

**SAMPLING AND ANALYSIS PLAN FOR THE
SUNSET NORTH COMMERCIAL SUB-AREA**

**BMI COMMON AREAS (EASTSIDE)
CLARK COUNTY, NEVADA**

Prepared for:

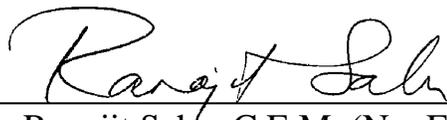
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NOVEMBER 2008

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 6, 2008

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Date

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ACRONYMS AND ABBREVIATIONS

Aa	alluvial aquifer
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
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
FSSOP	Field Sampling and Standard Operating Procedures
HSA	Hollow Stem Auger
IRMs	interim remedial measures
MCL	maximum contaminant level
MDLs	method detection limits
MSSLs	medium-specific screening levels
NDEP	Nevada Division of Environmental Protection
NFAD	no further action determination
PAHs	polynuclear aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PSQs	Principal Study Questions
QA/QC	Quality Assurance/Quality Control
Qal	Quaternary alluvium
QAPP	Quality Assurance Project Plan
RAP	Remedial Action Plan
SAP	Sampling and Analysis Plan
SOPs	Standard Operating Procedures
SRC	Site-related chemicals
SSL	Soil Screening Level
SVOCs	semi-volatile organic compounds
TDS	total dissolved solids
TEQ	toxic equivalency
TMCf	Muddy Creek formation
TPH	total petroleum hydrocarbons
UCL	upper confidence limit
USEPA	U.S. Environmental Protection Agency
VOCs	volatile organic compounds
WRF	Wastewater Reclamation Facility

1.0 INTRODUCTION

Basic Remediation Company (BRC) has prepared this Sampling and Analysis Plan (SAP) for the Sunset North Commercial sub-area. The SAP describes tasks for performance of confirmation sampling in order to obtain a no further action determination (NFAD) for this area. 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 initial version of the SAP incorporates comments received from the NDEP on all previously submitted BMI Common Areas (Eastside) sub-area SAPs. The NDEP comments and BRC's response to these comments are not included; however, Appendix A is provided as a 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 Sunset North Commercial sub-area (hereinafter "the Site") is one of several sub-areas of the BMI Common Areas (Eastside) located in Clark County, Nevada (Figure 1). The Site encompasses an area of approximately 44 acres¹ (Figure 2). The Site includes former ponds, ditches, and areas that were not used for any known waste disposal. 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:

- 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);

¹ This acreage differs from the 57.9 acreage presented in the *BRC Closure Plan* for the BMI Common Areas (BRC *et al.* 2007). This change is primarily due to the reconfiguration of the Galleria North sub-area boundaries subsequent to Closure Plan finalization to include a portion of what was formerly part of the Sunset North Commercial sub-area, and the carveout of the Nevada Power Substation property.

- 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).

For certain areas within the BMI Common Areas remediation is planned based on existing Site data, and will be performed prior to conducting the site characterization activities proposed under this SAP; however, none is planned for this Site other than clearing of obvious contamination (*e.g.*, burn pits, stained soil, abandoned vehicles, and other debris). These clearing activities will occur prior to implementing the procedures described in this SAP. 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 seven 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; and spatial coverage of the Site is incomplete.

Therefore, because of these various factors, and because the post-remediation investigation results are considered representative of site conditions, risk assessments for the Site will be conducted using the data collected as part of this SAP. The need for remediation will be primarily based on these data, which represent a more robust sampling coverage than employed during the historical sampling events and can thus be more reliably used to delineate areas requiring remediation. Validated, reliable historical data will be used as appropriate to augment the dataset derived from the SAP activities. In general, historical data 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 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 addresses sampling procedures such that remaining contaminants and their potential impacts to future Site uses (as discussed in the Closure Plan) can be determined. In this SAP, as recommended in the *Statistical Methodology Report*, samples will be collected throughout the Site on a systematic sampling basis, consisting of a regular 3-acre grid overlay across the property with a randomly placed sample within each grid cell to provide enough samples for completion of a statistically robust assessment of contaminant distribution, and subsequently, 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 interests, including but not limited to previous debris locations, ponds, berm walls, and the conveyance ditches.

1.1 PURPOSE OF THE SAP

The purpose of this SAP is to evaluate soil and soil vapor conditions (including any indirect impacts from underlying groundwater) that may have been impacted at the Site from former activities and 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 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 (SRC). 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.

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) comprises approximately 44 acres² that is gently sloping to the northeast. The Site contains a portion of the Upper Ponds, which were once associated with historical conveyance and/or disposal of operations effluent and cooling water by companies operating at the BMI Complex. The individual ponds (typically approximately 3 to 8 acres in size) are distinct and defined by berms along the north, east, and west sides. In general, the berms are relatively uniformly-shaped, often with angular corners showing little evidence of erosion. The berms are typically 4 to 6 feet tall. As depicted in Figure 2, a portion of a former effluent conveyance ditch (the Alpha Ditch) passes along the western edge of the Site.

The Site was undeveloped desert land until the construction of the Upper Ponds and associated conveyance ditches, into which various plant wastewaters were discharged from 1942 through 1976. Since that time, the Site has been vacant and unused with the exception of the 2.84-acre Nevada Power Substation property.

The native soils are compacted, poorly-sorted, non-plastic, light brown to red silty sand with varying amounts of gravel. Within individual Upper 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 not present in the portion of the Upper Ponds that is included within the Sunset North Commercial sub-area. The lack of this material suggests limited use of these former ponds for historical wastewater

² As previously noted, this acreage amount reflects a revision in the sub-area boundaries adopted after finalization of the Closure Plan, which presented an approximate area of 57.9 acres for the Sunset North Commercial sub-area.

discharge, which is further supported by historical aerial photographs that do not show evidence of surface liquids within the ponds.³

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, primarily retail/commercial and roads/parking, with surrounding residential housing (low and medium density). 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 top soils⁴ 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.

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.

³ Evidence of groundwater seeps onto the ground surface in the northern (non-pond) area is seen in historical aerial photographs, as discussed in Section 2.3.

⁴ 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.

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 but one (the west) by Eastside sub-areas. The Site is bordered to the west by Pabco Road, beyond which are industrial/commercial businesses, with residential housing to the southwest. The 2.84-acre Nevada Power Substation property is located within the Site and was granted an NFAD status in March 2000. The Galleria North sub-area (144 acres⁵) is immediately north of the Site. The Upper Ponds sub-area (283 acres) is immediately to the south and east of the Site. Other nearby features of interest include:

- The City of Henderson Wastewater Reclamation Facility (WRF), which is associated with City water treatment operations, is 150 to 450 feet north of the Site (north of the Galleria North sub-area)
- The 100' Utility Corridor, which runs adjacent to the eastern edge of the Site; and
- The former TIMET Spray Wheel area (128.7 acres), which is located approximately 400 feet southeast, was the former site of an evaporative agricultural-type mechanism used for the evaporative disposal of aqueous salt waste. The Spray Wheel was operated by TIMET from 1983 to 1991.

Chemicals detected in these sub-areas are similar to those found at the Site. The phased remediation schedule for the Eastside sub-areas calls for the Galleria North sub-area and the 100' Utility Corridor to be remediated prior to the Site. Although the Upper Ponds sub-area contains elevated chemicals in soil, and remediation of this sub-area is scheduled to occur after remediation of the Site, impacts from these areas to the Site are considered negligible because dust suppression/mitigation measures and storm water pollution prevention controls will be implemented during remediation activities. Analytical results for the Galleria North and Upper Ponds sub-areas and the 100' Utility Corridor are presented further in Section 2.8 below.

⁵ These acreage estimates reflect a change from those presented in the Closure Plan that has resulted from the revision of site boundaries that occurred subsequent to Closure Plan finalization. The Galleria North acreage has increased from the 136 acres presented in the Closure Plan, due in large part to the incorporation of part of the Sunset North Commercial sub-area. The Upper Ponds acreage has also decreased from the 284.5 acres presented in the Closure Plan.

2.2 SURFACE WATER

Surface water flow occurs for brief periods of time during periodic precipitation events. The nature of the Upper 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 surface waters generated within the non-pond areas of 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 City of Henderson WRF and northern rapid infiltration basins (RIBs) between the Site and the Wash. However, the presence of the drainage ditch in the western portion of the Site suggests the current potential for rainfall to be carried from that portion of the Site to the Wash.

After development, when the former wastewater conveyance features (*e.g.*, the Upper Pond berms and ditches) have presumably been removed, as noted above, there will be a low likelihood that surface waters generated within the Site will migrate via overland transport to the Las Vegas Wash from the Site due to the large distance to the Wash, the intervening presence of other developed properties, and storm water features as part of the future development.

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 35 feet thick at the Site with variations due, in part, to the non-uniform contact between the Qal and the underlying Tertiary Muddy Creek Formation (TMCf).

The TMCf underlies the Qal. The Muddy Creek formation, of which the TMCf 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 TMCf underlying the Site

is typically fine-grained (sandy silt and clayey silt), although layers with increased sand content are sporadically encountered. These TMCf materials have typically low permeability, with hydraulic conductivities on the order of 10^{-6} to 10^{-8} centimeters per second (Weston 1993). The TMCf in the vicinity of the Site was encountered 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 herein as the alluvial aquifer (Aa), and also referred to as the water table aquifer, and (2) a deep, confined water-bearing zone that occurs in a sandier depth interval within the silts of the deeper TMCf (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.

Alluvial Aquifer. The Aa is an unconfined, shallower, water-bearing zone that occurs across the Site. For the most part, water in the Aa occurs in the Qal. The water surface in the Aa generally follows topography, with the water surface sloping towards the Las Vegas Wash. According to recent groundwater monitoring performed in May 2008, the depth from the surface to first groundwater at the Site is approximately 30 feet bgs. Wells completed in the Aa 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 2.9.⁶

Groundwater seeps currently exist at various locations within the Common Areas near the Las Vegas Wash. No seeps currently exist within the Sunset North Commercial sub-area, however they may have occurred in the past. An evaluation of historical aerial photos taken between 1964 and 1970 indicates that seeps may have historically appeared at various locations in the northern portions of the Site and at nearby off-site locations in association with past effluent infiltration at the Eastside ponds and with infiltration of municipal wastewater at the southern RIBs. Evidence of seeps was not observed in aerial photographs after 1972. The extent to which these former

⁶ 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. Therefore, 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 ongoing groundwater investigation, and the CSM for the Eastside and CAMU areas will be updated accordingly.

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

Shallow soil samples were collected within the Site prior to April 2000 (*i.e.*, initiation of the IRM) during the following separate events (see Figure 2 for sample locations; sample locations are differentiated between pre and post-IRM.):

- 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 workplan 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. The results are provided in Appendix B. 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;
- Supplemental soil investigation conducted in October 1999 (dataset 6d) in the Upper Ponds. These data were not collected under a formal NDEP-approved workplan. The results are provided in Appendix B. Data validation results are presented in the DVSR for dataset 6d (ERM 2006b), which was approved by NDEP on October 10, 2006, and;
- Additional soil sampling conducted in February and March 2000 within the northernmost Upper and Lower ponds (dataset 8b). These data were not collected under a formal NDEP-approved workplan. The results were summarized in the IRM Completion Report (ERM 2000), which has not been approved by NDEP. Data validation results are presented in the DVSR for dataset 8b (ERM 2006c), which was approved by NDEP on September 14, 2006.

During these investigations, soil samples at various depths were collected and analyzed for VOCs, semi-volatile organic compounds (SVOCs), organochlorine pesticides, polychlorinated biphenyls (PCBs), metals, perchlorate, and/or radionuclides. The results of these field sampling events are summarized in the database excerpt provided in Appendix B. As seen in Figure 2, samples were collected from only eight locations within the Site during these events: two from within the Alpha Ditch (ADB-06 and -07) and one each within former ponds PUN-07, PUN-08, PUN-09, PUO-08, PUP-08, and PUP-10.

The following compounds were detected in soils collected during the sampling events listed above at concentrations greater than U.S. Environmental Protection Agency (USEPA) Region 6 residential soil medium-specific screening levels (MSSLs; USEPA 2007) or the USEPA soil screening levels (SSLs; dilution attenuation factor [DAF] = 1) for protection of groundwater (USEPA 2007):

Location	Site-Related Chemical	Residential Soil MSSL (mg/kg)	SSL (DAF 1) (mg/kg)	Maximum Detection (mg/kg)
PUN-07	Arsenic	0.39	1	3.2
	Barium	15,600	82	230
	Chromium	211	2	10
	beta-BHC	0.316	0.0001	0.015
	Dieldrin	0.0304	0.0002	0.039
	Radium-226	0.0124	0.0161	1.3
	Radium-228	0.0677	0.0595	2.11
	Thorium-228	0.154	3.3	2.28
	Thorium-230	3.49	0.303	1.62
	Thorium-232	3.1	0.303	2.05
Uranium-238	0.742	0.00605	0.92	
PUN-08	Arsenic	0.39	1	3.7
PUN-09	Arsenic	0.39	1	3.4
PUO-08	Arsenic	0.39	1	4.6
	Barium	15,600	82	300
	Cadmium	39	0.4	0.5
	Chromium	211	2	15
	Selenium	391	0.3	1.2
	beta-BHC	0.316	0.0001	0.014
	Dichloromethane	8.9	0.001	0.0014
PUP-08	Antimony	31.3	0.3	13
	Arsenic	0.39	1	1,800
	Barium	15,600	82	2,200
	Cadmium	39	0.4	19
	Chromium	211	2	590
	Lead	400	-	23,000
	Manganese	3,470	-	25,000
	Nickel	1,560	7	16

Location	Site-Related Chemical	Residential Soil MSSL (mg/kg)	SSL (DAF 1) (mg/kg)	Maximum Detection (mg/kg)
	Silver	391	2	2.9
	Thallium	5.48	0.4	7.7
	alpha-BHC	0.0902	0.00003	0.056
	Hexachlorobenzene	0.304	0.1	12
PUP-10	Arsenic	0.39	1	2.9
	Barium	15,600	82	270
	Chromium	211	2	15
	Nickel	1,560	7	17
	beta-BHC	0.316	0.0001	0.006
	Radium-226	0.0124	0.0161	0.36
	Radium-228	0.0677	0.0595	1.28
	Thorium-228	0.154	3.3	1.47
	Thorium-230	3.49	0.303	0.89
	Thorium-232	3.1	0.303	1.59
	Uranium-235/236	0.195	0.0389	0.05
	Uranium-238	0.742	0.00605	0.77
ADB-06	Barium	15,600	82	240
	Chromium	211	2	55
ADB-07	Antimony	31.3	0.3	0.55
	Barium	15,600	82	330
	Chromium	211	2	48
	alpha-BHC	0.0902	0.00003	0.0026
	beta-BHC	0.316	0.0001	0.016

Exceeded screening level presented in bolded font

As discussed in the following section, an IRM was subsequently performed in former ponds PUP-08 and PUO-07, and the maximum values presented above for PUP-08 no longer represent current conditions.

2.5 INTERIM REMEDIAL MEASURES (IRMs)

In 2000, while conducting an IRM for areas within the Western Hook Development and Western Hook Open Space sub-areas, stained surficial soils were observed in two ponds (PUP-08 and PUO-07) that are partially included within the Site. These two ponds are shared by the Sunset

North Commercial and Upper Ponds sub-areas. The stained soils in former pond PUO-07 were sampled and found to contain elevated concentrations of several metals and PCBs. These data were not collected under a formal NDEP-approved workplan. The results were summarized in the IRM Completion Report (ERM 2000), which has not been approved by NDEP. Data validation results are presented in the DVSR for dataset 7d (ERM 2006d), which was approved by NDEP on September 14, 2006.

The IRM was therefore extended to include these two ponds, which were not included in the *Sunset North Area IRM Workplan* (ERM 1999; approved by NDEP on August 27, 1999). IRM activities, which were performed in accordance with the approved workplan, consisted of excavation of the impacted shallow soils, transportation to a secured location within the Upper Ponds, and treatment to prevent generation of wind-blown dusts and runoff. A total estimated 130,000 cubic yards of soil (including areas other than ponds PUP-08 and PUO-07) were excavated and removed from the Site during this IRM. Results of the IRM for the Site were presented in the IRM completion report (ERM 2000); this report has not been approved by NDEP.

In addition to this IRM, in 2007 BRC conducted a broad-scale removal of tamarisk plants in the Site; evidence of the ground surface disturbance from those plant removal activities can be seen in Figure 2. These tamarisk removal efforts covered an area of approximately one acre and involved the removal of minimal amounts of site soil incorporated in the plant roots.

2.6 IRM-RELATED CONFIRMATION SAMPLING

As soon as practical following excavation within former pond cells PUO-07 and PUP-08, soil samples were collected to confirm that the residual chemical concentrations were below screening levels. The confirmation samples were collected from 0 to 1 foot below the post-excavation grade in each former pond cell using hand trowel techniques. Each of the ponds was partitioned into smaller sub-areas from which composite samples were collected; the composite samples were composed of three-subsamples. As seen in Figure 2, the majority of the IRM area is located outside the Site boundaries. Additional confirmation sampling was conducted in the off-site portions of the ponds.

The confirmation samples collected from each former pond were analyzed for metals, PCBs, VOCs, SVOCs and polynuclear aromatic hydrocarbons (PAHs). As noted above, the soil sampling activities were performed in accordance with the workplan and approved by NDEP on August 27, 1999. The confirmation sampling results were presented in the IRM completion

report (ERM 2000). All data from this investigation have been validated. Data validation results are presented in the DVSR for dataset 7b (ERM 2006e), which was approved by NDEP on September 13, 2006. The confirmation sampling data are also included in the database excerpt provided in Appendix B. Concentrations of SRCs exceeding screening levels in Site soils were reduced as follows:

Pond ID	Site-Related Chemical	Pre-IRM Maximum Detection (mg/kg)	Post-IRM Maximum Detection (mg/kg)
PUO-07	Arsenic	130	11
	Barium	1,200	200
	Cadmium	1.8	ND
	Chromium	66	19
	Lead	2,100	190
	Nickel	23	17
	Thallium	1.7	ND
	Aroclor 1254	0.41	ND
PUP-08	Antimony	13	ND
	Arsenic	1,800	8.4
	Barium	2,200	310
	Cadmium	19	ND
	Chromium	590	20
	Lead	23,000	23
	Manganese	25,000	660
	Nickel	16	17
	Silver	2.9	ND
	Thallium	7.7	ND
	Hexachlorobenzene	12	ND

ND = not detected

2.7 INVESTIGATIONS SUBSEQUENT TO IRM

Shallow soil samples were collected within the Site after conducting the initial IRM (*i.e.*, 2000 and later) during the following three separate events (see Figure 2 for sample locations):

- Supplemental soil investigation conducted in October 2000 (dataset 8c) in the Alpha Ditch and pond PUP-08. These data were not collected under a formal NDEP-approved workplan. The results are provided in Appendix B. Data validation results are presented in the DVSR for dataset 8c (ERM 2006f), which was approved by NDEP on October 26, 2006;
- Supplemental soil investigation conducted in May 2001 (dataset 20c). These data were not collected under a formal NDEP-approved workplan. The results are provided in Appendix B. Data validation results are presented in the DVSR for dataset 20c (ERM 2007), which was approved by NDEP on February 5, 2007; and

- Waste characterization conducted in August 2006 (dataset 39). The soil investigation activities were performed in accordance with BRC's sampling and analysis plan submitted on June 29, 2006 and approved by NDEP in July 2006. The soil sampling results for the investigation activities were 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 2006), 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, organophosphorous pesticides, PCBs, chlorinated herbicides, dioxins/furans, PAHs, metals, 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 CURRENT CHEMICAL DISTRIBUTION WITHIN SOILS

A summary of historic post-IRM soil chemical data from surface to 10 feet bgs, excluding excavated sample results, is presented in Table 1. Compound-specific historical sampling results collected from the Site, including those sample locations that were excavated during the IRM and depth intervals deeper than 10 feet bgs, are shown in Appendix B, Tables B-1 through B-10, and included electronically in Appendix B. Sample locations are shown on Figure 2. Figures showing the assumed current distribution of several chemicals for soil samples collected at the Site (*i.e.*, excluding samples collected from IRM areas prior to IRM completion) are presented in Appendix C. These figures also include samples within 1,000 feet of the Site from the adjacent Galleria North and Upper Ponds sub-areas and the 100' Utility Corridor 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 USEPA Region 6 residential soil MSSL. In addition, to assess the potential for impacts to groundwater quality, chemical detections at the Site were also compared to the SSL (DAF 1) established for each chemical. Chemical occurrence patterns for the chemicals detected at concentrations in excess of screening levels, in samples collected from surface to 10 feet bgs, are provided below.

Arsenic. Of the 24 samples (16 surface and 8 subsurface samples, Table B-1) reflecting current conditions in which arsenic was analyzed, arsenic was detected in approximately 83 percent. Twenty of the detections were higher than the MSSL and the SSL.

However, it should be noted that the range of background concentrations for arsenic are appreciably higher than the MSSL; therefore, comparison to background arsenic concentrations is more appropriate than using the MSSL and SSL as points of comparison. Only two of the samples had reported arsenic concentrations in excess of the maximum shallow soil background level (7.2 mg/kg; from BRC/TIMET 2007); those samples were associated with former ponds PUO-07 and PUP-08 (maximum detection 11 mg/kg). The distribution of arsenic for soil samples collected in the surface soils and the intervals from 3 to 5 feet bgs and 7 to 10 feet bgs at the Site are shown on Figures C-1 through C-3, respectively.

Other Inorganics. As seen in Table 1 and Tables B-1 and B-6 in Appendix B, several inorganic constituents were routinely detected in soil samples reflecting current conditions. Excluding arsenic, which is discussed above, 42 of the detections were higher than the maximum background concentration; none of the detections exceeded the MSSLs.

In addition to arsenic, the following metals were detected at concentrations in excess of the SSLs for protection of groundwater:

- Antimony (SSL exceedances in two samples, from the Alpha Ditch and former pond PUP-08; both of which were higher than background);
- Barium (SSL exceedances in all samples collected from across the Site, none of which were higher than background);
- Cadmium (SSL exceedances in two samples, from former pond PUO-08, both of which were higher than background);
- Chromium (SSL exceedances in 24 samples collected from across the Site, eight of which were higher than background, collected from within the ponds excavated during the IRM or from within the Alpha Ditch); The distribution of chromium for soil samples collected in the surface soils and the interval from 5 to 10 feet bgs at the Site are shown on Figures C-4 and C-5, respectively;
- Nickel (SSL exceedances in all fifteen samples analyzed; none of which were higher than background); and
- Selenium (SSL exceedances in nine samples collected from across the Site, five of which were higher than background, collected from the Alpha ditch, PUO-08, and PUO-09).

The remaining inorganic constituents were either detected at concentrations less than the SSLs for protection of groundwater, or did not have established SSLs.

Organochlorine Pesticides. Twenty soil samples (12 surface and 8 subsurface samples, Table B-2) reflecting current conditions were analyzed for organochlorine pesticides. Thirty-one detections of organochlorine pesticides were reported for the analyses performed on soils; 4,4-DDE, 4,4-DDT, and beta-BHC were the most commonly detected. There was only a single detection, of dieldrin from former pond PUN-07, above the USEPA Region 6 residential soil MSSL.

The following organochlorine pesticide detections were higher than the USEPA SSLs for protection of groundwater (DAF 1):

- alpha-BHC (one SSL exceedance in a surface soil samples collected from within the Alpha Ditch);
- beta-BHC (eight SSL exceedances in soil samples collected from across the site); and
- Dieldrin (one SSL exceedance in a surface soil sample collected from former pond PUN-07).

The distribution of beta-BHC for soil samples collected in the surface soils and the interval from 5 to 10 feet bgs at the Site are shown on Figures C-6 and C-7, respectively.

Volatile Organic Compounds. Eighteen samples (11 surface and 7 subsurface samples, Table B-3) reflecting current conditions were analyzed for VOCs. Three detections of VOCs (one each of 1,2-dichlorobenzene, acetone, and dichloromethane) were reported in the analyses performed on soils. None of the detections were above the USEPA Region 6 residential soil MSSLs.

The dichloromethane detection was slightly higher than the USEPA SSL for the protection of groundwater (DAF 1). This SSL exceedance was associated with a sample collected from PUO-08, at 5 ft bgs prior to IRM grading.

Semi-Volatile Organic Compounds. Seventeen samples (11 surface and 6 subsurface samples, Table B-4) reflecting current conditions were analyzed for SVOCs. Only one detection of an SVOC, bis(2-ethylhexyl)phthalate, was reported in the analyses performed on soils. This detection was associated with an Alpha Ditch sample, and was lower than the USEPA Region 6 residential soil MSSL and the USEPA SSL for the protection of groundwater (DAF 1).

Dioxins and Furans. Three surface soil samples (Table B-5) reflecting current conditions were analyzed for dioxins and furans. All of the individual dioxins and furans congeners analyzed were reported as detections in each sample, screening 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) screening value of 50 parts per trillion (ppt). None of the samples analyzed had calculated TEQ values in excess of this screening level. The ranges of calculated TCDD TEQ values for soil samples collected in surface soil samples from the Site are shown on Figure C-8.

SSLs 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 screening levels.

Polychlorinated Biphenyls. Nineteen samples (12 surface, 7 subsurface, Table B-8) reflecting current conditions were analyzed for PCBs; there were three detections in soil samples collected from the Alpha Ditch and PUP-08; all of the reported detections were lower than the USEPA Region 6 residential soil MSSL. SSLs have not been established for any of the PCBs.

Other Organic Compounds. The waste characterization sample was analyzed for herbicides; there were no detections (Table B-6). Eleven soil samples (7 surface, 4 subsurface, Table B-7) reflecting current conditions were analyzed for organophosphorous pesticides; there were no detections. Seventeen soil samples (11 surface, 6 subsurface, Table B-7) reflecting current conditions were analyzed for PAHs; there were no detections.

Radionuclides. Radionuclides were detected in all three of the soil samples analyzed (surface soil samples, Table B-9). Of the radionuclides that are the standard focus during this investigation (radium-226, radium-228, thorium-228, thorium-230, thorium-232, uranium-233/234, uranium-235/236, and uranium-238) 11 detections were in excess of the MSSL (for radium-226, radium-228, thorium-228, and uranium-238).

In addition, the following radionuclides were detected at concentrations in excess of the SSLs for protection of groundwater: radium-226; radium-228; thorium-230; thorium-232; uranium-235/236; and uranium-238. It should be noted, however, that none of the reported activities were in excess of the maximum shallow soil background level. The distribution of radium-226,

representative of radionuclides, for samples collected in the surface soils at the Site is shown on Figure C-9.

Summary of Soil Exceedances. As summarized above and in the associated data tables, sampling of Site soils has been limited, and the analyte list is incomplete. Based on the limited historical data, the following screening level exceedances were observed:

- The only MSSL exceedances were of arsenic and radionuclides, all of which are within the range of background, and one exceedance of dieldrin.
- SSLs for protection of groundwater were also limited to selected metals, alpha and beta-BHC, dieldrin, radionuclides, and dichloromethane. Many of the SSL exceedances for metals and radionuclides were within the range of background.

2.9 CHEMICAL DISTRIBUTION WITHIN GROUNDWATER

For evaluating Aa groundwater quality at the Site, the following wells in the immediate Site vicinity were used: AA-20, DBMW-1, DBMW-2, and DBMW-3. 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.

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

- Alpha-BHC was detected in the sample from AA-20 at a reported concentration of 0.078 µg/L;
- Chloroform was detected in samples from all four of the monitoring wells; the highest detection was 98 µg/L (AA-20);
- Tetrachloroethene (PCE) was detected in the sample from AA-20 at a reported concentration of 5.1 µg/L;
- Toluene was detected in the sample from DBMW-1 at a reported concentration of 0.15 µg/L, an estimated value below the reporting limit;

- Trichloroethene (TCE) was detected in the sample from AA-20 at a reported concentration of 0.31 µg/L, an estimated value below the reporting limit;

No other organic chemicals were detected in these monitoring wells. With the exception of one chloroform detection and the PCE detection, these relatively low detections are below human health screening levels for ingestion exposure routes (*i.e.*, maximum contaminant levels [MCLs]) and indoor air intrusion (*i.e.*, USEPA generic groundwater to indoor air screening level; “VI SL”), where established.

Inorganic Compounds. Several inorganic compounds were detected above their respective MCLs as summarized below:

- Chloride, sulfate, and total dissolved solids (TDS) were substantially higher than the MCLs in all samples analyzed; maximum detections were 1,470 mg/L (DBMW-3), 3,160 mg/L (DBMW-2), and 6,600 mg/L (DBMW-2), respectively;
- Nitrate is higher than the MCL in samples collected from AA-20 and DBMW-3; the maximum reported concentration was 20.5 mg/L (AA-20);
- Perchlorate was higher than the USEPA Drinking Water Equivalent Level in all samples analyzed; the maximum detection was 8,020 µg/L (DBMW-1);
- Aluminum is higher than the MCL in the sample collected from well DBMW-2 (reporting limits for other samples elevated above MCL);
- Arsenic is higher than the MCL in samples collected from wells AA-20, DBMW-2, and DBMW-3; the highest concentration is associated with AA-20; and
- Selenium is higher than the MCL in samples collected from wells DBMW-1 and DBMW-2 (reporting limits for other samples elevated above MCL); the highest concentration is associated with DBMW-2.

