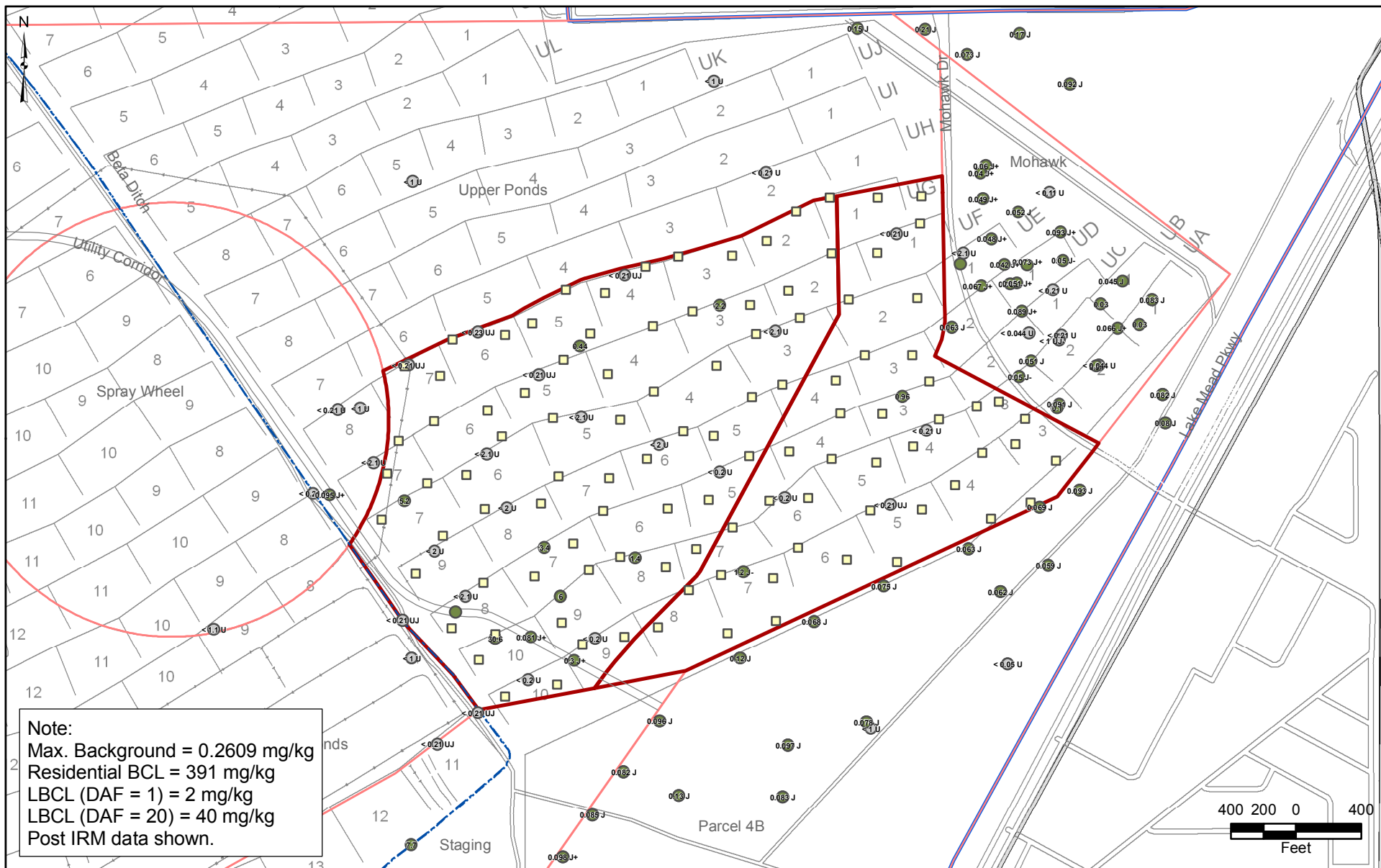


- | | |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < 1/2-Residential BCL |
| Eastside Soil Sub-Areas | ● >= 1/2-BCL and < BCL |
| □ SAP Proposed Soil Sample Location | ● >= BCL and < 10x BCL |
| | ● >= 10x BCL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-23

**SILVER RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**





- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-24

**SILVER RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**

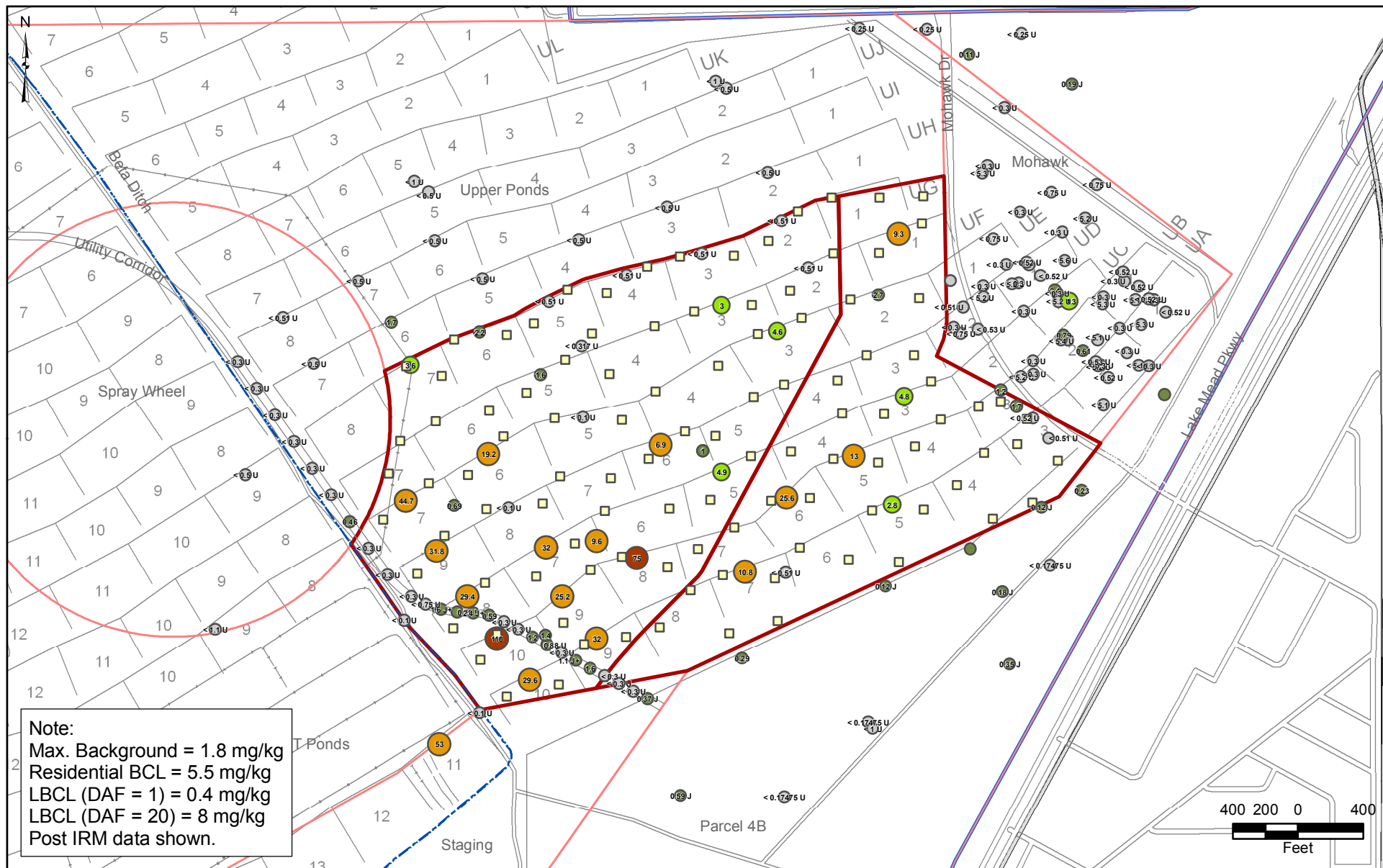


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 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



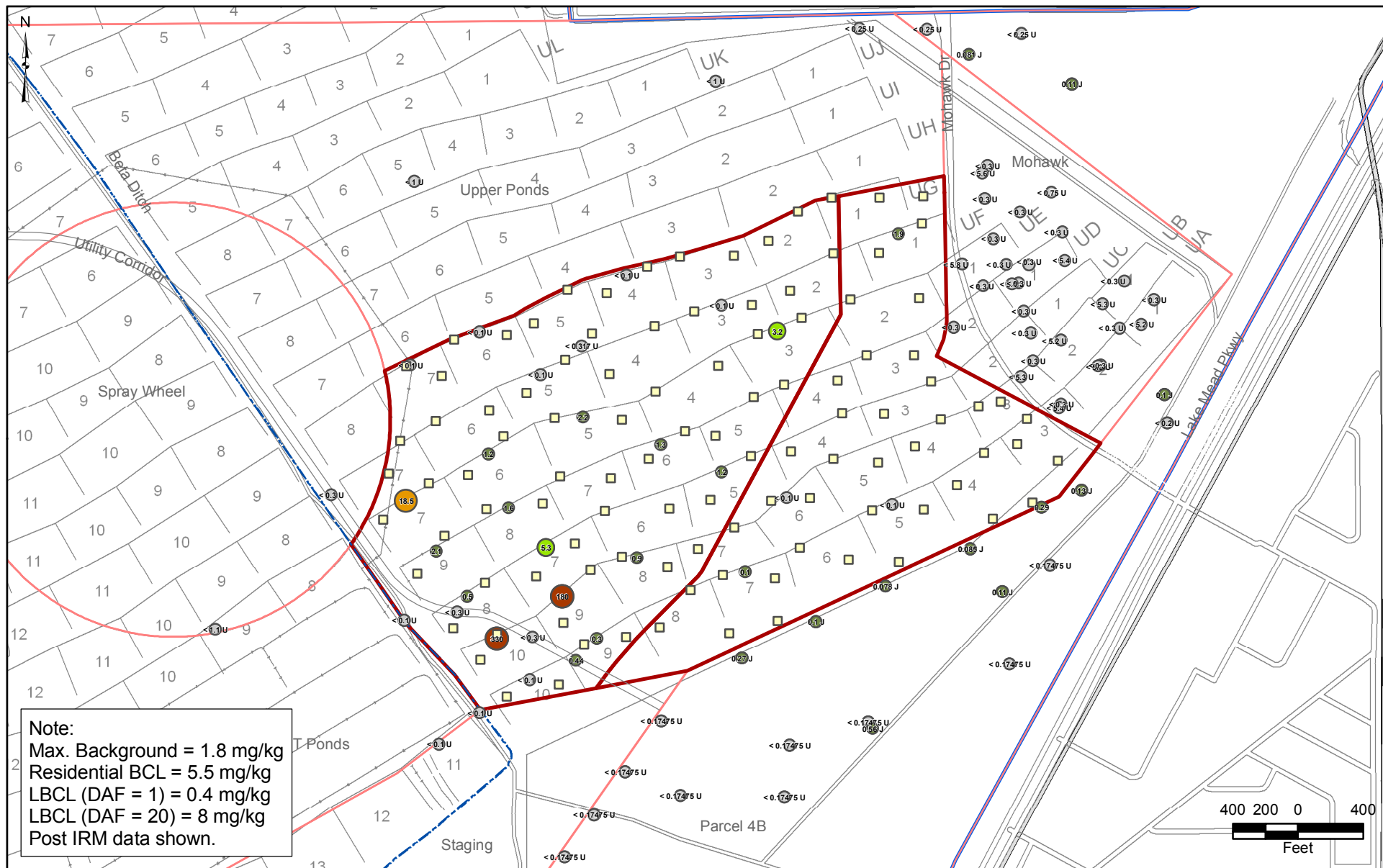
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-25

**THALLIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**



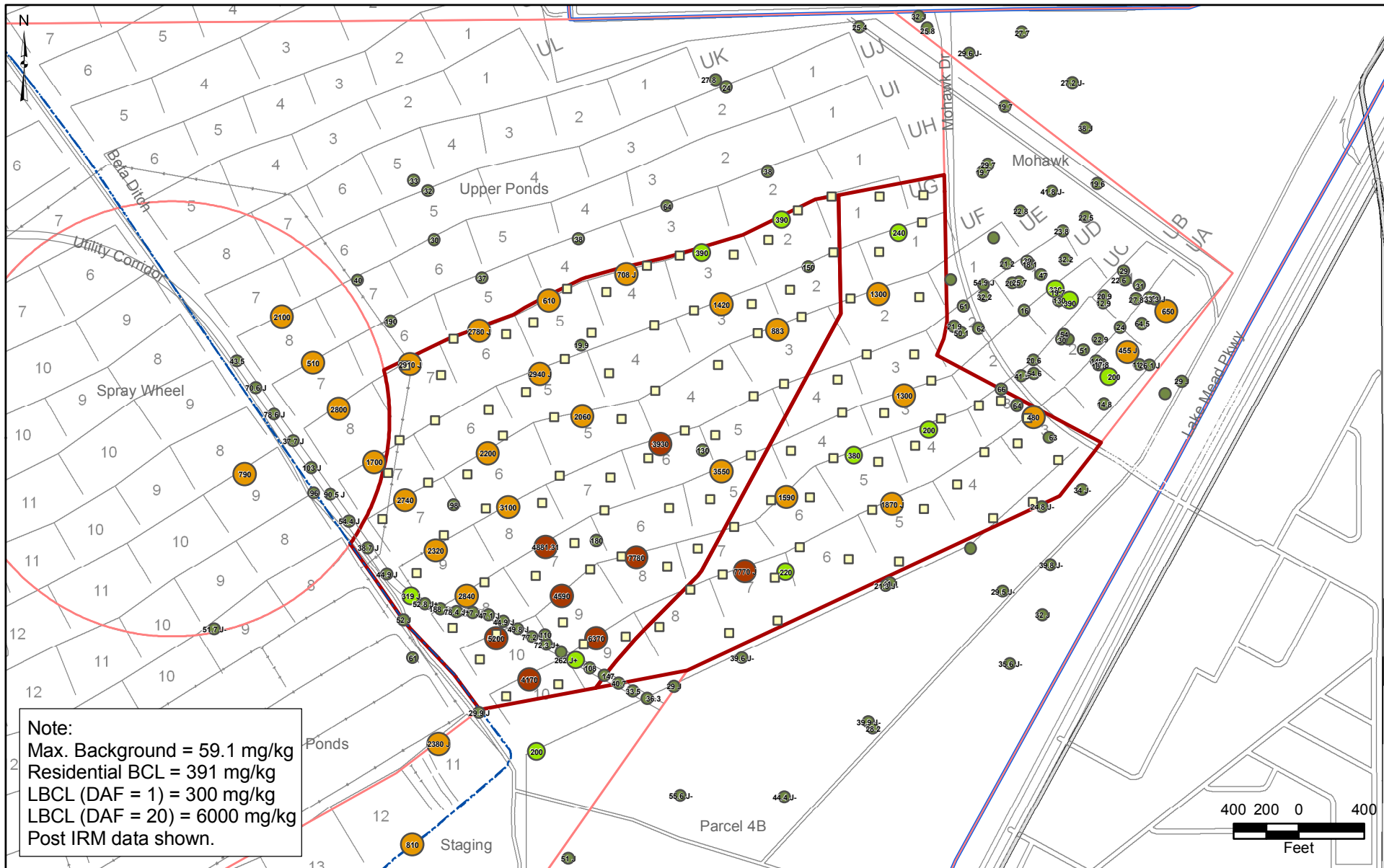


- | | |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < 1/2-Residential BCL |
| Eastside Soil Sub-Areas | ● >= 1/2-BCL and < BCL |
| □ SAP Proposed Soil Sample Location | ● >= BCL and < 10x BCL |
| | ● >= 10x BCL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-26

**THALLIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**





- | | |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < 1/2-Residential BCL |
| Eastside Soil Sub-Areas | ● >= 1/2-BCL and < BCL |
| □ SAP Proposed Soil Sample Location | ● >= BCL and < 10x BCL |
| | ● >= 10x BCL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-27

**VANADIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**

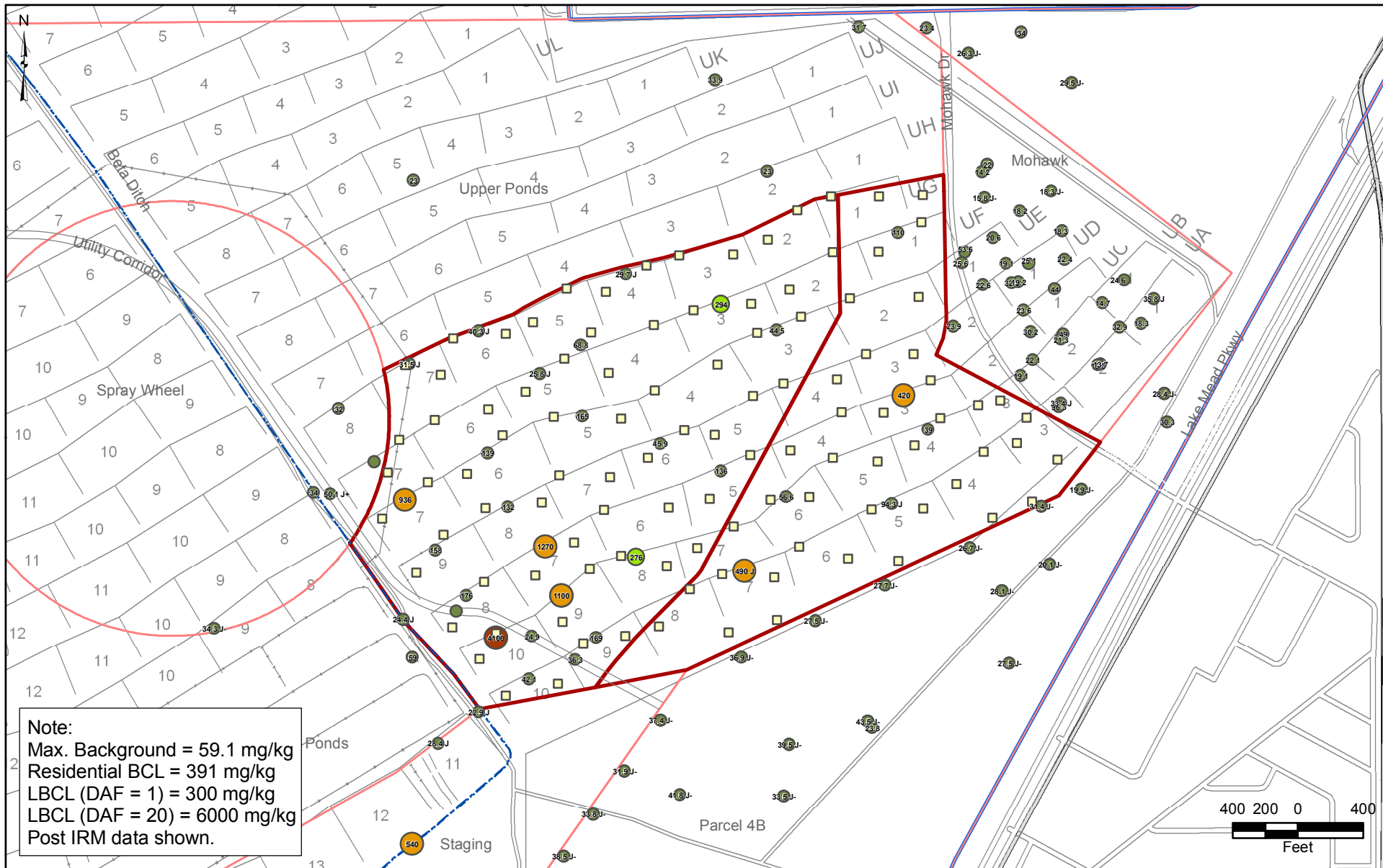


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JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL


BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-28

**VANADIUM RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**

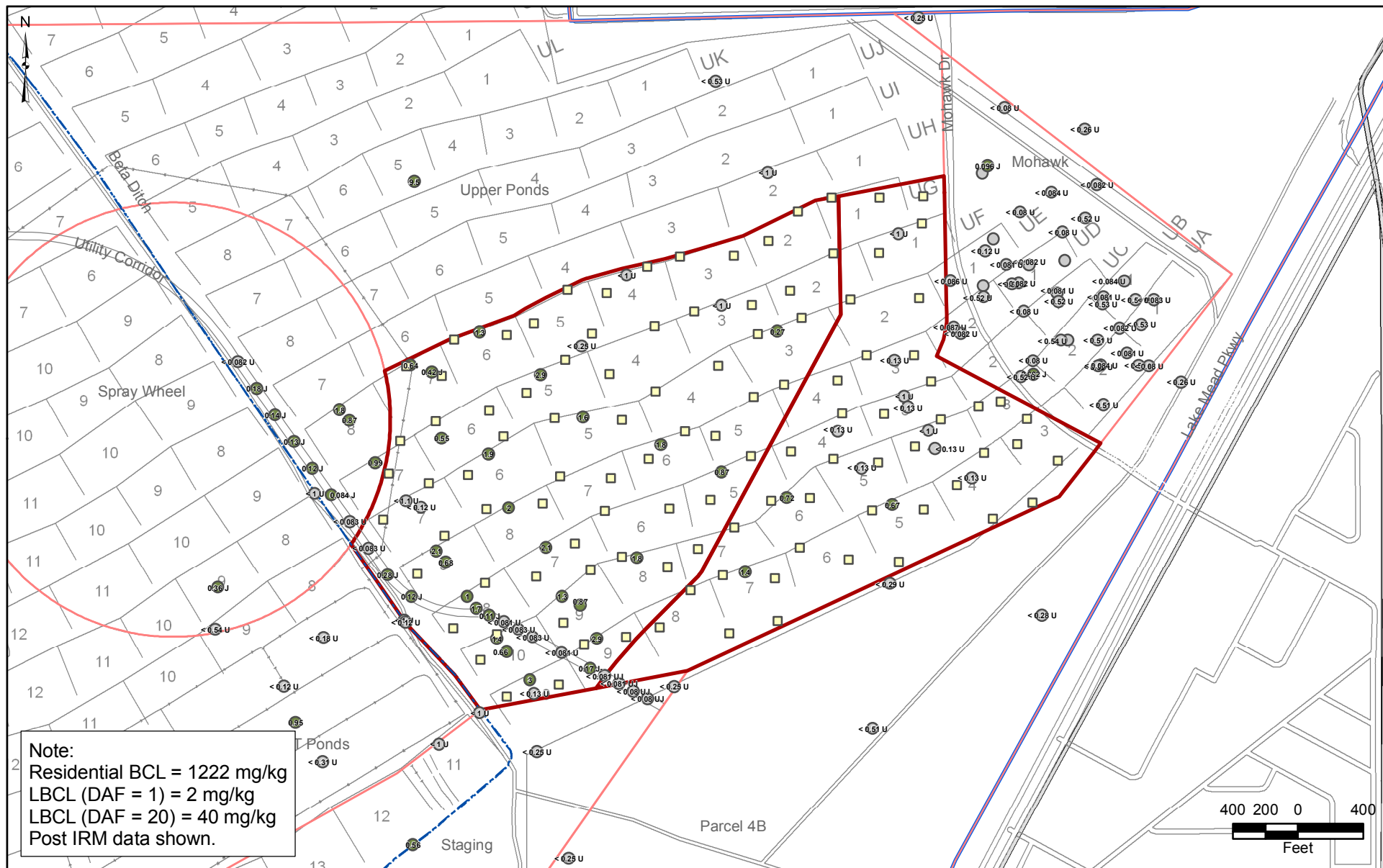
Prepared by
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JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



Basic Remediation
COMPANY



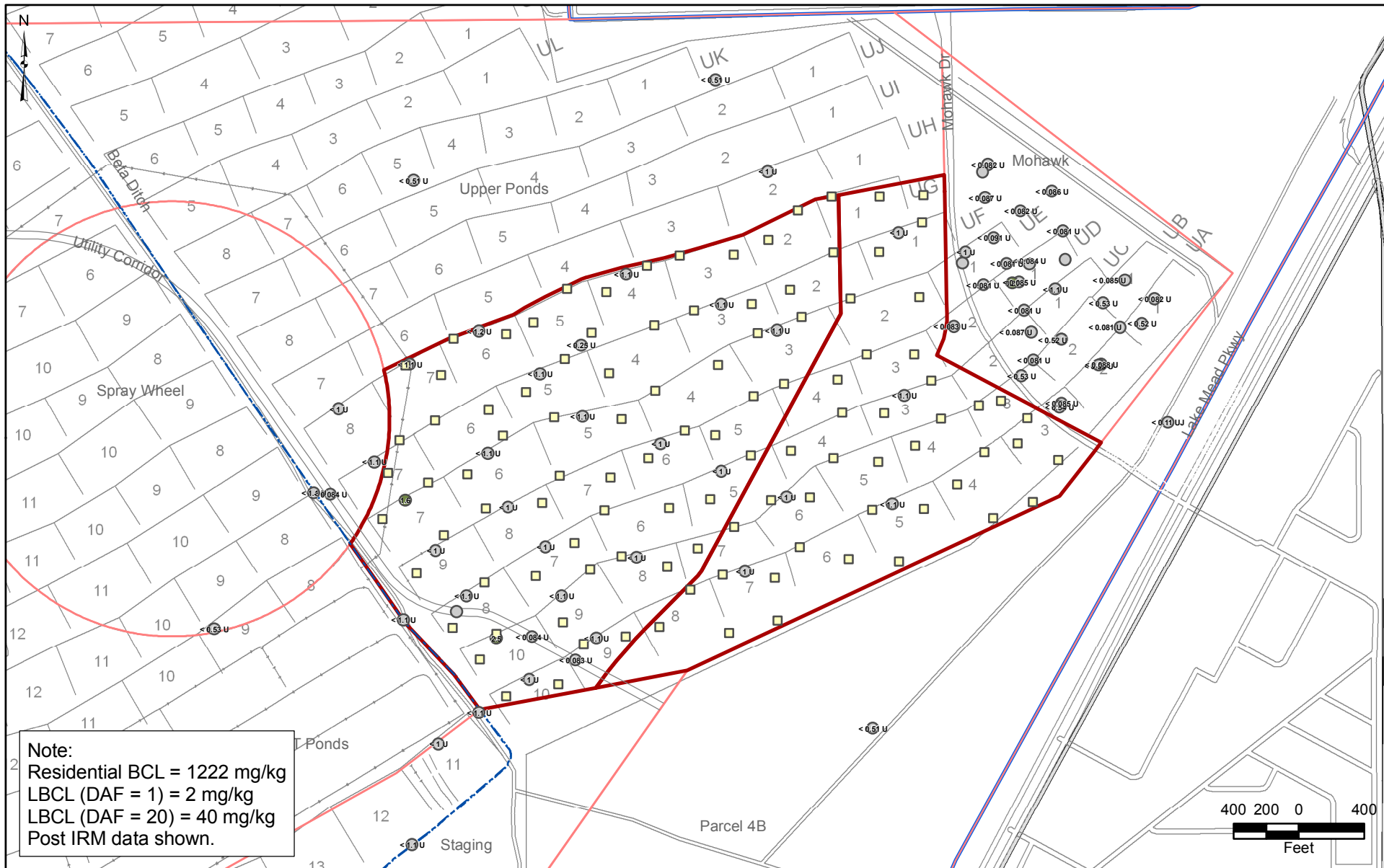
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-29

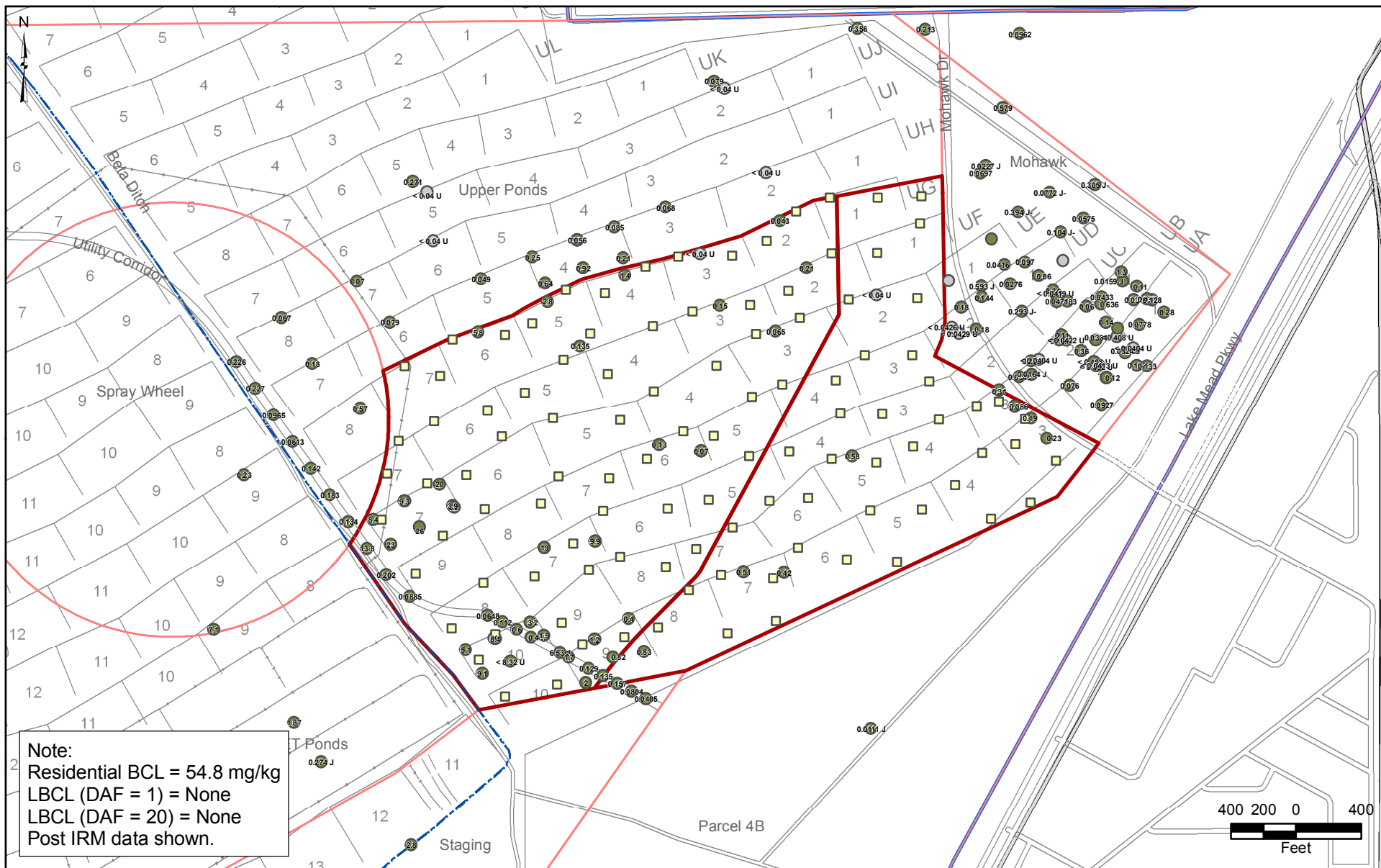
**TOTAL CYANIDE RESULTS
 IN FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**





