



**Performance Evaluation Report for the  
A-Area Burning/Rubble Pits (731-A, -1A) and  
Rubble Pit (731-2A) and the Miscellaneous  
Chemical Basin/Metals Burning Pit  
(731-4A, -5A) Operable Unit  
January through December 2024 (U)**

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*and*  
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**LIST OF ABBREVIATIONS AND ACRONYMS**

ABRP	A-Area Burning/Rubble Pits and Rubble Pit
AHT	A-Area Hidden Trench
amsl	Above mean sea level
ASVE	active soil vapor extraction
bgs	below ground surface
CM	contaminant migration
CMI/RAIP	Corrective Measures Implementation/Remedial Action Implementation Plan
CO <sub>2</sub>	carbon dioxide
COC	constituent of concern
CY	calendar year
<u>DOO</u>	<u>data quality objective</u>
<u>EQL</u>	<u>estimated quantitation limit</u>
ft	feet or foot
<del>FY</del>	<del>fiscal year</del>
hr	hour
IROD	Interim Record of Decision
kg	kilogram
km	kilometer
lb	pound
LLC	limited liability company
µg/kg	microgram per kilogram
m	meter
m <sup>3</sup>	cubic meter
MAAZ	M-Area Aquifer Zone
MBP	Metals Burning Pit
MCB	Miscellaneous Chemical Basin
MCL	maximum contaminant level
<u>MDL</u>	<u>Method detection limit</u>
mi	mile
ND	non-detect
OU	operable unit
PCE	Tetrachloroethylene
PCR	Post-Construction Report
PER	Performance Evaluation Report
ppm	parts per million
ppmV	parts per million by volume
PSVE	passive soil vapor extraction
RA	remedial action
RAO	remedial action objective
RCRA	Resource Conservation and Recovery Act

**LIST OF ABBREVIATIONS AND ACRONYMS** *(Continued/End)*

RFI/RI/BRA	RCRA Facility Investigation/Remedial Investigation Report with Baseline Risk Assessment
ROD	Record of Decision
SAP	Sampling Analysis Plan
SCDES <sup>1</sup>	South Carolina Department of Environmental Services
SEMS	Superfund Enterprise Management System
SPL	Split Soil Sample
SRNS	Savannah River Nuclear Solutions, LLC
SRS	Savannah River Site
SVE	soil vapor extraction
TCE	trichloroethylene
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VOC	volatile organic compound
WSRC	Washington Savannah River Company, LLC

<sup>1</sup> SCDES was known as the South Carolina Department of Health and Environmental Control prior to July 1, 2024.

## **1.0 INTRODUCTION**

This Performance Evaluation Report (PER) addresses remedial system performance at the consolidated A-Area Burning/Rubble Pits (731-A, -1A) and Rubble Pit (731-2A) (ABRP) and Miscellaneous Chemical Basin (MCB)/Metals Burning Pit (MBP) (731-4A, 5A) Operable Unit (OU) for calendar year (CY) 2024. Monitoring requirements for ABRP/MCB/MBP are identified in the Corrective Measure Implementation/Remedial Action Implementation Plan (CMI/RAIP) (Westinghouse Savannah River Company, LLC [WSRC] 2006) and Post-Construction Report (PCR) for the ABRP/MCB/MBP OU (Savannah River Nuclear Solutions, LLC [SRNS] 2009). For additional information, refer to previous PERs (SRNS 2016, 2017, 2018a, 2019, 2020, 2021, 2022, 2023a and 2024a). This PER also presents soil sampling data necessary for Core Team (representatives from the U.S. Environmental Protection Agency [USEPA], South Carolina Department of Environmental Services [SCDES], and U.S. Department of Energy) review and approval for the discontinuation of soil vapor extraction (SVE) operations at the ABRP/MCB/MBP OU.

The ABRP/MCB/MBP OU is located approximately 2.4 kilometers (km [1.5 miles {mi}]) south of M Area and 4.8 km (3-mi) east of the Savannah River Site (SRS) boundary, in the Upper Three Runs watershed (Figure 1). The ABRP/MCB/MBP OU comprises 11 subunits. This PER specifically addresses the remedial actions (RAs) conducted at the ABRP Trench (vadose zone soil) Subunit and the 731-4A MCB Vadose Zone Subunit, which are summarized in Section 2.0. Remedial actions for the remaining nine subunits are complete or were not required.

### **1.1 ABRP Area Subunits**

The ABRP Trench Subunit (outlined in blue on Figure 2), located beneath the A-Area Ash Pile Subunit (788-2A), has been identified as a source for volatile organic compound (VOC) contamination. Trichloroethylene (TCE) was identified as a contaminant migration (CM) constituent of concern (COC) for the ABRP Trench Subunit. Contamination leaching from this area has impacted vadose zone soils and groundwater beneath ABRP. A detailed facility description is provided in the Resource Conservation and Recovery Act (RCRA) Facility

Investigation/Remedial Investigation Report with Baseline Risk Assessment (RFI/RI/BRA), Revision 1.2 (WSRC 1997) and the Addendum to the Revision 1.2, RFI/RI/BRA (WSRC 2003a).

## 1.2 MCB Subunits

The MCB (731-4A) (Figure 2) is believed to have been a disposal site for solvents and oils based on the type of contamination in the vadose zone and groundwater beneath the area. TCE and tetrachloroethylene (PCE) were identified as CM COCs for the MCB Vadose Zone Subunit. A detailed facility description is provided in the RFI/RI/BRA (WSRC 1992).

## 1.3 Groundwater

Groundwater is not part of the ABRP/MCB/MBP OU. The Core Team agreed to transfer responsibility for the ABRP/MCB/MBP groundwater from the Federal Facility Agreement to the RCRA program as part of the M-Area VOC plume under the *2000 RCRA Part B Permit Renewal Application*:

*M-Area and Metallurgical Laboratory Hazardous Waste Management Facilities Postclosure* (SRNS 2018b).

Monitoring wells screened in the water table aquifer (M-Area Aquifer Zone [MAAZ]) near the ABRP and MCB source areas have historically shown elevated levels of PCE and TCE contamination. TCE and PCE concentrations observed in the monitoring wells located in the Lost Lake Aquifer Zone are impacted from upgradient M Area sources in addition to ABRP/MCB sources. In the Upper Lost Lake Aquifer Zone, wells near the source areas have had historically elevated TCE concentrations that have decreased with time, indicating less M Area influence. Monitoring wells in the Lower Lost Lake Aquifer Zone have had stable TCE concentrations with minimal change over time, indicating more influence from upgradient M Area sources.

SVE was deployed to reduce the vadose zone source term and has a delayed impact on groundwater contamination by inhibiting further contamination. SRS expects to see a long-term impact on groundwater contamination from SVE operations in shallower groundwater; however, deeper groundwater impacts from this system may be less apparent due to commingling of the plumes. Therefore, it is important to focus on the MAAZ (water table aquifer) wells when evaluating the

effectiveness of the vadose zone RAs. MAAZ wells near the ABRP source have decreasing VOC trends, indicating mass depletion of the source. PCE is below the groundwater maximum contaminant level (MCL, 0.005 parts per million [ppm]) in all eight MAAZ wells. TCE is trending downward to the MCL (0.005 ppm). Refer to the Annual 2023 M-Area and Metallurgical Laboratory Hazardous Waste Management Facilities Groundwater Monitoring and Corrective Action Report (SRNS 2023c) for more detail.

## 2.0 REMEDIAL ACTIONS

The final RAs for the ABRP Trench Subunit and the MCB Vadose Zone Subunit are ongoing. In 2024, the ABRP RA and the MCB RA operated passive SVE (PSVE) using MicroBlowers™ and BaroBalls™. All MicroBlowers™ are equipped with BaroBalls™ for backup operation. See Figures 3 and 4 for aerial photos of the MicroBlowers™ and BaroBalls™ at ABRP and MCB, respectively.

The RAs and the regulatory decision documents for all 11 ABRP/MCB/MBP OU subunits are listed in Table 1.

### 2.1 ABRP Trench Subunit

#### 2.1.1 Treatment Area

The treatment area for the ABRP Trench Subunit was established by the ABRP/MCB/MBP CMI/RAIP (WSRC 2006) based on a soil concentration remedial goal (i.e., cleanup level) of 610 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ) for TCE. To identify the areas exceeding the cleanup level, the CMI/RAIP composited the sampling results provided by extensive soil sampling and cone penetrometer characterization conducted between 1996 and 2004. The 1996-2004 TCE Composite 610  $\mu\text{g}/\text{kg}$  contour location is shown on Figure 5.

#### 2.1.2 Historical Information

##### *Characterization*

Detailed analytical data for all environmental media samples taken in the characterization of the ABRP OU is presented in the RFI/RI/BRA (WSRC 1997). Characterization of the ABRP Trench

Subunit occurred in April 2001 (WSRC 2003a). Following characterization activities, an Explanation of Significant Difference (WSRC 2001) to the Interim Record of Decision (IROD) was issued in 2002 to expand the SVE portion of the interim action to include the Trench Subunit where VOCs were identified at levels that would likely leach to groundwater. In 2002, the CM analysis of the Trench Subunit determined that although TCE; PCE; and cis-1,2-dichloroethylene were present in vadose zone soils, only TCE was present at levels that could potentially migrate to groundwater above the MCL. Thus, the Addendum to the RFI/RI/BRA for the ABRP (WSRC 2002b) and the 2007 Record of Decision (ROD) identified TCE as the only CM COC in the Trench Subunit. The approved ROD for the ABRP/MCB/MBP OU (WSRC 2007) selected phased SVE as the RA for the Trench Subunit vadose zone and a soil cover as the RA for the A-Area Ash Pile Subunit (788-2A).

Characterization indicated the ABRP Trench Subunit contaminant plume is migrating laterally along a perched water table to a point where it has impacted the MAAZ (WSRC 2005a). The path of migration goes across the area of the Potential Pit Subunit. The Potential Pit was previously characterized, and there are no problems warranting action for near-surface soils (WSRC 1997). The wells of the SVE system (interim and final RAs) established at the Potential Pit are treating deep, vadose-zone contamination migrating from the ABRP Trench Subunit.

Rebound testing conducted on September 12 and 13, 2012, indicated that the VOC removal at the ABRP Trench Subunit is significantly diffusion limited (SRNS 2017).

### *Configuration Changes*

During the operational life of SVE at ABRP, many modifications to the system were made between 2008 and 2018 to adjust to changing field conditions. These changes are listed in Table 2. Historical configuration changes to the SVE at ABRP are provided in more detail in the previous PERs. For details regarding construction of the SVE at ABRP, refer to the PCR (SRNS 2009).

#### **2.1.3 Current Configuration**

The ABRP RA operated only PSVE systems in 2024. The current PSVE system uses 26 wells consisting of 13 wells equipped with MicroBlowers™ powered by photovoltaic units and 13 wells

equipped with passive BaroBalls™. Construction details for the SVE wells are shown in Table 3. The well locations are shown in Figure 5 and are in the following subunits:

- ABRP Trench Subunit – Five wells (AHT-05, -06, -07A, -09A, and ASH-06). The ABRP Trench is 4.6 meters (m [15 feet {ft}]) wide by 91.4 m (300 ft) long and between 2.4 m and 4.6 m (8 to 15 ft) deep, most of which is overlain by about 6.1 m (20 ft) of compacted ash.
- Ash Pile Subunit – Ten wells (AHT-07B, AHT-08A, -08B, AHT-09B through AHT-12B) clustered in sets of two.
- Potential Pit Subunit – Ten single wells (ABV-01, ARV-1D1, -2D1, -2D2, and -2D3, and AHT-13 through AHT-17) along the northern, cleared edge in an east-to-west orientation.
- Rubble Pit Subunit – One well (ARV-3D3).