It should be noted that reporting limits for several analytes were higher than the MCLs, and these constituents may be present in Site groundwater at concentrations greater than the MCLs.

3.0 DATA QUALITY OBJECTIVES

A general overview of USEPA and NDEP's 7-step DQO process is provided in the Closure Plan. One of the key decision inputs to the DQO process, namely the Step 2 Principal Study Questions (PSQs) is 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. For the sake of continuity, BRC is providing a discussion of Steps 1 through 5 of the DQOs for this Site. BRC is not addressing DQO Steps 6 and 7 based on prior discussions with the NDEP.

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, including 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 information to be obtained from the data. 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.

Steps 1 through 5, along with sub-activities that comprise each step, are outlined below.

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

1. As presented in the Closure Plan, the Site consists mostly of open land that has been modified to accept waste water discharges from the BMI Complex through various trenches and evaporation ponds from 1942 through 1976. Currently, the Site includes former unlined evaporation ponds (approximately 44 acres) across which traverse effluent conveyance ditches 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 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 from vapor intrusion from 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 a variety of purposes, including retail/commercial and roads/parking, with adjacent residential housing, although only a residential exposure scenario is assumed for this problem. The current and future potential exposure pathways of concern are being addressed by this SAP and any subsequent remediation. The potentially exposed populations for the Site and their potential routes of exposure are presented in Figure 8 and are summarized in Section 9 of the Closure Plan.

2. As described in the Closure Plan, remediation for all media will be to risk-based levels protective of human health and the environment, under current and future land use scenarios.

Therefore, appropriate risk-based cleanup goals for the protection of human health, ground water protection, and surface water protection must be established. These criteria shall apply to all affected media (*i.e.*, soil, soil vapor). Where background levels exceed risk-based goals, metals and radionuclides in Site soils are targeted to have risks no greater than those associated with background conditions.

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. The final site conditions will include regrading of on-site soils (post-remediation), 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. It should be noted that information regarding the specific locations that will be covered with fill may not be known at the time of risk assessment for closure purposes; however, the current grading plan (Figure 4) is being used in this SAP for the Site.

Although the primary focus is human health risk assessment for a residential scenario, secondary issues that will be addressed include contamination of deeper soils and of groundwater beneath the Site. In addition, the impact to off-site receptors will be addressed; however, because remediation of the Site will be to on-site residential standards, risks to off-site receptors will be minimal. It should be noted that BRC will discuss the issue of off-Site transport of contaminants with the NDEP should the NDEP determine that this is necessary, maintaining consistency with AOC3.

3.1.2 Proposed Assessment Team

A multidisciplinary 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 development.

Surface soil data will be used to evaluate both 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 *Corrective Action Plan* (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 for the Site is: Are the current (post-remediation, pre-development) and future (post-development) incremental risks to human health or the environment in the Site soil and soil vapor flux under investigation 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. A secondary PSQ deals 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.⁷ Cleanup goals for the project are defined in Sections 1.1 and 9.1.1 of the Closure Plan. The data pool employed in the risk assessment will comprise only those data collected in accordance with this SAP,⁸ after clearing activities have been performed or after subsequent remediation phases performed iteratively during the closure process, as and if such occur(s).
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 2008). 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 conditions⁹ result in acceptable human health risks and risks to the environment for future land uses. This will be determined through human health risk assessment for 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-site capping of soils), and (4B) excavation of soils and on-site landfill disposal at the project Corrective Action Management Unit (CAMU). How the study decisions will be made for the Site, including how the risk assessment will be performed, are presented in the Closure Plan.

⁷ The existing historical data suggest that some remediation may be needed to attain cleanup goals; however, the need for 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.

⁸ Data collected prior to SAP approval and expected to be representative of current 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 the risk assessment or it will be explained why the new data supplants the old data. These historical data may be used to help develop the CSM for both this Site and the overall Eastside.

⁹ “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, if such actions are determined necessary during the Site characterization activities planned under this SAP.

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. As previously discussed, risk assessment will be the primary means of answering the PSQs as discussed in the Closure Plan, and will incorporate the various data inputs listed, as discussed in the Closure Plan. These data inputs either 1) are already established (as presented in the Closure Plan), 2) will be obtained during the soil and soil vapor flux sampling program – that is, this SAP (Section 5), or 3) currently exist as data gaps (see Section 1) 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 (see Closure Plan).
- Toxicity inputs parameters consistent with USEPA hierarchy guidance (see Closure Plan).
- 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 data (to be collected as determined by this SAP in accordance with the most recent NDEP-approved version of Standard Operating Procedure [SOP]-16) in case Site materials are used in other portions of the Site as fill materials.
- Identified locations/depth intervals where contaminant concentrations could affect future land users.
- Characterization data for imported fill if such fill is considered for use at the Site. At this point, it is not expected that 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;
- The temporal boundary 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

Based on the primary PSQ and the necessary information listed in Step 3, there are several target populations to be sampled for this project, including 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 to assess chemical concentrations and/or human health risks associated with each of these populations, and for cumulative risk across these media types and pathways. Ultimately, these chemical concentrations and risk-based levels will be compared to project cleanup goals that are consistent with regulatory-defined acceptable concentrations and/or risk levels appropriate for the planned redevelopment of the Site and will ensure protection of human health and the environment.

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 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. It should be noted that there could be more than one set of surface spatial boundaries ultimately identified. For example, data may need to be grouped for areas within the Site in order to appropriately address the decision units (*e.g.*, exposure areas). Also, data may ultimately be grouped by soil depth to appropriately address different soil exposure points. 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 sub-area sources, risk assessment could be performed across sub-area boundaries, and/or adjacent sub-areas 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 sub-areas will involve dust suppression and storm water pollution prevention activities. Therefore, risk assessment or additional remediation across sub-areas should not be necessary to assess or avoid potential impacts due to 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.

Surface Soil

The surface soil concentrations used in the risk assessment will be derived from existing soil conditions (that is, established during the characterization activities performed in accordance with this SAP). BRC assumes that these will reflect the maximum concentration ranges for the project lifetime, and those data will be relied upon throughout the redevelopment process and in 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 at 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 flux concentrations used in the risk assessment will be derived from existing soil and groundwater conditions (that is, established during the characterization activities performed in accordance with this SAP). BRC assumes that these will reflect the maximum concentration ranges for the project lifetime, and those data will be relied upon throughout the redevelopment process and in assessing risks under current and future land use scenarios. Given the soil and groundwater data for the area (see Section 2 and Appendix B) this assumption is considered appropriate. The timeframe for data collection, assessment, and decision-making will be from one to three months for surface soils. 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 ground water (which is not part of this SAP), additional and/or routine sampling activities (such as ground water 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 varies based on the target sample population of interest, as described below.

Surface Soil

Redevelopment of the Site following remediation includes significant changes in land uses, including residential housing. 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 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. Post-remediation data will be used in a risk assessment to determine if further remediation is needed. This will allow for maximum flexibility in the redevelopment of the Site, without concern for residual concentrations to pose a threat to human health and the environment. This issue of correlated versus uncorrelated data for the Site and how it applies to the decision-making is discussed in the *Statistical Methodology Report* (NewFields 2006). 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 step is to define the population parameter (mean, median, etc.) of interest for each population (surface soil, etc.), identify the appropriate action level (target concentration or 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 (4B) listed in Section 3.2 (from Section 8 of the Closure Plan) 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 in the Site for which additional and continued remediation will not be practical or effective, then other alternatives such as Alternative (2) and Alternative (3) identified in Section 3.2 (from Section 8 of the Closure Plan) 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 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

Other than the removal of debris found on the Site, no remediation is proposed prior to the sampling activities specified in this SAP. Decisions regarding the need for 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. Much of the discussion below regarding confirmation soil sampling is taken from the *Statistical Methodology Report* (NewFields 2006).

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.
- **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 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.

A reconnaissance of the Site was performed in October 2008 to check the Site for environmentally significant features such as debris piles or stained soil. Results of this site

reconnaissance are shown in Table 3. Certain biased sampling locations for the Site were based on the outcome of this reconnaissance. Eight debris piles were observed during the site reconnaissance. Biased sampling locations were located at each of the eight observed debris piles/soil staining. A final reconnaissance will be performed prior to sampling to check for any additional environmentally significant features since the initial reconnaissance. If found, these additional features will also be sampled. 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	24
Pond Berm	8
Conveyance Ditch	6
Debris/Other/Unused Land	12

In addition, 15 of the samples will be collected from within the historical groundwater seep areas. Figure 9 and accompanying Table 4 show the random and biased discrete sampling locations that are proposed to be collected within the Site.

At each selected location, multi-depth soil samples will be collected and analyzed for the 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 two sample locations, one within a remediated pond and one within an unremediated pond, 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 feet¹⁰) 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

¹⁰ 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 4.

All soil samples will be tagged in the database with numeric designations of their corresponding assigned soil layer grouping based on these rules. Initially, 103 soil samples will be collected from 50 soil boring locations (not including deep samples to be collected for soil physical parameter data). This includes 20 random and 30 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 Samples¹¹</u>
Fill material	8
Surface soil	53
Subsurface soil	50

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

¹¹ Note that in some cases a soil sample may be considered both a fill sample and a surface sample (as indicated in Table 4). 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 additional 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. 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* (NewFields 2006).

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 SAP¹² 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 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.

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 will coincide with a biased sampling location, if any, in a given cell; if none are present, the soil vapor flux sampling will be

¹² 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.

performed at the grid-specific random sampling location. This approach results in 20 soil vapor flux sampling locations, indicated in 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 Plan¹³ and Table 5, 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;
- USEPA Method 8141A for organophosphorous 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 soil samples collected within the Site;
- 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

¹³ Specific analytes and analyte-specific reporting limits for each analysis are listed in Table 4 of the QAPP.

Eastside, including those associated with one soil sample collected within the Site. Detection limits are below USEPA Region 6 residential soil MSSSLs;

- HPLC Method for organic acids 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. Detection limits are below USEPA Region 6 residential soil MSSSLs;
- 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. Detection limits and the few detections have been well below USEPA Region 6 residential soil MSSSLs;
- 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; of the 11 samples subjected to TPH analysis from the Site (Table B-10), none exhibited reportable concentrations of TPH. 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 SRC list will be back-quantitated.

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 2008), 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 2007), including radon. This analyte list is provided in Table 6.

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 2007). In accordance with applicable federal regulation (29 CFR 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 2007). 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 2008) 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 2008) 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 complete SRC list as approved by the NDEP is presented in Table 4 of the QAPP. Table 5 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 exclusion of a chemical for analysis is provided in Table 5 of this SAP.

5.2.2 Soil Vapor Flux Analyses

As indicated in Table 6, 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). All samples will be analyzed for the target list with optimum method detection limits (MDLs) 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 the 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 5). These soil physical parameters will be measured from each of the subsurface samples collected from the two 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. One of the deep sample locations will be within the historical groundwater seep area and one will be within one of the remediated ponds. In addition, samples will be collected from two subsurface sample locations (see Figure 9 and Table 4) 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. One of the SPLP sample locations will be within the historical groundwater seep area and one will be within one of the remediated ponds.

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 2008) and SOP-40 (BRC, ERM and MWH 2007). 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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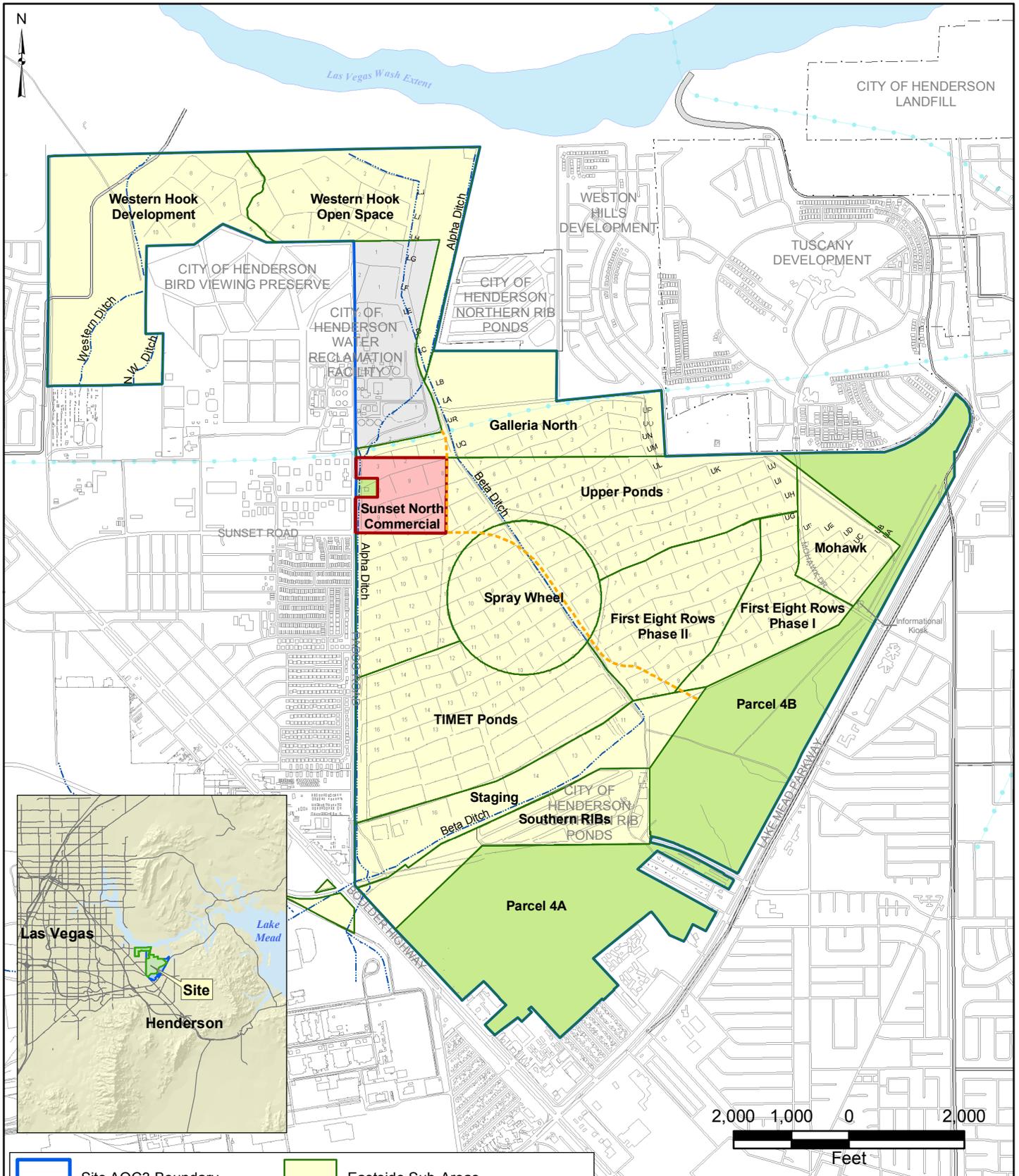
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FIGURES



	Site AOC3 Boundary		Eastside Sub-Areas
	100' Utility Corridor		Sunset North Commercial Sub-Area
	Ditches		NFA Areas*
	Flood Conveyance Channels		CoH WRF*
	Laterals	*Not part of the Closure Plan for soils.	

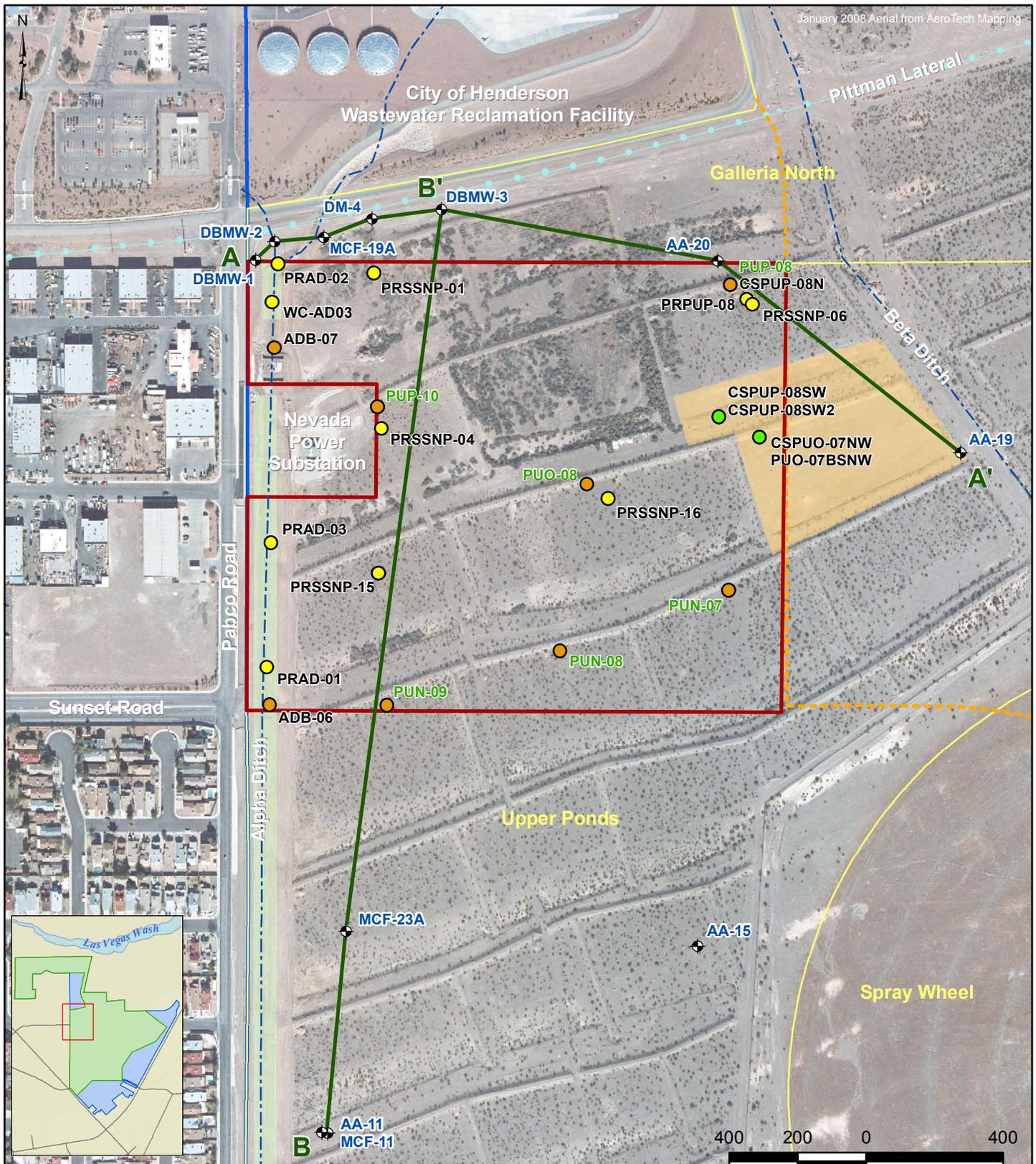
BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 1

**SUNSET NORTH
COMMERCIAL
SUB-AREA LOCATION**



Prepared by MKJ (ERM)	Date 11/05/08	JOB No. 0064276	FILE: GIS/BRC/SC-COMMERCIAL_SAP/FIGURE_1.MXD
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- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- Interim Remedial Measure Areas
- Tamarisk Removal Area
- 100' Utility Corridor
- Cross-Section Location
- ◆ Historical Soil Sample Location
- Pre-IRM Location
- IRM Location
- Post-IRM Location

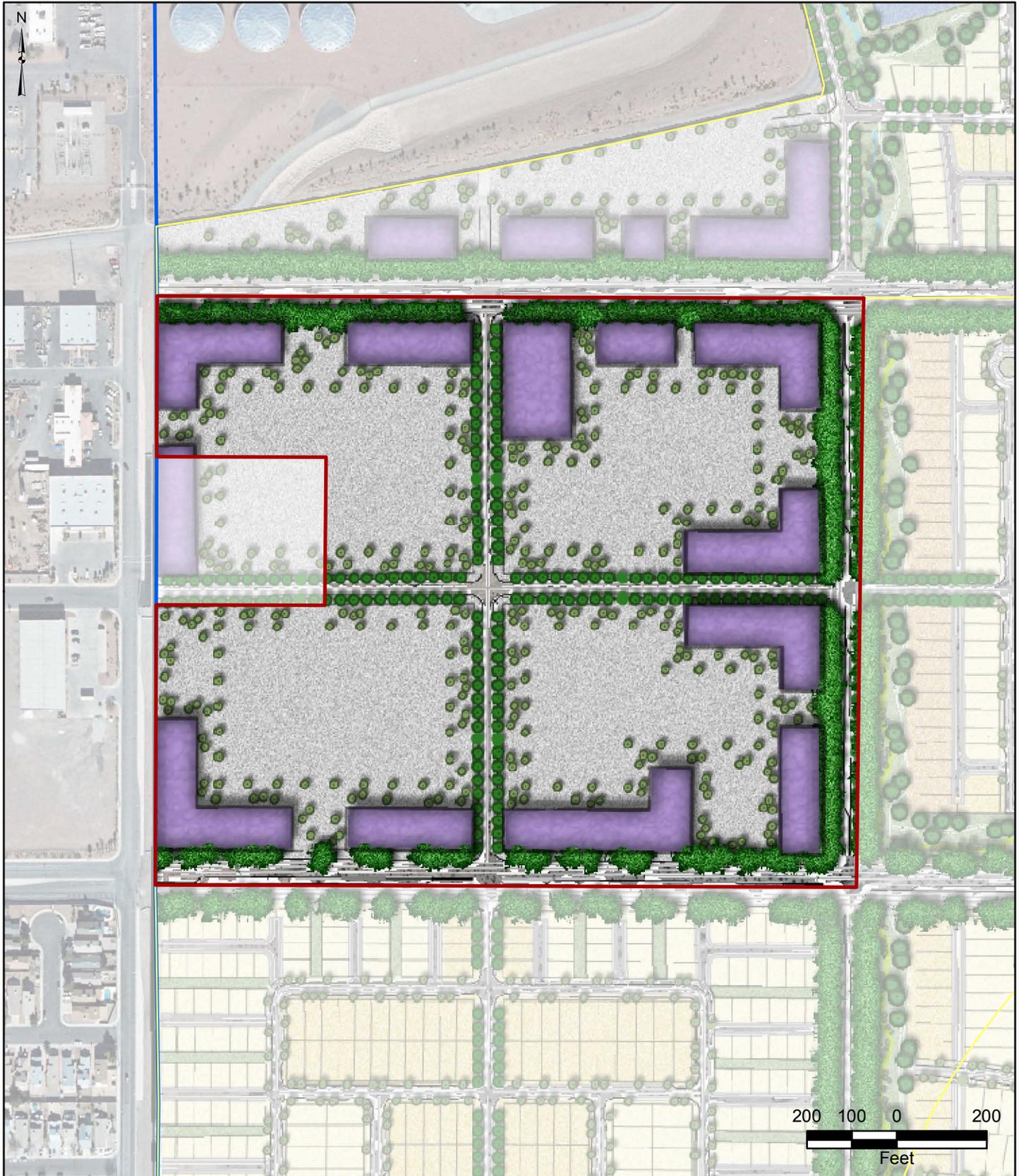
PRSSNP-15 - Discrete Sample
 PUO-08 - Composite Sample

BMI Common Areas (Eastside)
 Clark County, Nevada

FIGURE 2

SITE PLAN WITH HISTORIC SOIL SAMPLE LOCATIONS AND MONITORING WELLS

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- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas

Current Development Plan

- | | |
|--|--|
| Retail/Commercial | Parks & Trails |
| Medium Density Residential | Roads/Parking |
| Low Density Residential | |

BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 3

CURRENT DEVELOPMENT PLAN

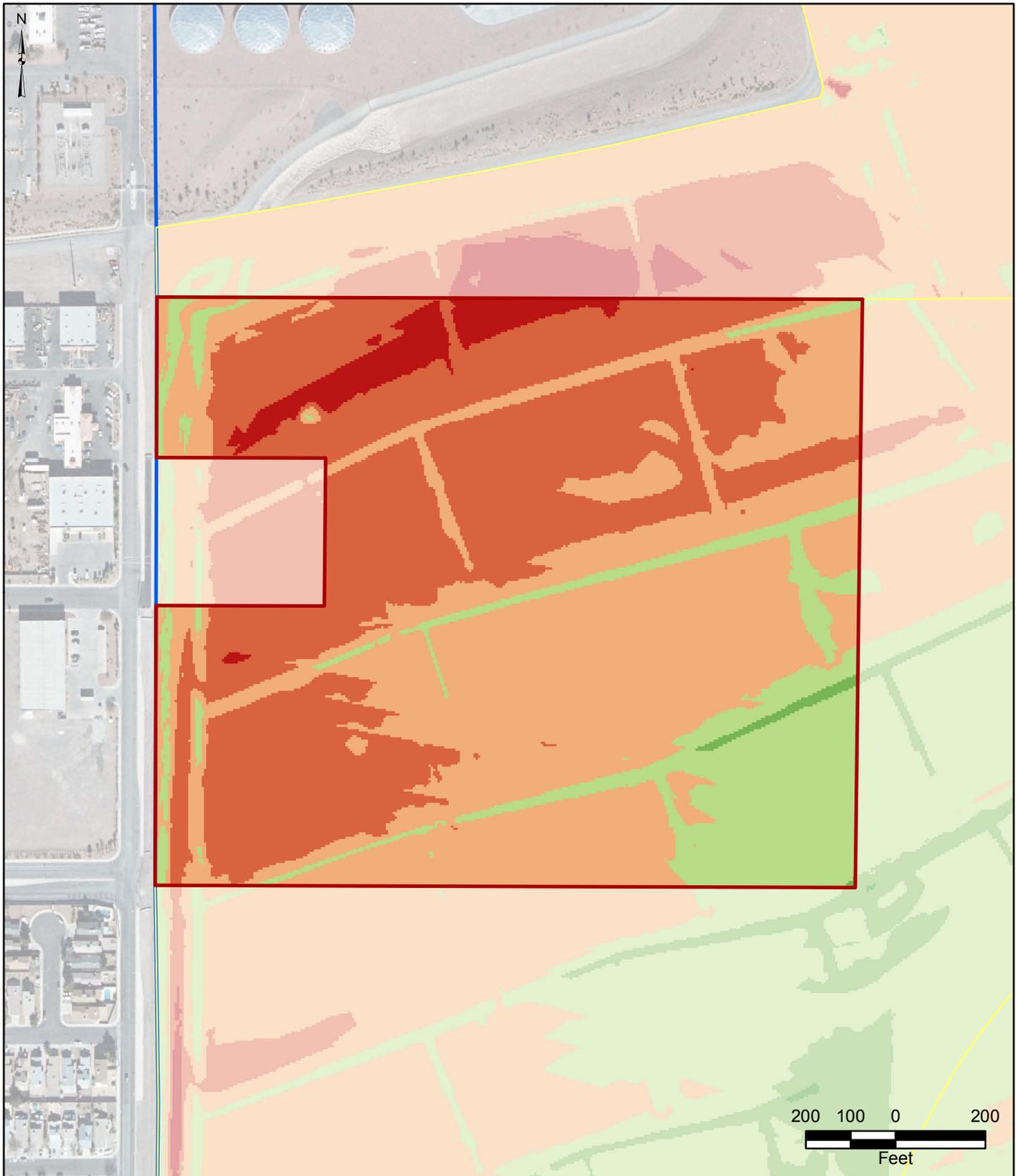


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11/04/08

JOB No. 0064276
FILE: GIS/BRC/SN-COMMERCIAL_SAP/FIGURES_3-4.MXD



- Sunset North Commercial Sub-Area
- 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