<div style="border: 2px solid red; width: 20px; height: 10px; display: inline-block;"></div> First Eight Rows Sub-Areas <div style="border: 2px solid blue; width: 20px; height: 10px; display: inline-block;"></div> Site AOC3 Boundary <div style="border: 2px solid pink; width: 20px; height: 10px; display: inline-block;"></div> Eastside Soil Sub-Areas <div style="width: 10px; height: 10px; border: 1px solid black; display: inline-block; margin-right: 5px;"></div> SAP Proposed Soil Sample Location	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="width: 10px; height: 10px; border: 1px solid gray; margin-bottom: 5px;"></div> Non-Detect <div style="width: 10px; height: 10px; background-color: #666; margin-bottom: 5px;"></div> Detect < 1/2-Residential BCL <div style="width: 10px; height: 10px; background-color: #00ff00; margin-bottom: 5px;"></div> >= 1/2-BCL and < BCL <div style="width: 10px; height: 10px; background-color: #ffa500; margin-bottom: 5px;"></div> >= BCL and < 10x BCL <div style="width: 10px; height: 10px; background-color: #800000; margin-bottom: 5px;"></div> >= 10x BCL </div>	<p>BMI Common Areas (Eastside) Clark County, Nevada FIGURE C-30</p> <p>TOTAL CYANIDE RESULTS IN FIRST 8 ROWS SUB-AREAS AND ADJACENT 1,000 FT 3 TO 10 FT BGS</p> <p>Prepared by: MKJ (ERM) Date: 11/17/09 JOB No. 0064276 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD</p>
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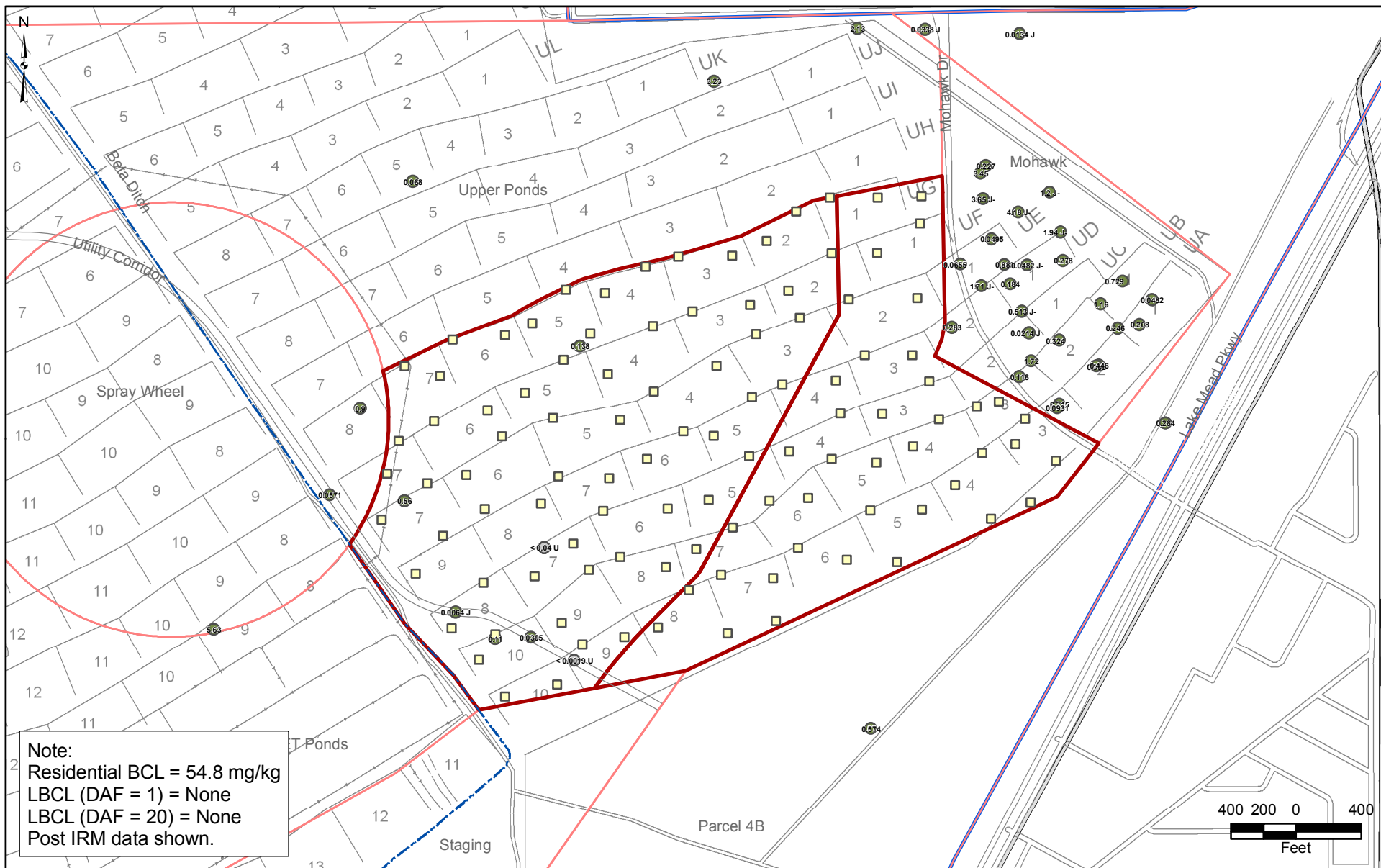


- | | |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < 1/2-Residential BCL |
| Eastside Soil Sub-Areas | ● >= 1/2-BCL and < BCL |
| SAP Proposed Soil Sample Location | ● >= BCL and < 10x BCL |
| | ● >= 10x BCL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-31

**PERCHLORATE RESULTS
 IN FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**



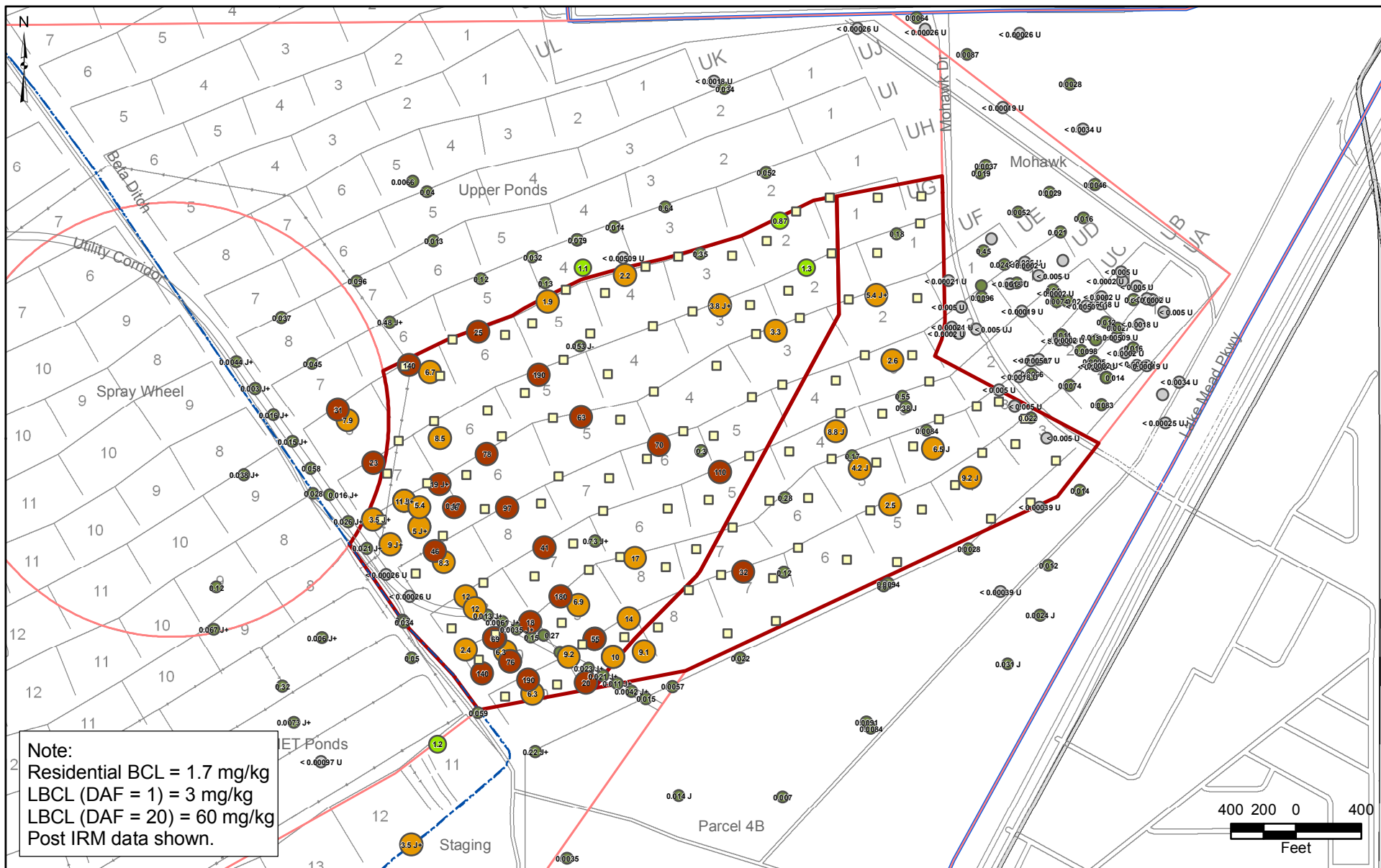


- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < 1/2-Residential BCL |
| Eastside Soil Sub-Areas | ● >= 1/2-BCL and < BCL |
| SAP Proposed Soil Sample Location | ● >= BCL and < 10x BCL |
| | ● >= 10x BCL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-32