#### 2.1.4 Sampling Methods and Results

ABRP TCE concentrations at the MicroBlowers™ and BaroBalls™ wells have decreased significantly since 2007, prior to active SVE (ASVE) system operations (2008 – 2017) (Figure 6). TCE concentrations continue to be low in 2024 as indicated below:

Year	MicroBlower™	BaroBall™
	Sample Results Average TCE	Sample Results Average TCE
	<i>Parts per million by volume (ppmV)</i>	
2007	33.0	12.1
2024	0.074	0.015

In 2024 at ABRP, three of 13 wells with MicroBlowers™ had detectable sample results and three of 13 wells with BaroBalls™ had detectable sample results (maximum value was 0.131 ppmV at AHT-07A). From 2011 to 2024, the following average and maximum TCE concentrations were recorded:

MicroBlower™ Well	TCE <i>Parts per million by volume (ppmV)</i>	
	2016-2024 Average Exhaust Gas Concentration	2016-2024 Maximum Exhaust Gas Concentration
AHT-07A	0.034	0.135 IN 2019
AHT-07B	0.071	0.171 in 2018
AHT-08B	0.102	0.339 in 2022
AHT-09B	0.023	0.037 in 2019
AHT-10B	0.025	0.067 in 2019
ASH-06	0.487	3.383 in 2018

MicroBlower™ wells with quarterly TCE exhaust gas results are listed in Table 4 and BaroBall™ wells with quarterly exhaust gas TCE results are listed in Table 5. For all BaroBall™ samples collected during 2024, there were no unfavorable atmospheric conditions that impacted sampling (i.e., BaroBall™ wells are considered not venting during high barometric pressure events when no subsurface vapor is exiting the well.).

In the event that unfavorable atmospheric conditions (i.e., high barometric pressure) are present during future sampling events, an alternative sampling method that applies a vacuum to the well head using a portable vacuum pump will be employed to collect the soil vapor sample and carbon dioxide (CO<sub>2</sub>) concentrations. The CO<sub>2</sub> concentrations will be measured during sample collection to determine if a representative soil vapor sample is being collected. CO<sub>2</sub> concentrations are significantly higher in subsurface vapor from the aerobic respiration of microbial communities than in atmospheric CO<sub>2</sub> concentrations. It is still possible that no sample can be collected using the alternative sampling method when CO<sub>2</sub> concentrations are lower than expected. If no sample can be collected during unfavorable atmospheric conditions using the alternative method, then the sample will be cancelled for that quarter, and resampling will be attempted during subsequent quarters.

During 2024, total TCE mass removed from the MicroBlowers™ and BaroBalls™ at the ABRP Trench Subunit are as follows:

Calendar Year	Total TCE Mass Removed	Maximum TCE Mass Removed from One Well
2024	0.419 kg (0.923 lb)	0.321 kg (0.708 lb) at ASH-06

The ABRP historical record of TCE and PCE mass removed is provided by Table 9. The VOC mass (TCE) removed from the SVE wells was estimated from the vapor-phase concentrations, flow rates, and operational period. This method, like the method used in a study of SVE and air sparging (Holbrook et al. 1998), calculates mass removal by converting soil gas concentrations to mass removal rates using the extraction flow rate and the Ideal Gas Law. The generalized equation for mass removal is given in Equation 1.

$$M = C \times Q \times T \times MW \quad (\text{Equation 1})$$

where,

- M = cumulative mass removed (kg)                      T<sup>2</sup> = operational period (hr)  
 C = vapor concentration (kg/m<sup>3</sup>)                      MW = molecular weight (grams/mole)  
 Q<sup>1</sup> = extraction flow rate (m<sup>3</sup>/hour [hr])

Notes:

<sup>1</sup> - MicroBlower™ extraction flow rates were measured monthly. However, BaroBall™ flow rates were estimated to be a uniform average of one cubic foot per minute based on the estimated flow rates at Met Lab PSVE wells (WSRC 2000b)

<sup>2</sup> - An operational period of 12 hours/day for MicroBlowers™ and 24 hours/day for BaroBalls™ was used.

## 2.2 MCB Vadose Zone Subunit

### 2.2.1 Treatment Area

The treatment area for the MCB Vadose Zone Subunit was established by the IROD (WSRC 1999) based on the soil cleanup level of 344 µg/kg for TCE and PCE concentration contours as shown in Figure 7. The areas were identified by extensive characterization and sampling history at the MCB Subunit since 1996. This sampling provided sufficient data to identify the location of ASVE in high VOC concentration areas (greater than 50 ppmV, defined for this OU as a hot spot area), the location of PSVE in lower concentration areas (less than 50 ppmV), and the SVE design requirements.

### ***2.2.2 Historical Information***

At MCB, the upper 9 to 11 m (30 to 35 ft) of the vadose zone consists of fine-grained sediments (the Upland Unit). Capillary forces within the sediments tend to restrict migration of contaminants. Characterization data at MCB showed that VOCs disposed at the surface have migrated downward into the Upland Unit where further migration downward into the underlying sandy soils is limited.

A network of BaroBall™-equipped PSVE wells was installed during characterization activities, with operations starting up on November 1, 1996. The MCB ASVE system started operation on October 29, 2001, operated for approximately one year, and then was removed from service after demonstrating that exhaust emissions were significantly below the target 50 ppmV. The ASVE wells were restored to passive operation with BaroBalls™ and are still in service. MCSV-7 and MCSV-17 were converted to MicroBlowers™ and began operation on December 10, 2008.

The MCB SVE wells are screened in the sandy zone below the Upland Unit and have been able to remove VOC mass at a rate approximately equal to the downward migration rate from the Upland Unit, with some variation, as demonstrated by a diffusion rate study conducted by the Savannah River National Laboratory (WSRC 2005b) in 2004 and as evidenced by the relative stability in soil-gas concentration seen across the MCB Subunit.

### ***2.2.3 Current Configuration***

Since December 10, 2008, the MCB Vadose Zone Subunit RA operates a network of 26 PSVE wells consisting of 24 wells equipped with BaroBalls™ and 2 wells, MCSV-07 and MCSV-17, equipped with MicroBlowers™. Locations of the wells are shown in Figure 7. Construction details of these wells are provided in Table 6. The PSVE system at MCB operates under the same principles and limitations discussed for PSVE operations at the ABRP Trench Subunit.

### ***2.2.4 PSVE Results***

MCB soil-gas concentrations of TCE and PCE from PSVE wells declined significantly until 2010 and have remained steady through 2024 (Figure 8). A comparison between maximum TCE and

PCE concentrations before 2009 and in 2024 at the MCB PSVE wells is provided in the table below:

Calendar Year	MCB MicroBlower™ Maximum Sample Results		MCB BaroBall™ Maximum Sample Results	
	TCE	PCE	TCE	PCE
	<i>(ppmV)</i>			
Before 2009	8.02	8.25	37.35	18.60
2024	0.96	1.61	0.149	0.020

Since 2008, sample results from MCSV-07 and MCSV-17 tend to be consistent and nearing the lower laboratory detection limits. In 2024, both wells with MicroBlowers™ had detectable sample results (maximum value was 1.61 ppmV of PCE at MCSV-07) and nine of 24 wells with BaroBalls™ had detectable sample results (maximum value was 0.149 ppmV of TCE at MCSV-27). Quarterly analytical results of MCB PSVE wells sampling are provided for PCE in Table 7 and for TCE in Table 8. For all BaroBall™ samples collected during 2024, there were no unfavorable atmospheric conditions that impacted sampling (i.e., BaroBall™ wells are considered not venting during high barometric pressure events when no subsurface vapor is exiting the well).

The four wells (MCSV-07, -17, -25, -27) with the highest concentrations continue to produce TCE, but at low concentrations. From 2011 to 2024, the following average and maximum TCE and PCE concentrations were recorded:

Well	TCE <i>(ppmV)</i>		PCE <i>(ppmV)</i>	
	2011-2024 Average Exhaust Gas Concentration	2011-2024 Maximum Exhaust Gas Concentration	2011-2024 Average Exhaust Gas Concentration	2011-2024 Maximum Exhaust Gas Concentration
MCSV-07	0.626	1.153 in 2017	0.730	1.81 in 2021
MCSV-17	0.787	1.734 in 2011	0.035	0.435 in 2018
MCSV-25	0.227	1.228 in 2011	0.030	0.087 in 2011
MCSV-27	0.211	1.122 in 2011	0.030	0.072 in 2011

All four wells remain stable in sampled soil-gas concentrations.

During 2024, total TCE and PCE mass removed from the MicroBlowers™ and BaroBalls™ are as follows:

Calendar Year	Total TCE and PCE Mass Removed	Maximum TCE and PCE Mass Removed from One Well
2024	1.064 kg (2.346 lb)	0.763 kg (1.683 lb) at MCSV-07

The MCB historical record of TCE and PCE mass removed is provided by Table 10. Wells near the dilute edge of the plume (e.g., MCSV-5, -8, -9, -11, -15, -23) produce very little contaminant removal, as indicated by sampling results. See Figure 7 for well locations.

### 3.0 CLOSURE CRITERIA FOR WASTE UNITS WITH SVE SYSTEMS

SRS is committed to SVE operations until Core Team agreement is reached that the cleanup levels at the ABRP Trench Subunit and MCB Vadose Zone Subunit are achieved. The closure criteria for determining when to terminate SVE operations is based on the attainment of the Remedial Action Objectives (RAOs)/cleanup levels. The RAO will be met when residual TCE and PCE contamination in the vadose zone soil is reduced below their respective cleanup level in accordance with the action plan described in the ABRP/MCB/MBP OU CMI/RAIP (WSRC 2006). The Core Team met in December 2022 and reached an agreement on obtaining soil samples at the ABRP Trench Subunit and the MCB Vadose Zone Subunit to evaluate the effectiveness of the SVE remediation in reaching soil cleanup levels.

In 2023, a Sampling and Analysis Plan (SAP) (SRNS 2023b) was developed to provide the technical basis for discontinuing SVE operations at the ABRP Trench Subunit and MCB Vadose Zone Subunit. –The SAP was approved by SCDES on June 14, 2023, and by the USEPA on June 9, 2023. The data quality objectives (DQOs) in the SAP included the following:

1. 90% of planned samples are collected and their data are useable for completeness data quality indicator
2. 5% of the samples will be duplicate and split samples for the comparability data quality indicator.
3. No target compound  $\geq$  site specific estimated quantitation limit for equipment blank, field blanks, method blanks, or instrument blanks for accuracy data quality indicator

4. Laboratory data will be used to support a determination as to whether further remedial action is warranted.
5. All (i.e., 100%) samples will follow preservative guidelines as listed in Table 6.
6. Laboratory data will meet the analytical and contract-required detection limits listed in Table 5.

The six Project Quality Objectives and the DQOs outlined in the SAP (SRNS 2023b) have been successfully met with no issues concerning the data. Ninety percent of planned samples were collected. Five percent of the samples were duplicate or split samples. No target compounds exceeded the estimated quantitation limits (EQL) for any of the blank samples. The laboratory data was used to support a determination as to whether further remedial action is warranted. All samples followed the preservative guidelines listed in Table 6 of the SAP (SRNS 2023b). The laboratory data met the analytical and contract-required detection limits listed in Table 5 of the SAP (SRNS 2023b). The soil characterization data from the 2024 soil sampling event are 100% Definitive level (D) data, suitable for making decisions based on this report's recommendations.