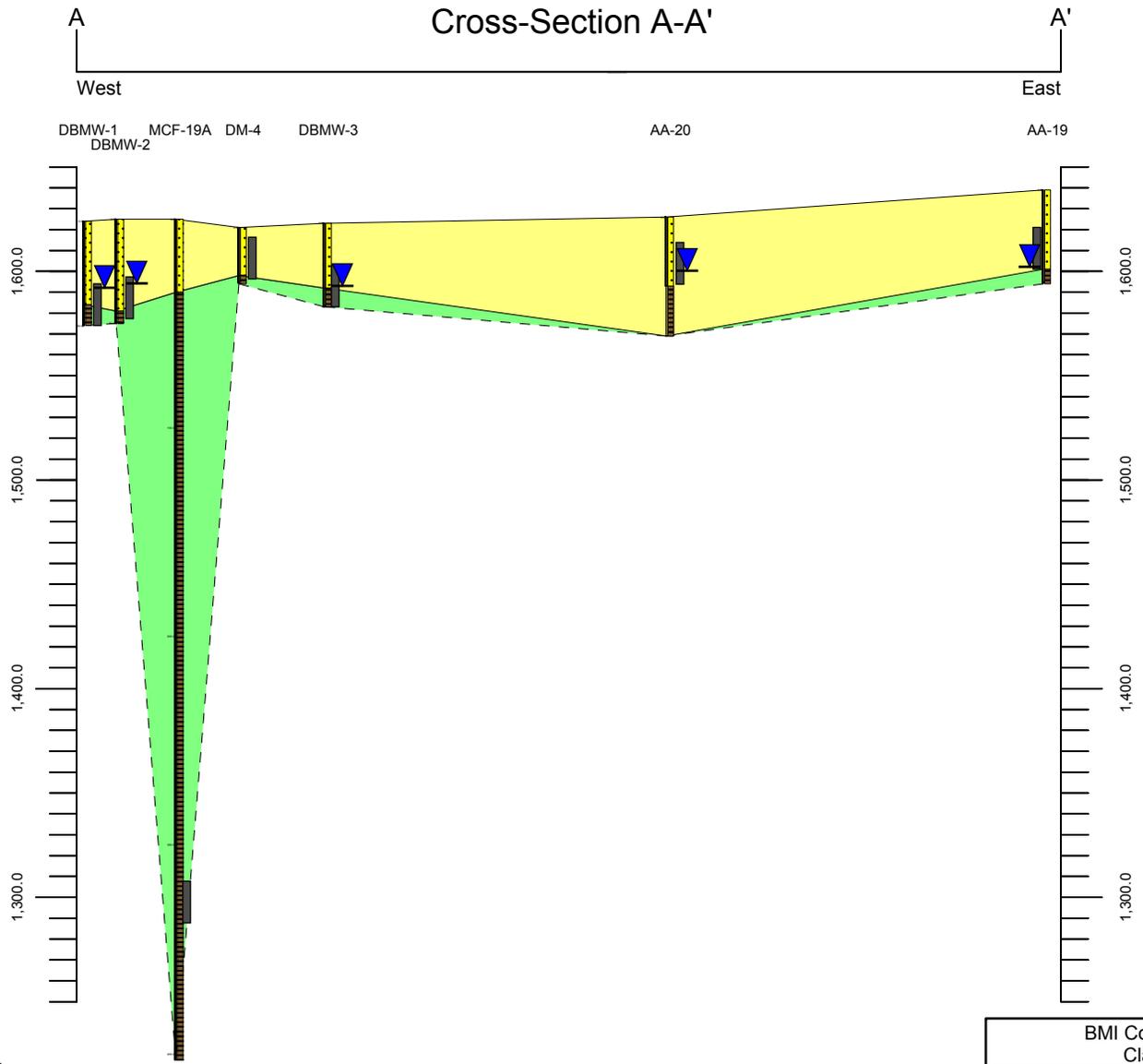
Prepared by
MKJ (ERM)



Date
11/04/08

JOB No. 0064276
FILE: GIS/BRC/SN-COMMERCIAL_SAP/FIGURES_3-4.MXD

Cross-Section A-A'



- ▬ = Screen Interval
- ▼ = Qal Water Level
- = Qal = Quaternary alluvium
- = TMCf = Tertiary Muddy Creek formation

Vertical Scale = 5x Horizontal Scale

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

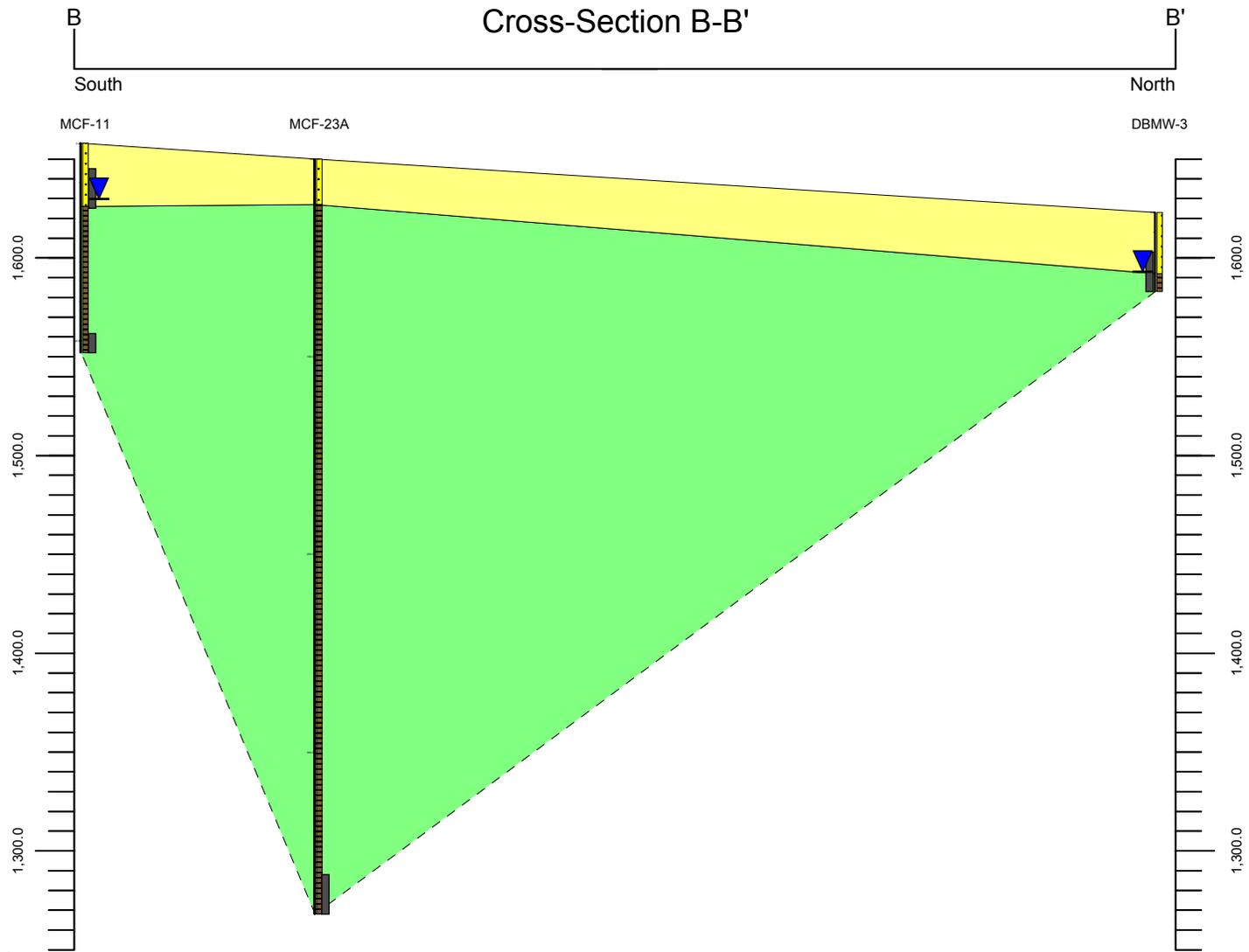
See Figure 2 for cross-section location.

BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 5

SUNSET NORTH
COMMERCIAL SUB-AREA
CROSS-SECTION A-A'





- ▬ = Screen Interval
- ▼ = Qal Water Level
- = Qal = Quaternary alluvium
- = TMCf = Tertiary Muddy Creek formation

Vertical Scale = 5x Horizontal Scale

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

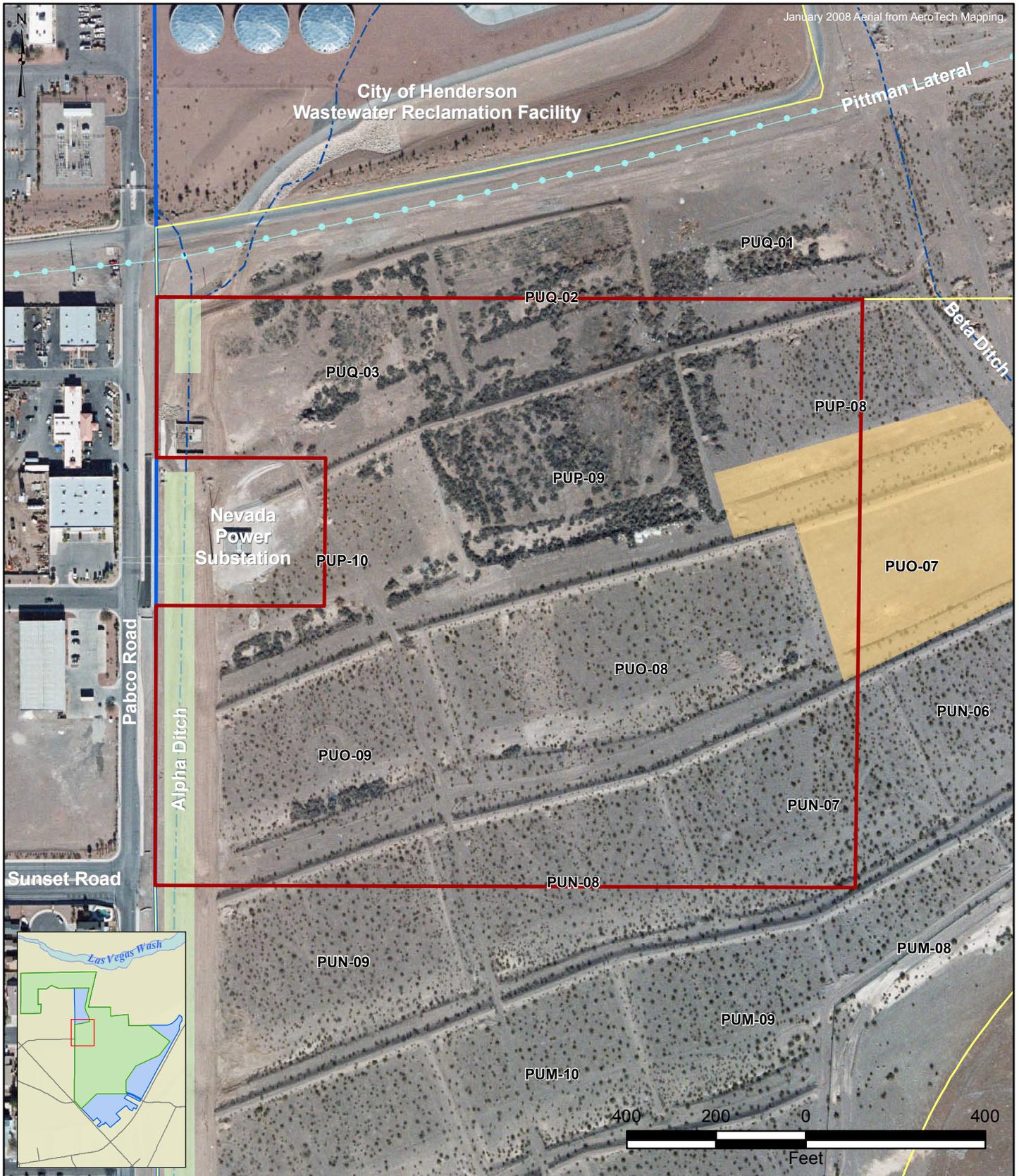
See Figure 2 for cross-section location.

BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 6

**SUNSET NORTH
COMMERCIAL SUB-AREA
CROSS-SECTION B-B'**





- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- Interim Remedial Measure Areas
- Tamarisk Removal Area

BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 7

**HISTORICAL SOIL
REMOVAL AREAS**



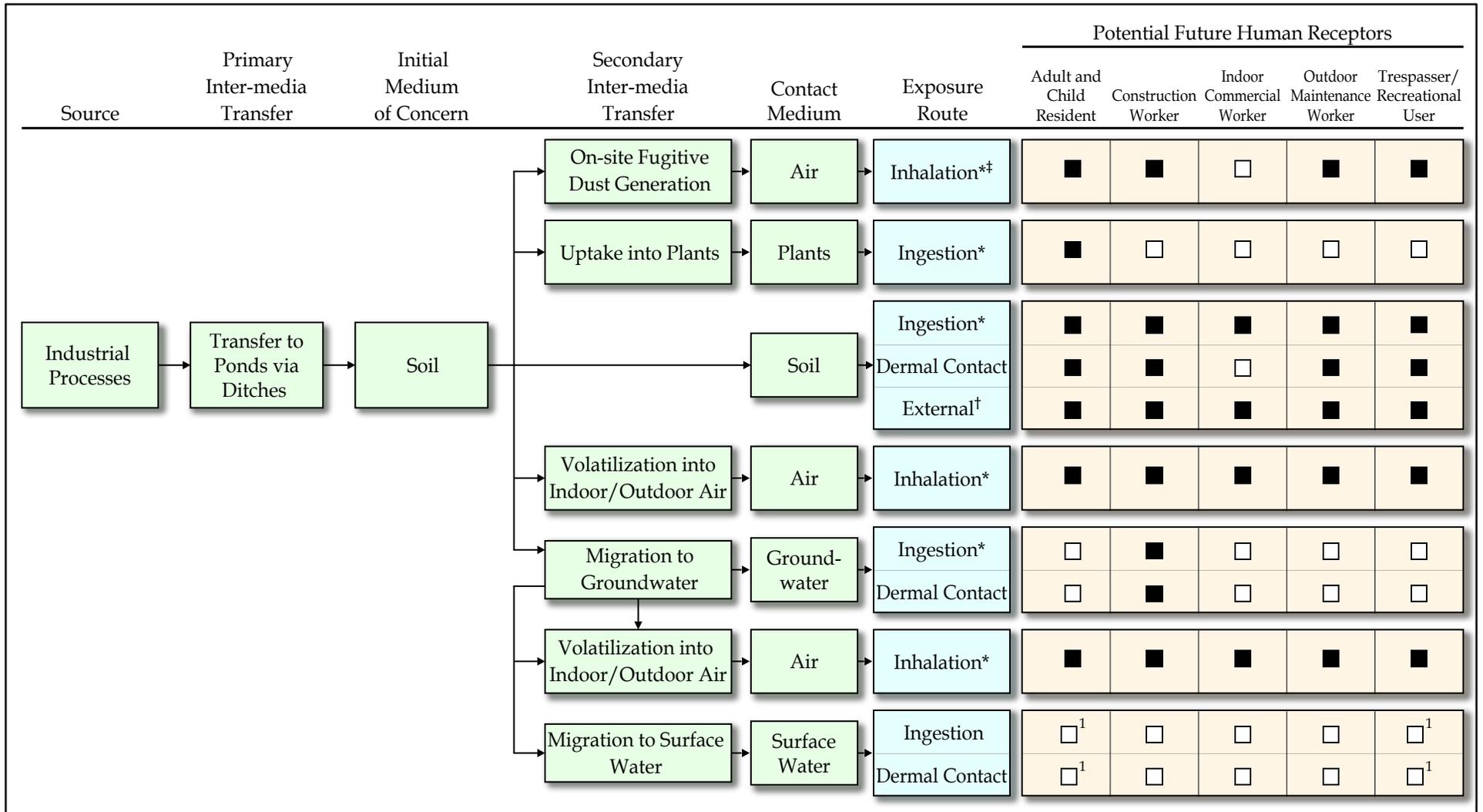
Prepared by
MKJ (ERM)



Date
11/04/08

FILE: GIS/BRC/SN-COMMERCIAL_SAP/FIGURE_7.MXD

JOB No. 0064276



□ - Incomplete or insignificant exposure pathway.

■ - Complete or potentially complete exposure pathway.

¹Potentially complete exposure pathway following discharge to Las Vegas Wash and Lake Mead.

*Includes radionuclide exposures.

†Only radionuclide exposures.

**Includes asbestos exposures.

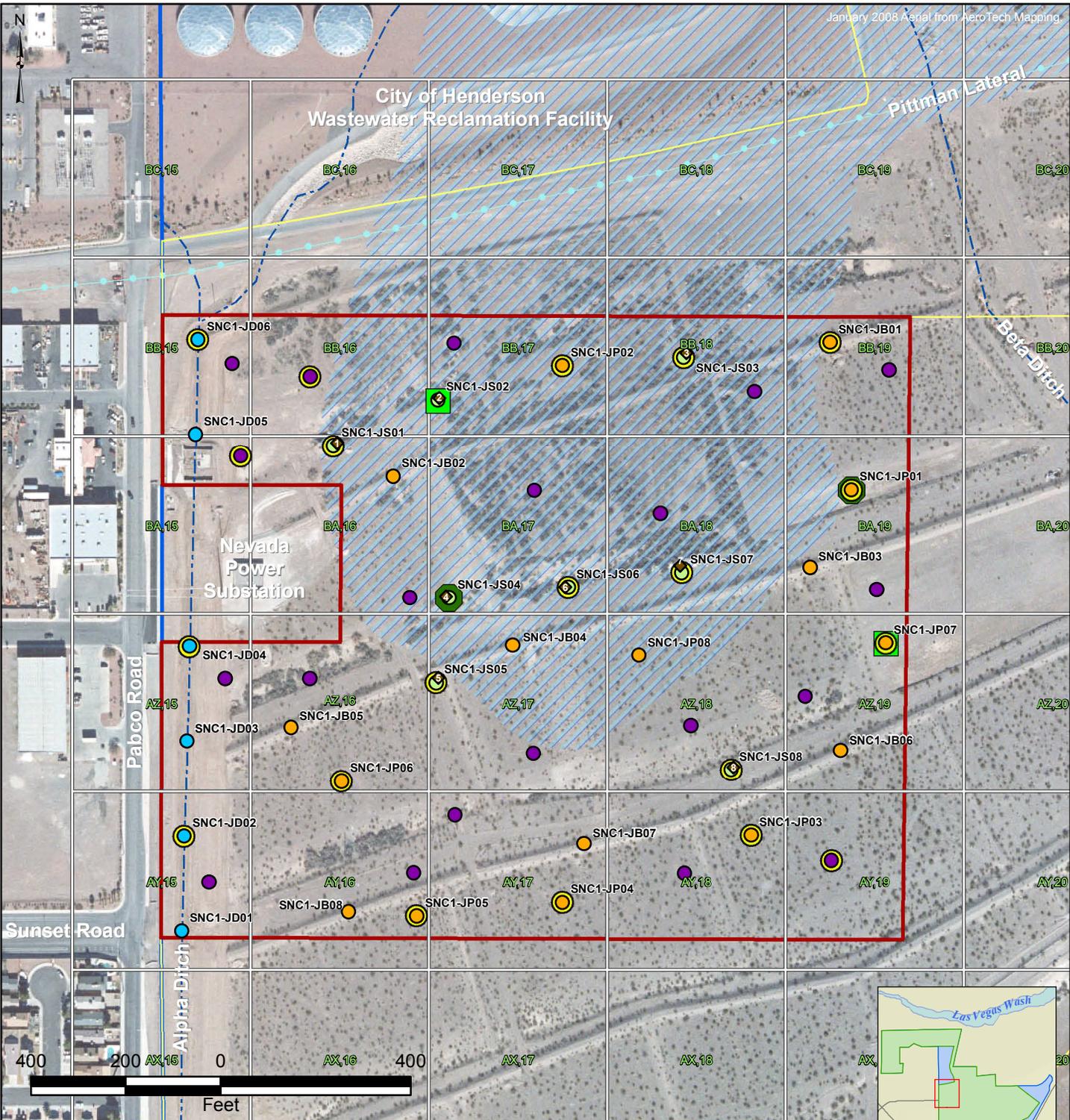
BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 8

CONCEPTUAL SITE MODEL
DIAGRAM FOR POTENTIAL
HUMAN EXPOSURES



Prepared by: MKJ (ERM) Date: 11/05/08 JOB No. 0064276
FILE: GIS/BRC/ISN-COMMERCIAL_SAP/FIGURE_8.AI



Eastside 3-Acre Random Sampling Grid (Grid ID = "XX,##")	2008 Survey Debris Locations
Sunset North Commercial Sub-Area	Random Sample Location (20)
Site AOC3 Boundary	Ditch Sample Location (6)
Eastside Soil Sub-Areas	Debris Sample Location (8)
Approximate Historical Seep Area	Other Biased Sample Locations (16)
	Surface Flux Sample Location (20)
	Deep Sample Location (2; to GW). Deep sample locations will be analyzed for soil physical parameters (see Table 4).
	SPLP Sample Location (2; subsurface)

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



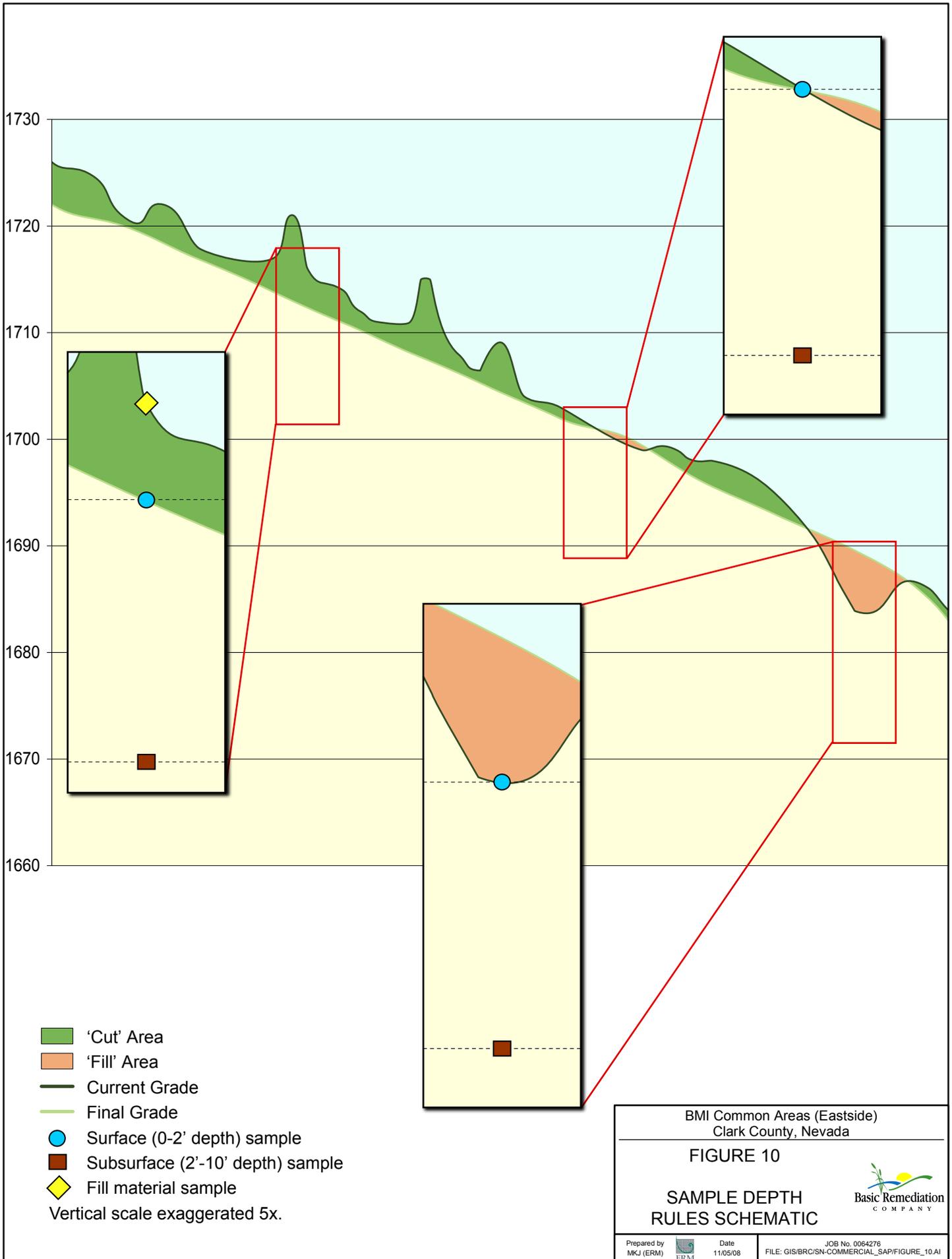
BMI Common Areas (Eastside)
Clark County, Nevada

FIGURE 9

PROPOSED SOIL AND SOIL VAPOR FLUX SAMPLING LOCATIONS

Basic Remediation COMPANY

Prepared by MKJ (ERM)	Date 11/04/08	JOB No. 0064276
FILE: GIS/BRC/SN-COMMERCIAL_SAP/FIGURE_9.MXD		



TABLES

TABLE 1
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 3 of 5)

Parameter of Interest	Compound List	Units	Total Count	Detect Count	Detection Frequency	Min. Detect ^a	Max. Detect ^a	Mean ^b	Median ^b	Std. Dev. ^b	Min. Non-Detect Limit ^c	Max. Non-Detect Limit ^c	USEPA Region 6 Residential Soil MSSL ^d	Count of Detects > MSSL	USEPA SSL (DAF 1) ^e	Count of Detects > DAF 1	USEPA SSL (DAF 20) ^e	Count of Detects > DAF 20	Max. Bkgrnd ^f	Count of Detects > Bkgrnd
Polycyclic Aromatic Hydrocarbons (PAHs)	Acenaphthene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	3680	--	29	--	580	--	--	--
	Acenaphthylene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	--	--	--	--	--	--	--	--
	Anthracene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	21900	--	590	--	11800	--	--	--
	Benzo(a)anthracene	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	0.148	--	0.08	--	1.6	--	--	--
	Benzo(a)pyrene	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	0.0148	--	0.4	--	8	--	--	--
	Benzo(b)fluoranthene	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	0.148	--	0.2	--	4	--	--	--
	Benzo(g,h,i)perylene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	--	--	--	--	--	--	--	--
	Benzo(k)fluoranthene	mg/kg	14	0	0%	--	--	0.223	0.175	0.082	0.34	0.73	1.48	--	2	--	40	--	--	--
	Chrysene	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	14.8	--	8	--	160	--	--	--
	Dibenzo(a,h)anthracene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	0.0148	--	0.08	--	1.6	--	--	--
	Indeno(1,2,3-cd)pyrene	mg/kg	16	0	0%	--	--	0.217	0.175	0.0728	0.34	0.73	0.148	--	0.7	--	14	--	--	--
	Phenanthrene	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	--	--	--	--	--	--	--	--
	Pyrene	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	2310	--	210	--	4200	--	--	--
	Polychlorinated Biphenyls	Aroclor 1016	mg/kg	19	0	0%	--	--	0.0126	0.017	0.00556	0.0015	0.037	3.93	--	--	--	--	--	--
Aroclor 1221		mg/kg	19	0	0%	--	--	0.0126	0.017	0.00556	0.0015	0.037	0.222	--	--	--	--	--	--	--
Aroclor 1232		mg/kg	19	0	0%	--	--	0.0126	0.017	0.00556	0.0015	0.037	0.222	--	--	--	--	--	--	--
Aroclor 1242		mg/kg	19	0	0%	--	--	0.0126	0.017	0.00556	0.0015	0.037	0.222	--	--	--	--	--	--	--
Aroclor 1248		mg/kg	19	0	0%	--	--	0.0126	0.017	0.00556	0.0015	0.037	0.222	--	--	--	--	--	--	--
Aroclor 1254		mg/kg	19	1	5%	0.083	0.083	0.0164	0.017	0.017	0.0015	0.037	0.222	0	--	--	--	--	--	--
Aroclor 1260	mg/kg	19	2	11%	0.025	0.056	0.0165	0.017	0.0109	0.0015	0.037	0.222	0	--	--	--	--	--	--	
Radionuclides ^h	Actinium-228	pCi/g	1	1	100%	1.41	1.41	1.41	1.41	--	0.34	0.34	--	--	--	--	--	--	3.4	0
	Bismuth-212	pCi/g	1	1	100%	2.6	2.6	2.6	2.6	--	2.3	2.3	--	--	--	--	--	--	1.82	1
	Bismuth-214	pCi/g	1	1	100%	0.79	0.79	0.79	0.79	--	0.41	0.41	--	--	--	--	--	--	1.62	0
	Lead-210	pCi/g	1	1	100%	2.1	2.1	2.1	2.1	--	2.1	2.1	--	--	--	--	--	--	2.2	0
	Lead-212	pCi/g	1	1	100%	1.28	1.28	1.28	1.28	--	0.18	0.18	--	--	--	--	--	--	2.11	0
	Lead-214	pCi/g	1	1	100%	0.7	0.7	0.7	0.7	--	0.16	0.16	--	--	--	--	--	--	1.72	0
	Potassium-40	pCi/g	1	1	100%	24.8	24.8	24.8	24.8	--	0.6	0.6	--	--	--	--	--	--	35	0
	Radium-226	pCi/g	3	3	100%	0.36	1.3	0.81	0.78	0.47	0.097	0.33	0.0124	3	0.0161	3	0.322	3	2.36	0
	Radium-228	pCi/g	3	3	100%	1.28	2.11	1.56	1.28	0.48	0.79	0.84	0.0677	3	0.0595	3	1.19	3	2.94	0
	Thallium-208	pCi/g	1	1	100%	0.43	0.43	0.43	0.43	--	0.1	0.1	--	--	--	--	--	--	0.72	0
	Thorium-228	pCi/g	3	3	100%	1.05	2.28	1.6	1.47	0.63	0.28	0.3	0.154	3	3.3	0	66	0	2.28	0
	Thorium-230	pCi/g	3	3	100%	0.89	1.62	1.18	1.04	0.39	0.15	0.19	3.49	0	0.303	3	6.06	0	3.01	0
	Thorium-232	pCi/g	3	3	100%	1.14	2.05	1.59	1.59	0.46	0.13	0.16	3.1	0	0.303	3	6.06	0	2.23	0
	Uranium-233/234	pCi/g	3	3	100%	0.61	0.84	0.73	0.75	0.12	0.06	0.1	3.86	0	112	0	2240	0	2.84	0
Uranium-235/236	pCi/g	3	1	33%	0.037	0.095	0.061	0.05	0.03	0.034	0.095	0.195	0	0.03885	2	0.777	0	0.21	0	
Uranium-238	pCi/g	3	3	100%	0.74	0.92	0.81	0.77	0.096	0.07	0.09	0.742	2	0.00605	3	0.121	3	2.37	0	
Semivolatile Organic Compounds	1,2,4,5-Tetrachlorobenzene	mg/kg	1	0	0%	--	--	0.17	0.17	--	0.34	0.34	18.3	--	--	--	--	--	--	--
	1,4-Dioxane	mg/kg	1	0	0%	--	--	0.17	0.17	--	0.34	0.34	44.2	--	--	--	--	--	--	--
	2,4,5-Trichlorophenol	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	6110	--	14	--	280	--	--	--
	2,4,6-Trichlorophenol	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	44.2	--	0.008	--	0.16	--	--	--
	2,4-Dichlorophenol	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	183	--	0.05	--	1	--	--	--
	2,4-Dimethylphenol	mg/kg	16	0	0%	--	--	0.258	0.178	0.122	0.34	1	1220	--	0.4	--	8	--	--	--
	2,4-Dinitrophenol	mg/kg	16	0	0%	--	--	1.11	0.85	0.408	1.6	3.7	122	--	0.01	--	0.2	--	--	--
	2,4-Dinitrotoluene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	122	--	0.00004	--	0.0008	--	--	--
	2,6-Dinitrotoluene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	61.1	--	0.00003	--	0.0006	--	--	--
	2-Chloronaphthalene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	3860	--	--	--	--	--	--	--
	2-Chlorophenol	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	63.5	--	0.2	--	4	--	--	--
	2-Methylnaphthalene	mg/kg	15	0	0%	--	--	0.23	0.18	0.078	0.34	0.73	--	--	--	--	--	--	--	--
	2-Nitroaniline	mg/kg	16	0	0%	--	--	1.11	0.85	0.408	1.6	3.7	183	--	--	--	--	--	--	--
	2-Nitrophenol	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	--	--	--	--	--	--	--	--
	3,3'-Dichlorobenzidine	mg/kg	15	0	0%	--	--	0.75	0.8	0.124	1	1.8	1.08	--	0.0003	--	0.006	--	--	--
	3-Methylphenol & 4-Methylphenol	mg/kg	3	0	0%	--	--	0.28	0.25	0.052	0.5	0.68	306	--	--	--	--	--	--	--
	3-Nitroaniline	mg/kg	15	0	0%	--	--	1.13	0.85	0.413	1.6	3.7	--	--	--	--	--	--	--	--
	4,6-Dinitro-o-cresol	mg/kg	15	0	0%	--	--	1.13	0.85	0.413	1.6	3.7	--	--	--	--	--	--	--	--
	4-Bromophenyl phenyl ether	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	--	--	--	--	--	--	--	--
	4-Chloro-3-Methylphenol	mg/kg	16	0	0%	--	--	0.343	0.178	0.233	0.34	1.4	--	--	--	--	--	--	--	--
	4-Chlorophenyl phenyl ether	mg/kg	15	0	0%	--	--	0.23	0.18	0.078	0.34	0.73	--	--	--	--	--	--	--	--
	4-Nitrophenol	mg/kg	16	0	0%	--	--	1.11	0.85	0.408	1.6	3.7	489	--	--	--	--	--	--	--
	Acetophenone	mg/kg	1	0	0%	--	--	0.17	0.17	--	0.34	0.34	1741	--	--	--	--	--	--	--
	Aniline	mg/kg	3	0	0%	--	--	0.39	0.5	0.191	0.34	1	85.3	--	--	--	--	--	--	--