**PERCHLORATE RESULTS
 IN FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**





- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-33

**4,4-DDE RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**



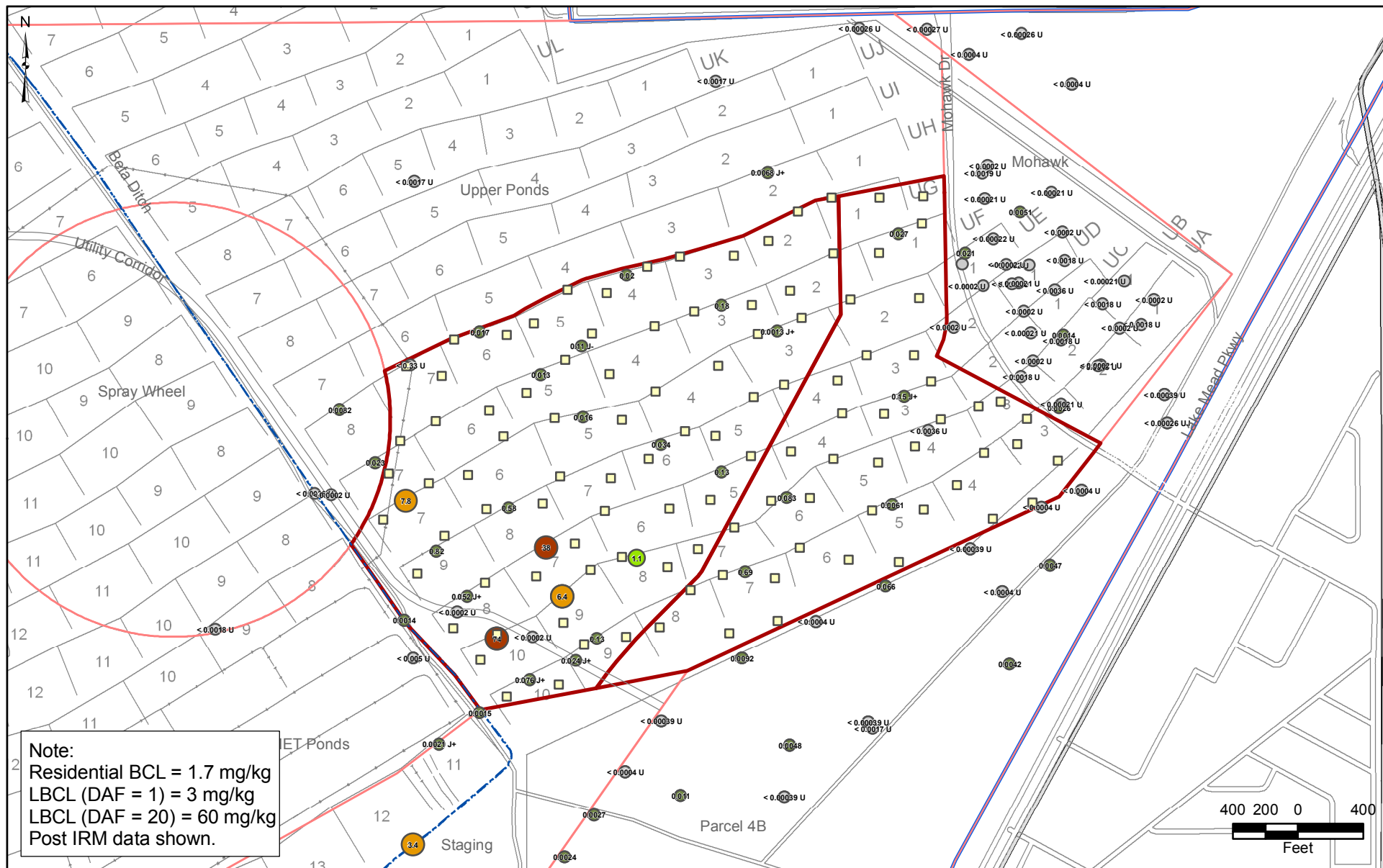
Prepared by
 MKJ (ERM)



Date
 11/17/09

FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD

JOB No. 0064276



- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

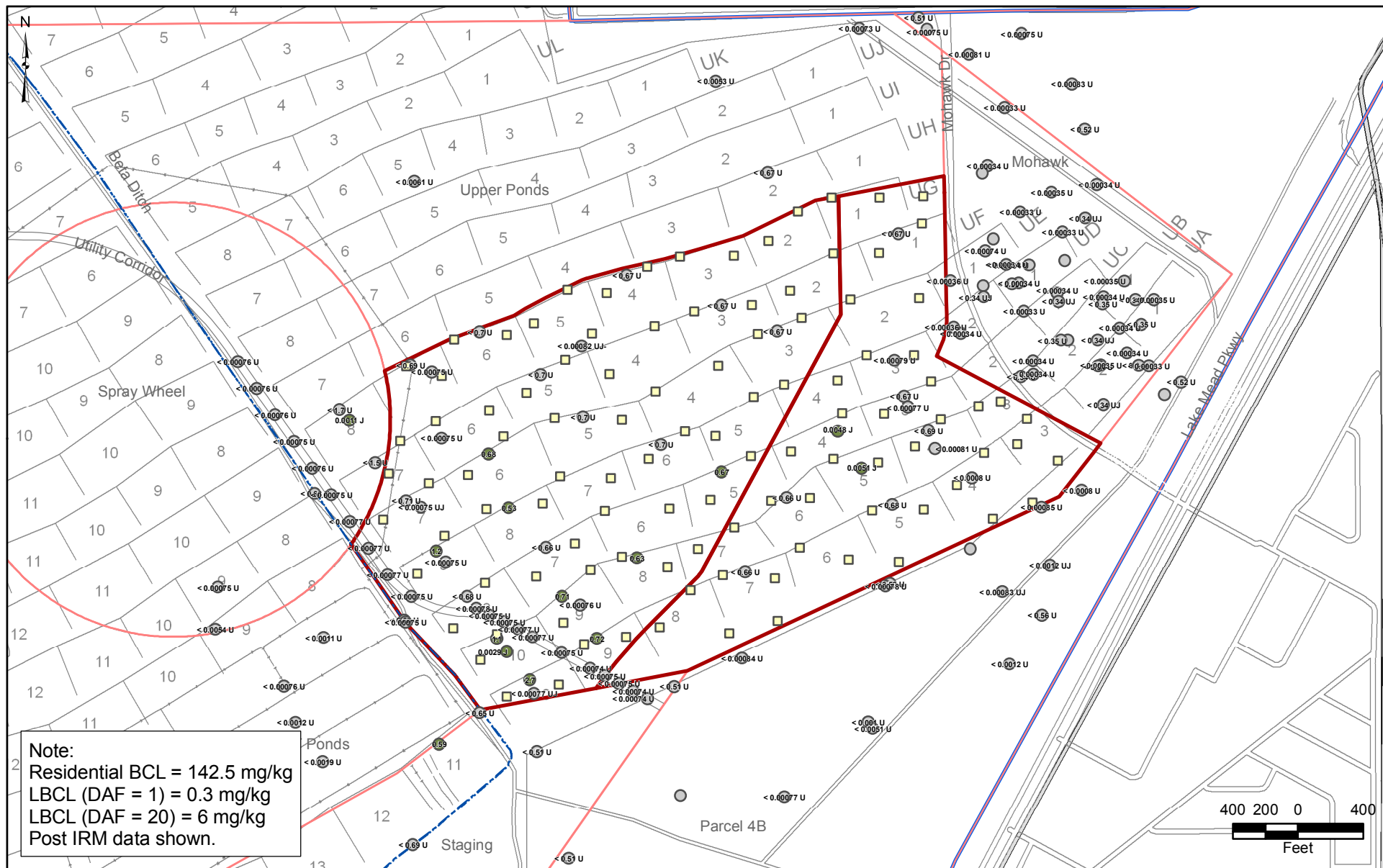
- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-34

**4,4-DDE RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**



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 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD



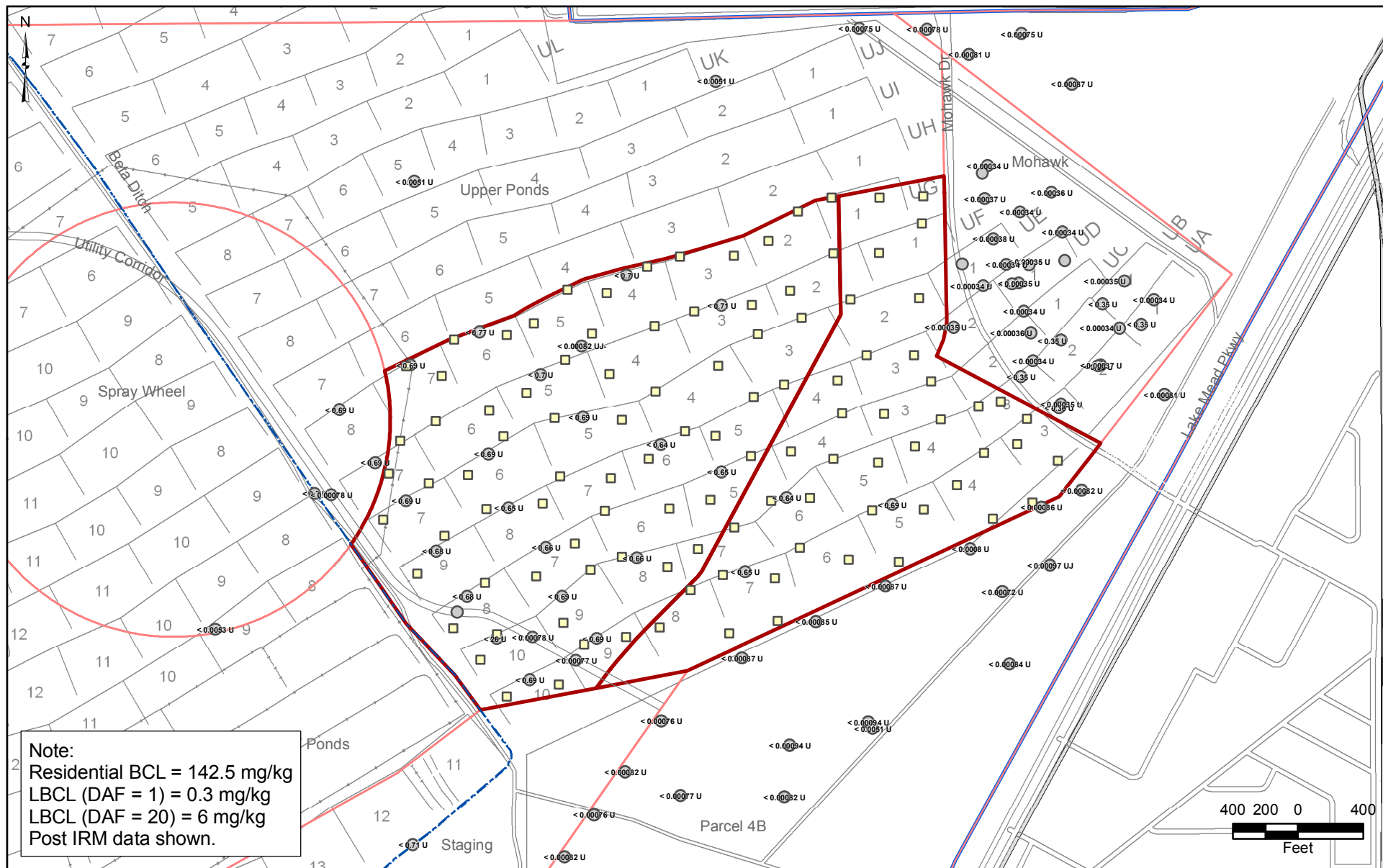
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-35