The results of the ABRP soil sample data were discussed with the EPA and SCDES on September 11, 2024 (i.e., Proposal to Discontinue Soil Vapor Extraction Operations) ahead of submittal of the PER. (SRNS 2024b) A total of twelve borings were advanced at ABRP and sampled per the approved SAP in 2024 (Figures 9 and 10). Of the 422 soil samples, 381 were regular, 19 were split, and 22 were field duplicates. Out of 422 soil samples at ABRP, 420 samples were non-detect for TCE. Two split soil samples had estimated (UJ or J) values for TCE (6.82 µg/kg and 1.97 µg/kg) which are below the TCE cleanup level of 610 µg/kg. Data from the 2024 sampling event show that soil cleanup levels have been met at ABRP Trench Subunit for TCE. Table 12 provides a summary of ~~the sampling data~~ regular, split, and field duplicate samples collected at ABRP. For ABRP, the EQL of the regular samples ranged from 0.2 µg/kg to 360 µg/kg, while the method detection limits (MDL) ranged from 0.076 µg/kg to 140 µg/kg. In contrast, split samples analyzed at a different lab had much lower EQL (4.95 µg/kg - 12 µg/kg) and MDL (0.964 µg/kg - 8.76 µg/kg) ranges. Field duplicates showed an EQL range of 170 µg/kg - 230 µg/kg and an MDL range of 65 µg/kg - 93 µg/kg. All maximum results from ABRP regular, split, and field duplicate samples were well below the cleanup level of 610 µg/kg. Table 14 provides a complete listing of ABRP soil sampling data.

A total of eleven borings were advanced at the MCB Vadose Zone Subunit and sampled per the approved SAP in 2024 (Figures 11 and 12). Of the 383 soil samples, 350 were regular, 18 were split, and 15 were field duplicates. Out of 383 soil samples, 381 samples were non-detect for PCE and TCE at the MCB Vadose Zone Subunit. Two soil samples had estimated (UJ) values for PCE and TCE (280 µg/kg and 190 µg/kg) which are below the TCE and PCE cleanup levels of 344 µg/kg. Ten soil samples had quantitation limits that exceeded the cleanup level but were qualified as non-detect. Data from the 2024 sampling event show that soil cleanup levels have been met at the MCB Vadose Zone Subunit for PCE and TCE. Table 13 provides a summary of the sampling summary regular, split, and field duplicate samples collected at MCB. For MCB, regular samples had an EQL of 160 µg/kg to 430 µg/kg and an MDL of 62 µg/kg to 160 µg/kg. Split samples from another lab exhibited a much lower EQL range of 4.62 µg/kg - 34.1 µg/kg and an MDL range of 0.899 µg/kg - 7.63 µg/kg. Field duplicates had an EQL range of 180 µg/kg - 280 µg/kg and an MDL range of 70 µg/kg - 110 µg/kg. All maximum detections from MCB regular, split, and field duplicate samples were below the cleanup level of 344 µg/kg. Ten samples with non-detect results had EQL values exceeding this cleanup level, however, the MDL values were less than the cleanup level, and thus any detections above the cleanup level (344 µg/L) would have likely been detected. Table 15 provides a complete listing of MCB soil sampling data.

The quality assurance/quality control data for split and field duplicate samples are acceptable. Soil sampling locations were chosen based on historical characterization of the source areas, current soil vapor concentrations, and within the zone of influence of the SVE wells, ensuring comprehensive data coverage for the sampled areas.

## 4.0 CONCLUSIONS/RECOMMENDATIONS

### 4.1 ABRP Trench Subunit Conclusion

The current PSVE system uses 26 wells consisting of 13 wells equipped with MicroBlowers™ powered by photovoltaic units and 13 wells equipped with passive BaroBalls™. This system is functioning as expected.

Annual average soil-gas concentrations at the highest producing wells (i.e., ASH-06 and MCSV-07) have remained low. In 2024, 6 of 26 wells at the ABRP Trench Subunit had detectable sample results of TCE (Tables 4 and 5). Only 0.419 kg (0.923 lb) of TCE were removed at ABRP Trench Subunit. Data from the 2024 soil sampling event show that soil cleanup levels have been met at the ABRP Trench Subunit for TCE.

Operation and performance monitoring (Table 11) of the MicroBlowers™ and BaroBalls™ will continue until closure approval is granted by the Core Team.

#### **4.2 MCB Vadose Zone Subunit Conclusion**

Currently, the PSVE system consists of two wells equipped with MicroBlowers™ and 24 wells equipped with BaroBalls™. The system continues to perform well and remains a cost-effective treatment technology in removing low concentration VOC contaminants.

Annual average soil-gas concentrations at the highest producing wells (i.e., ASH-06 and MCSV-07) have remained low. In 2024, 10 of 26 wells at the MCB Vadose Zone Subunit had detectable sample results for either TCE or PCE (Tables 7 and 8). Only 1.064 kg (2.346 lb) of TCE and PCE combined at the MCB Vadose Zone Subunit were removed in 2024. The MAAZ monitoring wells in the area are below respective MCLs for PCE, also indicating no impact to the water table for these units. Data from the 2024 soil sampling event show that soil cleanup levels have been met at the MCB Vadose Zone Subunit for PCE and TCE.

Operation and performance monitoring (Table 11) of the MicroBlowers™ and BaroBalls™ will continue until closure approval is granted by the Core Team.

#### **4.3 Recommendations**

Overall, soil-gas vapor samples have remained at very low (near the lower laboratory detection limits) asymptotic levels indicating VOCs are no longer productively being removed and VOCs are nearly depleted as shown on Figures 6 and 8. Data from the 2024 soil sampling event show that soil cleanup levels have been met at the ABRP Trench Subunit for TCE and the MCB Vadose Zone Subunit for PCE and TCE (Tables 10 and 11). The six Project Quality Objectives and the

DQOs outlined in the SAP (SRNS 2023b) have been successfully met with no issues concerning the data.

SRS recommends the completion of the ABRP/MCB/MBP OU RA based on the acceptance of the execution of the SAP and the favorable soil data gathered from that effort. Regulatory approval of this PER will serve as approval to discontinue SVE operations at the ABRP/MCB/MBP OU. The ABRP/MCB/MBP OU path forward is recommended as follows:

1. Discontinue SVE operations at the ABRP/MCB/MBP OU since soil cleanup levels have been met at both the ABRP Trench Subunit and the MCB Vadose Zone Subunit
2. Terminate Operation and Maintenance activities for all MicroBlowers™ and BaroBalls™ associated with the ABRP/MCB/MBP OU
3. Abandon all wells (MicroBlowers™ and BaroBalls™) associated with the ABRP/MCB/MBP OU and dismantle and remove SVE equipment ~~as funding becomes available~~ in Fiscal Year 2027 pending Core Team approval.
4. Submit a Remedial Action Completion Report
5. Maintain current land use controls (LUCs) to preclude residential/unrestricted land use. No change to the ABRP/MCB/MBP OU Land Use Control Implementation Plan (LUCIP) (WSRC-RP-2006-4073, Revision 1, September 2007) is needed. The LUCs specified in the LUCIP include OU warning signs, SRS boundary controls to restrict public and trespasser access, Site Use Program to prevent onsite worker exposure to contamination left in place, and property record notices. Custodial responsibilities for maintenance and annual inspections will be maintained by the Post-Closure Maintenance Group until the concentrations of hazardous substances are at levels that allow for unrestricted use. Remedial action reviews will continue to be conducted every five years to ensure the remedy is still protective of human health and the environment.

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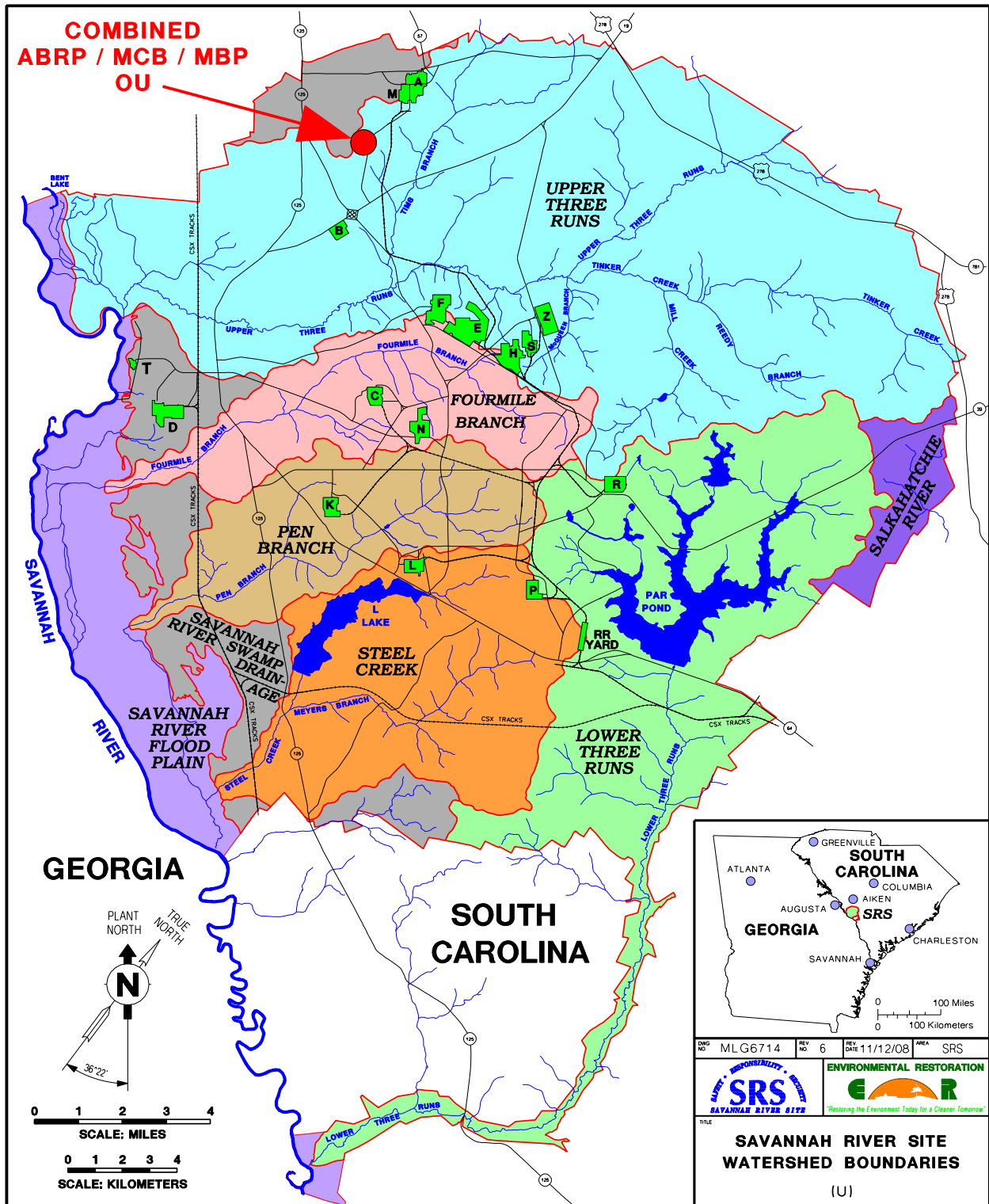