TABLE 1
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 4 of 5)

Parameter of Interest	Compound List	Units	Total Count	Detect Count	Detection Frequency	Min. Detect ^a	Max. Detect ^a	Mean ^b	Median ^b	Std. Dev. ^b	Min. Non-Detect Limit ^c	Max. Non-Detect Limit ^c	USEPA Region 6 Residential Soil MSSL ^d	Count of Detects > MSSL	USEPA SSL (DAF 1) ^e	Count of Detects > DAF 1	USEPA SSL (DAF 20) ^e	Count of Detects > DAF 20	Max. Bkgrnd ^f	Count of Detects > Bkgrnd
Semivolatile Organic Compounds	Azobenzene	mg/kg	3	0	0%	--	--	0.223	0.25	0.0462	0.34	0.5	4.42	--	--	--	--	--	--	--
	Benzoic acid	mg/kg	7	0	0%	--	--	1.61	1.75	0.251	2.5	3.7	100000	--	20	--	400	--	--	--
	Benzyl alcohol	mg/kg	6	0	0%	--	--	0.625	0.675	0.0987	1	1.4	18300	--	--	--	--	--	--	--
	Benzyl butyl phthalate	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	240	--	810	--	16200	--	--	--
	bis(2-Chloroethoxy) methane	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	--	--	--	--	--	--	--	--
	bis(2-Chloroethyl) ether	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	0.211	--	0.00002	--	0.0004	--	--	--
	bis(2-Chloroisopropyl) ether	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	2.89	--	--	--	--	--	--	--
	bis(2-Ethylhexyl) phthalate	mg/kg	16	1	6%	0.23	0.23	0.241	0.208	0.0787	0.34	0.73	34.7	0	180	0	3600	0	--	--
	Carbazole	mg/kg	15	0	0%	--	--	0.23	0.18	0.078	0.34	0.73	24.3	--	0.03	--	0.6	--	--	--
	Dibenzofuran	mg/kg	15	0	0%	--	--	0.23	0.18	0.078	0.34	0.73	145	--	--	--	--	--	--	--
	Dibutyl phthalate	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	6110	--	270	--	5400	--	--	--
	Diethyl phthalate	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	48900	--	--	--	--	--	--	--
	Dimethyl phthalate	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	100000	--	--	--	--	--	--	--
	Di-n-octyl phthalate	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	--	--	--	--	--	--	--	--
	Fluoranthene	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	2290	--	210	--	4200	--	--	--
	Fluorene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	2640	--	28	--	560	--	--	--
	Hexachloro-1,3-butadiene	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	6.24	--	0.1	--	2	--	--	--
	Hexachlorobenzene	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	0.304	--	0.1	--	2	--	--	--
	Hexachlorocyclopentadiene	mg/kg	16	0	0%	--	--	0.637	0.8	0.261	0.5	1.8	366	--	20	--	400	--	--	--
	Hexachloroethane	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	34.7	--	0.02	--	0.4	--	--	--
	Isophorone	mg/kg	15	0	0%	--	--	0.23	0.18	0.078	0.34	0.73	512	--	0.03	--	0.6	--	--	--
	Naphthalene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	125	--	4	--	80	--	--	--
	Nitrobenzene	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	19.7	--	0.007	--	0.14	--	--	--
	N-Nitrosodimethylamine	mg/kg	2	0	0%	--	--	0.25	0.25	--	0.5	0.5	0.0023	0	--	--	--	--	--	--
	N-nitrosodi-n-propylamine	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	0.0695	0	0.000002	0	0.00004	0	--	0
	N-nitrosodiphenylamine	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	99.3	0	0.06	0	1.2	0	--	0
	o-Cresol	mg/kg	16	0	0%	--	--	0.227	0.178	0.0769	0.34	0.73	3060	0	0.8	0	16	0	--	0
	p-Chloroaniline	mg/kg	17	0	0%	--	--	0.364	0.18	0.242	0.34	1.4	244	0	0.03	0	0.6	0	--	0
	p-Cresol	mg/kg	13	0	0%	--	--	0.227	0.175	0.0838	0.34	0.73	--	0	--	0	--	0	--	0
	Pentachlorobenzene	mg/kg	1	0	0%	--	--	0.17	0.17	--	0.34	0.34	48.9	0	--	0	--	0	--	0
	Pentachlorophenol	mg/kg	17	0	0%	--	--	1.15	0.85	0.424	1.6	3.7	2.98	0	0.001	0	0.02	0	--	0
	Phenol	mg/kg	17	0	0%	--	--	0.234	0.18	0.0798	0.34	0.73	18300	0	5	0	100	0	--	0
	Phthalic acid	mg/kg	1	0	0%	--	--	0.8	0.8	--	1.6	1.6	100000	0	--	0	--	0	--	0
p-Nitroaniline	mg/kg	16	0	0%	--	--	1.02	0.85	0.452	1	3.7	--	0	--	0	--	0	--	0	
Pyridine	mg/kg	3	0	0%	--	--	0.433	0.25	0.318	0.5	1.6	61.1	0	--	0	--	0	--	0	
Volatile Organic Compounds	1,1,1,2-Tetrachloroethane	mg/kg	1	0	0%	--	--	0.00255	0.00255	--	0.0051	0.0051	3.01	0	--	0	--	0	--	0
	1,1,1-Trichloroethane	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	1390	0	0.1	0	2	0	--	0
	1,1,2,2-Tetrachloroethane	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.384	0	0.0002	0	0.004	0	--	0
	1,1,2-Trichloroethane	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.844	0	0.0009	0	0.018	0	--	0
	1,1-Dichloroethane	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	846	0	1	0	20	0	--	0
	1,1-Dichloroethylene	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	285	0	0.003	0	0.06	0	--	0
	1,2,3-Trichloropropane	mg/kg	1	0	0%	--	--	0.00255	0.00255	--	0.0051	0.0051	--	0	--	0	--	0	--	0
	1,2,4-Trichlorobenzene	mg/kg	17	0	0%	--	--	0.224	0.18	0.0967	0.0051	0.73	143	0	0.3	0	6	0	--	0
	1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	1	0	0%	--	--	0.005	0.005	--	0.01	0.01	0.00263	0	--	0	--	0	--	0
	1,2-Dichlorobenzene	mg/kg	18	1	6%	0.0011	0.0011	0.116	0.17	0.096	0.0051	0.5	279	0	0.9	0	18	0	--	0
	1,2-Dichloroethane	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.347	0	0.001	0	0.02	0	--	0
	1,2-Dichloropropane	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.351	0	0.001	0	0.02	0	--	0
	1,3-Dichlorobenzene	mg/kg	18	0	0%	--	--	0.116	0.17	0.0959	0.0051	0.5	68.5	0	--	0	--	0	--	0
	1,4-Dichlorobenzene	mg/kg	18	0	0%	--	--	0.116	0.17	0.0959	0.0051	0.5	3.2	0	0.1	0	2	0	--	0
	2-Chloroethyl vinyl ether	mg/kg	6	0	0%	--	--	0.0106	0.0105	0.0002	0.021	0.022	--	0	--	0	--	0	--	0
	Acetone	mg/kg	8	1	13%	0.015	0.015	0.00712	0.0055	0.00368	0.01	0.022	14200	0	0.8	0	16	0	--	0
	Acetonitrile	mg/kg	1	0	0%	--	--	0.0255	0.0255	--	0.051	0.051	1470	0	--	0	--	0	--	0
	Benzene	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.656	0	0.002	0	0.04	0	--	0
	Bromodichloromethane	mg/kg	8	0	0%	--	--	0.00239	0.00262	0.00077	0.001	0.0056	1.03	0	0.03	0	0.6	0	--	0
	Bromomethane	mg/kg	8	0	0%	--	--	0.0033	0.00265	0.00121	0.0052	0.011	8.7	0	0.01	0	0.2	0	--	0
	Carbon disulfide	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	721	0	2	0	40	0	--	0
	Carbon tetrachloride	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.24	0	0.003	0	0.06	0	--	0
	CFC-11	mg/kg	8	0	0%	--	--	0.00299	0.00262	0.00102	0.0051	0.011	387	0	--	0	--	0	--	0
	CFC-12	mg/kg	1	0	0%	--	--	0.005	0.005	--	0.01	0.01	94.1	0	--	0	--	0	--	0
	Chlorinated fluorocarbon (Freon 113)	mg/kg	1	0	0%	--	--	0.00255	0.00255	--	0.0051	0.0051	5550	0	--	0	--	0	--	0

**TABLE 1
SUMMARY OF POST-IRM SOIL CHEMICAL DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 5 of 5)**

Parameter of Interest	Compound List	Units	Total Count	Detect Count	Detection Frequency	Min. Detect ^a	Max. Detect ^a	Mean ^b	Median ^b	Std. Dev. ^b	Min. Non-Detect Limit ^c	Max. Non-Detect Limit ^c	USEPA Region 6 Residential Soil MSSL ^d	Count of Detects > MSSL	USEPA SSL (DAF 1) ^e	Count of Detects > DAF 1	USEPA SSL (DAF 20) ^e	Count of Detects > DAF 20	Max. Bkgrnd ^f	Count of Detects > Bkgrnd
Volatile Organic Compounds	Chlorobenzene	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	273	0	0.07	0	1.4	0	--	0
	Chlorodibromomethane	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	1.01	0	0.02	0	0.4	0	--	0
	Chloroethane	mg/kg	8	0	0%	--	--	0.0033	0.00265	0.00121	0.0052	0.011	3.03	0	--	0	--	0	--	0
	Chloroform	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.245	0	0.03	0	0.6	0	--	0
	Chloromethane	mg/kg	8	0	0%	--	--	0.0033	0.00265	0.00121	0.0052	0.011	111	0	--	0	--	0	--	0
	cis-1,2-Dichloroethylene	mg/kg	7	0	0%	--	--	0.00246	0.0026	0.0005	0.0027	0.0056	43	0	0.02	0	0.4	0	--	0
	cis-1,3-Dichloropropylene	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.697	0	0.0002	0	0.004	0	--	0
	Dibromomethane	mg/kg	1	0	0%	--	--	0.00255	0.00255	--	0.0051	0.0051	141	0	--	0	--	0	--	0
	Dichloromethane	mg/kg	8	1	13%	0.0014	0.0014	0.00247	0.0026	0.00043	0.0051	0.0056	8.9	0	0.001	1	0.02	0	--	0
	Ethylbenzene	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	234	0	0.7	0	14	0	--	0
	m,p-Xylene	mg/kg	6	0	0%	--	--	0.00265	0.00262	0.00008	0.0052	0.0056	375	0	10	0	200	0	--	0
	Methyl ethyl ketone	mg/kg	8	0	0%	--	--	0.00662	0.0055	0.00256	0.01	0.022	32100	0	--	0	--	0	--	0
	Methyl iodide	mg/kg	1	0	0%	--	--	0.00255	0.00255	--	0.0051	0.0051	--	0	--	0	--	0	--	0
	Methyl isobutyl ketone	mg/kg	8	0	0%	--	--	0.00662	0.0055	0.00256	0.01	0.022	5800	0	--	0	--	0	--	0
	Methyl n-butyl ketone	mg/kg	7	0	0%	--	--	0.00607	0.0055	0.00219	0.01	0.022	--	0	--	0	--	0	--	0
	o-Xylene	mg/kg	6	0	0%	--	--	0.00265	0.00262	0.00008	0.0052	0.0056	282	0	9	0	180	0	--	0
	Styrene (monomer)	mg/kg	7	0	0%	--	--	0.00266	0.00265	0.00007	0.0052	0.0056	1730	0	0.2	0	4	0	--	0
	Tetrachloroethylene	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.554	0	0.003	0	0.06	0	--	0
	Toluene	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	521	0	0.6	0	12	0	--	0
	trans-1,2-Dichloroethylene	mg/kg	8	0	0%	--	--	0.00247	0.0026	0.00046	0.0027	0.0056	122	0	0.03	0	0.6	0	--	0
	trans-1,3-Dichloropropylene	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.697	0	0.0002	0	0.004	0	--	0
	Tribromomethane	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	61.6	0	0.04	0	0.8	0	--	0
Trichloroethylene	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.0426	0	0.003	0	0.06	0	--	0	
Vinyl acetate	mg/kg	7	0	0%	--	--	0.00489	0.005	0.001	0.0054	0.011	988	0	8	0	160	0	--	0	
Vinyl chloride	mg/kg	8	0	0%	--	--	0.00264	0.00262	0.00008	0.0051	0.0056	0.043	0	0.0007	0	0.014	0	--	0	
Xylenes (total)	mg/kg	2	0	0%	--	--	0.00385	0.00385	0.00163	0.0054	0.01	214	0	10	0	200	0	--	0	

Notes:

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 Region 6 MSSL 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.

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 - Includes both detect values and non-detect values, with one-half the DL used for non-detect values (or the actual reported activities for radionuclides). Values for median, mean, and standard deviation are truncated to 3 significant figures. Calculated from the 'STAT' field in the data include on the CD.

c - The quantitation limits shown include samples which had detections.

d - From USEPA Region 6 medium-specific screening levels (MSSLs) table, March 2008 (and the 2007 USEPA radionuclide PRG webpage; <http://epa-prgs.ornl.gov/radionuclides>). Values used are residential soil MSSLS.

e - From USEPA Region 6 medium-specific screening levels (MSSLs) table, March 2008 (and the 2007 USEPA radionuclide PRG webpage; <http://epa-prgs.ornl.gov/radionuclides>). Value used is the soil screening level (SSL) with a dilution attenuation factor (DAF) of 1 or 20.

f - 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).

g - Agency for Toxic Substances and Disease Registry (ATSDR) screening value of 50 parts per trillion (ppt).

h - Exceedances of MSSL and SSLs 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 Sunset North Commercial 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-20, DBMW-1, DBMW-2, AND DBMW-3
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 1 of 6)

Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	AA-20 N May 2008	DBMW-1 N May 2008	DBMW-2 N June 2008	DBMW-3 N June 2008
Aldehydes	Acetaldehyde	µg/L	340	--	< 30 UJ	< 30 UJ	< 30 U	< 30 U
	Chloroacetaldehyde	µg/L	--	--	< 10 U	< 10 U	< 10 U	< 10 U
	Formaldehyde	µg/L	--	--	< 60 UJ	< 60 UJ	< 60 U	< 60 U
General Chemistry	Alkalinity	mg/L	--	--	79 J-CAB	63	94 J-CAB	57 J-CAB
	Ammonia	µg/L	--	--	< 50 U	< 50 U	59.1 J+	79.2 J+
	Bicarbonate alkalinity	mg/L	--	--	79 J-CAB	63	94 J-CAB	57 J-CAB
	Bromide	mg/L	--	--	0.57	5	< 2.5 U	< 2.5 U
	Bromine	mg/L	--	--	1.1	10.1	< 5 U	< 5 U
	Carbonate alkalinity	mg/L	--	--	< 5 U	< 5 U	< 5 U	< 5 U
	Chlorate	mg/L	--	--	97.5	26.2	17.5	59.9
	Chloride	mg/L	--	250	1200 J-CAB	991	1280 J-CAB	1470 J-CAB
	Chlorine	mg/L	--	--	2390	1980	2570	2940
	Chlorite	µg/L	--	1,000	< 1000 U	< 400 U	< 400 U	< 400 U
	Cyanide (Total)	µg/L	--	200	< 50 U	8.4	< 5 U	R
	Fluoride	mg/L	--	4.0	0.31	0.33	0.82	0.51
	Hydroxide alkalinity	mg/L	--	--	< 5 U	< 5 U	< 5 U	< 5 U
	Iodide	mg/L	--	--	< 10 U	< 10 U	< 10 U	< 10 U
	Ion Balance Difference	percent	--	--	12.8	2.4	8.7	11.3
	Nitrate (as N)	mg/L	--	10	20.5	8.8	6.7	14.9
	Nitrite (as N)	mg/L	--	1	< 20 U	< 20 U	< 10 U	< 10 U
	Orthophosphate as P	mg/L	--	--	< 0.5 UJ	< 5 U	< 5 U	< 5 U
	Perchlorate	µg/L	--	18/24.5 ⁽²⁾	7180	8020	5560	6400
	Sulfate	mg/L	--	250	2660 J-CAB	2810	3160 J-CAB	2920 J-CAB
	Sulfide	mg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
Total Inorganic Carbon	mg/L	--	--	25.8 J	22 J+	27	16.5	
Total Kjeldahl Nitrogen (TKN)	mg/L	--	--	0.59 J-	0.51	0.75	0.86 J+	
Total Organic Carbon	mg/L	--	--	< 50 U	< 50 U	< 50 U	< 50 U	
Metals	Aluminum	µg/L	--	50	< 1200 U	< 1500 U	245	< 600 U
	Antimony	µg/L	--	6	< 200 U	< 250 U	< 100 U	< 100 U
	Arsenic	µg/L	--	10	84.7 J	< 500 U	38.7	49.7
	Barium	µg/L	--	2,000	< 80 U	< 100 U	16.4	11.4
	Beryllium	µg/L	--	4	< 20 U	< 25 U	< 10 U	< 10 U
	Boron	µg/L	--	--	2520 J+,J-CAB	2900	3400 J+,J-CAB	2810 J+,J-CAB
	Cadmium	µg/L	--	5	< 20 U	< 25 U	< 10 U	< 10 U
	Calcium	µg/L	--	--	483000 J-CAB	624000 J	551000 J-CAB	539000 J-CAB
	Chromium (Total)	µg/L	--	100	< 400 U	< 500 U	< 200 U	< 200 U
	Chromium (VI)	mg/L	--	--	0.093	0.051	0.037	0.057
	Cobalt	µg/L	--	--	< 80 U	< 100 U	< 40 U	< 40 U
	Copper	µg/L	--	1,300	< 40 U	< 50 U	< 20 U	< 20 U
	Iron	µg/L	--	300	R	< 2500 U	< 1000 U	< 1000 U
	Lead	µg/L	--	15	< 120 U	< 150 U	< 60 U	< 60 U
	Lithium	µg/L	--	--	< 1000 U	< 1000 U	604	< 1000 U
	Magnesium	µg/L	--	--	205000 J-CAB	306000	299000 J-CAB	297000 J-CAB
	Manganese	µg/L	--	50	< 80 U	< 100 U	15.9	< 40 U
	Mercury	µg/L	--	2	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	Molybdenum	µg/L	--	--	118 J	821 J+	1130	671
	Nickel	µg/L	--	--	< 200 U	< 250 U	19.1	23
	Niobium	µg/L	--	--	< 1000 U	< 1250 U	< 500 U	< 500 U
	Palladium	µg/L	--	--	16.5 J-	34.3	38.2	25.9
	Phosphorus (as P)	µg/L	--	25 ⁽³⁾	< 800 U	< 1000 U	< 400 U	< 400 U
	Platinum	µg/L	--	--	< 40 U	< 50 U	< 20 U	< 20 U
	Potassium	µg/L	--	--	32900 J-CAB	51900	72800 J-CAB	75500 J-CAB

TABLE 2
SUMMARY OF RECENT (5TH MONITORING EVENT) ALLUVIAL AQUIFER GROUNDWATER DATA
FROM MONITORING WELLS AA-20, DBMW-1, DBMW-2, AND DBMW-3
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 2 of 6)

Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	AA-20 N May 2008	DBMW-1 N May 2008	DBMW-2 N June 2008	DBMW-3 N June 2008
Metals	Selenium	µg/L	--	50	< 200 U	79.6 J	140	< 100 U
	Silicon	µg/L	--	--	27700 J-CAB	38800	38100 J-CAB	29300 J-CAB
	Silver	µg/L	--	100	< 80 U	< 100 U	< 40 U	< 40 U
	Sodium	µg/L	--	--	668000 J-CAB	634000	792000 J-CAB	687000 J-CAB
	Strontium	µg/L	--	--	9380	15900 J+	14600 J	8950 J
	Sulfur	µg/L	--	--	830000	1030000 J	861000	887000
	Thallium	µg/L	--	2	< 80 U	< 100 U	< 40 U	< 40 U
	Tin	µg/L	--	--	< 80 U	< 100 U	< 40 U	< 40 U
	Titanium	µg/L	--	--	< 80 U	< 100 U	20.4 J+	< 40 U
	Tungsten	µg/L	--	--	< 200 U	< 250 U	< 100 U	< 100 U
	Uranium	µg/L	--	30	15.3 J	< 50 U	12.8	8.2
	Vanadium	µg/L	--	--	< 400 UJ	< 500 U	< 200 U	< 200 U
	Zinc	µg/L	--	500	< 400 U	< 500 U	< 200 U	< 200 U
	Zirconium	µg/L	--	--	< 200 U	< 250 U	< 100 U	< 100 U
Organic Acids	4-Chlorobenzenesulfonic acid	mg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Benzenesulfonic acid	mg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Diethyl phosphorodithioic acid	mg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Dimethyl phosphorodithioic acid	mg/L	--	--	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
	Phthalic acid	mg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
Organochlorine Pesticides	2,4-DDD	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	2,4-DDE	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	4,4-DDD	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	4,4-DDE	µg/L	29	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	4,4-DDT	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Aldrin	µg/L	0.071	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	alpha-BHC	µg/L	3.1	--	0.078	< 0.05 U	< 0.05 U	< 0.05 U
	alpha-Chlordane	µg/L	--	2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	beta-BHC	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Chlordane	µg/L	12	2	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
	delta-BHC	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Dieldrin	µg/L	0.86	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Endosulfan I	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Endosulfan II	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Endosulfan sulfate	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Endrin	µg/L	--	2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Endrin aldehyde	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Endrin ketone	µg/L	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	gamma-Chlordane	µg/L	--	2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Heptachlor	µg/L	0.4	0.4	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Heptachlor epoxide	µg/L	--	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Lindane	µg/L	11	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
	Methoxychlor	µg/L	--	40	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U
Toxaphene	µg/L	--	3	< 2 U	< 2 U	< 2 U	< 2 U	
Radionuclides	Radium-226	pCi/L	--	--	1.55	2.01 J	1.02 J	5.51 J
	Radium-228	pCi/L	--	--	0.571	1.25	1.16	0.758
	Radium-226/228	pCi/L	--	5 ⁽⁶⁾	2.12	3.26	2.18	6.27
	Thorium-228	pCi/L	--	--	0.599 U	0.665 U	-0.054 U	-0.423 U
	Thorium-230	pCi/L	--	--	1 U	0.331 U	-0.0409 U	-0.0161 U
	Thorium-232	pCi/L	--	--	-0.0234 U	0.059 U	-0.0385 U	-0.162 U
	Uranium-233/234	pCi/L	--	--	7.32	3.87	5.42	3.89
	Uranium-235/236	pCi/L	--	--	0.457	0.45	0.127 U	0.361
	Uranium-238	pCi/L	--	--	5.44 J-	3.39	3.69	2.27

TABLE 2
SUMMARY OF RECENT (5TH MONITORING EVENT) ALLUVIAL AQUIFER GROUNDWATER DATA
FROM MONITORING WELLS AA-20, DBMW-1, DBMW-2, AND DBMW-3
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 3 of 6)

Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	AA-20 N May 2008	DBMW-1 N May 2008	DBMW-2 N June 2008	DBMW-3 N June 2008
SVOCs	1,2,4,5-Tetrachlorobenzene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	1,2-Diphenylhydrazine	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	1,4-Dioxane	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	2,4,5-Trichlorophenol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	2,4,6-Trichlorophenol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	2,4-Dichlorophenol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	2,4-Dimethylphenol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	2,4-Dinitrophenol	µg/L	--	--	--	< 50 U	< 50 U	< 50 U
	2,4-Dinitrotoluene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	2,6-Dinitrotoluene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	2-Chloronaphthalene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	2-Chlorophenol	µg/L	1,100	--	--	< 10 U	< 10 U	< 10 U
	2-Methylnaphthalene	µg/L	3,300	--	--	< 10 U	< 10 U	< 10 U
	2-Nitroaniline	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	2-Nitrophenol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	3,3'-Dichlorobenzidine	µg/L	--	--	--	< 50 U	< 50 U	< 50 U
	3-Methylphenol & 4-Methylphenol	µg/L	--	--	--	< 20 U	< 20 U	< 20 U
	3-Nitroaniline	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	4-Bromophenyl phenyl ether	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	4-Chloro-3-Methylphenol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	4-Chlorophenyl phenyl ether	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	4-Chlorothioanisole	µg/L	--	--	--	< 50 U	< 50 U	< 50 U
	4-Nitrophenol	µg/L	--	--	--	< 25 U	< 25 U	< 25 U
	Acenaphthene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Acenaphthylene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Acetophenone	µg/L	800,000	--	--	< 10 U	< 10 U	< 10 U
	Aniline	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Anthracene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Azobenzene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Benzenethiol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Benzo(a)anthracene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Benzo(a)pyrene	µg/L	--	0.2	--	< 10 U	< 10 U	< 10 U
	Benzo(b)fluoranthene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Benzo(g,h,i)perylene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Benzo(k)fluoranthene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Benzoic acid	µg/L	--	--	--	< 50 U	< 50 U	< 50 U
	Benzyl alcohol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Benzyl butyl phthalate	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	bis(2-Chloroethoxy) methane	µg/L	0.0045	--	--	< 10 U	< 10 U	< 10 U
	bis(2-Chloroethyl) ether	µg/L	10	--	--	< 10 U	< 10 U	< 10 U
	bis(2-Chloroisopropyl) ether	µg/L	51	--	--	< 10 U	< 10 U	< 10 U
	bis(2-Ethylhexyl) phthalate	µg/L	--	6	--	< 10 U	< 10 U	< 10 U
	bis(p-Chlorophenyl) disulfide	µg/L	--	--	--	< 50 U	< 50 U	< 50 U
	bis(p-Chlorophenyl) sulfone	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Carbazole	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Chrysene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Dibenzo(a,h)anthracene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Dibenzofuran	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Dibutyl phthalate	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Diethyl phthalate	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
Dimethyl phthalate	µg/L	--	--	--	< 10 U	< 10 U	< 10 U	
Di-n-octyl phthalate	µg/L	--	--	--	< 10 U	< 10 U	< 10 U	