**1,2,4-TRICHLOROBENZENE
 RESULTS IN FIRST 8 ROWS
 SUB-AREAS AND ADJACENT
 1,000 FT - 0 to 2 FT BGS**





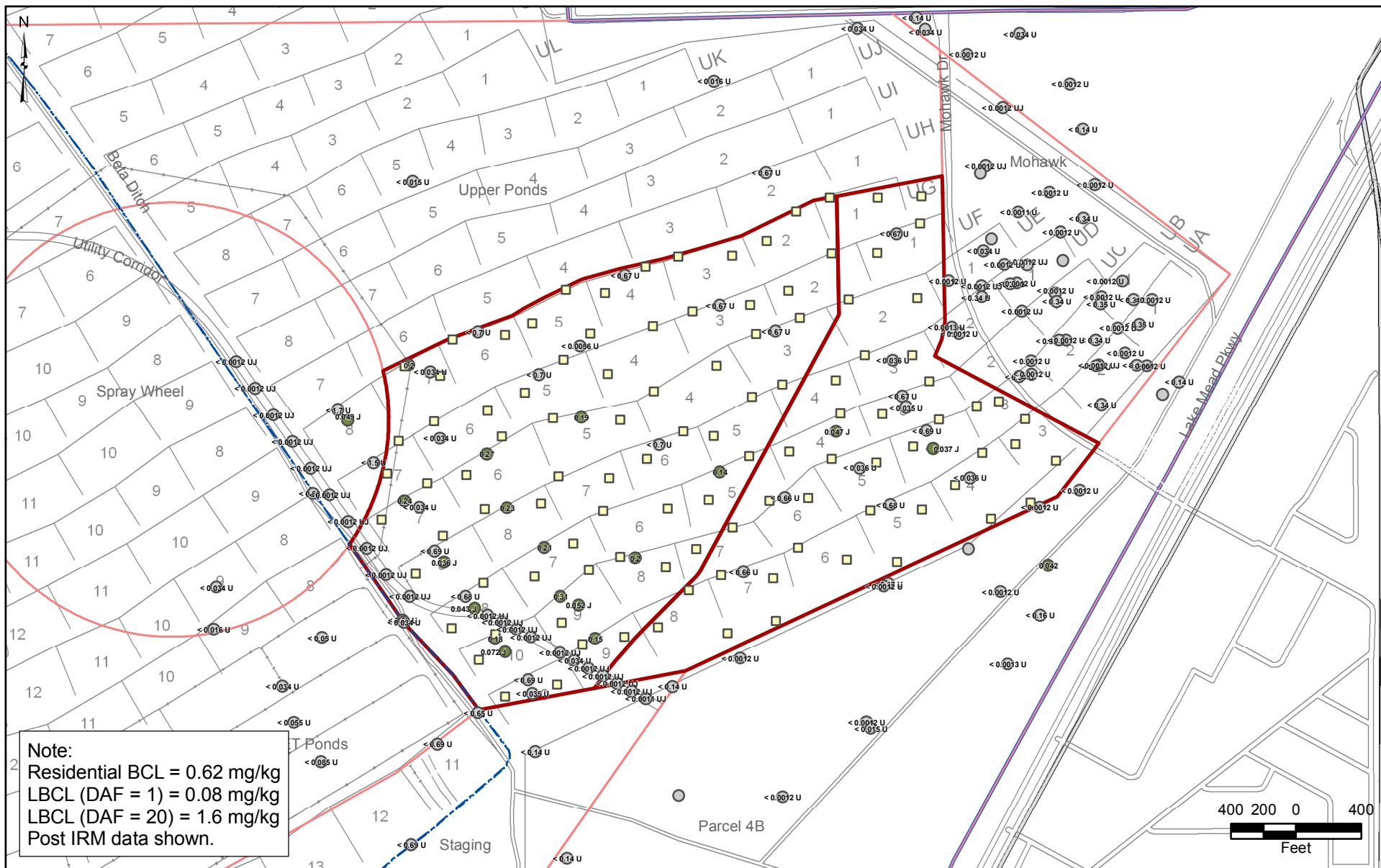
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

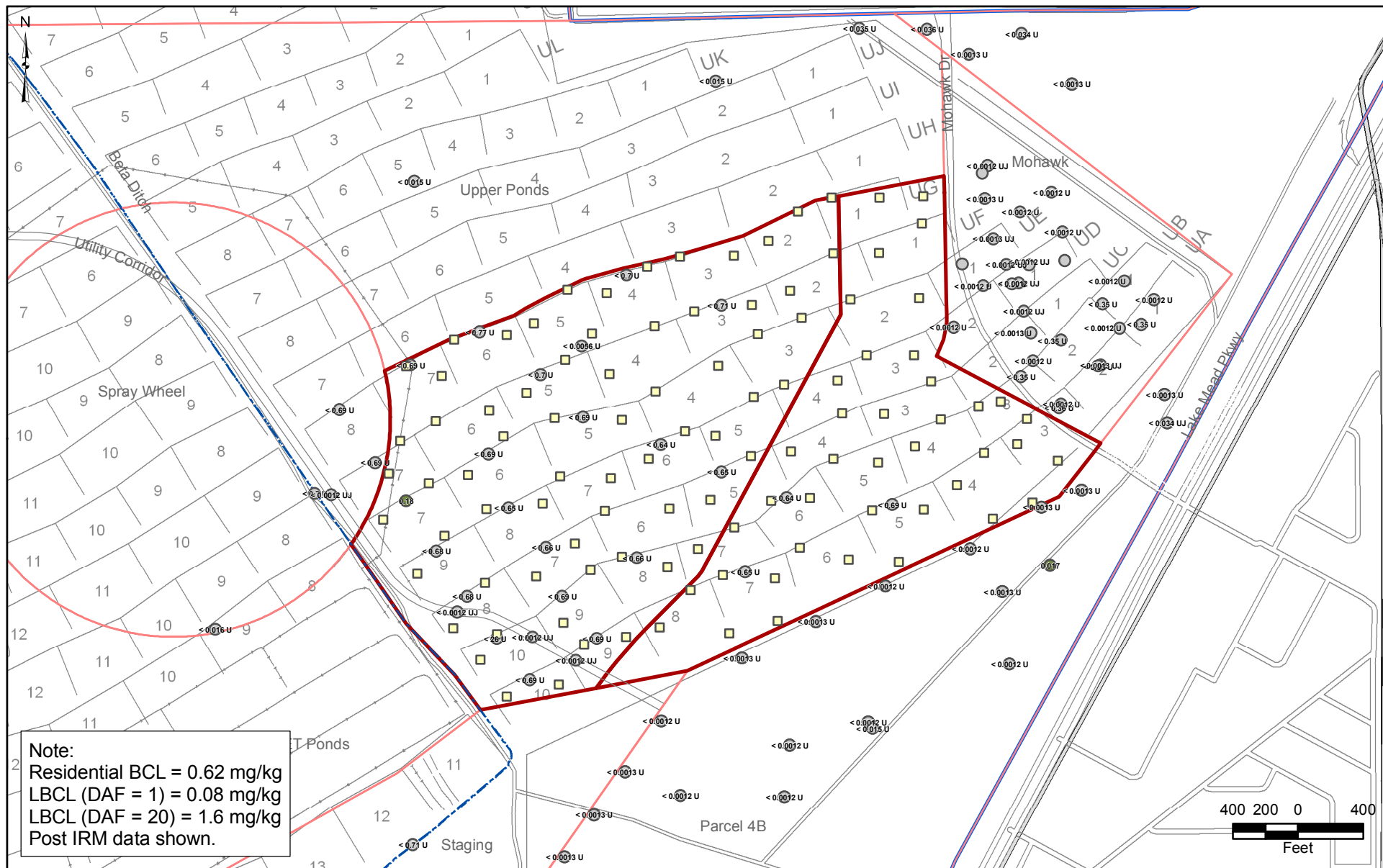
BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-36