Figure 1. Location of the ABRP/MCB/MBP OU at Savannah River Site

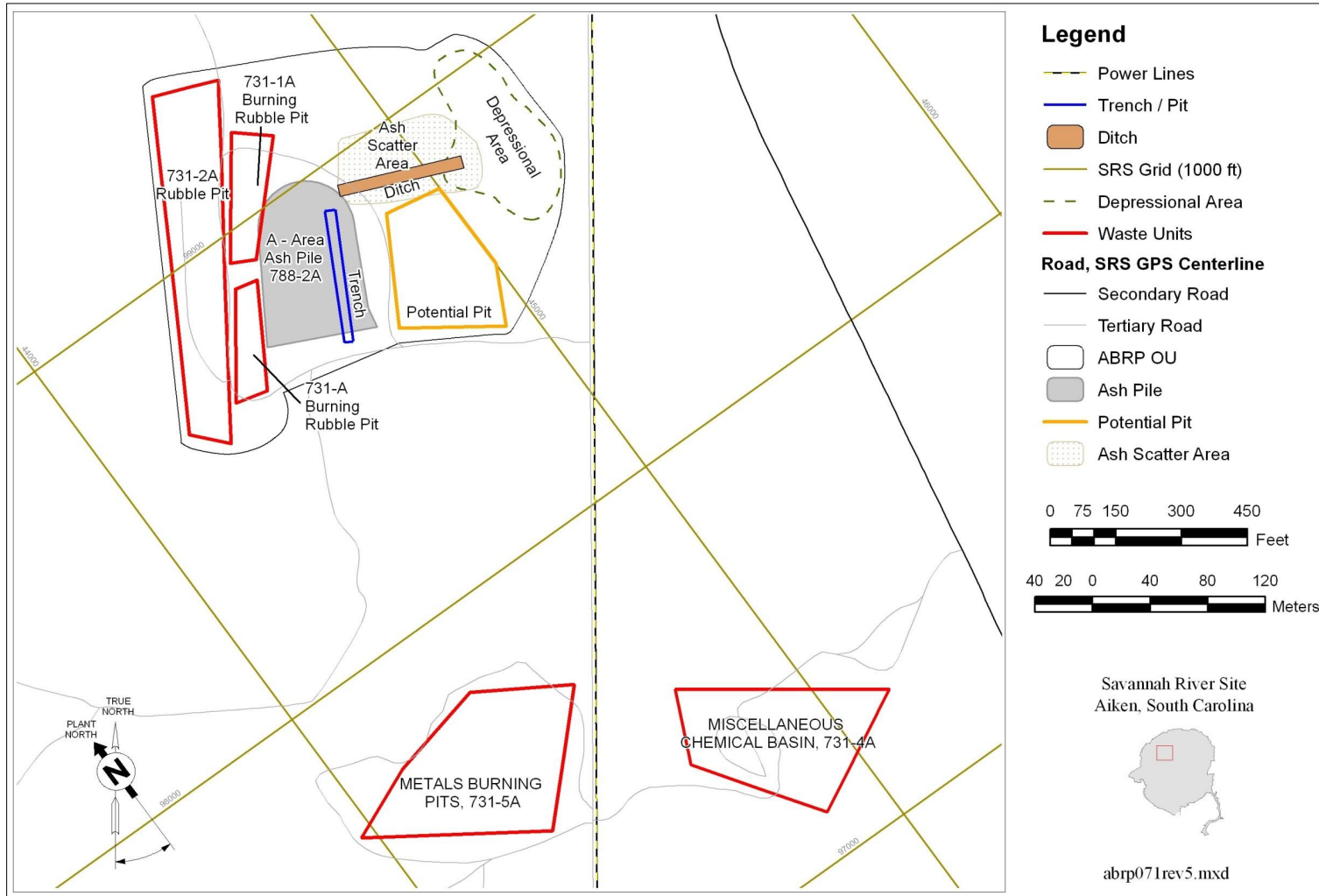


Figure 2 ABRP/MCB/MBP OU Subunits at Savannah River Site

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Figure 3. Aerial Photo of the ABRP MicroBlowers™ and BaroBalls™ at SRS (2022)

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Figure 4. Aerial Photo of the MCB MicroBlowers™ and BaroBalls™ at SRS (2022)

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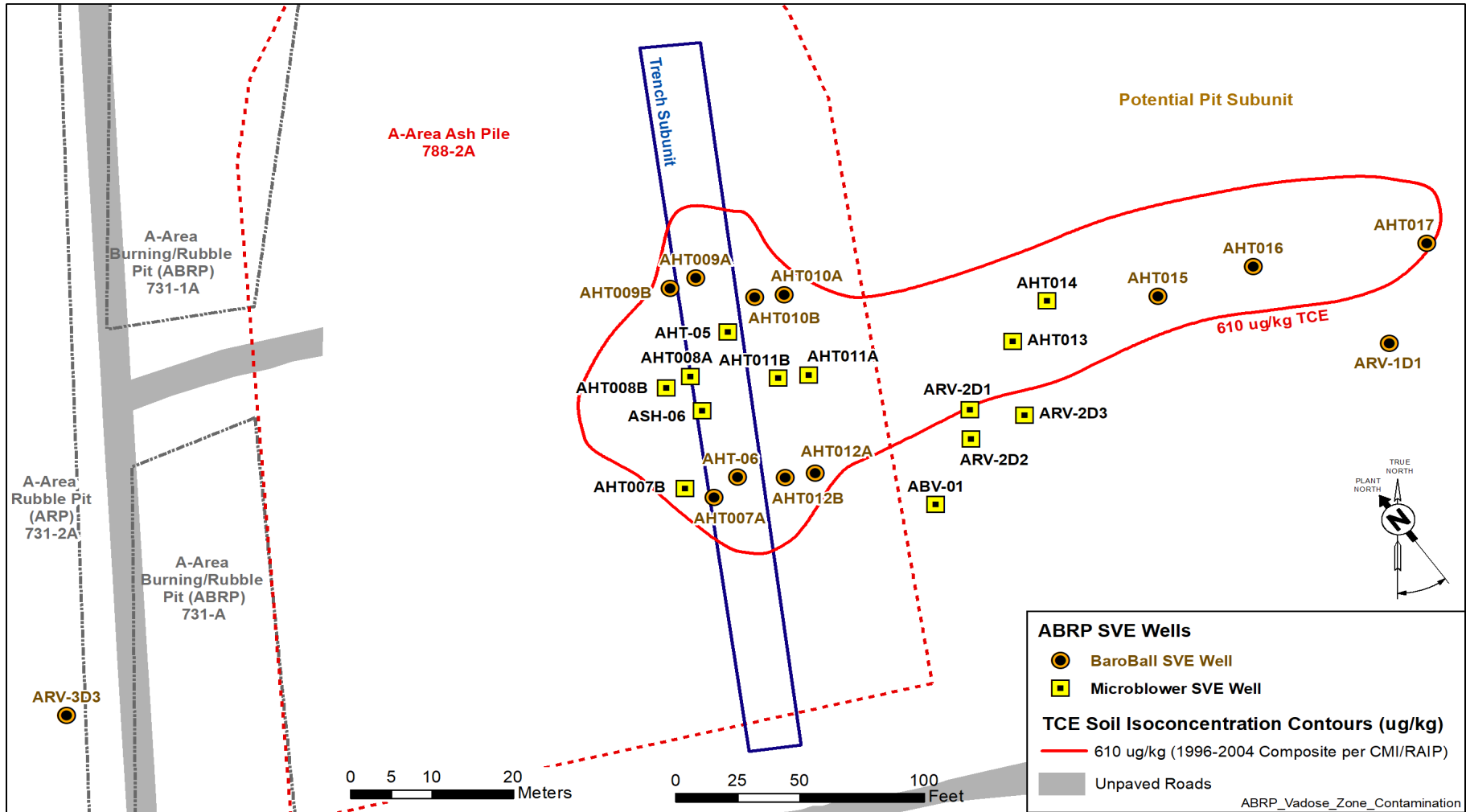
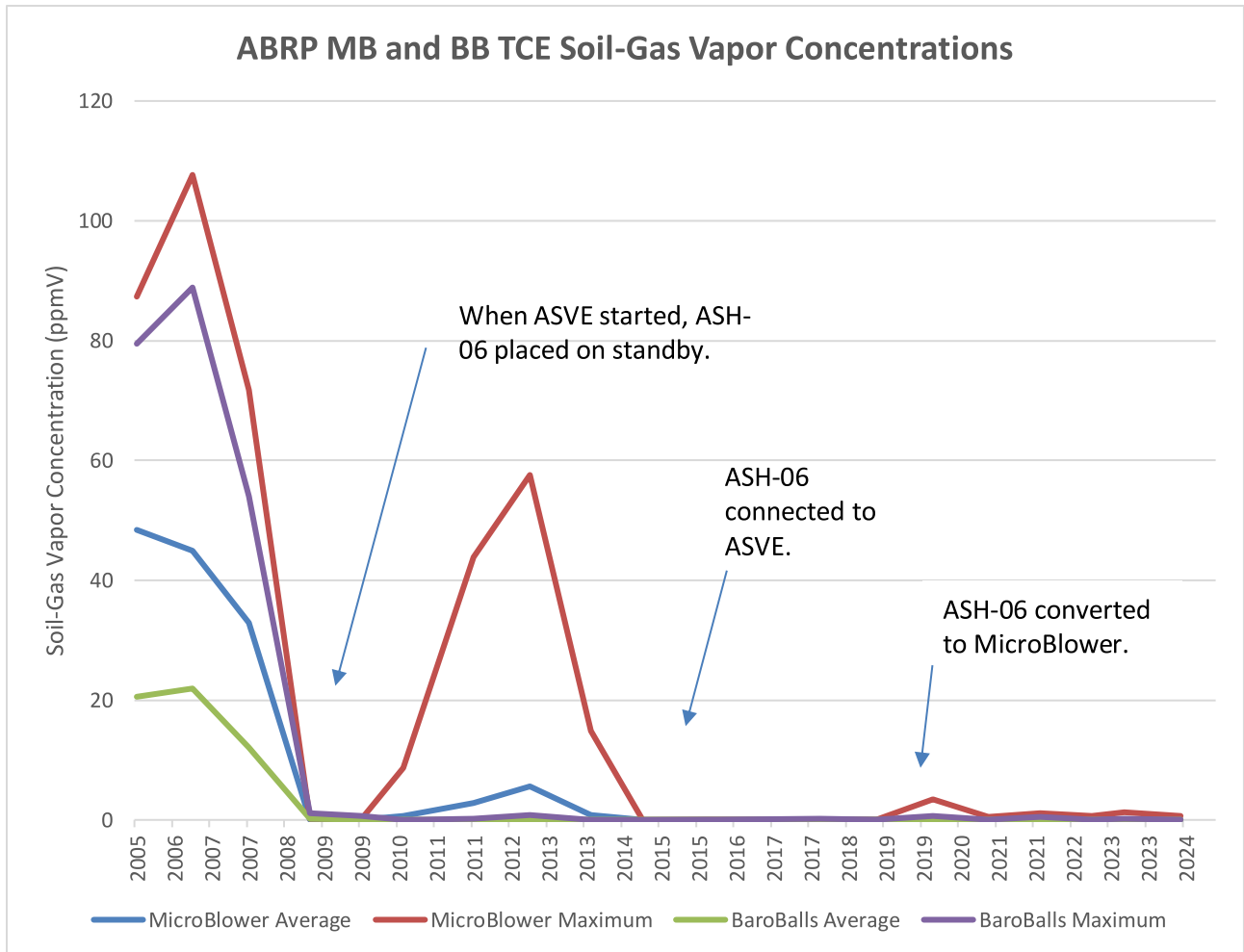


Figure 5. ABRP Vadose Zone Well Configuration and Treatment Area

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**Figure 6. ABRP Passive Soil-Gas Vapor Concentration Over Time Trend Diagram**