TABLE 2
SUMMARY OF RECENT (5TH MONITORING EVENT) ALLUVIAL AQUIFER GROUNDWATER DATA
FROM MONITORING WELLS AA-20, DBMW-1, DBMW-2, AND DBMW-3
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 4 of 6)

Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	AA-20 N May 2008	DBMW-1 N May 2008	DBMW-2 N June 2008	DBMW-3 N June 2008
SVOCs	Diphenyl sulfone	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Fluoranthene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Fluorene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Hexachloro-1,3-butadiene	µg/L	0.33	--	--	< 10 U	< 10 U	< 10 U
	Hexachlorobenzene	µg/L	1	1	--	< 10 U	< 10 U	< 10 U
	Hexachlorocyclopentadiene	µg/L	50	50	--	< 10 U	< 10 U	< 10 U
	Hexachloroethane	µg/L	3.8	--	--	< 10 U	< 10 U	< 10 U
	Hydroxymethyl phthalimide	µg/L	--	--	--	< 10 U	< 10 UJ	< 10 UJ
	Indeno(1,2,3-cd)pyrene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Isophorone	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Naphthalene	µg/L	150	--	--	< 10 U	< 10 U	< 10 U
	Nitrobenzene	µg/L	2,000	--	--	< 10 U	< 10 U	< 10 U
	N-nitrosodi-n-propylamine	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	N-nitrosodiphenylamine	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	o-Cresol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Octachlorostyrene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	p-Chloroaniline	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	p-Chlorothiophenol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Pentachlorobenzene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Pentachlorophenol	µg/L	--	1	--	< 50 U	< 50 U	< 50 U
	Phenanthrene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Phenol	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Phenyl Disulfide	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Phenyl Sulfide	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	p-Nitroaniline	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
	Pyrene	µg/L	--	--	--	< 10 U	< 10 U	< 10 U
Pyridine	µg/L	--	--	--	< 20 U	< 20 U	< 20 U	
VOCs	1,1,1,2-Tetrachloroethane	µg/L	3.3	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,1,1-Trichloroethane	µg/L	3,100	200	< 1 U	< 1 U	< 1 U	< 1 U
	1,1,2,2-Tetrachloroethane	µg/L	3	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,1,2-Trichloroethane	µg/L	5	5	< 1 U	< 1 U	< 1 U	< 1 U
	1,1-Dichloroethane	µg/L	2,200	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,1-Dichloroethene	µg/L	190	7	< 1 U	< 1 U	< 1 U	< 1 U
	1,1-Dichloropropene	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,2,3-Trichlorobenzene	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,2,3-Trichloropropane	µg/L	290	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,2,4-Trichlorobenzene	µg/L	3,400	70	< 1 U	< 1 U	< 1 U	< 1 U
	1,2,4-Trimethylbenzene	µg/L	24	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,2-Dibromo-3-chloropropane (DBCP)	µg/L	33	0.2	< 1 U	< 1 U	< 1 U	< 1 U
	1,2-Dichlorobenzene	µg/L	2,600	600	< 1 U	< 1 U	< 1 U	< 1 U
	1,2-Dichloroethane	µg/L	5	5	< 1 U	< 1 U	< 1 U	< 1 U
	1,2-Dichloroethene	µg/L	--	--	< 2 U	< 2 U	< 2 U	< 2 U
	1,2-Dichloropropane	µg/L	35	5	< 1 U	< 1 U	< 1 U	< 1 U
	1,3,5-Trichlorobenzene	µg/L	--	--	< 5 U	< 5 U	< 5 U	< 5 U
	1,3,5-Trimethylbenzene	µg/L	25	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,3-Dichlorobenzene	µg/L	830	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,3-Dichloropropane	µg/L	0.84	--	< 1 U	< 1 U	< 1 U	< 1 U
	1,4-Dichlorobenzene	µg/L	8,200	75	< 1 U	< 1 U	< 1 U	< 1 U
	1-Nonanal	µg/L	--	--	< 5 UJ	< 5 UJ	< 5 U	< 5 U
	2,2,3-Trimethylbutane	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	2,2-Dichloropropane	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	2,2-Dimethylpentane	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U

TABLE 2
SUMMARY OF RECENT (5TH MONITORING EVENT) ALLUVIAL AQUIFER GROUNDWATER DATA
FROM MONITORING WELLS AA-20, DBMW-1, DBMW-2, AND DBMW-3
SUNSET NORTH COMMERCIAL SUB-AREA
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Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	AA-20 N May 2008	DBMW-1 N May 2008	DBMW-2 N June 2008	DBMW-3 N June 2008
VOCs	2,3-Dimethylpentane	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	2,4-Dimethylpentane	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	2-Chlorotoluene	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	2-Nitropropane	µg/L	0.18	--	< 10 UJ	< 10 UJ	< 10 U	< 10 U
	2-Phenylbutane	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	3,3-dimethylpentane	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	3-ethylpentane	µg/L	--	--	< 10 U	< 10 U	< 10 U	< 10 U
	3-Methylhexane	µg/L	--	--	< 10 U	< 10 U	< 10 U	< 10 U
	4-Chlorotoluene	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	Acetone	µg/L	220,000	--	< 2 U	< 2 U	< 2 U	< 2 U
	Acetonitrile	µg/L	42,000	--	< 10 U	< 10 U	< 10 U	< 10 U
	Benzene	µg/L	5	5	< 1 U	< 1 U	< 1 U	< 1 U
	Bromobenzene	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	Bromodichloromethane	µg/L	2.1	80 ⁽⁷⁾	< 1 U	< 1 U	< 1 U	< 1 U
	Bromomethane	µg/L	--	--	< 2 U	< 2 U	< 2 U	< 2 U
	Carbon disulfide	µg/L	560	--	< 1 U	< 1 U	< 1 U	< 1 U
	Carbon tetrachloride	µg/L	5	5	< 1 U	< 1 U	< 1 U	< 1 U
	CFC-11	µg/L	180	--	< 1 U	< 1 U	< 1 U	< 1 U
	CFC-12	µg/L	14	--	< 2 UJ	< 2 U	< 2 U	< 2 U
	Chlorinated fluorocarbon (Freon 113)	µg/L	1,500	--	< 1 U	< 1 U	< 1 U	< 1 U
	Chlorobenzene	µg/L	390	100	< 1 U	< 1 U	< 1 U	< 1 U
	Chlorobromomethane	µg/L	3.2	--	< 1 U	< 1 U	< 1 U	< 1 U
	Chlorodibromomethane	µg/L	--	80 ⁽⁷⁾	< 1 U	< 1 U	< 1 U	< 1 U
	Chloroethane	µg/L	28,000	--	< 2 U	< 2 U	< 2 U	< 2 U
	Chloroform	µg/L	80	80 ⁽⁷⁾	98 J+	58 J+	47 J+	53 J+
	Chloromethane	µg/L	--	--	< 2 UJ	< 2 U	< 2 U	< 2 U
	cis-1,2-Dichloroethene	µg/L	210	70	< 1 U	< 1 U	< 1 U	< 1 U
	cis-1,3-Dichloropropene	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	Cymene	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	Dibromomethane	µg/L	990	--	< 1 U	< 1 U	< 1 U	< 1 U
	Dichloromethane	µg/L	58	5	< 1 U	< 1 U	< 1 U	< 1 U
	Ethanol	µg/L	--	--	< 250 U	< 250 U	< 250 UJ	< 250 UJ
	Ethylbenzene	µg/L	700	700	< 1 U	< 1 U	< 1 U	< 1 U
	Hexane, 2-methyl-	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	Isopropylbenzene	µg/L	8.4	--	< 1 U	< 1 U	< 1 U	< 1 U
	m,p-Xylene	µg/L	--	--	< 2 U	< 2 U	< 2 U	< 2 U
	Methyl disulfide	µg/L	--	--	< 5 U	< 5 U	< 5 U	< 5 U
	Methyl ethyl ketone	µg/L	440,000	--	< 5 UJ	< 5 UJ	< 5 U	< 5 U
	Methyl iodide	µg/L	--	--	< 2 U	< 2 U	< 2 U	< 2 U
	Methyl isobutyl ketone	µg/L	14,000	--	< 5 U	< 5 U	< 5 U	< 5 U
	Methyl n-butyl ketone	µg/L	--	--	< 5 U	< 5 U	< 5 UJ	< 5 UJ
	MTBE (Methyl tert-butyl ether)	µg/L	120,000	--	< 2 U	< 2 U	< 2 U	< 2 U
	n-Butyl benzene	µg/L	260	--	< 1 U	< 1 U	< 1 U	< 1 U
	n-Heptane	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	n-Propyl benzene	µg/L	320	--	< 1 U	< 1 U	< 1 U	< 1 U
	o-Xylene	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U
	Styrene	µg/L	8,900	100	< 1 U	< 1 U	< 1 U	< 1 U
	tert-Butyl benzene	µg/L	290	--	< 1 U	< 1 U	< 1 U	< 1 U
	Tetrachloroethene	µg/L	5	5	5.1 J+	< 1 U	< 1 U	< 1 U
	Toluene	µg/L	1,500	1,000	< 1 U	0.15 J	< 1 U	< 1 U
trans-1,2-Dichloroethene	µg/L	180	100	< 1 U	< 1 U	< 1 U	< 1 U	
trans-1,3-Dichloropropene	µg/L	--	--	< 1 U	< 1 U	< 1 U	< 1 U	

TABLE 2
SUMMARY OF RECENT (5TH MONITORING EVENT) ALLUVIAL AQUIFER GROUNDWATER DATA
FROM MONITORING WELLS AA-20, DBMW-1, DBMW-2, AND DBMW-3
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 6 of 6)

Class	Chemical	Units	USEPA 2002 VI SL ⁽¹⁾	MCL	AA-20 N May 2008	DBMW-1 N May 2008	DBMW-2 N June 2008	DBMW-3 N June 2008
VOCs	Tribromomethane	µg/L	0.0083	80 ⁽⁷⁾	< 1 U	< 1 U	< 1 U	< 1 U
	Trichloroethene	µg/L	5	5	0.31 J+	< 1 U	< 1 U	< 1 U
	Vinyl acetate	µg/L	9,600	--	< 2 U	< 2 U	< 2 U	< 2 U
	Vinyl chloride	µg/L	2	2	< 2 U	< 2 U	< 2 U	< 2 U
	Xylenes (total)	µg/L	22,000	10,000	< 3 U	< 3 U	< 3 U	< 3 U
Water Quality Parameters	Conductivity	umhos/cm	--	--	7530	6780	7610	7810
	Hardness, Total	mg/L	--	--	2680	2780	2840	3010
	pH (Hydrogen Ion)	--	--	6.5-9 ⁽³⁾	7.4 J	7.4 J	7.3 J	7.3 J
	Total Dissolved Solids	mg/L	--	500	5990	6180	6600	6590
	Total Suspended Solids	mg/L	--	--	4	27	22	12

⁽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
2008 DEBRIS SURVEY RESULTS
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 1)

Station No.	Item Descriptions	Dimensions	Sample Location
1	Soil, plant material, concrete debris, empty, unstained drum, lumber, metal and plastic trash, empty gasoline tank	~20' high debris pile	SNC1-JS01
2	Old tire, metal parts, cinderblock, lumber, carpet, wood, etc.	50' radius	SNC1-JS02
3	Asphalt shingles, tires, trash, PVC pipe, particle board, metal parts, hose, bed springs, aerosol (empty, rusted) cans	~100' radius	SNC1-JS03
4	Empty, unstained oil	~100' X 400' area	SNC1-JS04
5	Abandoned homeless camp, widely scattered trash, particle board, etc., tire, metal parts	~100' radius	SNC1-JS05
6	Trash, glass, metal parts, lumber, oil filters, concrete rubble, carpet, empty plastic oil containers	200' radius	SNC1-JS06
7	Sheetrock, lumber, metal debris, concrete rubble, plastic pipe, particle board	200' radius	SNC1-JS07
8	Concrete debris, lumber, trash, metal parts	~200' radius	SNC1-JS08

Notes:

Results are based on a ground survey conducted October 2008.

See Table 5 for analyses at each sample location.

All debris locations will be removed/scraped prior to initiation of sampling activities at the Site.

TABLE 4
SAMPLE-SPECIFIC COLLECTION DEPTHS
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 2)

Sample Location	Sample Type	Grading Plan	Sample Depth 1	Sample Depth 2	Sample Depth 3
SNC1-AY15	Random	Fill +1	0 (Surface)	10 (Subsurface)	--
SNC1-AZ15	Random	Fill +7	0 (Surface)	10 (Subsurface)	--
SNC1-BA15	Random with Flux	Fill +9	0 (Surface)	10 (Subsurface)	--
SNC1-BB15	Random	Fill +5	0 (Surface)	10 (Subsurface)	--
SNC1-AY16	Random	Fill +4	0 (Surface)	10 (Subsurface)	--
SNC1-AZ16	Random	Fill +8	0 (Surface)	10 (Subsurface)	--
SNC1-BA16	Random	Fill +6	0 (Surface)	10 (Subsurface)	--
SNC1-BB16	Random with Flux	Fill +7	0 (Surface)	10 (Subsurface)	--
SNC1-AY17	Random	Fill +4	0 (Surface)	10 (Subsurface)	--
SNC1-AZ17	Random	Fill +3	0 (Surface)	10 (Subsurface)	--
SNC1-BA17	Random	Fill +6	0 (Surface)	10 (Subsurface)	--
SNC1-BB17	Random	Fill +11	0 (Surface)	10 (Subsurface)	--
SNC1-AY18	Random	Fill +1	0 (Surface)	10 (Subsurface)	--
SNC1-AZ18	Random	Fill +2	0 (Surface)	10 (Subsurface)	--
SNC1-BA18	Random	Fill +4	0 (Surface)	10 (Subsurface)	--
SNC1-BB18	Random	Fill +6	0 (Surface)	10 (Subsurface)	--
SNC1-AY19	Random with Flux	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
SNC1-AZ19	Random	Fill +2	0 (Surface)	10 (Subsurface)	--
SNC1-BA19	Random	-- 0	0 (Surface)	10 (Subsurface)	--
SNC1-BB19	Random	Fill +3	0 (Surface)	10 (Subsurface)	--
SNC1-JD01	Ditch	Fill +5	0 (Surface)	10 (Subsurface)	--
SNC1-JD02	Ditch with Flux	Fill +7	0 (Surface)	10 (Subsurface)	--
SNC1-JD03	Ditch	Fill +6	0 (Surface)	10 (Subsurface)	--
SNC1-JD04	Ditch with Flux	Fill +3	0 (Surface)	10 (Subsurface)	--
SNC1-JD05	Ditch	-- 0	0 (Surface)	10 (Subsurface)	--
SNC1-JD06	Ditch with Flux	-- 0	0 (Surface)	10 (Subsurface)	--
SNC1-JS01	Debris with Flux	Fill +3	0 (Surface)	10 (Subsurface)	--
SNC1-JS02	Debris	Fill +9	0 (Surface)	10 (Subsurface)	--
SNC1-JS03	Debris with Flux	Fill +7	0 (Surface)	10 (Subsurface)	--
SNC1-JS04	Debris	Fill +7	0 (Surface)	10 (Subsurface)	--
SNC1-JS05	Debris with Flux	-- 0	0 (Surface)	10 (Subsurface)	--
SNC1-JS06	Debris with Flux	Fill +5	0 (Surface)	10 (Subsurface)	--
SNC1-JS07	Debris with Flux	Fill +3	0 (Surface)	10 (Subsurface)	--
SNC1-JS08	Debris with Flux	-- 0	0 (Surface)	10 (Subsurface)	--
SNC1-JB01	Berm with Flux	Cut -1	0 (Fill/Surface)	11 (Subsurface)	--
SNC1-JB02	Berm	Fill +2	0 (Surface)	10 (Subsurface)	--
SNC1-JB03	Berm	Cut -4	0 (Fill/Surface)	4 (Surface)	14 (Subsurface)
SNC1-JB04	Berm	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
SNC1-JB05	Berm	-- 0	0 (Surface)	10 (Subsurface)	--
SNC1-JB06	Berm	Cut -7	0 (Fill/Surface)	7 (Surface)	17 (Subsurface)
SNC1-JB07	Berm	Cut -2	0 (Fill/Surface)	12 (Subsurface)	--
SNC1-JB08	Berm	Cut -1	0 (Fill/Surface)	11 (Subsurface)	--
SNC1-JP01	Ponds with Flux	Fill +7	0 (Surface)	10 (Subsurface)	--
SNC1-JP02	Ponds with Flux	Fill +8	0 (Surface)	10 (Subsurface)	--
SNC1-JP03	Ponds with Flux	Cut -1	0 (Fill/Surface)	11 (Subsurface)	--
SNC1-JP04	Ponds with Flux	Fill +2	0 (Surface)	10 (Subsurface)	--

TABLE 4
SAMPLE-SPECIFIC COLLECTION DEPTHS
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 2 of 2)

Sample Location	Sample Type	Grading Plan	Sample Depth 1	Sample Depth 2	Sample Depth 3
SNC1-JP05	Ponds with Flux	Fill +4	0 (Surface)	10 (Subsurface)	--
SNC1-JP06	Ponds with Flux	Fill +5	0 (Surface)	10 (Subsurface)	--
SNC1-JP07	Ponds with Flux	-- 0	0 (Surface)	10 (Subsurface)	--
SNC1-JP08	Pond	Fill +2	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 SNC1-JS02 and SNC1-JP07) indicates deep soil samples will be collected for physical parameter analyses.

Green shaded locations SNC1-JS04 and SNC1-JP07) indicates subsurface soil samples will also include synthetic precipitation leaching procedure (SPLP) sampling and analysis. Depths are in feet bgs (current grade).

TABLE 5
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
SUNSET NORTH COMMERCIAL SUB-AREA
 (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)
	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 Dibenzodioxins/ 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-Tetrachlorodibenzo-p-dioxin	1746-01-6	✓	(e)	(e)	(h)		
Asbestos	Elutriator/TEM	Asbestos	1332-21-4	✓	(f)	(f)	(h)

TABLE 5
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
SUNSET NORTH COMMERCIAL SUB-AREA
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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)	✓		

TABLE 5
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 3 of 12)

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)	✓
EPA 7470/7471A	Mercury	7439-97-6	✓	✓	(g)	✓	
Organophosphorous Pesticides	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)		

TABLE 5
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 4 of 12)

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)
		Stirophos (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)	✓		

TABLE 5
SITE-RELATED CHEMICALS LIST AND PROPOSED SAMPLE ANALYSES AND DEPTHS
SUNSET NORTH COMMERCIAL SUB-AREA
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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)
	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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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)	✓		

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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	
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)

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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	
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)		

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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	
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)

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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	
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 4).

h - Rationale provided in text for analyte list for synthetic precipitation leaching procedure (SPLP); from three subsurface sample locations (see Table 4).

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 6
 PROPOSED SOIL VAPOR FLUX SAMPLE ANALYSES
 SUNSET NORTH COMMERCIAL SUB-AREA
 (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 6
PROPOSED SOIL VAPOR FLUX SAMPLE ANALYSES
SUNSET NORTH COMMERCIAL SUB-AREA
 (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 6
PROPOSED SOIL VAPOR FLUX SAMPLE ANALYSES
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 3 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 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

µg/m³ - microgram per cubic meter

APPENDIX A

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

This is a placeholder for Appendix A.

APPENDIX B

**ALL HISTORICAL SAMPLING RESULTS COLLECTED
FROM THE SUNSET NORTH COMMERCIAL SUB-AREA**

TABLE B-1
SOIL METALS DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 2)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals											
					Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (Total)	Chromium (VI)	Cobalt	Copper	Iron	Lead
ADB-06	1a	1	N	4/18/1996	--	--	< 6.7 UJ	240	--	--	55	--	--	--	--	13
ADB-06	1a	5	N	4/18/1996	--	--	< 6.3 UJ	210	--	--	< 21 U	--	--	--	--	16
ADB-07	1a	1	N	4/19/1996	--	--	< 21 U	330	--	< 10 U	48	--	--	--	--	42
ADB-07	1a	1	N	5/13/1999	--	0.55	--	--	--	--	--	--	--	--	--	--
ADB-07	1a	5	N	4/19/1996	--	--	< 20 U	170	--	< 10 U	21	--	--	--	--	14
CSPUO-07NW	7b	1	N	4/27/2000	--	< 0.52 U	11	200	1.3	< 0.53 U	19	--	--	57	--	190
CSPUP-08N	7b	1	N	4/27/2000	--	< 0.51 U	8.4	310	1.3	< 0.51 U	20	--	--	17	--	23
CSPUP-08SW	7b	1	N	4/28/2000	--	< 0.54 U	20	300	1.2	< 0.54 U	62	--	--	86	--	480
CSPUP-08SW2	7b	1	N	5/16/2000	--	< 0.54 U	5	280	0.95	< 0.54 U	11	--	--	--	--	12
PRAD-01	8c	1	N	10/3/2000	--	--	--	--	--	--	44	1.3	--	--	--	--
PRAD-02	8c	1	N	10/3/2000	--	--	--	--	--	--	42	0.49	--	--	--	--
PRAD-03	20c	0	N	6/20/2001	15500	< 1 U	1.8	277	0.53	0.14	9.4	< 0.005 U	8	16	20900	14
PRPUP-08	8c	1	N	10/3/2000	--	--	--	--	--	--	20	< 0.41 U	--	--	--	--
PRSSNP-01	20c	0	N	5/14/2001	13000 J-	< 1 UJ	2	278 J-	0.61	0.17	8.6 J-	< 0.005 U	8.1	14.4 J-	22100 J-/+	14
PRSSNP-01	20c	4	N	5/15/2001	12800 J-	< 1.1 U	3.9	223	0.55	0.09	10	< 0.005 U	6.7	13.5	19000 J-	7.3
PRSSNP-04	20c	0	N	5/14/2001	13900 J-	< 1.1 UJ	2	256 J-	0.52	0.15	8 J-	< 0.005 U	7.5	13.1 J-	25100 J-/+	9.9
PRSSNP-04	20c	4	N	5/14/2001	11900 J-	< 1.1 UJ	3	143 J-	0.36	0.12	5.8 J-	< 0.005 U	7.2	10.4 J-	20300 J-/+	6.6
PRSSNP-04	20c	9	N	5/14/2001	11200 J-	< 1.1 U	6.1	752	0.55	0.11	9.4	< 0.005 U	8.6	13.3	16600 J-	9.1
PRSSNP-04	20c	19	N	5/14/2001	6170 J-	< 1 UJ	4.6	273 J-	0.31	0.03	14.5 J-	< 0.005 U	3.6	7.4 J-	10500 J-/+	4.4
PRSSNP-06	20c	0	N	5/14/2001	11500 J-	< 1 UJ	2.1	268 J-	0.5	0.14	6.4 J-	< 0.005 U	7.2	13.2 J-	22700 J-/+	22.1
PRSSNP-15	20c	0	N	5/14/2001	12000 J-	< 1 UJ	1.6	222 J-	0.52	0.15	5.1 J-	< 0.005 U	8.7	13.4 J-	13700 J-/+	12.3
PRSSNP-15	20c	4	N	5/14/2001	13300 J-	< 1.1 UJ	6.7	323 J-	0.53	0.14	7.5 J-	< 0.005 U	7.4	12.5 J-	19600 J-/+	9.3
PRSSNP-16	20c	0	N	5/14/2001	12900 J-	< 1 UJ	1.3	243 J-	0.59	0.18	6.3 J-	< 0.005 U	9	13.6 J-	21600 J-/+	10.8
PUN-07	6d	0	N	10/13/1999	--	< 0.5 U	3.2	230	--	--	10	--	--	--	--	--
PUN-08	6d	0	N	10/26/1999	--	--	3.7	--	--	--	--	--	--	--	--	--
PUN-09	6d	0	N	10/26/1999	--	--	3.4	--	--	--	--	--	--	--	--	--
PUO-07BSNW	7d	0.5	N	3/24/2000	--	< 0.52 U	130	1200	1.6	1.8	66	--	--	140	--	2100
PUO-07BSNW	7d	1.5	N	3/24/2000	--	< 0.54 U	7.7	250	1.4	< 0.54 U	18	--	--	19	--	9.7
PUO-08	1a	1	N	3/22/1996	--	--	3.4	240	--	0.48	15	--	--	--	--	16
PUO-08	1a	5	N	3/22/1996	--	--	4.6	300	--	0.5	15	--	--	--	--	10
PUP-08	8b	1	N	3/1/2000	--	13	1800	2200	< 0.25 U	19	590	--	--	390	--	23000
PUP-08	8b	5	N	3/1/2000	--	1.6	3.5	250	1.1	< 0.5 U	16	--	--	17	--	7.6
PUP-10	8b	1	N	2/15/2000	--	< 0.5 U	2.9	270	1.1	< 0.5 U	15	--	--	20	--	11

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.

Shaded results indicate soil has been excavated and removed.

TABLE B-1
SOIL METALS DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 2 of 2)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Metals										
					Magnesium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Titanium	Vanadium	Zinc
ADB-06	1a	1	N	4/18/1996	--	--	< 0.11 U	--	--	< 6.7 U	< 2.2 U	--	--	47	--
ADB-06	1a	5	N	4/18/1996	--	--	< 0.092 U	--	--	< 6.3 U	< 2.1 U	--	--	50	--
ADB-07	1a	1	N	4/19/1996	--	--	0.17	--	--	< 6.3 U	< 21 U	--	--	77	--
ADB-07	1a	1	N	5/13/1999	--	850	--	--	--	--	--	< 0.5 U	--	--	--
ADB-07	1a	5	N	4/19/1996	--	--	< 0.1 U	--	--	< 10 U	< 20 U	--	--	54	--
CSPUO-07NW	7b	1	N	4/27/2000	--	760	< 0.1 U	--	17	< 5.2 U	< 1 U	< 0.52 U	--	66	90
CSPUP-08N	7b	1	N	4/27/2000	--	660	< 0.1 U	--	17	< 5.1 U	< 1 U	< 0.51 U	--	77	53
CSPUP-08SW	7b	1	N	4/28/2000	--	930	< 0.11 U	--	16	< 5.4 U	< 1.1 U	< 0.54 U	--	73	97
CSPUP-08SW2	7b	1	N	5/16/2000	--	600	< 0.11 U	--	14	--	--	< 0.54 U	--	37	61
PRAD-01	8c	1	N	10/3/2000	--	--	--	--	--	--	--	--	--	--	--
PRAD-02	8c	1	N	10/3/2000	--	--	--	--	--	--	--	--	--	--	--
PRAD-03	20c	0	N	6/20/2001	11300	509	< 0.03 U	< 4.1 U	13.8	0.8	< 1 UJ	< 5.1 U	542	26.1	46.4
PRPUP-08	8c	1	N	10/3/2000	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-01	20c	0	N	5/14/2001	11300	574 J-	0.01	0.29	14	0.42 J-	0.19 J-	0.12	633 J-	25.2	49 J-
PRSSNP-01	20c	4	N	5/15/2001	12500	356	< 0.03 U	0.59	12.3	0.27 J-	0.12 J-	0.06	514	24.6	44.2 J-
PRSSNP-04	20c	0	N	5/14/2001	11400	461 J-	< 0.03 U	0.21	13.4	0.59 J-	0.16 J-	0.1	562 J-	22.7	49.5 J-
PRSSNP-04	20c	4	N	5/14/2001	11400	320 J-	0.02	0.78	12.8	0.26 J-	0.09 J-	0.04	389 J-	20.5	42.6 J-
PRSSNP-04	20c	9	N	5/14/2001	11800	391	< 0.03 U	0.95	13.9	0.13 J-	0.13 J-	0.06	506	26.6	36 J-
PRSSNP-04	20c	19	N	5/14/2001	5610	175 J-	0.01	1.7	5.8	0.45 J-	0.06 J-	0.1	297 J-	16	23.4 J-
PRSSNP-06	20c	0	N	5/14/2001	10100	571 J-	0.02	0.21	11.2	0.53 J-	1.2 J-	0.09	614 J-	23.5	47.5 J-
PRSSNP-15	20c	0	N	5/14/2001	10500	634 J-	0.01	0.22	12.7	0.9 J-	0.14 J-	0.08	514 J-	20.9	39.5 J-
PRSSNP-15	20c	4	N	5/14/2001	12400	454 J-	< 0.03 U	0.85	11.8	0.63 J-	0.17 J-	0.08	624 J-	29.7	43.2 J-
PRSSNP-16	20c	0	N	5/14/2001	10600	583 J-	0.01	< 4.1 U	14.1	0.35 J-	0.16 J-	0.09	657 J-	24	47.2 J-
PUN-07	6d	0	N	10/13/1999	--	550	--	--	--	--	--	< 0.5 U	--	34	--
PUN-08	6d	0	N	10/26/1999	--	--	--	--	--	--	--	--	--	--	--
PUN-09	6d	0	N	10/26/1999	--	--	--	--	--	--	--	--	--	--	--
PUO-07BSNW	7d	0.5	N	3/24/2000	--	2900	< 0.105 U	--	23	< 5.2 U	< 1.05 U	1.7	--	88	210
PUO-07BSNW	7d	1.5	N	3/24/2000	--	940	0.13	--	18	< 5.4 U	< 1.08 U	< 0.54 U	--	72	48
PUO-08	1a	1	N	3/22/1996	--	--	< 0.091 U	--	--	1.2	< 2 U	--	--	50	--
PUO-08	1a	5	N	3/22/1996	--	--	< 0.097 U	--	--	1	< 2.2 U	--	--	51	--
PUP-08	8b	1	N	3/1/2000	--	25000	0.39	--	15	< 5 U	2.9	7.7	--	270	350
PUP-08	8b	5	N	3/1/2000	--	520	< 0.1 U	--	16	< 5 U	< 1 U	< 0.5 U	--	61	42
PUP-10	8b	1	N	2/15/2000	--	610	< 0.1 U	--	17	< 5 U	< 1 U	< 0.5 U	--	51	47

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.