**1,2,4-TRICHLOROBENZENE
 RESULTS IN FIRST 8 ROWS
 SUB-AREAS AND ADJACENT
 1,000 FT - 3 to 10 FT BGS**





<div style="border: 2px solid red; width: 20px; height: 10px; display: inline-block;"></div> First Eight Rows Sub-Areas <div style="border: 2px solid blue; width: 20px; height: 10px; display: inline-block;"></div> Site AOC3 Boundary <div style="border: 2px solid pink; width: 20px; height: 10px; display: inline-block;"></div> Eastside Soil Sub-Areas <div style="width: 10px; height: 10px; border: 1px solid black; display: inline-block; margin-right: 5px;"></div> SAP Proposed Soil Sample Location	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="width: 10px; height: 10px; background-color: gray; border-radius: 50%; margin-bottom: 5px;"></div> Non-Detect <div style="width: 10px; height: 10px; background-color: darkgreen; border-radius: 50%; margin-bottom: 5px;"></div> Detect < 1/2-Residential BCL <div style="width: 10px; height: 10px; background-color: limegreen; border-radius: 50%; margin-bottom: 5px;"></div> >= 1/2-BCL and < BCL <div style="width: 10px; height: 10px; background-color: orange; border-radius: 50%; margin-bottom: 5px;"></div> >= BCL and < 10x BCL <div style="width: 10px; height: 10px; background-color: brown; border-radius: 50%; margin-bottom: 5px;"></div> >= 10x BCL </div>	<p>BMI Common Areas (Eastside) Clark County, Nevada FIGURE C-37</p> <p>BENZO(a)ANTHRACENE RESULTS IN FIRST 8 ROWS SUB-AREAS AND ADJACENT 1,000 FT - 0 to 2 FT BGS</p> <p>Prepared by MKJ (ERM)</p> <p>Date 11/17/09</p> <p>JOB No. 0064276 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD</p> <p> Basic Remediation COMPANY</p>
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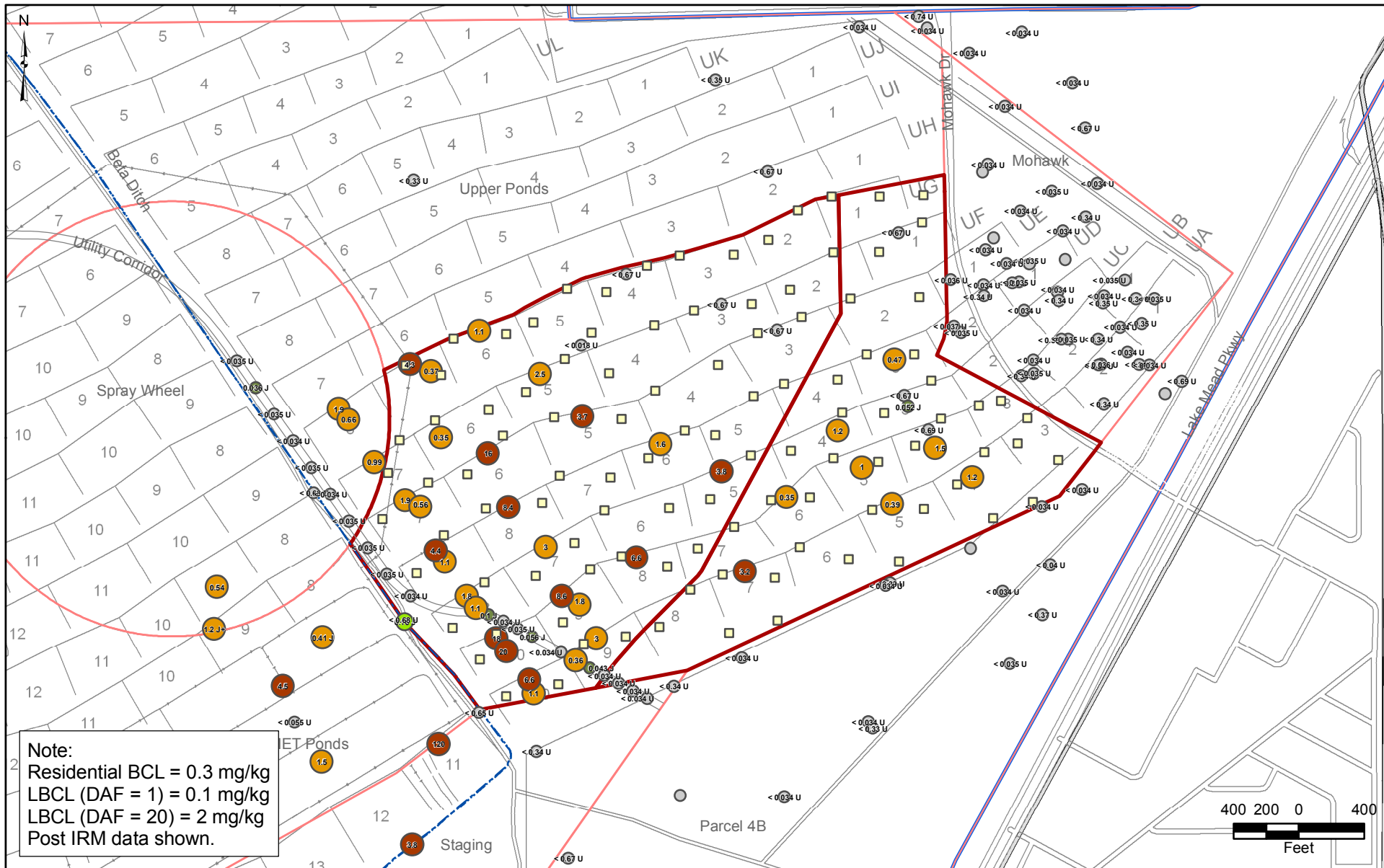
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-38

**BENZO(a)ANTHRACENE
 RESULTS IN FIRST 8 ROWS
 SUB-AREAS AND ADJACENT
 1,000 FT - 3 to 10 FT BGS**





- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-39

**HEXACHLORO BENZENE
 RESULTS IN FIRST 8 ROWS
 SUB-AREAS AND ADJACENT
 1,000 FT - 0 to 2 FT BGS**

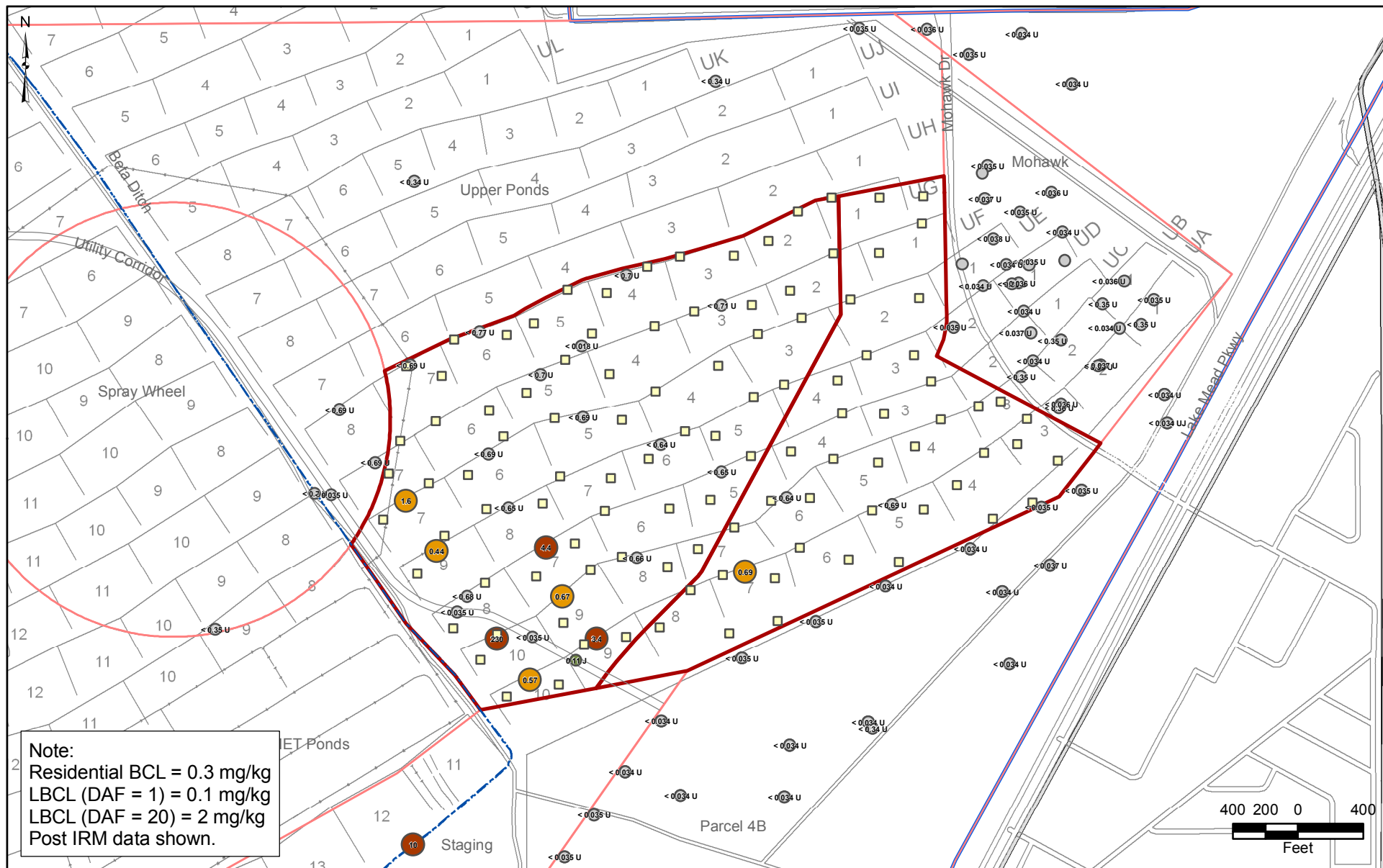


Prepared by
 MKJ (ERM)



Date
 11/17/09

JOB No. 0064276
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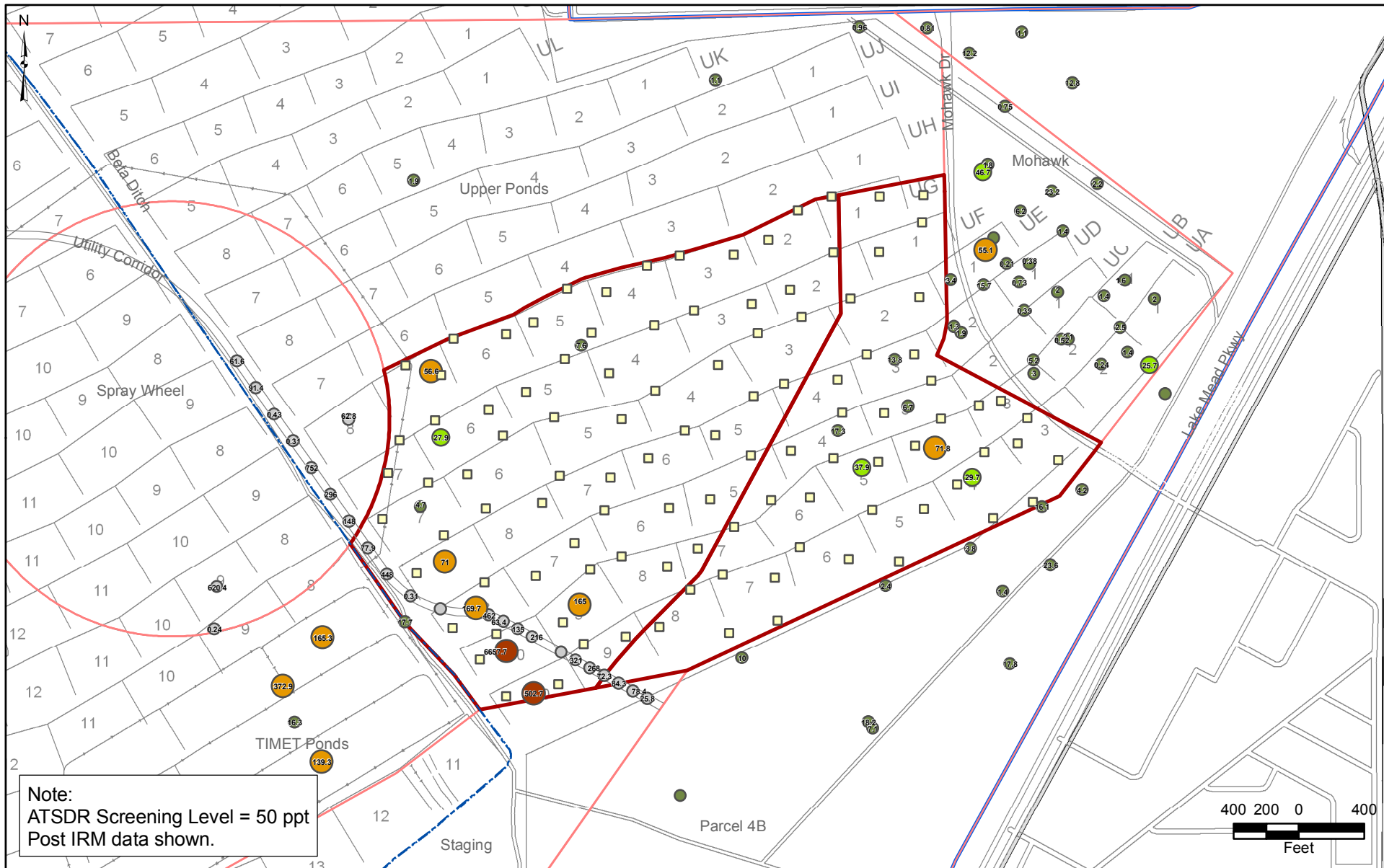
- First Eight Rows Sub-Areas
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-Residential BCL
- >= 1/2-BCL and < BCL
- >= BCL and < 10x BCL
- >= 10x BCL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-40