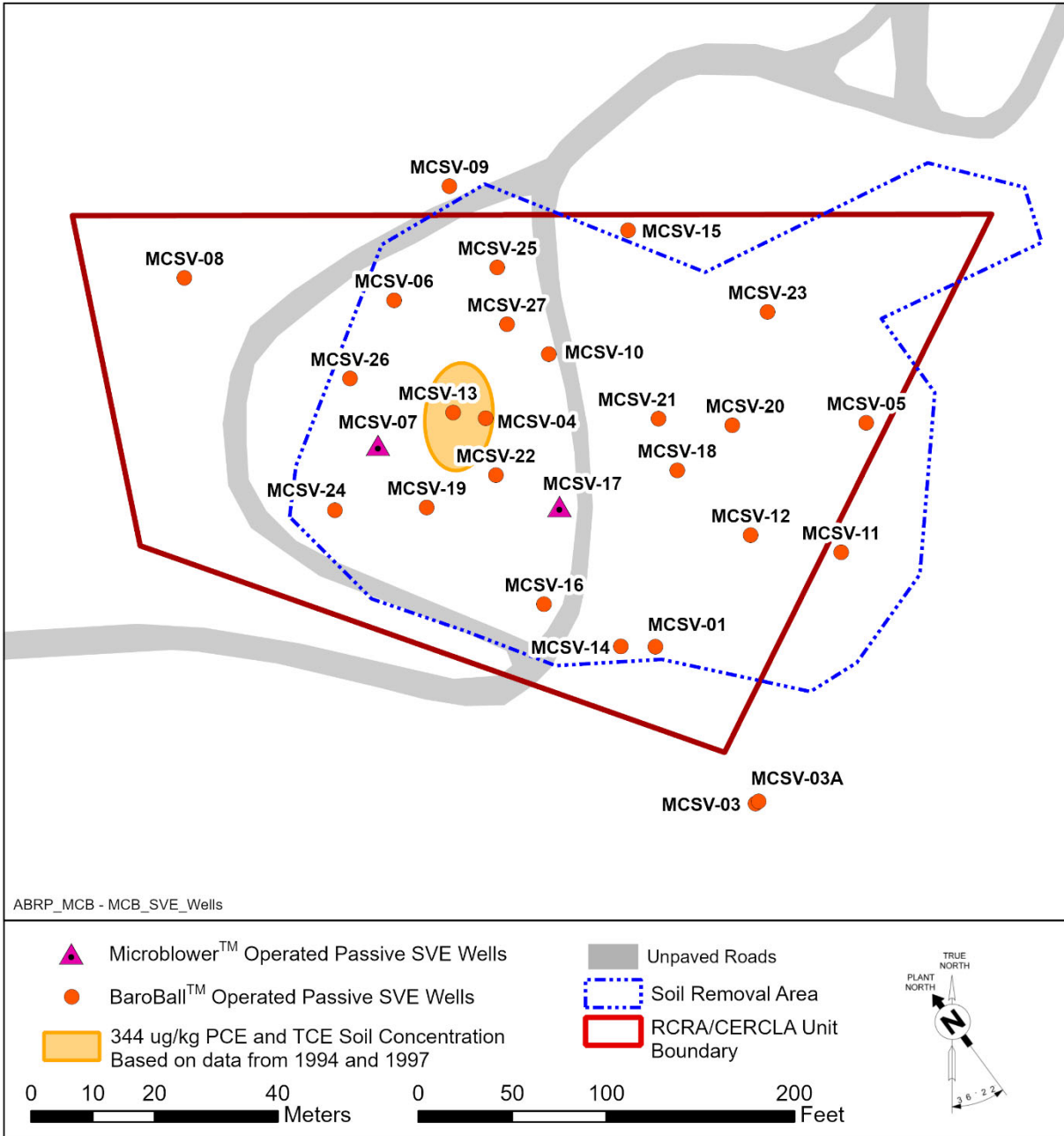


Figure 7. Miscellaneous Chemical Basin SVE Wells

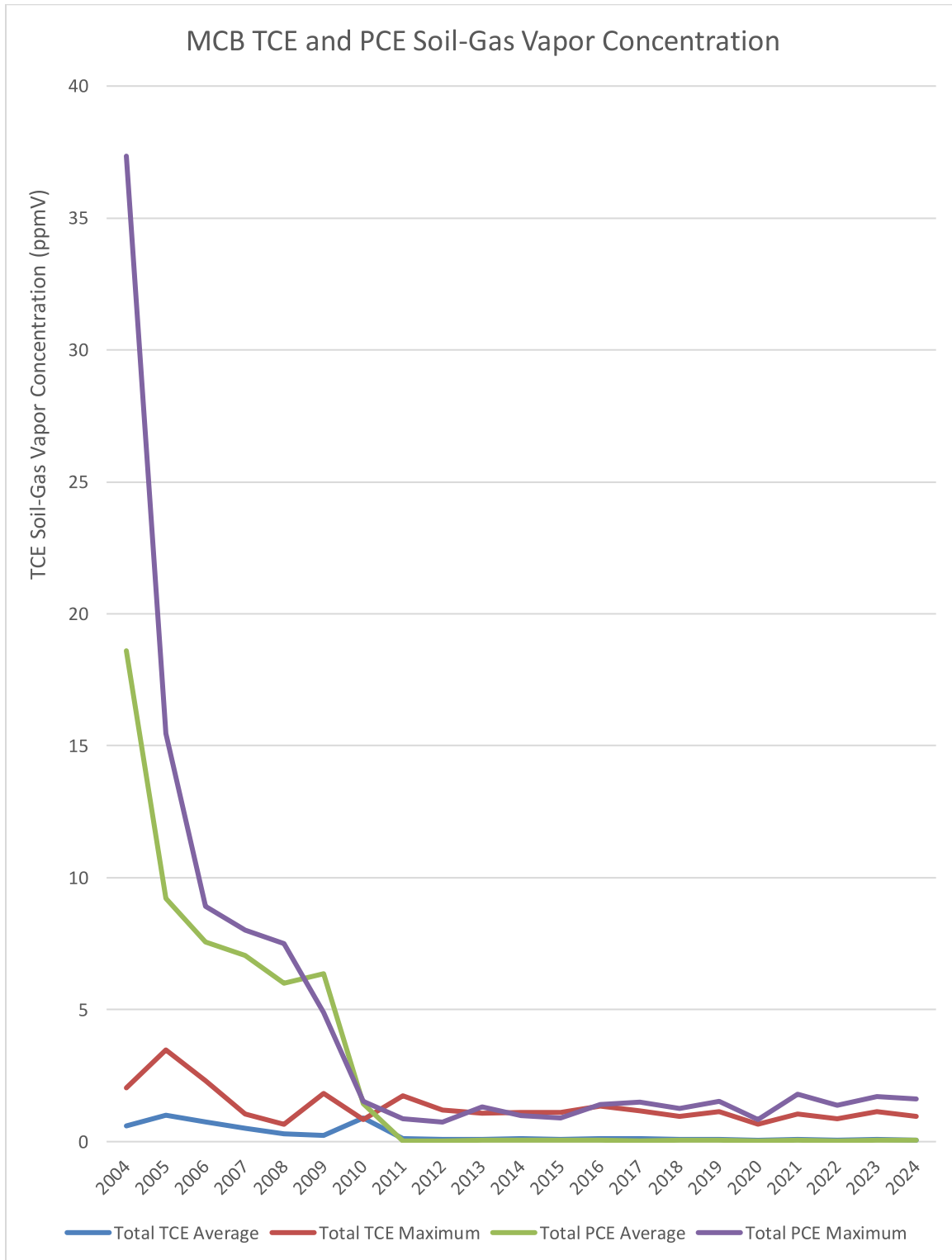


Figure 8. MCB Soil-Gas Vapor Concentration Over Time Trend Diagram

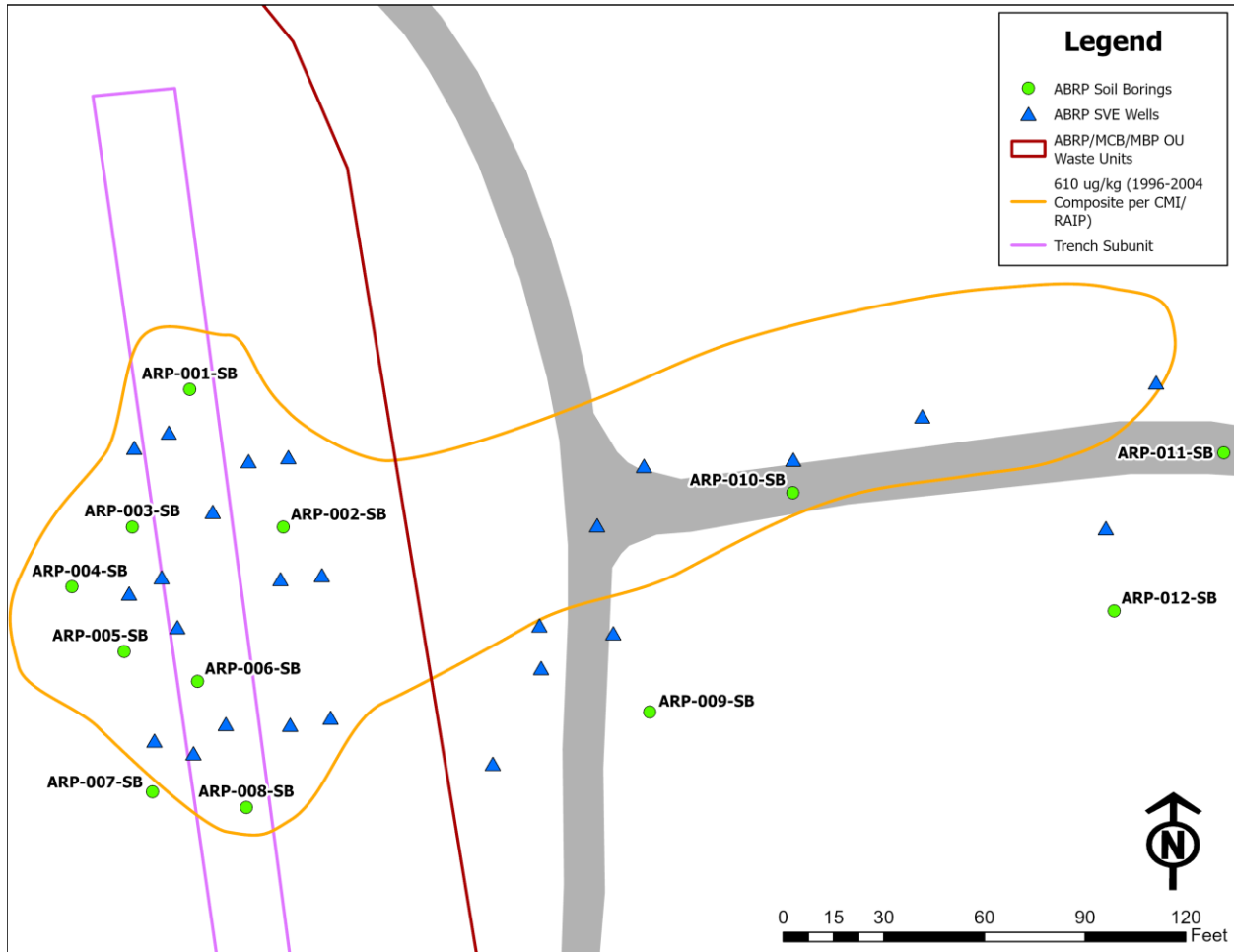


Figure 9. ABRP Trench Area Subunit Soil Sample Locations



**Figure 10. ABRP Trench Area Subunit Soil Sampling (2024)**

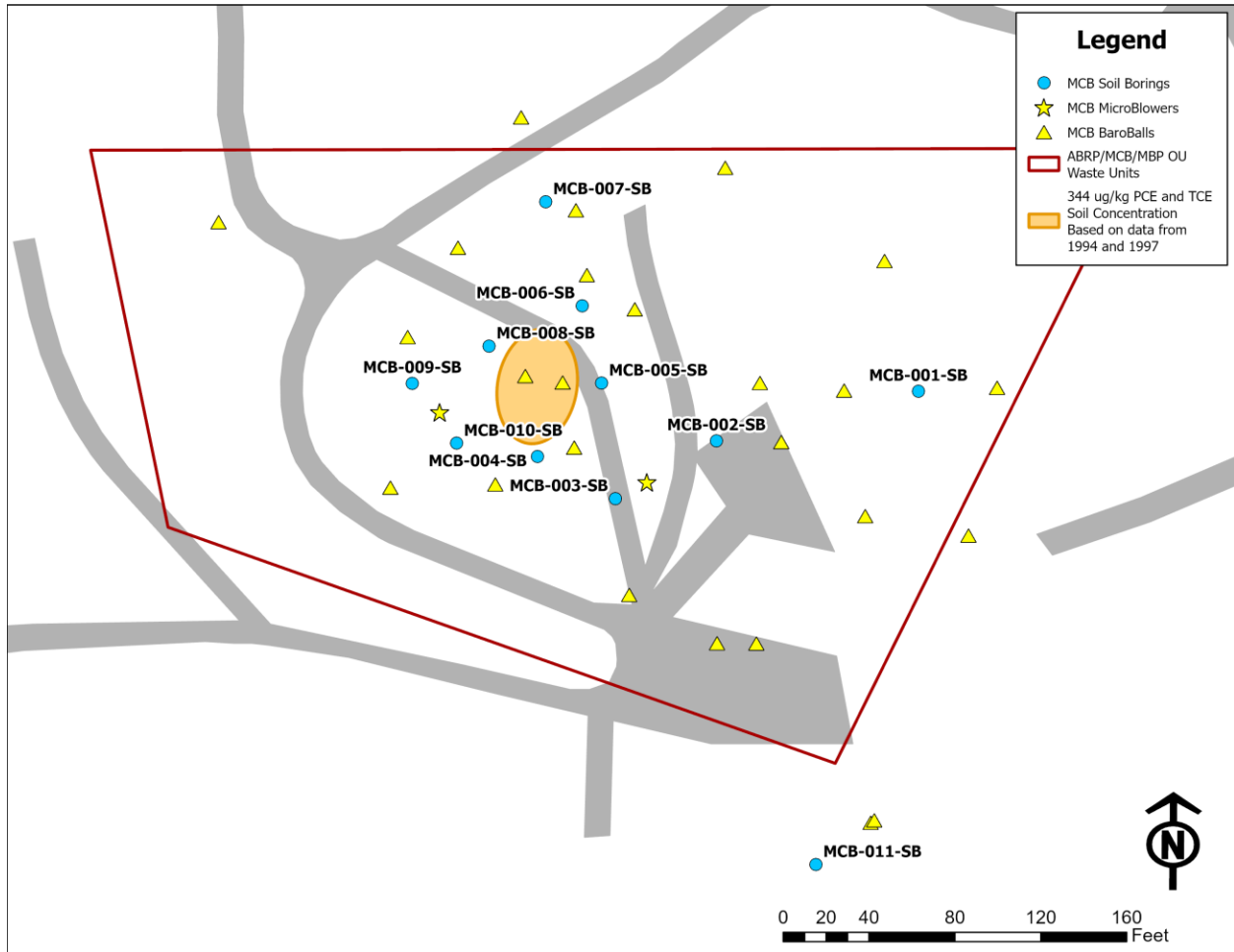


Figure 11. MCB Vadose Zone Subunit Soil Sample Locations



**Figure 12. MCB Vadose Zone Subunit Soil Sampling (2024)**

**Table 1. ABRP/MCB/MBP OU Subunit Remedial Actions and Regulatory Decision Documents**

**ABRP Area Subunits**

Subunit (Decision Document)	RA Status	RA Description
Trench (vadose zone soil) (WSRC 2007, SRNS 2009)	Final RA Ongoing	PSVE operation - 13 wells equipped with MicroBlowers™ and 13 wells equipped with BaroBalls™). PCE is below the groundwater MCL in all eight the wells. TCE is below the groundwater MCL in six wells. The two wells which exceed MCL have decreasing trends and are expected to be below MCL in the near future. The final cleanup level for TCE in the soil at the Trench subunit is 610 µg/kg.
731-2A Rubble Pit (WSRC 2000a, WSRC 2003b).	Complete	A 0.3-meter (m [1-foot {ft}]) thick soil cover for benzo(a)pyrene contamination in surface soil. The RA meets the RAOs to prevent human exposure to COCs that present a risk to future industrial workers and to prevent ecological exposure to COCs that present a hazard to ecological receptors.
788-2A Ash Pile (SRNS 2009).	Complete	A 0.6-m (2-ft) minimum thick vegetative soil cover and institutional controls (i.e., land use controls) for arsenic, selenium, potassium-40, radium-226, radium-228, thorium-228 and uranium-238 contamination in surface soil. The RA meets the RAOs to prevent human exposure to COCs that present a risk to future industrial workers and to prevent ecological exposure to COCs that present a hazard to ecological receptors.
731-A Burning/Rubble Pit (WSRC 2000a)	No RA Required	No RA Required
731-1A Burning/Rubble Pit (WSRC 2000a)		
Potential Pit (WSRC 2000a)		
Depressional Area (WSRC 2000a)		
Ash Scatter Area/Ditch (WSRC 2001)		

**Table 1. ABRP/MCB/MBP OU Subunit Remedial Actions and Regulatory Decision Documents (Continued/End)**

**MCB/MBP Subunits**

Subunit (Decision Document)	RA Status	RA Description
731-4A MCB Vadose Zone (WSRC 2007, SRNS 2009)	Ongoing	PSVE operation - 2 wells equipped with MicroBlowers™ and 24 wells equipped with BaroBalls™. The 26 PSVE wells installed as part of the interim RA (WSRC 1999, WSRC 2002a) were deemed sufficient to meet the RAOs of the final RA to prevent migration of TCE and PCE contamination in soil to groundwater at a concentration above the MCLs (5 µg/L for each). The cleanup levels for TCE and PCE in the soil at the MCB Vadose Zone subunit are 344 µg/kg for each compound.
731-4A MCB Surface Soil (WSRC 1999, WSRC 2002a).	Complete	Excavation and off-SRS disposal of elevated levels of polychlorinated biphenyls MCB soils.
731-5A MBP Surface Soil (WSRC 1999, WSRC 2002a).	Complete	Excavation and off-SRS disposal of elevated levels of aluminum in MBP surface soils.

**Table 2. Historical ABRP SVE Operating Configurations**

<b>Interim Remedial Action (WSRC 2000a)</b>		
<b>Originally, 9 Wells Fitted with BaroBalls™</b>		
<b>ABV-01, AHT-05, AHT-06, ARV-1D1, ARV-2D1, -2D2, -2D3, -3D3, ASH-06</b>		
<b>Start Date</b>	<b>End Date</b>	<b>Technology</b>
10/5/2001	12/3/2001	PSVE w/ BaroBalls™
12/3/2001	12/17/2001	4 wells (ABV-01, AHT-05, AHT-06, ASH-06) connected to ASVE
12/17/2001	9/1/2002	All 9 wells PSVE w/ BaroBalls™