Shaded results indicate soil has been excavated and removed.

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
SUNSET NORTH COMMERCIAL SUB-AREA
 (Page 1 of 2)

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
ADB-06	1a	1	N	4/18/1996	--	--	<0.0037 U	0.014	0.019	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.045 U	<0.0019 U	<0.0037 U
ADB-06	1a	5	N	4/18/1996	--	--	<0.0035 U	0.0018	<0.0035 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.042 U	<0.0018 U	<0.0035 U
ADB-07	1a	1	N	4/19/1996	--	--	<0.0035 U	0.67 J+	0.34 J+	<0.0018 U	0.0026 J+	0.011 J+	0.016 J+	<0.042 U	<0.0018 U	<0.0035 U
ADB-07	1a	5	N	4/19/1996	--	--	<0.0034 U	<0.0034 U	<0.0034 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.042 U	<0.0018 U	<0.0034 U
PRAD-03	20c	0	N	6/20/2001	--	--	<0.0018 U	0.0082	0.0047	<0.0018 U	<0.0018 U	<0.0018 U	0.0079	--	<0.0018 U	<0.0018 U
PRSSNP-01	20c	0	N	5/14/2001	--	--	<0.0017 U	0.0068	--	<0.0017 U	<0.0017 U					
PRSSNP-01	20c	4	N	5/15/2001	--	--	<0.0019 U	<0.0019 U	--	<0.0019 U	<0.0019 U					
PRSSNP-04	20c	0	N	5/14/2001	--	--	<0.0018 U	<0.0018 U	--	<0.0018 U	<0.0018 U					
PRSSNP-04	20c	4	N	5/14/2001	--	--	<0.0018 U	<0.0018 U	--	<0.0018 U	<0.0018 U					
PRSSNP-04	20c	9	N	5/14/2001	--	--	<0.0018 U	<0.0018 U	--	<0.0018 U	<0.0018 U					
PRSSNP-04	20c	19	N	5/14/2001	--	--	<0.0018 U	0.01	--	<0.0018 U	<0.0018 U					
PRSSNP-06	20c	0	N	5/14/2001	--	--	<0.0017 U	0.0026	--	<0.0017 U	<0.0017 U					
PRSSNP-15	20c	0	N	5/14/2001	--	--	<0.0017 U	0.0035	--	<0.0017 U	<0.0017 U					
PRSSNP-15	20c	4	N	5/14/2001	--	--	<0.0018 U	<0.0018 U	--	<0.0018 U	<0.0018 U					
PRSSNP-16	20c	0	N	5/14/2001	--	--	<0.0018 U	0.013	--	<0.0018 U	<0.0018 U					
PUN-07	6d	0	N	10/13/1999	--	--	<0.005 U	0.0074	0.082	<0.005 U	<0.005 U	<0.005 U	0.015	<0.06 U	<0.005 U	0.039
PUO-08	1a	1	N	3/22/1996	--	--	<0.0033 U	0.023	0.031	<0.0017 U	<0.0017 U	<0.0017 U	0.014	<0.04 U	<0.0017 U	<0.0033 U
PUO-08	1a	5	N	3/22/1996	--	--	<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
PUP-08	8b	1	N	3/1/2000	--	--	<0.005 U	<0.005 U	0.19 J+	<0.005 U	0.056 J+	<0.005 U	<0.005 U	<0.02 U	0.11 J+	<0.005 U
PUP-08	8b	5	N	3/1/2000	--	--	<0.005 U	<0.005 U	<0.02 U	<0.005 U	<0.005 U					
PUP-10	8b	1	N	2/15/2000	--	--	<0.005 U	0.01	<0.005 U	<0.005 U	<0.005 U	<0.005 U	0.006	<0.02 U	<0.005 U	<0.005 U
WC-AD03	39	0	N	8/3/2006	<0.0017 U	0.0035	<0.0017 U	0.0097	0.0062	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	--	<0.0017 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.

Shaded results indicate soil has been excavated and removed.

TABLE B-2
SOIL ORGANOCHLORINE PESTICIDES DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 2 of 2)

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
ADB-06	1a	1	N	4/18/1996	0.0013	<0.0037 U	<0.0037 U	<0.0037 U	<0.0037 U	--	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U
ADB-06	1a	5	N	4/18/1996	<0.0018 U	<0.0035 U	<0.0035 U	<0.0035 U	<0.0035 U	--	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U
ADB-07	1a	1	N	4/19/1996	0.12 J+	<0.0035 U	<0.0035 U	<0.0035 U	<0.0035 U	--	0.012 J+	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U
ADB-07	1a	5	N	4/19/1996	<0.0018 U	<0.0034 U	<0.0034 U	<0.0034 U	<0.0034 U	--	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U
PRAD-03	20c	0	N	6/20/2001	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0034 U	<0.069 U
PRSSNP-01	20c	0	N	5/14/2001	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0034 U	<0.069 U
PRSSNP-01	20c	4	N	5/15/2001	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0019 U	<0.0037 U	<0.075 U
PRSSNP-04	20c	0	N	5/14/2001	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0035 U	<0.072 U
PRSSNP-04	20c	4	N	5/14/2001	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0035 U	<0.072 U
PRSSNP-04	20c	9	N	5/14/2001	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0036 U	<0.073 U
PRSSNP-04	20c	19	N	5/14/2001	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0035 U	<0.07 U
PRSSNP-06	20c	0	N	5/14/2001	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0034 U	<0.068 U
PRSSNP-15	20c	0	N	5/14/2001	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0034 U	<0.068 U
PRSSNP-15	20c	4	N	5/14/2001	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0035 U	<0.071 U
PRSSNP-16	20c	0	N	5/14/2001	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0018 U	<0.0034 U	<0.069 U
PUN-07	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
PUO-08	1a	1	N	3/22/1996	0.0062	<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
PUO-08	1a	5	N	3/22/1996	<0.0019 U	<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	<0.19 U
PUP-08	8b	1	N	3/1/2000	<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
PUP-08	8b	5	N	3/1/2000	<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
PUP-10	8b	1	N	2/15/2000	<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
WC-AD03	39	0	N	8/3/2006	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	--	<0.0017 U	<0.0017 U	<0.0017 U	<0.0017 U	<0.0034 U	<0.069 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.

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TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 4)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	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	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene
ADB-06	1a	1	N	4/18/1996	--	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	--	< 0.73 U	--	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U
ADB-06	1a	5	N	4/18/1996	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	< 0.7 U	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U
ADB-07	1a	1	N	4/19/1996	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	< 0.69 U	--	0.0011	< 0.0052 U	< 0.0052 U	< 0.0052 U
ADB-07	1a	5	N	4/19/1996	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	< 0.69 U	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U
CSPUO-07NW	7b	1	N	4/27/2000	--	--	--	--	--	--	--	< 0.5 UJ	--	< 0.5 UJ	--	--	< 0.5 UJ
CSPUP-08N	7b	1	N	4/27/2000	--	--	--	--	--	--	--	< 0.5 UJ	--	< 0.5 UJ	--	--	< 0.5 UJ
CSPUP-08SW	7b	1	N	4/28/2000	--	--	--	--	--	--	--	< 0.5 UJ	--	< 0.5 UJ	--	--	< 0.5 UJ
PRAD-03	20c	0	N	6/20/2001	--	--	--	--	--	--	--	< 0.34 U	--	< 0.34 U	--	--	< 0.34 U
PRSSNP-01	20c	0	N	5/14/2001	--	--	--	--	--	--	--	< 0.34 U	--	< 0.34 U	--	--	< 0.34 U
PRSSNP-01	20c	4	N	5/15/2001	--	--	--	--	--	--	--	< 0.37 U	--	< 0.37 U	--	--	< 0.37 U
PRSSNP-04	20c	4	N	5/14/2001	--	--	--	--	--	--	--	< 0.35 U	--	< 0.35 U	--	--	< 0.35 U
PRSSNP-04	20c	9	N	5/14/2001	--	< 0.0054 U	< 0.0054 U	< 0.0054 U	< 0.0054 U	< 0.0054 U	--	< 0.36 U	--	< 0.36 U	< 0.0054 U	< 0.0054 U	< 0.36 U
PRSSNP-04	20c	19	N	5/14/2001	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	< 0.35 U	--	< 0.35 U	< 0.0052 U	< 0.0052 U	< 0.35 U
PRSSNP-06	20c	0	N	5/14/2001	--	--	--	--	--	--	--	< 0.34 U	--	< 0.34 U	--	--	< 0.34 U
PRSSNP-15	20c	0	N	5/14/2001	--	--	--	--	--	--	--	< 0.34 U	--	< 0.34 U	--	--	< 0.34 U
PRSSNP-15	20c	4	N	5/14/2001	--	--	--	--	--	--	--	< 0.35 U	--	< 0.35 U	--	--	< 0.35 U
PRSSNP-16	20c	0	N	5/14/2001	--	--	--	--	--	--	--	< 0.34 U	--	< 0.34 U	--	--	< 0.34 U
PUO-07BSNW	7d	0.5	N	3/24/2000	--	--	--	--	--	--	--	< 0.53 UJ	--	< 0.53 UJ	--	--	< 0.53 UJ
PUO-07BSNW	7d	1.5	N	3/24/2000	--	--	--	--	--	--	--	< 0.5 UJ	--	< 0.5 UJ	--	--	< 0.5 UJ
PUO-08	1a	1	N	3/22/1996	--	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	--	< 0.66 U	--	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U
PUO-08	1a	5	N	3/22/1996	--	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	--	--	--	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U
PUP-08	8b	1	N	3/1/2000	--	--	--	--	--	--	--	< 2.5 U	--	< 2.5 U	--	--	< 2.5 U
WC-AD03	39	0	N	8/3/2006	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.01 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 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.

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TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 2 of 4)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	VOCs												
					1,4-Dichlorobenzene	2-Chloroethyl vinyl ether	Acetone	Acetonitrile	Benzene	Bromodichloromethane	Bromomethane	Carbon disulfide	Carbon tetrachloride	CFC-11	CFC-12	Chlorinated fluorocarbon (Freon 113)	Chlorobenzene
ADB-06	1a	1	N	4/18/1996	< 0.0053 U	< 0.021 U	< 0.011 U	--	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	--	--	< 0.0053 U
ADB-06	1a	5	N	4/18/1996	< 0.0052 U	< 0.021 U	< 0.01 U	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	--	< 0.0052 U
ADB-07	1a	1	N	4/19/1996	< 0.0052 U	< 0.021 U	< 0.01 U	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	--	< 0.0052 U
ADB-07	1a	5	N	4/19/1996	< 0.0052 U	< 0.021 U	< 0.01 U	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	--	< 0.0052 U
CSPUO-07NW	7b	1	N	4/27/2000	< 0.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--
CSPUP-08N	7b	1	N	4/27/2000	< 0.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--
CSPUP-08SW	7b	1	N	4/28/2000	< 0.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--
PRAD-03	20c	0	N	6/20/2001	< 0.34 U	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-01	20c	0	N	5/14/2001	< 0.34 U	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-01	20c	4	N	5/15/2001	< 0.37 U	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-04	20c	4	N	5/14/2001	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-04	20c	9	N	5/14/2001	< 0.36 U	--	0.015	--	< 0.0054 U	< 0.0054 U	< 0.011 U	< 0.0054 U	< 0.0054 U	< 0.011 U	--	--	< 0.0054 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.35 U	--	0.01	--	< 0.0052 U	< 0.0052 U	< 0.01 U	< 0.0052 U	< 0.0052 U	< 0.01 U	--	--	< 0.0052 U
PRSSNP-06	20c	0	N	5/14/2001	< 0.34 U	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-15	20c	0	N	5/14/2001	< 0.34 U	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-15	20c	4	N	5/14/2001	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-16	20c	0	N	5/14/2001	< 0.34 U	--	--	--	--	--	--	--	--	--	--	--	--
PUO-07BSNW	7d	0.5	N	3/24/2000	< 0.53 UJ	--	--	--	--	--	--	--	--	--	--	--	--
PUO-07BSNW	7d	1.5	N	3/24/2000	< 0.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--
PUO-08	1a	1	N	3/22/1996	< 0.0053 U	< 0.021 U	< 0.011 U	--	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	--	--	< 0.0053 U
PUO-08	1a	5	N	3/22/1996	< 0.0056 U	< 0.022 U	< 0.011 U	--	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	--	--	< 0.0056 U
PUP-08	8b	1	N	3/1/2000	< 2.5 U	--	--	--	--	--	--	--	--	--	--	--	--
WC-AD03	39	0	N	8/3/2006	< 0.0051 U	--	< 0.021 U	< 0.051 UJ	< 0.0051 U	< 0.001 U	< 0.01 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.01 UJ	< 0.0051 U	< 0.0051 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.

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TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 3 of 4)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	VOCs												
					Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethylene	cis-1,3-Dichloro-propylene	Dibromomethane	Dichloromethane	Ethylbenzene	m,p-Xylene	Methyl ethyl ketone	Methyl iodide	Methyl isobutyl ketone
ADB-06	1a	1	N	4/18/1996	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	--	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.011 U	--	< 0.011 U
ADB-06	1a	5	N	4/18/1996	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.01 U	--	< 0.01 U
ADB-07	1a	1	N	4/19/1996	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.01 U	--	< 0.01 U
ADB-07	1a	5	N	4/19/1996	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.01 U	--	< 0.01 U
CSPUO-07NW	7b	1	N	4/27/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
CSPUP-08N	7b	1	N	4/27/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
CSPUP-08SW	7b	1	N	4/28/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
PRAD-03	20c	0	N	6/20/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-01	20c	0	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-01	20c	4	N	5/15/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-04	20c	4	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-04	20c	9	N	5/14/2001	< 0.0054 U	< 0.011 U	< 0.0054 U	< 0.011 U	< 0.0027 U	< 0.0054 U	--	< 0.0054 U	< 0.0054 U	--	< 0.022 U	--	< 0.022 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.0052 U	< 0.01 U	< 0.0052 U	< 0.01 U	< 0.0026 U	< 0.0052 U	--	< 0.0052 U	< 0.0052 U	--	< 0.021 U	--	< 0.021 U
PRSSNP-06	20c	0	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-15	20c	0	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-15	20c	4	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-16	20c	0	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--	--
PUO-07BSNW	7d	0.5	N	3/24/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
PUO-07BSNW	7d	1.5	N	3/24/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
PUO-08	1a	1	N	3/22/1996	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	--	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.011 U	--	< 0.011 U
PUO-08	1a	5	N	3/22/1996	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	--	0.0014	< 0.0056 U	< 0.0056 U	< 0.011 U	--	< 0.011 U
PUP-08	8b	1	N	3/1/2000	--	--	--	--	--	--	--	--	--	--	--	--	--
WC-AD03	39	0	N	8/3/2006	< 0.0051 U	< 0.01 U	< 0.0051 U	< 0.01 U	--	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	--	< 0.021 U	< 0.0051 U	< 0.021 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.

Shaded results indicate soil has been excavated and removed.

TABLE B-3
SOIL VOLATILE ORGANIC COMPOUNDS (VOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 4 of 4)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	VOCs											
					Methyl n-butyl ketone	o-Xylene	Styrene (monomer)	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	trans-1,3-Dichloropropylene	Tribromomethane	Trichloroethylene	Vinyl acetate	Vinyl chloride	Xylenes (total)
ADB-06	1a	1	N	4/18/1996	< 0.011 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.011 U	< 0.0053 U	--
ADB-06	1a	5	N	4/18/1996	< 0.01 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.01 U	< 0.0052 U	--
ADB-07	1a	1	N	4/19/1996	< 0.01 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.01 U	< 0.0052 U	--
ADB-07	1a	5	N	4/19/1996	< 0.01 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.01 U	< 0.0052 U	--
CSPUO-07NW	7b	1	N	4/27/2000	--	--	--	--	--	--	--	--	--	--	--	--
CSPUP-08N	7b	1	N	4/27/2000	--	--	--	--	--	--	--	--	--	--	--	--
CSPUP-08SW	7b	1	N	4/28/2000	--	--	--	--	--	--	--	--	--	--	--	--
PRAD-03	20c	0	N	6/20/2001	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-01	20c	0	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-01	20c	4	N	5/15/2001	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-04	20c	4	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-04	20c	9	N	5/14/2001	< 0.022 U	--	< 0.0054 U	< 0.0054 U	< 0.0054 U	< 0.0027 U	< 0.0054 U	< 0.0054 U	< 0.0054 U	< 0.0054 U	< 0.0054 U	< 0.0054 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.021 U	--	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0026 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U	< 0.0052 U
PRSSNP-06	20c	0	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-15	20c	0	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-15	20c	4	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--
PRSSNP-16	20c	0	N	5/14/2001	--	--	--	--	--	--	--	--	--	--	--	--
PUO-07BSNW	7d	0.5	N	3/24/2000	--	--	--	--	--	--	--	--	--	--	--	--
PUO-07BSNW	7d	1.5	N	3/24/2000	--	--	--	--	--	--	--	--	--	--	--	--
PUO-08	1a	1	N	3/22/1996	< 0.011 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.0053 U	< 0.011 U	< 0.0053 U	--
PUO-08	1a	5	N	3/22/1996	< 0.011 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.0056 U	< 0.011 U	< 0.0056 U	--
PUP-08	8b	1	N	3/1/2000	--	--	--	--	--	--	--	--	--	--	--	--
WC-AD03	39	0	N	8/3/2006	--	--	--	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	< 0.0051 U	--	< 0.0051 U	< 0.01 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.

Shaded results indicate soil has been excavated and removed.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 6)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	SVOCs									
					1,2,4,5-Tetrachloro-benzene	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	2-Chloronaphthalene
ADB-06	1a	1	N	4/18/1996	--	--	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 3.7 U	< 0.73 U	< 0.73 U	< 0.73 U
ADB-06	1a	5	N	4/18/1996	--	--	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 0.7 U	< 0.7 U
ADB-07	1a	1	N	4/19/1996	--	--	< 0.69 U	< 0.69 U	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 0.69 U	< 0.69 U
ADB-07	1a	5	N	4/19/1996	--	--	--	--	--	--	--	--	--	--
CSPUO-07NW	7b	1	N	4/27/2000	--	--	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 1 UJ	< 2.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08N	7b	1	N	4/27/2000	--	--	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 1 UJ	< 2.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08SW	7b	1	N	4/28/2000	--	--	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 1 UJ	< 2.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
PRAD-03	20c	0	N	6/20/2001	--	--	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	0	N	5/14/2001	--	--	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	4	N	5/15/2001	--	--	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 1.8 U	< 0.37 U	< 0.37 U	< 0.37 U
PRSSNP-04	20c	4	N	5/14/2001	--	--	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 1.7 U	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-04	20c	9	N	5/14/2001	--	--	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 1.7 U	< 0.36 U	< 0.36 U	< 0.36 U
PRSSNP-04	20c	19	N	5/14/2001	--	--	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 1.7 U	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-06	20c	0	N	5/14/2001	--	--	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	0	N	5/14/2001	--	--	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	4	N	5/14/2001	--	--	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 1.7 U	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-16	20c	0	N	5/14/2001	--	--	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1.7 U	< 0.34 U	< 0.34 U	< 0.34 U
PUO-07BSNW	7d	0.5	N	3/24/2000	--	--	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 1.07 UJ	< 2.7 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ
PUO-07BSNW	7d	1.5	N	3/24/2000	--	--	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 1 UJ	< 2.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
PUO-08	1a	1	N	3/22/1996	--	--	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 0.66 U	< 0.66 U
PUP-08	8b	1	N	3/1/2000	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 12.5 U	< 2.5 U	< 2.5 U	< 2.5 U
WC-AD03	39	0	N	8/3/2006	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 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.

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TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 2 of 6)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	SVOCs									
					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	4-Chloro-3-Methyl-phenol
ADB-06	1a	1	N	4/18/1996	< 0.73 U	< 0.73 U	< 3.7 U	< 0.73 U	< 1.4 U	--	< 3.7 U	< 3.7 U	< 0.73 U	< 1.4 U
ADB-06	1a	5	N	4/18/1996	< 0.7 U	< 0.7 U	< 3.5 U	< 0.7 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.7 U	< 1.4 U
ADB-07	1a	1	N	4/19/1996	< 0.69 U	< 0.69 U	< 3.5 U	< 0.69 U	< 1.4 U	--	< 3.5 U	< 3.5 U	< 0.69 U	< 1.4 U
ADB-07	1a	5	N	4/19/1996	--	--	--	--	--	--	--	--	< 0.69 U	--
CSPUO-07NW	7b	1	N	4/27/2000	< 0.5 UJ	< 0.5 UJ	< 2.5 UJ	< 0.5 UJ	< 1 UJ	< 0.5 UJ	< 2.5 UJ	< 2.5 UJ	< 0.5 UJ	< 1 UJ
CSPUP-08N	7b	1	N	4/27/2000	< 0.5 UJ	< 0.5 UJ	< 2.5 UJ	< 0.5 UJ	< 1 UJ	< 0.5 UJ	< 2.5 UJ	< 2.5 UJ	< 0.5 UJ	< 1 UJ
CSPUP-08SW	7b	1	N	4/28/2000	< 0.5 UJ	< 0.5 UJ	< 2.5 UJ	< 0.5 UJ	< 1 UJ	< 0.5 UJ	< 2.5 UJ	< 2.5 UJ	< 0.5 UJ	< 1 UJ
PRAD-03	20c	0	N	6/20/2001	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 1.6 U	--	< 1.6 U	< 1.6 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 1.6 U	--	< 1.6 U	< 1.6 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	4	N	5/15/2001	< 0.37 U	< 0.37 U	< 1.8 U	< 0.37 U	< 1.8 U	--	< 1.8 U	< 1.8 U	< 0.37 U	< 0.37 U
PRSSNP-04	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 1.7 U	< 0.35 U	< 1.7 U	--	< 1.7 U	< 1.7 U	< 0.35 U	< 0.35 U
PRSSNP-04	20c	9	N	5/14/2001	< 0.36 U	< 0.36 U	< 1.7 U	< 0.36 U	< 1.7 U	--	< 1.7 U	< 1.7 U	< 0.36 U	< 0.36 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.35 U	< 0.35 U	< 1.7 U	< 0.35 U	< 1.7 U	--	< 1.7 U	< 1.7 U	< 0.35 U	< 0.35 U
PRSSNP-06	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 1.6 U	--	< 1.6 U	< 1.6 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 1.6 U	--	< 1.6 U	< 1.6 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 1.7 U	< 0.35 U	< 1.7 U	--	< 1.7 U	< 1.7 U	< 0.35 U	< 0.35 U
PRSSNP-16	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 1.7 U	< 0.34 U	< 1.7 U	--	< 1.7 U	< 1.7 U	< 0.34 U	< 0.34 U
PUO-07BSNW	7d	0.5	N	3/24/2000	< 0.53 UJ	< 0.53 UJ	< 2.7 UJ	< 0.53 UJ	< 1.07 UJ	< 0.53 UJ	< 2.7 UJ	< 2.7 UJ	< 0.53 UJ	< 1.07 UJ
PUO-07BSNW	7d	1.5	N	3/24/2000	< 0.5 UJ	< 0.5 UJ	< 2.5 UJ	< 0.5 UJ	< 1 UJ	< 0.5 UJ	< 2.5 UJ	< 2.5 UJ	< 0.5 UJ	< 1 UJ
PUO-08	1a	1	N	3/22/1996	< 0.66 U	< 0.66 U	< 3.3 U	< 0.66 U	< 1.3 U	--	< 3.3 U	< 3.3 U	< 0.66 U	< 1.3 U
PUP-08	8b	1	N	3/1/2000	< 2.5 U	< 2.5 U	< 12.5 U	< 2.5 U	< 5 U	< 2.5 U	< 12.5 U	< 12.5 U	< 2.5 U	< 5 U
WC-AD03	39	0	N	8/3/2006	< 0.34 U	--	< 1.6 U	< 0.34 U	--	< 0.68 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.

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TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 3 of 6)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	SVOCs									
					4-Chlorophenyl phenyl ether	4-Nitrophenol	Acetophenone	Aniline	Azobenzene	Benzoic acid	Benzyl alcohol	Benzyl butyl phthalate	bis(2-Chloroethoxy) methane	bis(2-Chloroethyl) ether
ADB-06	1a	1	N	4/18/1996	< 0.73 U	< 3.7 U	--	--	--	< 3.7 U	< 1.4 U	< 0.73 U	< 0.73 U	< 0.73 U
ADB-06	1a	5	N	4/18/1996	< 0.7 U	< 3.5 U	--	--	--	< 3.5 U	< 1.4 U	< 0.7 U	< 0.7 U	< 0.7 U
ADB-07	1a	1	N	4/19/1996	< 0.69 U	< 3.5 U	--	--	--	< 3.5 U	< 1.4 U	< 0.69 U	< 0.69 U	< 0.69 U
ADB-07	1a	5	N	4/19/1996	--	--	--	--	--	< 3.5 U	--	< 0.69 U	--	--
CSPUO-07NW	7b	1	N	4/27/2000	< 0.5 UJ	< 2.5 UJ	--	< 1 UJ	< 0.5 UJ	< 2.5 UJ	< 1 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08N	7b	1	N	4/27/2000	< 0.5 UJ	< 2.5 UJ	--	< 1 UJ	< 0.5 UJ	< 2.5 UJ	< 1 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08SW	7b	1	N	4/28/2000	< 0.5 UJ	< 2.5 UJ	--	< 1 UJ	< 0.5 UJ	< 2.5 UJ	< 1 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
PRAD-03	20c	0	N	6/20/2001	< 0.34 U	< 1.6 U	--	--	--	--	--	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	0	N	5/14/2001	< 0.34 U	< 1.6 U	--	--	--	--	--	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	4	N	5/15/2001	< 0.37 U	< 1.8 U	--	--	--	--	--	< 0.37 U	< 0.37 U	< 0.37 U
PRSSNP-04	20c	4	N	5/14/2001	< 0.35 U	< 1.7 U	--	--	--	--	--	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-04	20c	9	N	5/14/2001	< 0.36 U	< 1.7 U	--	--	--	--	--	< 0.36 U	< 0.36 U	< 0.36 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.35 U	< 1.7 U	--	--	--	--	--	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-06	20c	0	N	5/14/2001	< 0.34 U	< 1.6 U	--	--	--	--	--	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	0	N	5/14/2001	< 0.34 U	< 1.6 U	--	--	--	--	--	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	4	N	5/14/2001	< 0.35 U	< 1.7 U	--	--	--	--	--	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-16	20c	0	N	5/14/2001	< 0.34 U	< 1.7 U	--	--	--	--	--	< 0.34 U	< 0.34 U	< 0.34 U
PUO-07BSNW	7d	0.5	N	3/24/2000	< 0.53 UJ	< 0.53 UJ	--	< 1.07 UJ	< 0.53 UJ	< 2.7 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 1.07 UJ
PUO-07BSNW	7d	1.5	N	3/24/2000	< 0.5 UJ	< 0.5 UJ	--	< 1 UJ	< 0.5 UJ	< 2.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 1 UJ
PUO-08	1a	1	N	3/22/1996	< 0.66 U	< 3.3 U	--	--	--	< 3.3 U	< 1.3 U	< 0.66 U	< 0.66 U	< 0.66 U
PUP-08	8b	1	N	3/1/2000	< 2.5 U	< 12.5 U	--	< 5 U	< 2.5 U	< 12.5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U
WC-AD03	39	0	N	8/3/2006	--	< 1.6 U	< 0.34 U	< 0.34 U	< 0.34 U	--	--	< 0.34 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.