**HEXACHLORO BENZENE
 RESULTS IN FIRST 8 ROWS
 SUB-AREAS AND ADJACENT
 1,000 FT - 3 to 10 FT BGS**





- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| First Eight Rows Sub-Areas | Non-Detect |
| Site AOC3 Boundary | Detect < 1/2-ATSDR SL (50 ppt) |
| Eastside Soil Sub-Areas | >= 1/2-ATSDR SL and < ATSDR SL |
| SAP Proposed Soil Sample Location | >= ATSDR SL and < 10x ATSDR SL |
| | >= 10x ATSDR SL |

BMI Common Areas (Eastside)
Clark County, Nevada
FIGURE C-41

**TCDD TEQ RESULTS IN
FIRST 8 ROWS SUB-AREAS
AND ADJACENT 1,000 FT
0 to 2 FT BGS**

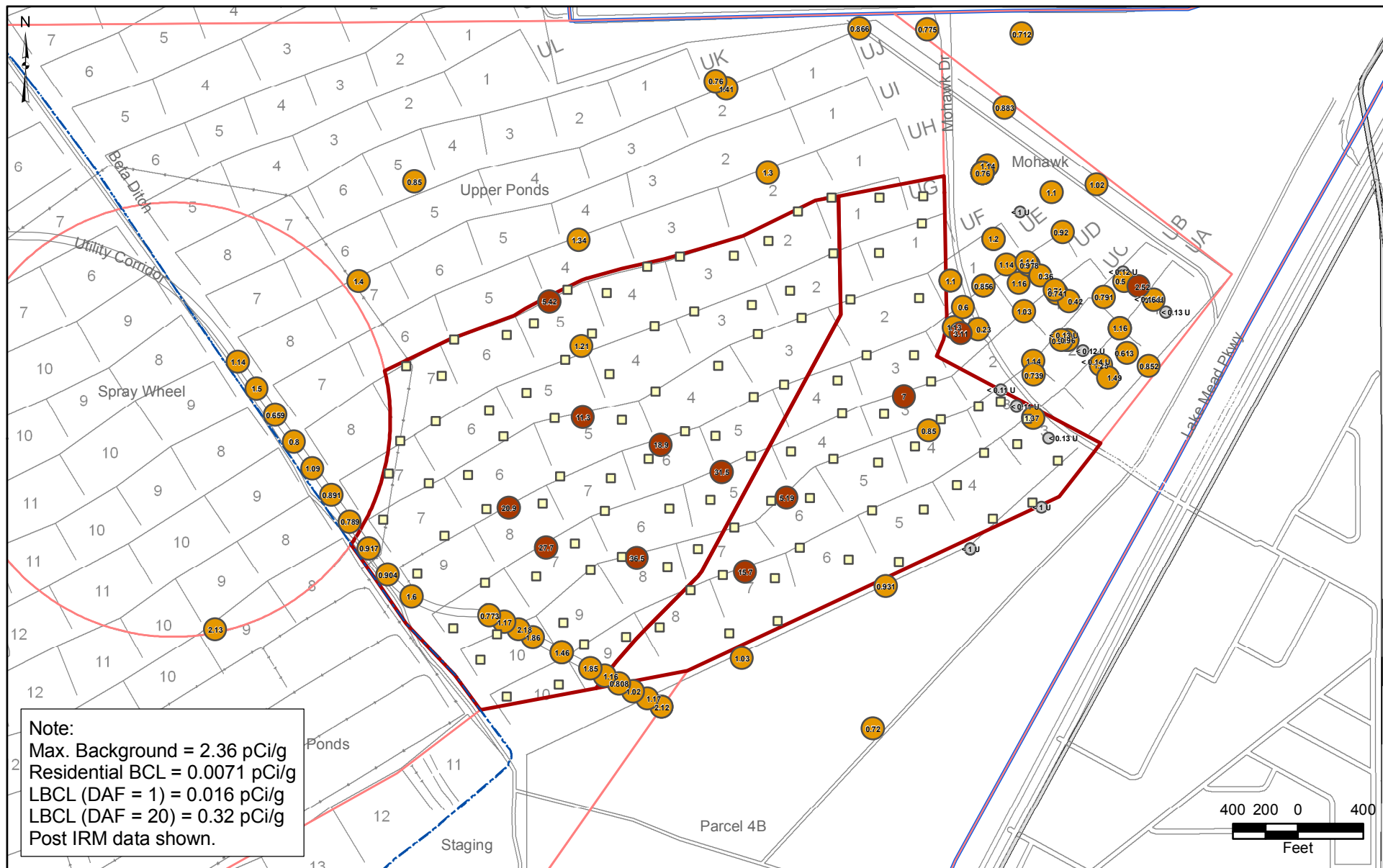


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- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| First Eight Rows Sub-Areas | ● Non-Detect |
| Site AOC3 Boundary | ● Detect < Residential BCL |
| Eastside Soil Sub-Areas | ● >= BCL and < 10x BCL |
| SAP Proposed Soil Sample Location | ● >= 10x BCL and < Max. Background |
| | ● >= Max. Background |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-42

**RADIUM-226 RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 0 to 2 FT BGS**

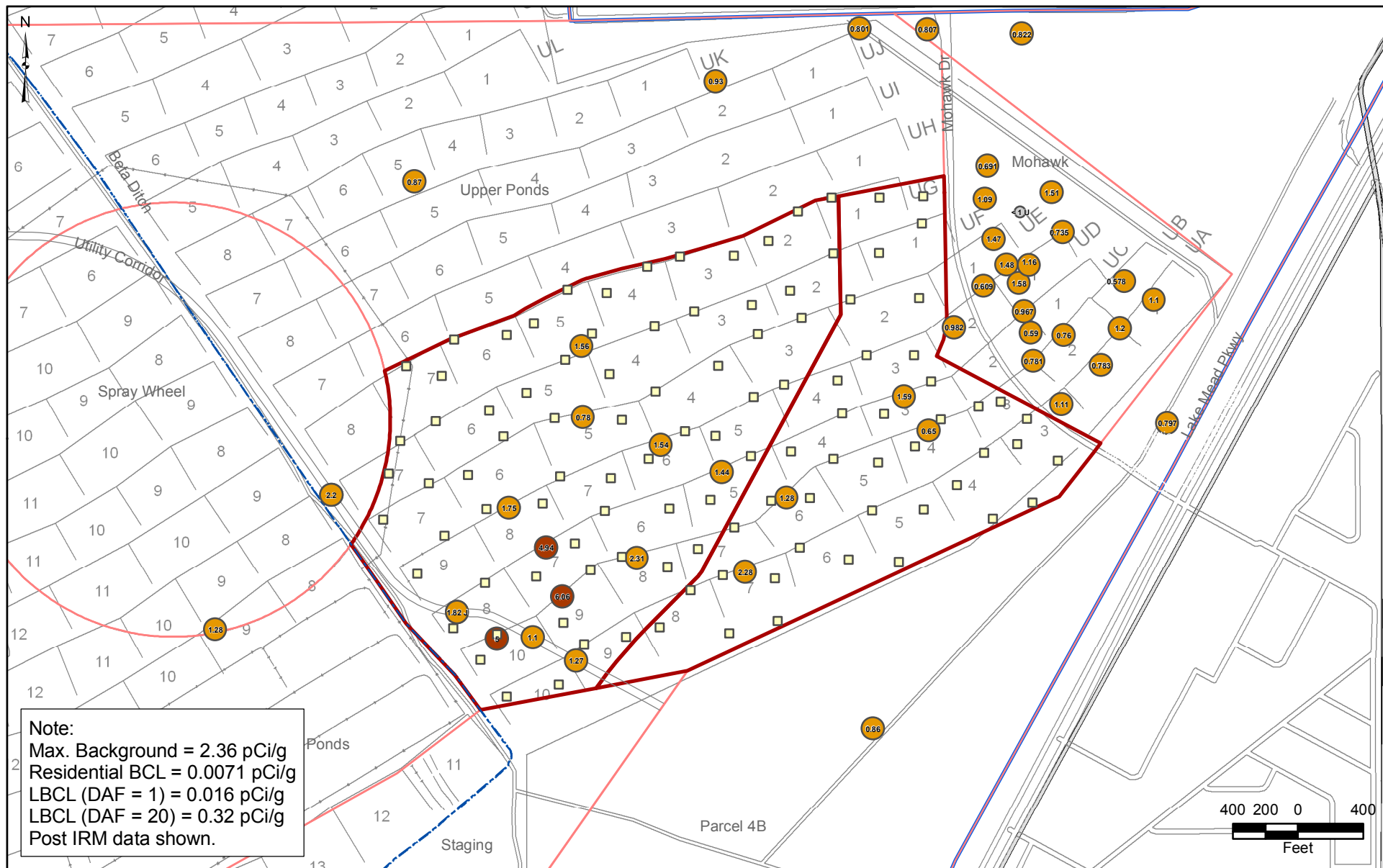


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- | | |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| First Eight Rows Sub-Areas | Non-Detect |
| Site AOC3 Boundary | Detect < Residential BCL |
| Eastside Soil Sub-Areas | >= BCL and < 10x BCL |
| SAP Proposed Soil Sample Location | >= 10x BCL and < Max. Background |
| | >= Max. Background |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-43

**RADIUM-226 RESULTS IN
 FIRST 8 ROWS SUB-AREAS
 AND ADJACENT 1,000 FT
 3 TO 10 FT BGS**



Prepared by
 MKJ (ERM)



Date
 11/17/09

JOB No. 0064276
 FILE: GIS/BRC/FIRST8ROWS_SAP/APPENDIX_C.MXD