<b>Explanation of Significant Differences (WSRC 2001)</b>		
<b>Operate 4 SVE Wells in the Trench/Pit Area</b>		
<b>(ABV-01, AHT-05, AHT-06, ASH-06)</b>		
<b>Start Date</b>	<b>End Date</b>	<b>Technology</b>
9/1/2002	7/15/2003	4 wells (ABV-01, AHT-05, AHT-06, ASH-06) converted to MicroBlowers™
7/15/2003	9/16/2003	4 wells (ABV-01, AHT-05, AHT-06, ASH-06) connected to ASVE
9/16/2003	12/18/2003	4 wells (ABV-01, AHT-05, AHT-06, ASH-06) capped for rebound test
12/18/2003	Current	3 wells (ABV-01, AHT-05, ASH-06) converted to MicroBlowers™
12/18/2003	11/28/2007	1 well (AHT-06) converted to BaroBalls™
11/28/2007	8/7/2008	Operation Suspended
<b>Final Remedial Action (WSRC 2007)</b>		
<b>17 Wells Added and Connected to ASVE</b>		
<b>AHT-07A, -07B, -08A, -08B, -09A, -09B, -10A, -10B, -11A, -11B, -12A, -12B, -13, -14, -15, -16, -17</b>		
<b>Start Date</b>	<b>End Date</b>	<b>Technology</b>
06/23/2008	12/13/2018	ASVE
8/7/2008	Current	2 wells (ARV-2D1, -2D3) converted to MicroBlowers™, Operations Intermittent
10/01/2009	Current	1 well (ARV-2D2) converted to MicroBlowers™, Operations Intermittent
11/17/2015	Current	10 wells (AHT-07A, -09A, -09B, -10A, -10B, -12A, -12B, -15, -16, -17) converted to BaroBalls™
12/7/2015	Current	5 wells (AHT-07B, -08A, -11B, 13, -14) converted to MicroBlowers™
4/4/2013	12/13/2018	1 well (ASH-06) added to ASVE
	12/13/2018	3 wells (AHT-08B, -11A, ASH-06) ASVE shutdown
10/17/2018	Current	3 wells (AHT-08B, -11A, ASH-06) converted to MicroBlowers™
<b>Current Configuration - 13 MicroBlowers™, 13 BaroBalls™</b>		

Table 3. ABRP Well Construction Details

Well ID	East Coordinate (UTM)	North Coordinate (UTM)	Ground Surface	Screen Top	Screen Bottom	Screen Length
			(ft amsl)	(ft bgs)		(ft)
<i>Installed for Final RA in 2008</i>						
AHT-07A	431,024.385	3,686,483.710	357.04	82.2	102.2	20
AHT-07B	431,020.836	3,686,484.858	357.43	45.7	70.7	25
AHT-08A	431,021.492	3,686,499.696	357.42	82.8	102.8	20
AHT-08B	431,018.533	3,686,498.220	357.69	45.4	70.4	25
AHT-09A	431,022.143	3,686,512.833	357.29	82.6	102.6	20
AHT-09B	431,019.003	3,686,511.452	357.52	46.0	71.0	25
AHT-10A	431,033.003	3,686,510.600	355.79	81.0	121.0	40
AHT10B	431,029.389	3,686,510.231	356.16	30.4	70.4	40
AHT-11A	431,036.050	3,686,499.890	355.39	80.4	120.4	40
AHT-11B	431,032.284	3,686,499.523	356.04	30.6	70.6	40
AHT-12A	431,036.846	3,686,486.939	355.81	80.4	120.4	40
AHT-12B	431,033.168	3,686,486.297	356.06	30.4	70.4	40
AHT-13	431,061.061	3,686,504.415	340.63	79.9	109.9	30
AHT-14	431,065.313	3,686,509.809	340.19	80.1	115.1	35
AHT-15	431,078.882	3,686,510.377	338.72	74.7	119.7	45
AHT-16	431,090.604	3,686,514.312	337.64	80.0	120.0	40
AHT-17	431,111.851	3,686,517.379	335.95	95.0	120.0	25
<i>Installed for Interim RA in 2003</i>						
ABV-01	431,051.581	3,686,482.763	340.7	73	123	50
ASH-06	431,022.923	3,686,495.167	360.7	40	140	100
AHT-05 – upper screen	431,026.137	3,686,505.643	359.3	50	70	20
– middle screen				90	100	10
– lower screen				120	140	20
AHT-06 – upper screen	431,027.323	3,686,486.373	361.2	45	80	35
– middle screen				95	105	10
– lower screen				120	125	5
<i>Installed for Sparging System in 2001</i>						
ARV-1D1	431,107.28	3,686,504.15	337.99	97.05	117.12	20.07
ARV-1D2*	431,106.85	3,686,499.89	337.96	96.60	116.50	19.90
ARV-1D3*	431,112.66	3,686,503.08	337.44	93.70	133.80	40.10
ARV-2D1	431,055.82	3,686,495.32	340.79	97.00	107.12	10.12
ARV-2D2	431,055.97	3,686,491.45	340.66	97.00	117.08	20.08
ARV-2D3	431,062.53	3,686,494.61	340.25	106.96	117.00	10.04
ARV-3D1*	430,948.38	3,686,457.29	350.44	100.88	121.00	20.12
ARV-3D2*	430,947.90	3,686,453.26	350.49	101.00	111.11	10.11
ARV-3D3	430,944.96	3,686,454.78	350.72	105.00	115.06	10.06