Shaded results indicate soil has been excavated and removed.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 4 of 6)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	SVOCs									
					bis(2-Chloroisopropyl) ether	bis(2-Ethylhexyl) phthalate	Carbazole	Dibenzofuran	Dibutyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene
ADB-06	1a	1	N	4/18/1996	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U
ADB-06	1a	5	N	4/18/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U
ADB-07	1a	1	N	4/19/1996	< 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
ADB-07	1a	5	N	4/19/1996	--	< 0.69 U	--	--	< 0.69 U	--	--	--	< 0.69 U	--
CSPUO-07NW	7b	1	N	4/27/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08N	7b	1	N	4/27/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08SW	7b	1	N	4/28/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
PRAD-03	20c	0	N	6/20/2001	< 0.34 U	0.23	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	4	N	5/15/2001	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U
PRSSNP-04	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-04	20c	9	N	5/14/2001	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-06	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-16	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PUO-07BSNW	7d	0.5	N	3/24/2000	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ
PUO-07BSNW	7d	1.5	N	3/24/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
PUO-08	1a	1	N	3/22/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U
PUP-08	8b	1	N	3/1/2000	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
WC-AD03	39	0	N	8/3/2006	< 0.34 U	--	--	--	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 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.

Shaded results indicate soil has been excavated and removed.

TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 5 of 6)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	SVOCs									
					Hexachloro-1,3-butadiene	Hexachlorobenzene	Hexachlorocyclopentadiene	Hexachloroethane	Isophorone	Naphthalene	Nitrobenzene	N-Nitrosodimethylamine	N-nitrosodi-n-propylamine	N-nitrosodiphenylamine
ADB-06	1a	1	N	4/18/1996	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	--	< 0.73 U	< 0.73 U
ADB-06	1a	5	N	4/18/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	--	< 0.7 U	< 0.7 U
ADB-07	1a	1	N	4/19/1996	< 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
ADB-07	1a	5	N	4/19/1996	< 0.69 U	< 0.69 U	--	--	--	--	--	--	--	--
CSPUO-07NW	7b	1	N	4/27/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08N	7b	1	N	4/27/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08SW	7b	1	N	4/28/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
PRAD-03	20c	0	N	6/20/2001	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	--	< 0.34 U	< 0.34 U
PRSSNP-01	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	--	< 0.34 U	< 0.34 U
PRSSNP-01	20c	4	N	5/15/2001	< 0.37 U	< 0.37 U	< 1.8 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	--	< 0.37 U	< 0.37 U
PRSSNP-04	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 1.7 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	--	< 0.35 U	< 0.35 U
PRSSNP-04	20c	9	N	5/14/2001	< 0.36 U	< 0.36 U	< 1.7 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	--	< 0.36 U	< 0.36 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.35 U	< 0.35 U	< 1.7 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	--	< 0.35 U	< 0.35 U
PRSSNP-06	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	--	< 0.34 U	< 0.34 U
PRSSNP-15	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	--	< 0.34 U	< 0.34 U
PRSSNP-15	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 1.7 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	--	< 0.35 U	< 0.35 U
PRSSNP-16	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 1.7 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	--	< 0.34 U	< 0.34 U
PUO-07BSNW	7d	0.5	N	3/24/2000	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ
PUO-07BSNW	7d	1.5	N	3/24/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
PUO-08	1a	1	N	3/22/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	--	< 0.66 U	< 0.66 U
PUP-08	8b	1	N	3/1/2000	< 2.5 U	12	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
WC-AD03	39	0	N	8/3/2006	< 0.34 U	< 0.34 U	< 1.6 U	< 0.34 U	--	< 0.34 U	< 0.34 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.

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TABLE B-4
SOIL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 6 of 6)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	SVOCs								
					o-Cresol	p-Chloroaniline	p-Cresol	Pentachlorobenzene	Pentachlorophenol	Phenol	Phthalic acid	p-Nitroaniline	Pyridine
ADB-06	1a	1	N	4/18/1996	< 0.73 U	< 1.4 U	< 0.73 U	--	< 3.7 U	< 0.73 U	--	< 3.7 U	--
ADB-06	1a	5	N	4/18/1996	< 0.7 U	< 1.4 U	< 0.7 U	--	< 3.5 U	< 0.7 U	--	< 3.5 U	--
ADB-07	1a	1	N	4/19/1996	< 0.69 U	< 1.4 U	< 0.69 U	--	< 3.5 U	< 0.69 U	--	< 3.5 U	--
ADB-07	1a	5	N	4/19/1996	--	< 1.4 U	--	--	< 3.5 U	< 0.69 U	--	--	--
CSPUO-07NW	7b	1	N	4/27/2000	< 0.5 UJ	< 1 UJ	--	--	< 2.5 UJ	< 0.5 UJ	--	< 1 UJ	< 0.5 UJ
CSPUP-08N	7b	1	N	4/27/2000	< 0.5 UJ	< 1 UJ	--	--	< 2.5 UJ	< 0.5 UJ	--	< 1 UJ	< 0.5 UJ
CSPUP-08SW	7b	1	N	4/28/2000	< 0.5 UJ	< 1 UJ	--	--	< 2.5 UJ	< 0.5 UJ	--	< 1 UJ	< 0.5 UJ
PRAD-03	20c	0	N	6/20/2001	< 0.34 U	< 0.34 U	< 0.34 U	--	< 1.6 U	< 0.34 U	--	< 1.6 U	--
PRSSNP-01	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	--	< 1.6 U	< 0.34 U	--	< 1.6 U	--
PRSSNP-01	20c	4	N	5/15/2001	< 0.37 U	< 0.37 U	< 0.37 U	--	< 1.8 U	< 0.37 U	--	< 1.8 U	--
PRSSNP-04	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 0.35 U	--	< 1.7 U	< 0.35 U	--	< 1.7 U	--
PRSSNP-04	20c	9	N	5/14/2001	< 0.36 U	< 0.36 U	< 0.36 U	--	< 1.7 U	< 0.36 U	--	< 1.7 U	--
PRSSNP-04	20c	19	N	5/14/2001	< 0.35 U	< 0.35 U	< 0.35 U	--	< 1.7 U	< 0.35 U	--	< 1.7 U	--
PRSSNP-06	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	--	< 1.6 U	< 0.34 U	--	< 1.6 U	--
PRSSNP-15	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	--	< 1.6 U	< 0.34 U	--	< 1.6 U	--
PRSSNP-15	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 0.35 U	--	< 1.7 U	< 0.35 U	--	< 1.7 U	--
PRSSNP-16	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	--	< 1.7 U	< 0.34 U	--	< 1.7 U	--
PUO-07BSNW	7d	0.5	N	3/24/2000	< 0.53 UJ	< 1.07 UJ	--	--	< 2.7 UJ	< 0.53 UJ	--	< 1.07 UJ	< 0.53 UJ
PUO-07BSNW	7d	1.5	N	3/24/2000	< 0.5 UJ	< 1 UJ	--	--	< 2.5 UJ	< 0.5 UJ	--	< 1 UJ	< 0.5 UJ
PUO-08	1a	1	N	3/22/1996	< 0.66 U	< 1.3 U	< 0.66 U	--	< 3.3 U	< 0.66 U	--	< 3.3 U	--
PUP-08	8b	1	N	3/1/2000	< 2.5 U	< 5 U	--	--	< 12.5 U	< 2.5 U	--	< 5 U	< 2.5 U
WC-AD03	39	0	N	8/3/2006	< 0.34 U	< 0.34 UJ	--	< 0.34 U	< 1.6 U	< 0.34 U	< 1.6 U	< 1.6 U	< 1.6 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.

Shaded results indicate soil has been excavated and removed.

TABLE B-5
SOIL DIOXINS/FURANS DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 2)

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
PRAD-02	8c	0	N	10/12/2000	198	22.7	55.4	68.6	1.7	38.3	3.8	6	4.1
PRPUP-08	8c	0	N	10/12/2000	42.5	3.3	11.8	15.6	0.37	9.6	0.65	1.2	0.81
WC-AD03	39	0	N	8/3/2006	61	9.9	23	--	--	--	--	--	--

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
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 2 of 2)

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
PRAD-02	8c	0	N	10/12/2000	28.2	2.1	20.8	14.5	20	0.62	110	1420	30.6
PRPUP-08	8c	0	N	10/12/2000	7.1	0.47	5.2	3.6	4.8	0.18	6.1	153	7.2
WC-AD03	39	0	N	8/3/2006	--	--	--	--	--	--	49	330	0.98

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 GENERAL CHEMISTRY, IONS, AND HERBICIDE DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 1)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	General Chemistry / Ions / Herbicides							
					2,4,5-T	2,4,5-TP	2,4-D	Chlorate	Chloride	Cyanide (Total)	Dinitrobutyl phenol	Perchlorate
ADB-06	1a	1	N	4/18/1996	--	--	--	0.034	--	< 0.28 U	--	--
ADB-06	1a	5	N	4/18/1996	--	--	--	0.077	--	< 0.27 U	--	--
ADB-07	1a	1	N	4/19/1996	--	--	--	0.032	--	< 0.26 U	--	--
ADB-07	1a	1	N	5/13/1999	--	--	--	--	--	--	--	< 0.04 U
ADB-07	1a	5	N	4/19/1996	--	--	--	0.031	--	< 0.26 U	--	--
PRAD-03	20c	0	N	6/20/2001	--	--	--	--	--	< 0.51 U	--	0.149
PRSSNP-01	20c	0	N	5/14/2001	--	--	--	--	--	< 0.51 U	--	0.393
PRSSNP-01	20c	4	N	5/15/2001	--	--	--	--	--	< 0.56 U	--	8.21
PRSSNP-04	20c	0	N	5/14/2001	--	--	--	--	--	< 0.54 U	--	6.01
PRSSNP-04	20c	4	N	5/14/2001	--	--	--	--	--	< 0.54 U	--	2.81
PRSSNP-04	20c	9	N	5/14/2001	--	--	--	--	--	< 0.54 U	--	0.787
PRSSNP-04	20c	19	N	5/14/2001	--	--	--	--	--	< 0.52 U	--	0.51
PRSSNP-06	20c	0	N	5/14/2001	--	--	--	--	--	< 0.51 U	--	0.0869
PRSSNP-15	20c	0	N	5/14/2001	--	--	--	--	--	< 0.51 U	--	0.0275
PRSSNP-15	20c	4	N	5/14/2001	--	--	--	--	--	< 0.53 U	--	2.26
PRSSNP-16	20c	0	N	5/14/2001	--	--	--	--	--	< 0.52 U	--	0.697
PUN-07	6d	0	N	10/13/1999	--	--	--	--	--	--	--	0.136
PUO-08	1a	1	N	3/22/1996	--	--	--	2.3	580	< 0.25 U	--	--
PUO-08	1a	5	N	3/22/1996	--	--	--	6.4	880	< 0.28 U	--	--
PUP-08	8b	1	N	3/1/2000	--	--	--	--	--	--	--	0.26
PUP-08	8b	5	N	3/1/2000	--	--	--	--	--	--	--	0.058
PUP-10	8b	1	N	2/15/2000	--	--	--	--	--	--	--	21
WC-AD03	39	0	N	8/3/2006	< 0.021 U	< 0.021 U	< 0.082 U	--	--	< 0.51 U	< 0.026 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.

Shaded results indicate soil has been excavated and removed.

TABLE B-7
SOIL ORGANOPHOSPHOROUS PESTICIDES DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 4)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organophosphorous Pesticides												
					Aspon	Azinphos-ethyl	Azinphos-methyl	Bidrin	Carbophenothion	Chlorfenvinfos	Chlorpyrifos-methyl	Chlorpyrifos	Coumaphos	Crotoxyphos	Demeton-O	Demeton-S	
PRAD-03	20c	0	N	6/20/2001	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	--	
PRSSNP-01	20c	0	N	5/14/2001	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	--
PRSSNP-01	20c	4	N	5/15/2001	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U
PRSSNP-04	20c	1	N	5/14/2001	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	--
PRSSNP-04	20c	4	N	5/14/2001	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	--
PRSSNP-04	20c	9	N	5/14/2001	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	--
PRSSNP-04	20c	19	N	5/14/2001	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	--
PRSSNP-06	20c	0	N	5/14/2001	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	--
PRSSNP-15	20c	0	N	5/14/2001	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U
PRSSNP-15	20c	4	N	5/14/2001	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U
PRSSNP-16	20c	0	N	5/14/2001	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	--
WC-AD03	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--	--	--	--	--

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 ORGANOPHOSPHOROUS PESTICIDES DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 2 of 4)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organophosphorous Pesticides											
					Diazinon	Dichlorfenthion	Dichlorvos	Dimethoate	Dioxathion	Disulfoton	Ethion	Ethoprophos	Ethyl p-nitrophenyl phenylphosphorothioate	Famphur	Fensulfothion	Fenthion
PRAD-03	20c	0	N	6/20/2001	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	--	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ
PRSSNP-01	20c	0	N	5/14/2001	< 0.107 U	< 0.107 U	--	< 0.107 U	< 0.107 U	--	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U
PRSSNP-01	20c	4	N	5/15/2001	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
PRSSNP-04	20c	1	N	5/14/2001	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	--	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U
PRSSNP-04	20c	4	N	5/14/2001	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	--	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U
PRSSNP-04	20c	9	N	5/14/2001	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	--	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	--	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
PRSSNP-06	20c	0	N	5/14/2001	< 0.11 U	< 0.11 U	--	< 0.11 U	< 0.11 U	--	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
PRSSNP-15	20c	0	N	5/14/2001	< 0.103 U	< 0.103 U	--	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U				
PRSSNP-15	20c	4	N	5/14/2001	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
PRSSNP-16	20c	0	N	5/14/2001	< 0.104 U	< 0.104 U	--	< 0.104 U	< 0.104 U	--	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U
WC-AD03	39	0	N	8/3/2006	--	--	--	--	--	< 0.049 U	--	--	--	< 0.013 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 ORGANOPHOSPHOROUS PESTICIDES DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 3 of 4)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organophosphorous Pesticides											
					Fonofos	Leptophos	Malathion	Merphos	Metathione	Methyl parathion	Mevinphos	Monocrotophos	Naled	o,o-Diethyl o-pyrazinyl phosphorothioate	Parathion	Phorate
PRAD-03	20c	0	N	6/20/2001	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ	<0.102 UJ
PRSSNP-01	20c	0	N	5/14/2001	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	<0.107 U	--	<0.107 U	<0.107 U	--
PRSSNP-01	20c	4	N	5/15/2001	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U
PRSSNP-04	20c	1	N	5/14/2001	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U	<0.108 U
PRSSNP-04	20c	4	N	5/14/2001	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U	<0.109 U
PRSSNP-04	20c	9	N	5/14/2001	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U
PRSSNP-04	20c	19	N	5/14/2001	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U
PRSSNP-06	20c	0	N	5/14/2001	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.11 U	--	<0.11 U	<0.11 U	--
PRSSNP-15	20c	0	N	5/14/2001	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	<0.103 U	--	<0.103 U	<0.103 U	<0.103 U
PRSSNP-15	20c	4	N	5/14/2001	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U	<0.12 U
PRSSNP-16	20c	0	N	5/14/2001	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	<0.104 U	--	<0.104 U	<0.104 U	--
WC-AD03	39	0	N	8/3/2006	--	--	--	--	--	<0.021 U	--	--	--	--	<0.018 U	<0.021 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 ORGANOPHOSPHOROUS PESTICIDES DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 4 of 4)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Organophosphorous Pesticides										
					Phosmet	Phosphamidon	Ronnel	Stirophos (Tetrachloro-vinphos)	Sulfotep	Sulprofos	Terbufos	Tetraethyl pyrophosphite	Tokuthion (Protothiofos)	Trichlorfon	Trichloronate
PRAD-03	20c	0	N	6/20/2001	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ	< 0.102 UJ
PRSSNP-01	20c	0	N	5/14/2001	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U	< 0.107 U
PRSSNP-01	20c	4	N	5/15/2001	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
PRSSNP-04	20c	1	N	5/14/2001	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U	< 0.108 U
PRSSNP-04	20c	4	N	5/14/2001	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U	< 0.109 U
PRSSNP-04	20c	9	N	5/14/2001	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
PRSSNP-06	20c	0	N	5/14/2001	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U	< 0.11 U
PRSSNP-15	20c	0	N	5/14/2001	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U	< 0.103 U
PRSSNP-15	20c	4	N	5/14/2001	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U
PRSSNP-16	20c	0	N	5/14/2001	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U	< 0.104 U
WC-AD03	39	0	N	8/3/2006	--	--	--	--	--	--	--	--	--	--	--

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-8
SOIL POLYCHLORINATED BIPHENYLS (PCBs) DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 1)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	PCBs							
					Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	
ADB-06	1a	1	N	4/18/1996	< 0.014 U	0.056						
ADB-06	1a	5	N	4/18/1996	< 0.014 U	< 0.014 U						
ADB-07	1a	1	N	4/19/1996	< 0.014 U	< 0.014 U						
ADB-07	1a	5	N	4/19/1996	< 0.0015 U	0.025 J+						
CSPUO-07NW	7b	1	N	4/27/2000	< 0.02 UJ	< 0.02 UJ						
CSPUP-08N	7b	1	N	4/27/2000	< 0.02 UJ	0.083 J-	< 0.02 UJ					
CSPUP-08SW	7b	1	N	4/28/2000	< 0.02 UJ	< 0.02 UJ						
CSPUP-08SW2	7b	1	N	5/16/2000	< 0.02 U	< 0.02 U						
PRAD-03	20c	0	N	6/20/2001	< 0.034 U	< 0.034 U						
PRSSNP-01	20c	0	N	5/14/2001	< 0.034 U	< 0.034 U						
PRSSNP-01	20c	4	N	5/15/2001	< 0.037 U	< 0.037 U						
PRSSNP-04	20c	0	N	5/14/2001	< 0.035 U	< 0.035 U						
PRSSNP-04	20c	4	N	5/14/2001	< 0.035 U	< 0.035 U						
PRSSNP-04	20c	9	N	5/14/2001	< 0.036 U	< 0.036 U						
PRSSNP-04	20c	19	N	5/14/2001	< 0.035 U	< 0.035 U						
PRSSNP-06	20c	0	N	5/14/2001	< 0.034 U	< 0.034 U						
PRSSNP-15	20c	0	N	5/14/2001	< 0.034 U	< 0.034 U						
PRSSNP-15	20c	4	N	5/14/2001	< 0.035 U	< 0.035 U						
PRSSNP-16	20c	0	N	5/14/2001	< 0.034 U	< 0.034 U						
PUO-07BSNW	7d	0.5	N	3/24/2000	< 0.02 UJ	0.41 J-/+	< 0.02 UJ					
PUO-07BSNW	7d	1.5	N	3/24/2000	< 0.02 UJ	< 0.02 UJ						
PUO-08	1a	1	N	3/22/1996	< 0.013 U	< 0.013 U						
PUO-08	1a	5	N	3/22/1996	< 0.014 U	< 0.014 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.

Shaded results indicate soil has been excavated and removed.

TABLE B-9
SOIL RADIONUCLIDES DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 1)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	Radionuclides																
					Actinium-228	Bismuth-212	Bismuth-214	Lead-210	Lead-212	Lead-214	Potassium-40	Radium-226	Radium-228	Thallium-208	Thorium-228	Thorium-230	Thorium-232	Uranium-233/234	Uranium-235/236	Uranium-238	
PRSSNP-04	20c	0	N	5/15/2001	1.41	2.6	0.79	< 2.1 U	1.28	0.7	24.8	0.78	1.28	0.43	1.05	1.04	1.14	0.61	< 0.095 U	0.74	
PUN-07	6d	0	N	10/13/1999	--	--	--	--	--	--	--	1.3	2.11	--	2.28	1.62	2.05	0.84	< 0.037 U	0.92	
PUP-10	8b	1	N	2/15/2000	--	--	--	--	--	--	--	0.36	1.28	--	1.47	0.89	1.59	0.75	0.05	0.77	

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 POLYNUCLEAR AROMATIC HYDROCARBON DATA
SUNSET NORTH COMMERCIAL SUB-AREA
(Page 1 of 1)

Sample ID	Dataset	Depth (ft bgs)	Sample Type	Sample Date	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
ADB-06	1a	1	N	4/18/1996	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U	< 0.73 U
ADB-06	1a	5	N	4/18/1996	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U
ADB-07	1a	1	N	4/19/1996	< 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
ADB-07	1a	5	N	4/19/1996	--	--	--	< 0.69 U	< 0.69 U	< 0.69 U	--	--	< 0.69 U	--	--	< 0.69 U	< 0.69 U
CSPUO-07NW	7b	1	N	4/27/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	--	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08N	7b	1	N	4/27/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	--	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
CSPUP-08SW	7b	1	N	4/28/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	--	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
PRAD-03	20c	0	N	6/20/2001	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-01	20c	4	N	5/15/2001	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U	< 0.37 U
PRSSNP-04	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-04	20c	9	N	5/14/2001	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U	< 0.36 U
PRSSNP-04	20c	19	N	5/14/2001	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-06	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PRSSNP-15	20c	4	N	5/14/2001	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U	< 0.35 U
PRSSNP-16	20c	0	N	5/14/2001	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U
PUO-07BSNW	7d	0.5	N	3/24/2000	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	--	< 2.7 UJ	--	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ	< 0.53 UJ
PUO-07BSNW	7d	1.5	N	3/24/2000	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	--	< 2.5 UJ	--	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ
PUO-08	1a	1	N	3/22/1996	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U	< 0.66 U
PUP-08	8b	1	N	3/1/2000	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
WC-AD03	39	0	N	8/3/2006	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 U	< 0.34 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.

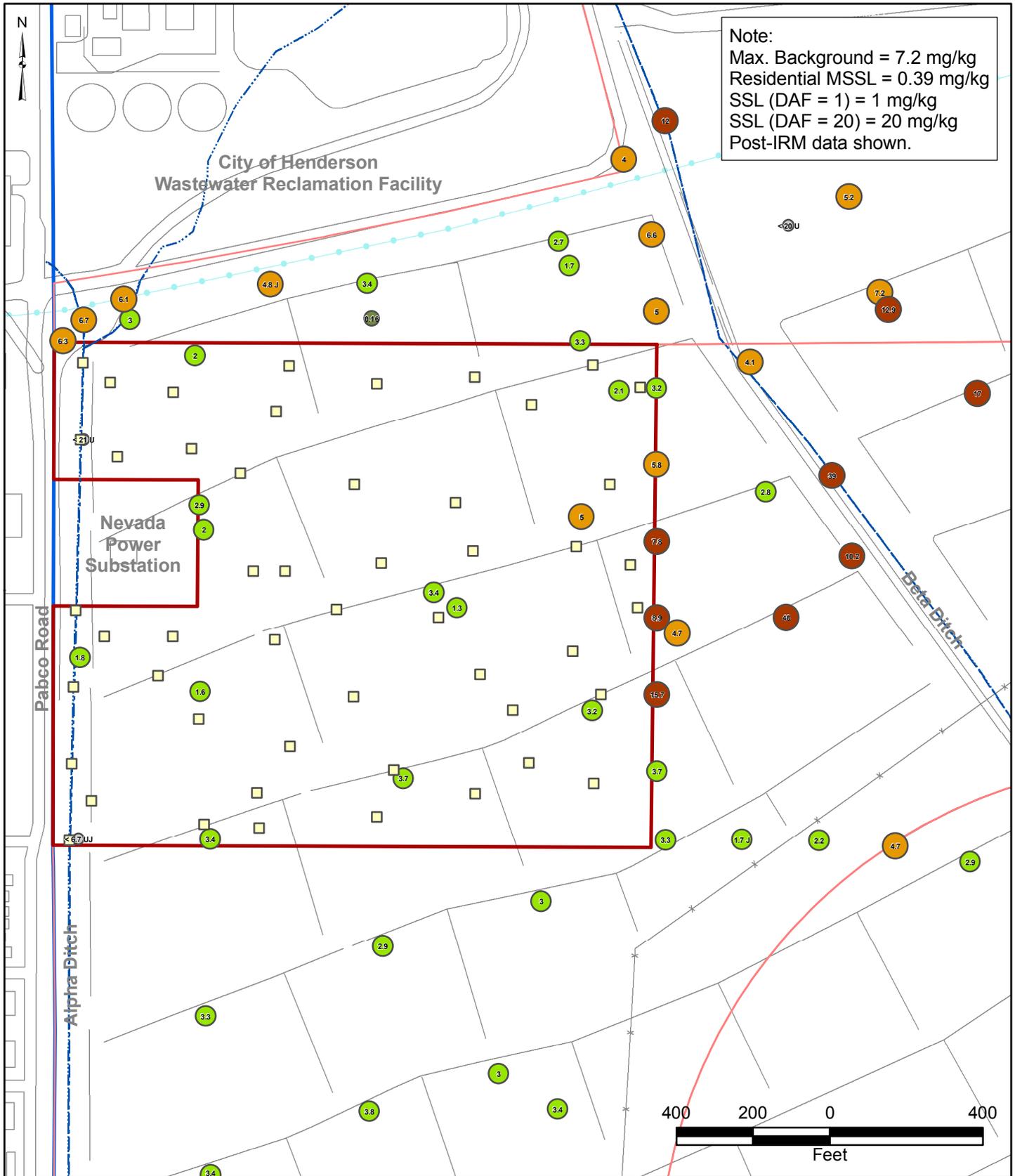
All units in mg/kg.

-- = no sample data.

Shaded results indicate soil has been excavated and removed.

APPENDIX C

SOIL CONCENTRATION
DISTRIBUTION FIGURES



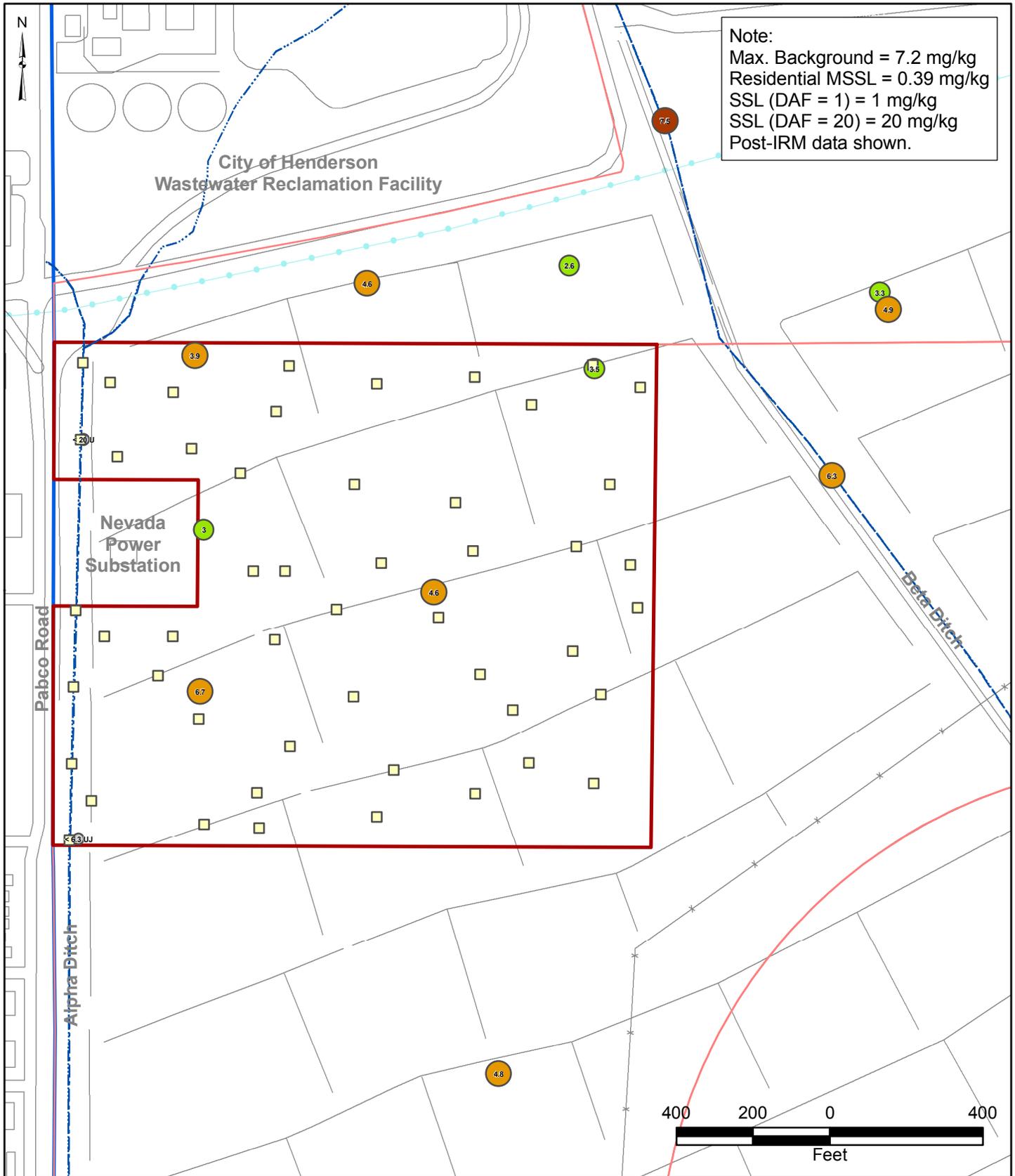
Note:
 Max. Background = 7.2 mg/kg
 Residential MSSL = 0.39 mg/kg
 SSL (DAF = 1) = 1 mg/kg
 SSL (DAF = 20) = 20 mg/kg
 Post-IRM data shown.

- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- Pittman Lateral
- SAP Proposed Soil Sample Location
- Non-Detect
- Detect < MSSL
- >= MSSL and < 10x MSSL
- >= 10x MSSL and < Max. Background
- >= Max. Background

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-1

**ARSENIC RESULTS IN
 SUNSET NORTH COMMERCIAL
 SUB-AREA AND ADJACENT
 1,000 FT - 0 TO 1 FT BGS**





Note:
 Max. Background = 7.2 mg/kg
 Residential MSSL = 0.39 mg/kg
 SSL (DAF = 1) = 1 mg/kg
 SSL (DAF = 20) = 20 mg/kg
 Post-IRM data shown.

- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- ~ Pittman Lateral
- SAP Proposed Soil Sample Location
- Non-Detect
- Detect < MSSL
- >= MSSL and < 10x MSSL
- >= 10x MSSL and < Max. Background
- >= Max. Background

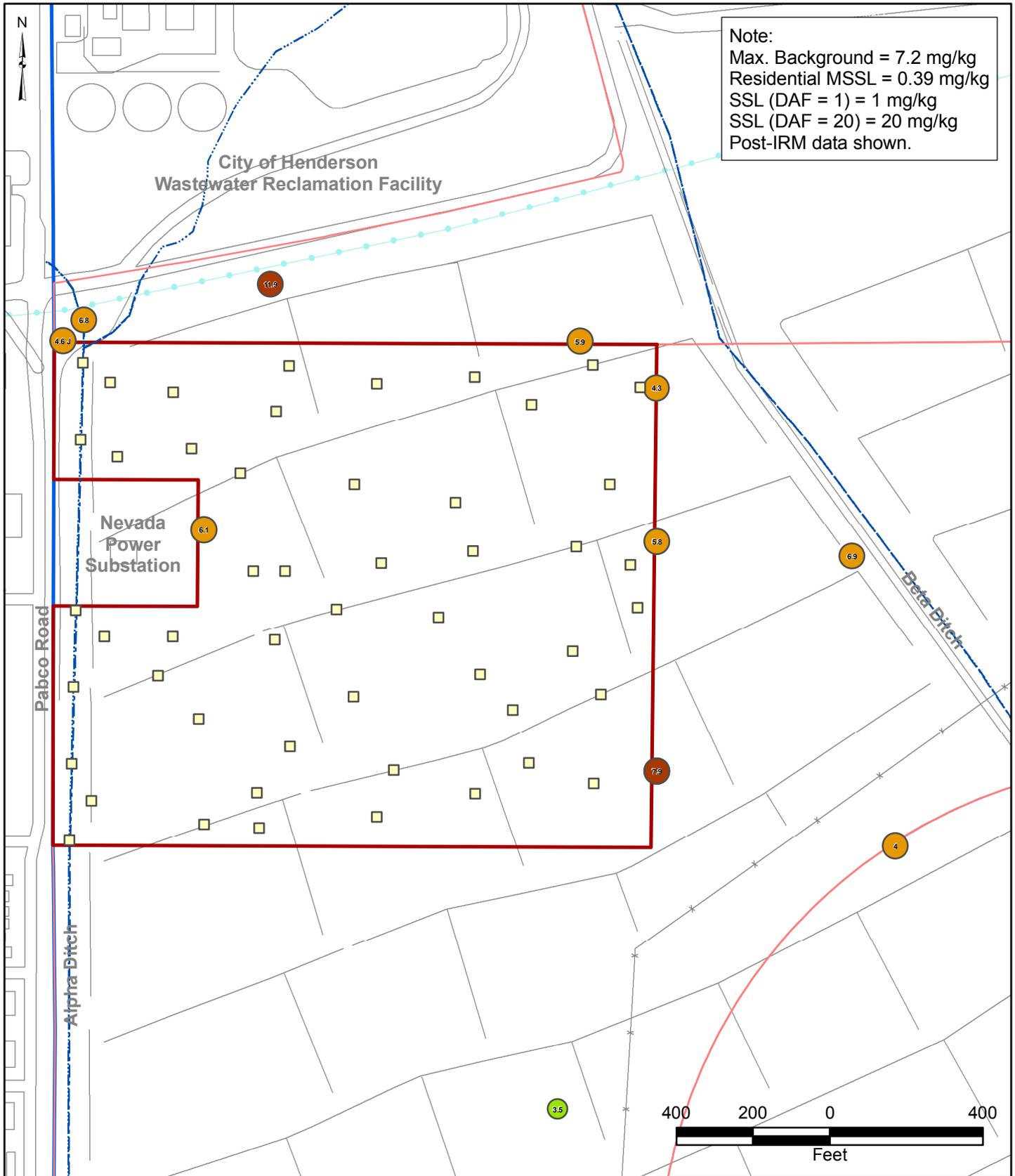
BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-2

**ARSENIC RESULTS IN
 SUNSET NORTH COMMERCIAL
 SUB-AREA AND ADJACENT
 1,000 FT - 3 TO 5 FT BGS**

Prepared by
MKJ (ERM)

Date
11/05/08

JOB No. 0064276
 FILE: GIS/BRC/SN-COMMERCIAL_SAP/APP-C FIGURES.MXD



Note:
 Max. Background = 7.2 mg/kg
 Residential MSSL = 0.39 mg/kg
 SSL (DAF = 1) = 1 mg/kg
 SSL (DAF = 20) = 20 mg/kg
 Post-IRM data shown.

- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- ~ Pittman Lateral
- SAP Proposed Soil Sample Location
- Non-Detect
- Detect < MSSL
- >= MSSL and < 10x MSSL
- >= 10x MSSL and < Max. Background
- >= Max. Background

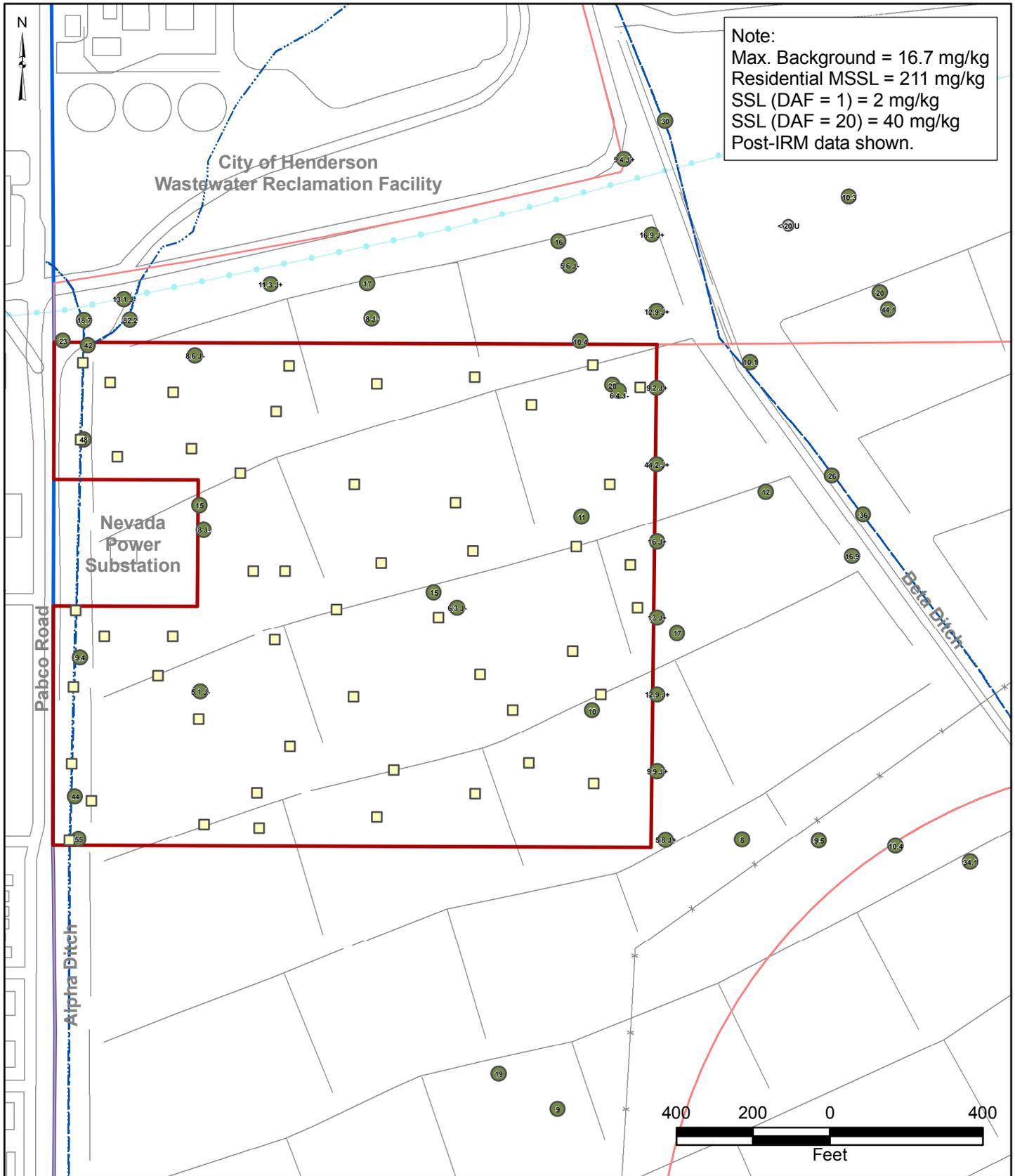
BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-3

**ARSENIC RESULTS IN
 SUNSET NORTH COMMERCIAL
 SUB-AREA AND ADJACENT
 1,000 FT - 7 TO 10 FT BGS**

Prepared by
MKJ (ERM)

Date
11/05/08

JOB No. 0064276
FILE: GIS/BRC/SN-COMMERCIAL_SAP/APP-C FIGURES.MXD



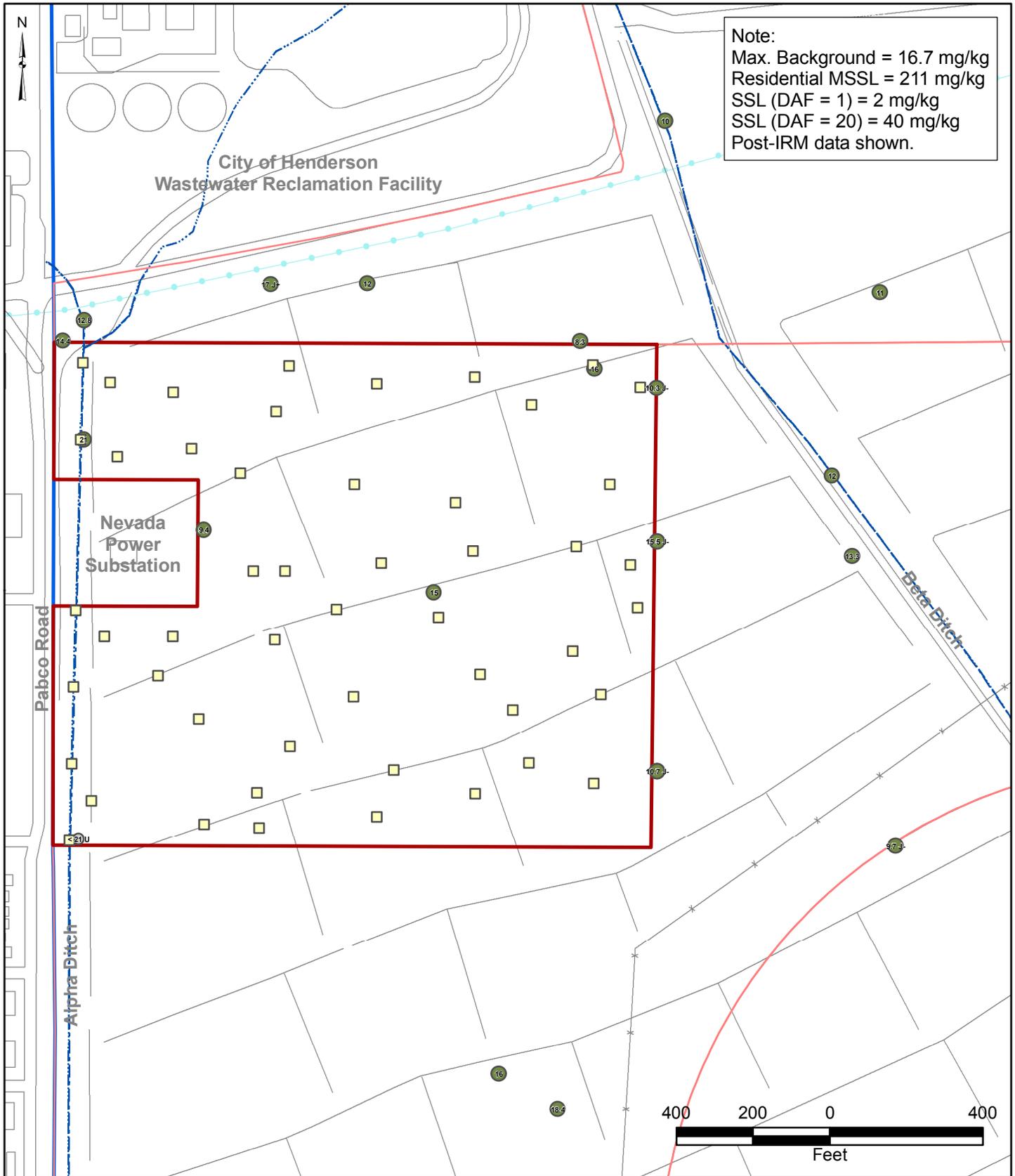
- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- ~ Pittman Lateral
- SAP Proposed Soil Sample Location
- Non-Detect
- Detect < 1/2-MSSL
- >= 1/2-MSSL and < MSSL
- >= MSSL and < 10x MSSL
- >= 10x MSSL

BMI Common Areas (Eastside)
 Clark County, Nevada

FIGURE C-4

**TOTAL CHROMIUM RESULTS
 IN SUNSET NORTH COMMERCIAL
 SUB-AREA AND ADJACENT
 1,000 FT - 0 to 1 FT BGS**





Note:
 Max. Background = 16.7 mg/kg
 Residential MSSL = 211 mg/kg
 SSL (DAF = 1) = 2 mg/kg
 SSL (DAF = 20) = 40 mg/kg
 Post-IRM data shown.

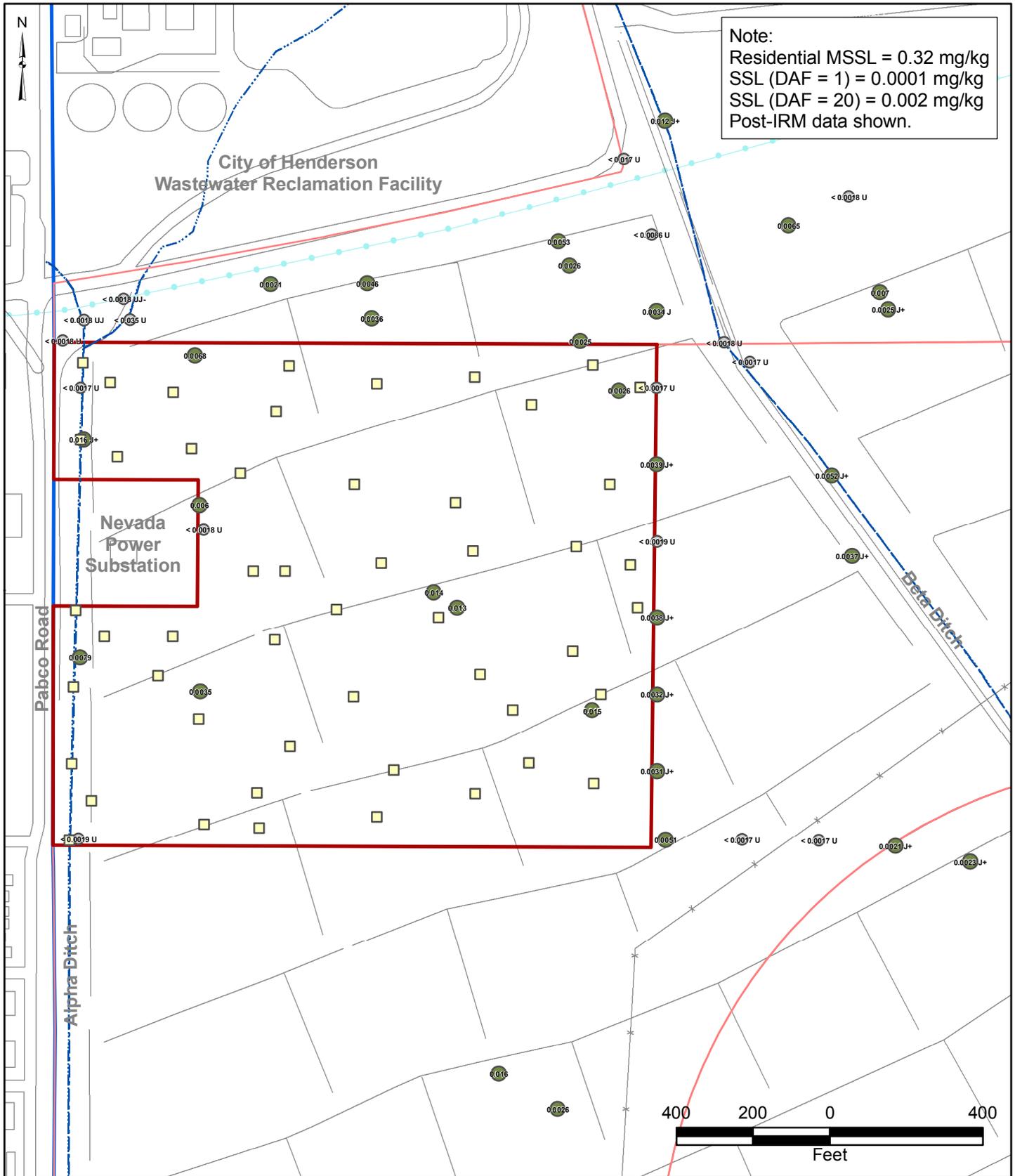
- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- ~ Pittman Lateral
- SAP Proposed Soil Sample Location

- Non-Detect
- Detect < 1/2-MSSL
- >= 1/2-MSSL and < MSSL
- >= MSSL and < 10x MSSL
- >= 10x MSSL

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-5

**TOTAL CHROMIUM RESULTS
 IN SUNSET NORTH COMMERCIAL
 SUB-AREA AND ADJACENT
 1,000 FT - 5 TO 10 FT BGS**





Note:
 Residential MSSL = 0.32 mg/kg
 SSL (DAF = 1) = 0.0001 mg/kg
 SSL (DAF = 20) = 0.002 mg/kg
 Post-IRM data shown.

- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- ~ Pittman Lateral
- SAP Proposed Soil Sample Location

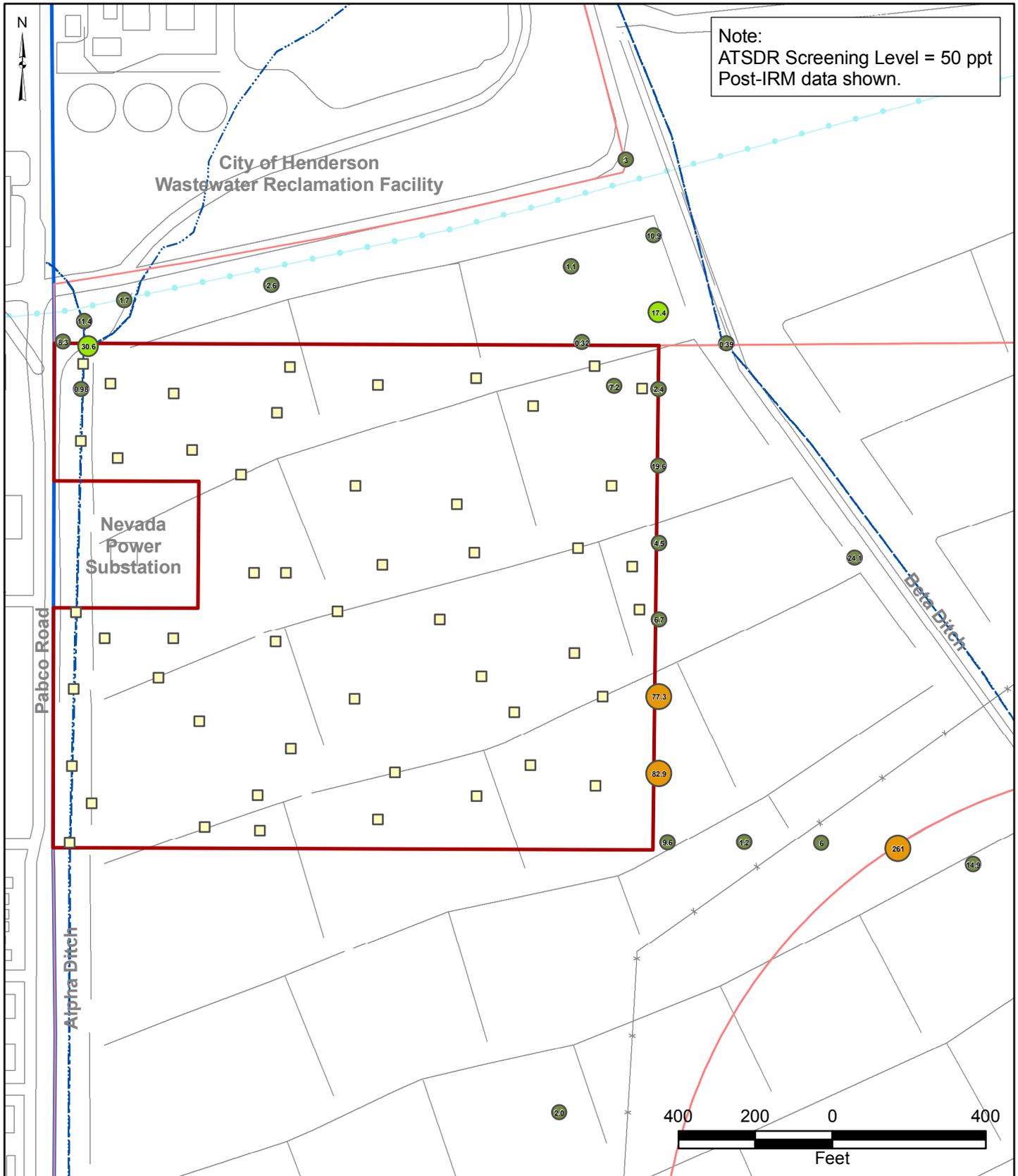
- Non-Detect
- Detect < 1/2-MSSL
- >= 1/2-MSSL and < MSSL
- >= MSSL and < 10x MSSL
- >= 10x MSSL

BMI Common Areas (Eastside)
 Clark County, Nevada

FIGURE C-6

**beta-BHC RESULTS IN
 SUNSET NORTH COMMERCIAL
 SUB-AREA AND ADJACENT
 1,000 FT - 0 to 1 FT BGS**





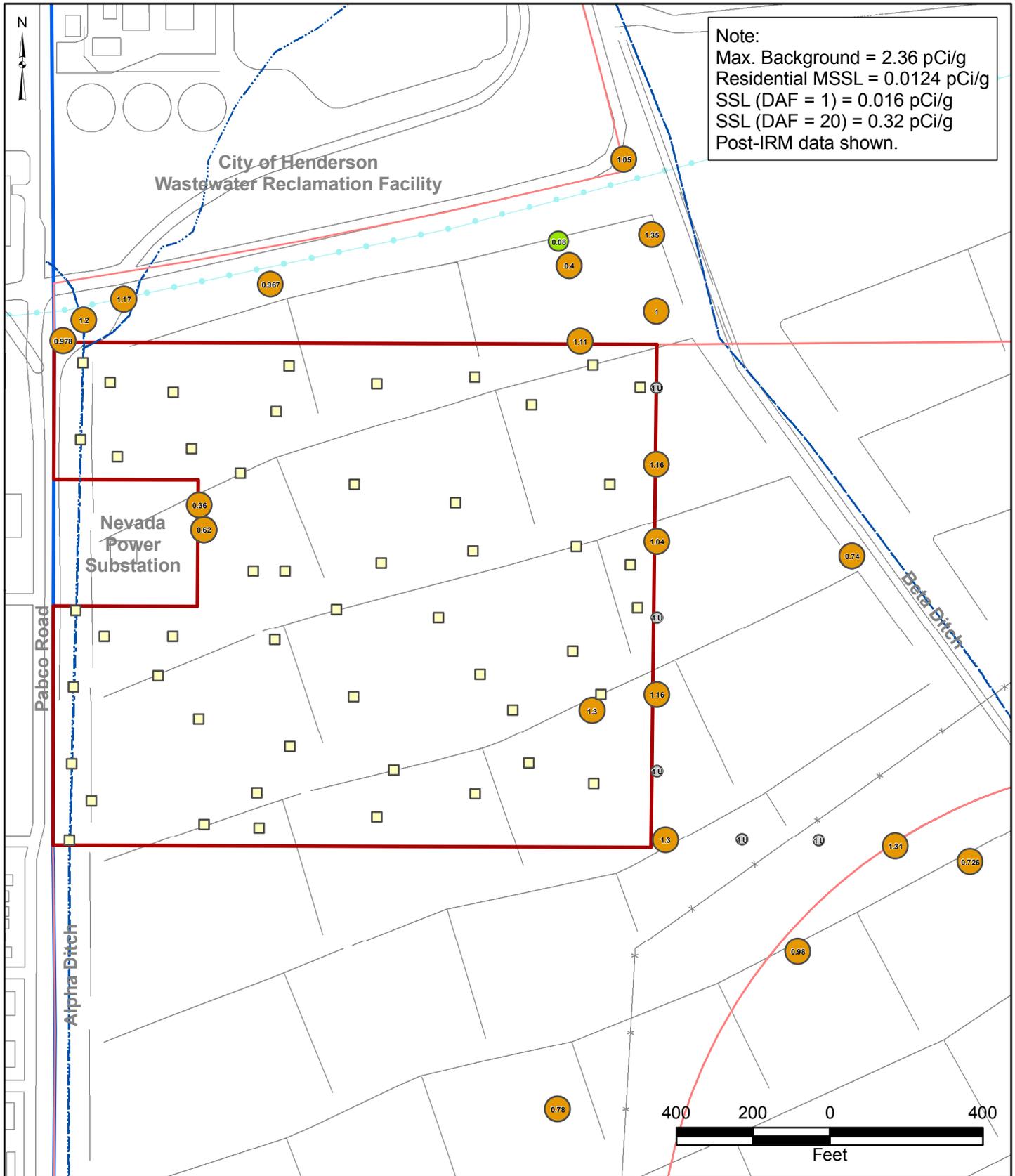
Note:
 ATSDR Screening Level = 50 ppt
 Post-IRM data shown.

- | | |
|-----------------------------------|--------------------------------|
| Sunset North Commercial Sub-Area | Non-Detect |
| Site AOC3 Boundary | Detect < 1/2-ATSDR SL (50 ppt) |
| Eastside Soil Sub-Areas | >= 1/2-ATSDR SL and < ATSDR SL |
| Pittman Lateral | >= ATSDR SL and < 10x ATSDR SL |
| SAP Proposed Soil Sample Location | >= 10x ATSDR SL |

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-8

**TCDD TEQ RESULTS IN
 SUNSET NORTH COMMERCIAL
 SUB-AREA AND ADJACENT
 1,000 FT - 0 to 1 FT BGS**

Prepared by MKJ (ERM)	Date 11/05/08	JOB No. 0064276
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Note:
 Max. Background = 2.36 pCi/g
 Residential MSSL = 0.0124 pCi/g
 SSL (DAF = 1) = 0.016 pCi/g
 SSL (DAF = 20) = 0.32 pCi/g
 Post-IRM data shown.

- Sunset North Commercial Sub-Area
- Site AOC3 Boundary
- Eastside Soil Sub-Areas
- ~ Pittman Lateral
- SAP Proposed Soil Sample Location
- Non-Detect
- Detect < MSSL
- >= MSSL and < 10x MSSL
- >= 10x MSSL and < Max. Background
- >= Max. Background

BMI Common Areas (Eastside)
 Clark County, Nevada
FIGURE C-9

**RADIUM-226 RESULTS IN
 SUNSET NORTH COMMERCIAL
 SUB-AREA AND ADJACENT
 1,000 FT - 0 TO 1 FT BGS**

Prepared by
 MKJ (ERM)

Date
 11/05/08

JOB No. 0064276
 FILE: GIS/BRC/SN-COMMERCIAL_SAP/APP-C FIGURES.MXD