Table 3. ABRP Well Construction Details (Continued/End)

Well ID	East Coordinate (UTM)	North Coordinate (UTM)	Ground Surface	Screen Top	Screen Bottom	Screen Length
			(ft amsl)	(ft bgs)		(ft)
<i>Installed for Sparging System in 2001</i>						
ARV-4D1*	430,946.09	3,686,501.62	350.00	106.75	126.87	20.12
ARV-4D2*	430,946.22	3,686,497.46	349.94	115.24	125.29	10.05
ARV-4D3*	430,943.01	3,686,498.91	350.28	115.00	125.04	10.04
ARV-5D1*	430,943.05	3,686,557.91	349.35	110.00	130.08	20.08
ARV-5D2*	430,944.24	3,686,553.81	349.18	110.00	130.12	20.12
ARV-5D3*	430,940.69	3,686,554.81	349.61	113.50	143.68	30.18
ARV-6D1*	430,946.95	3,686,483.83	350.18	110.00	130.14	20.14
ARV-6D2*	430,946.75	3,686,479.48	350.25	110.25	130.39	20.14
ARV-6D3*	430,943.31	3,686,482.38	350.33	106.00	126.18	20.18
ARV-7D1*	430,944.63	3,686,533.01	349.62	107.00	117.12	10.12
ARV-7D2*	430,943.83	3,686,528.32	349.91	115.45	125.60	10.15
ARV-7D3*	430,941.18	3,686,530.50	350.07	115.00	125.05	10.05
ARV-8D1*	430,903.32	3,686,462.86	350.65	108.00	128.10	20.10
ARV-8D2*	430,902.72	3,686,461.02	350.66	112.00	132.13	20.13
ARV-8D3*	430,896.44	3,686,463.66	350.35	114.50	144.70	30.20
ARV-9D1*	430,901.07	3,686,492.47	349.71	112.00	132.12	20.12
ARV-9D2*	430,901.09	3,686,496.75	349.45	112.00	132.14	20.14
ARV-9D3*	430,893.65	3,686,493.31	350.29	112.00	132.12	20.12
ARV-10D1*	430,896.57	3,686,530.10	348.64	107.00	127.12	20.12
ARV-10D2*	430,896.27	3,686,534.61	348.64	107.00	127.12	20.12
ARV-10D3*	430,889.35	3,686,530.87	349.54	106.59	126.71	20.12

\*- No longer in use and will be abandoned.

amsl – above sea level

bgs – below ground surface

ft – feet

ABV – A-Area Burning/Rubble Pit Vadose Zone

AHT – A-Area Hidden Trench

ARV – A-Area Recovery Vapor

UTM – Universal Transverse Mercator

**Table 4. ABRP MicroBlowers™ Well Exhaust Gas TCE Results**

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)					
	ABV-01	AHT-05	ARV-2D1	ARV-2D2	ARV-2D3	ASH-06
Well History Notes	1	1	3	4	3	1, 5, 7
10/17/2005	30.000	27.900	*	*	*	87.330
1/4/2006	29.987	29.929	*	*	*	97.494
4/17/2006	29.974	31.957	*	*	*	107.659
8/28/2006	27.702	32.292	*	*	*	58.957
10/12/2006	26.104	30.227	*	*	*	36.869
1/17/2007	27.302	31.093	*	*	*	46.688
4/19/2007	28.500	34.503	*	*	*	71.700
7/18/2007	25.015	15.046	*	*	*	39.847
10/23/2007	27.683	21.676	*	*	*	26.609
9/23/2008	0.057	0.023	0.068	*	0.134	0.016
11/17/2008	0.007	0.031	0.021	*	0.076	ND
1/27/2009	0.045	0.226	0.014	*	ND	ND
4/21/2009	ND	ND	ND	*	ND	ND
7/16/2009	ND	0.119	ND	*	ND	ND
10/26/2009	ND	ND	ND	ND	ND	ND
1/19/2010	ND	ND	ND	ND	ND	ND
7/19/2010	ND	ND	ND	ND	ND	8.640
1/18/2011	ND	ND	ND	ND	ND	ND
4/18/2011	ND	ND	ND	ND	ND	10.218
7/12/2011	ND	ND	ND	ND	ND	43.769
10/19/2011	ND	ND	ND	ND	ND	14.838
1/24/2012	ND	ND	ND	ND	ND	9.195
4/23/2012	ND	ND	ND	ND	ND	38.244
7/16/2012	ND	ND	ND	ND	ND	57.557
10/16/2012	ND	ND	ND	ND	ND	27.504
1/14/2013	ND	ND	ND	ND	ND	14.900
4/15/2013	ND	ND	ND	ND	ND	3.290
7/17/2013	ND	ND	ND	ND	ND	**
11/19/2013	ND	ND	ND	ND	ND	**
2/19/2014	ND	ND	ND	ND	ND	**
4/22/2014	ND	ND	ND	ND	ND	**
8/12/2014	ND	ND	ND	ND	ND	**
10/14/2014	ND	ND	ND	ND	ND	**
2/9/2015	ND	ND	ND	ND	ND	**
4/28/2015	ND	ND	ND	ND	ND	**
7/21/2015	ND	0.104	ND	ND	ND	**
12/8/2015	ND	ND	ND	ND	ND	**

Table 4. ABRP MicroBlowers™ Well Exhaust Gas TCE Results (Continued)

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)					
	ABV-01	AHT-05	ARV-2D1	ARV-2D2	ARV-2D3	ASH-06
Well History Notes	1	1	3	4	3	1, 5, 7
2/8/2016	ND	ND	ND	ND	0.036	**
5/17/2016	ND	ND	ND	0.049	ND	**
9/13/2016	ND	ND	ND	ND	ND	**
12/12/2016	ND	ND	ND	0.068	ND	**
2/13/2017	0.036	ND	ND	0.034	ND	**
5/16/2017	ND	0.029	ND	ND	ND	**
9/14/2017	ND	ND	ND	ND	ND	**
12/13/2017	ND	ND	ND	0.033	ND	**
2/12/2018	ND	ND	ND	ND	0.033	**
5/14/2018	0.033	0.089	0.046	0.078	0.295	**
9/18/2018	ND	0.078	ND	0.045	0.208	3.383
12/17/2018	0.028	ND	ND	0.042	0.038	0.429
2/11/2019	ND	ND	ND	ND	ND	0.305
5/13/2019	ND	ND	ND	ND	ND	0.486
9/23/2019	0.036	ND	ND	ND	ND	ND
12/10/2019	ND	ND	ND	ND	ND	0.520
2/10/2020	ND	ND	ND	ND	ND	0.501
5/11/2020	ND	ND	ND	ND	ND	0.433
9/21/2020	ND	ND	ND	ND	ND	0.954
12/14/2020	ND	ND	ND	ND	ND	1.140
2/22/2021	ND	0.015	ND	ND	ND	0.841
5/10/2021	ND	ND	ND	ND	ND	0.403
8/20/2021	ND	ND	ND	ND	ND	0.036
11/17/2021	ND	ND	ND	ND	ND	0.020
2/25/2022	ND	ND	ND	ND	ND	0.645
6/15/2022	ND	ND	ND	ND	ND	0.357
9/7/2022	ND	ND	ND	0.016	ND	0.824
10/12/2022	ND	ND	ND	ND	ND	1.200
2/20/2023	ND	ND	ND	ND	ND	0.947
5/17/2023	ND	ND	ND	ND	ND	0.258
8/22/2023	ND	ND	ND	ND	ND	0.504
11/7/2023	ND	ND	ND	ND	ND	0.626
1/29/2024	ND	ND	ND	ND	ND	0.725
5/14/2024	ND	ND	ND	ND	ND	0.613
8/14/2024	ND	ND	ND	ND	ND	0.462
11/11/2024	ND	ND	ND	ND	ND	0.421

**Table 4. ABRP MicroBlowers™ Well Exhaust Gas TCE Results (Continued/End)**

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)						
	AHT007B	AHT008A	AHT008B	AHT011A	AHT011B	AHT013	AHT014
Well History Notes	2, 6	2, 6	2, 7	2, 7	2, 6	2, 6	2, 6
5/17/2016	ND	ND	**	**	ND	ND	ND
9/13/2016	ND	0.068	**	**	ND	ND	ND
12/12/2016	ND	ND	**	**	ND	ND	ND
2/13/2017	ND	ND	**	**	ND	ND	ND
5/16/2017	ND	ND	**	**	ND	ND	ND
9/14/2017	ND	ND	**	**	ND	ND	ND
12/13/2017	ND	ND	**	**	ND	ND	ND
2/12/2018	0.082	ND	**	**	0.038	ND	ND
5/14/2018	0.156	ND	**	**	0.044	0.036	ND
9/18/2018	0.139	ND	0.027	ND	ND	0.071	ND
12/17/2018	0.171	ND	0.273	ND	ND	ND	ND
2/11/2019	0.109	ND	0.194	ND	ND	0.033	ND
5/13/2019	0.109	ND	0.139	ND	ND	ND	ND
9/23/2019	0.106	ND	0.161	ND	ND	ND	ND
12/10/2019	ND	ND	ND	ND	ND	ND	ND
2/10/2020	0.079	ND	0.176	ND	0.045	ND	ND
5/11/2020	0.070	ND	0.062	ND	ND	ND	ND
9/21/2020	0.035	ND	ND	ND	ND	ND	ND
12/14/2020	ND	ND	0.304	ND	ND	ND	ND
2/22/2021	0.103	0.353	ND	ND	ND	ND	ND
5/10/2021	0.078	ND	ND	ND	ND	ND	ND
8/20/2021	0.051	ND	0.043	ND	ND	ND	ND
11/17/2021	0.077	ND	0.304	ND	ND	ND	ND
2/25/2022	0.074	ND	0.263	ND	ND	ND	ND
6/15/2022	0.081	ND	0.050	ND	ND	ND	ND
9/7/2022	0.036	ND	0.114	0.049	0.016	ND	ND
10/12/2022	0.117	ND	0.339	ND	ND	ND	ND
2/20/2023	0.121	ND	0.079	ND	ND	ND	ND
5/17/2023	ND	ND	ND	ND	ND	ND	ND
8/22/2023	0.062	ND	ND	ND	ND	ND	ND
11/7/2023	0.131	ND	0.126	ND	ND	ND	ND
1/29/2024	0.132	ND	0.226	ND	ND	ND	ND
5/14/2024	0.087	ND	0.108	ND	ND	ND	ND
8/14/2024	0.067	ND	0.325	ND	ND	ND	ND
11/11/2024	0.060	ND	0.096	ND	ND	ND	ND

Well History Notes:

- <sup>1</sup> ABV-01, AHT-05 and ASH-06 were converted to a MicroBlowers™ SVE well on 9/1/2002
- <sup>2</sup> AHT-07B, -08A, -08B, -11A, -11B, -13, -14 were installed and connected to ASVE in April 2008.
- <sup>3</sup> ARV-2D1 and ARV-2D3 was converted to a MicroBlowers™ SVE well in 8/7/2008
- <sup>4</sup> ARV-2D2 was converted to a MicroBlowers™ SVE well in Q3, 2009
- <sup>5</sup> ASH-06 was converted to ASVE in April 2013
- <sup>6</sup> AHT-07B, -08A, -11B, -13, -14 were converted to a MicroBlowers™ SVE well on 12/7/15
- <sup>7</sup> AHT-08B, -11A and ASH-06 were converted to a MicroBlowers™ SVE well on 10/17/18

\*- Connected to BaroBall.

\*\* - Connected to ASVE.

\* -Connected to MicroBlower™.

Acronyms:

- ABV – A-Area Burning/Rubble Pit Vadose Zone
- AHT – A-Area Hidden Trench
- ARV – A-Area Recovery Vapor
- ASH – A-Area Ash Pile
- ND – non-detect
- ppmV – parts per million by volume

**Table 5. ABRP PSVE BaroBalls™ Well Exhaust Gas TCE Results**

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)						
	AHT-06	ARV-1D1	ARV-2D2	ARV-3D3	AHT007A	AHT009A	AHT009B
Well History Notes	2	1	1, 3	1	5, 6	5, 6	5, 6
10/17/2005	ND	1.550	79.500	1.050			
1/4/2006	ND	1.445	75.073	1.689			
4/17/2006	14.308	1.590	88.868	2.565			
8/28/2006	44.583	1.358	56.672	3.125			
10/12/2006	5.310	0.955	51.060	2.248			
1/17/2007	2.606	1.130	54.020	1.470			
4/19/2007	ND	0.623	45.571	0.995			
7/18/2007	1.079	0.620	43.143	0.553			
10/23/2007	0.057	0.703	40.715	0.876			
9/23/2008	1.079	0.020	0.132	ND			
11/17/2008	0.057	0.018	0.128	ND			
1/27/2009	0.097	0.006	0.659	ND			
4/21/2009	ND	ND	ND	ND			
7/16/2009	ND	ND	ND	ND			
10/26/2009	ND	ND	*	ND			
1/19/2010	ND	ND	*	ND			
7/19/2010	ND	ND	*	ND			
1/18/2011	ND	ND	*	ND			
4/18/2011	0.269	ND	*	ND			
7/12/2011	ND	ND	*	ND			
10/19/2011	ND	ND	*	ND			
1/24/2012	0.745	ND	*	ND			
4/23/2012	0.140	ND	*	ND			
7/16/2012	ND	ND	*	ND			
10/16/2012	0.202	ND	*	ND			
1/14/2013	ND	ND	*	ND			
4/15/2013	ND	ND	*	ND			
7/17/2013	ND	ND	*	ND			
11/19/2013	ND	ND	*	ND			
2/19/2014	ND	ND	*	ND			
4/22/2014	ND	ND	*	ND			
8/12/2014	ND	ND	*	ND			
10/14/2014	ND	ND	*	ND			
2/9/2015	ND	ND	*	ND			
4/28/2015	ND	ND	*	ND			
7/21/2015	ND	ND	*	ND			
12/8/2015	ND	ND	*	ND			

Table 5. ABRP PSVE BaroBalls™ Well Exhaust Gas TCE Results (Continued)

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)						
	AHT-06	ARV-1D1	ARV-2D2	ARV-3D3	AHT007A	AHT009A	AHT009B
Well History Notes	2	1	1, 3	1	5, 6	5, 6	5, 6
2/8/2016	ND	ND	*	ND			
5/17/2016	ND	ND	*	ND	ND	ND	ND
9/13/2016	0.091	ND	*	ND	ND	ND	ND
12/12/2016	0.045	ND	*	ND	0.042	ND	ND
2/13/2017	0.132	ND	*	ND	ND	ND	ND
5/16/2017	0.041	ND	*	ND	ND	ND	ND
9/14/2017	ND	ND	*	ND	ND	ND	ND
12/13/2017	ND	ND	*	ND	ND	ND	ND
2/12/2018	ND	ND	*	ND	ND	ND	ND
5/14/2018	ND	ND	*	ND	ND	ND	ND
9/18/2018	ND	ND	*	ND	ND	ND	ND
12/17/2018	ND	ND	*	ND	ND	ND	ND
2/11/2019	ND	ND	*	ND	0.135	ND	0.036
2/11/2019	ND	ND	*	ND	ND	ND	0.037
5/13/2019	0.589	ND	*	ND	ND	ND	ND
9/23/2019	ND	ND	*	ND	ND	ND	ND
12/10/2019	ND	ND	*	ND	ND	ND	ND
5/11/2020	ND	ND	*	ND	ND	ND	ND
9/21/2020	ND	ND	*	ND	0.075	ND	ND
12/14/2020	ND	ND	*	ND	0.040	ND	ND
2/22/2021	ND	ND	*	ND	ND	ND	0.018
5/10/2021	NA	NA	*	NA	NA	NA	NA
8/20/2021	ND	ND	*	ND	0.018	ND	ND
11/17/2021	0.581	ND	*	ND	0.033	ND	0.014
2/25/2022	ND	ND	*	ND	ND	ND	0.015
6/15/2022	ND	ND	*	ND	ND	ND	ND
9/7/2022	ND	ND	*	ND	0.037	ND	ND
10/12/2022	ND	ND	*	ND	0.016	ND	0.012
2/20/2023	ND	ND	*	ND	0.032	ND	0.011
5/17/2023	ND	ND	*	ND	0.027	ND	0.010
8/22/2023	ND	ND	*	ND	0.013	ND	0.015
11/7/2023	ND	ND	*	ND	0.131	ND	0.013
1/29/2024	ND	ND	*	ND	0.022	ND	0.014
5/14/2024	ND	ND	*	ND	ND	ND	0.012
8/14/2024	ND	ND	*	ND	0.021	ND	0.013
11/11/2024	ND	ND	*	ND	0.022	ND	ND

**Table 5. ABRP PSVE BaroBalls™ Well Exhaust Gas TCE Results (Continued/End)**

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)						
	AHT010A	AHT010B	AHT012A	AHT012B	AHT015	AHT016	AHT017
Well History Notes	5, 6	5, 6	5, 6	5, 6	5, 6	5, 6	5, 6
5/17/2016	ND	ND	ND	ND	ND	ND	ND
9/13/2016	ND	ND	ND	ND	ND	ND	ND
12/12/2016	0.032	ND	ND	ND	ND	ND	ND
2/13/2017	ND	ND	ND	ND	ND	ND	ND
5/16/2017	ND	ND	ND	ND	ND	ND	ND
9/14/2017	ND	ND	ND	ND	ND	ND	ND
12/13/2017	ND	ND	ND	ND	ND	ND	ND
2/12/2018	ND	0.032	ND	ND	ND	ND	ND
5/14/2018	ND	ND	ND	ND	ND	ND	ND
9/18/2018	ND	ND	ND	ND	ND	ND	ND
12/17/2018	ND	ND	ND	ND	ND	ND	ND
2/11/2019	0.039	0.067	ND	ND	ND	ND	ND
2/11/2019	ND	ND	ND	ND	ND	ND	ND
5/13/2019	ND	ND	ND	ND	ND	ND	ND
9/23/2019	ND	ND	ND	ND	ND	ND	ND
12/10/2019	ND	ND	ND	ND	ND	ND	ND
5/11/2020	ND	ND	ND	ND	ND	ND	ND
9/21/2020	ND	0.016	ND	ND	ND	ND	ND
12/14/2020	ND	0.023	ND	ND	ND	ND	ND
2/22/2021	0.020	0.017	ND	ND	ND	ND	ND
5/10/2021	NA	NA	NA	NA	NA	NA	NA
8/20/2021	ND	0.013	ND	ND	ND	ND	ND
11/17/2021	0.010	0.021	ND	ND	ND	ND	ND
2/25/2022	ND	0.025	ND	ND	ND	ND	ND
6/15/2022	ND	0.015	ND	ND	ND	ND	ND
9/7/2022	ND	0.015	ND	ND	ND	ND	ND
10/12/2022	ND	0.025	ND	ND	ND	ND	ND
2/20/2023	ND	0.025	ND	ND	ND	ND	ND
5/17/2023	ND	0.028	ND	ND	ND	ND	ND
8/22/2023	ND	0.029	ND	ND	ND	ND	ND
11/7/2023	ND	0.024	ND	ND	ND	ND	ND
1/29/2024	ND	0.022	ND	ND	ND	ND	ND
5/14/2024	ND	ND	ND	ND	ND	ND	ND
8/14/2024	ND	0.016	ND	ND	ND	ND	ND
11/11/2024	ND	0.018	ND	ND	ND	ND	ND

**Well History Notes:**

- <sup>1</sup> ARV-1D1, -2D2, -3D3 were converted to a BaroBall™ SVE well in 10/5/2001.
- <sup>2</sup> AHT-06, ASH-06 was converted to a BaroBall™ SVE well in 12/18/2003.
- <sup>3</sup> ARV-2D2 was converted to a MicroBlower™ SVE well in Q3, 2009
- <sup>4</sup> ASH-06 was converted to a ASVE well on 4/4/13
- <sup>5</sup> AHT-07A, -09A, -09B, -10A, -10B, -12A, -12B, -15, -16, -17 were installed and connected to ASVE in April 2008.
- <sup>6</sup> AHT-07A, -09A, -09B, -10A, -10B, -12A, -12B, -15, -16, -17 were converted to PSVE BaroBalls on 11/17/2015

\* —Connected to MicroBlower™.  
 \*Connected to ASVE

**Acronyms:**

- ABV — A-Area Burning/Rubble Pit Vadose Zone
- AHT — A-Area Hidden Trench
- ARV — A-Area Recovery Vapor
- ASH — A-Area Ash Pile
- ND — non-detect
- ppmV — parts per million by volume

**Table 6. MCB SVE Well Construction Details**

Well ID	East Coordinate (UTM)	North Coordinate (UTM)	Ground Surface	Screen Top	Screen Bottom	Screen Length
			(ft amsl)	(ft bgs)		(ft)
MCSV-01	431,353.543	3,686,134.387	336.11	unknown		
MCSV-03	431,369.808	3,686,108.869	331.169	80	95	15
MCSV-03A				57	72	15
MCSV-04 – upper screen	431,326.036	3,686,171.426	337.083	15	30	15
MCSV-04 – intermediate screen				35	40	5
MCSV-04 – intermediate screen				45	50	5
MCSV-04 – intermediate screen				55	60	5
MCSV-04 – intermediate screen				65	70	5
MCSV-04 – lower screen				75	80	5
MCSV-05	431,387.721	3,686,170.675	330.978	60	90	30
MCSV-06 – upper screen	431,311.184	3,686,190.540	338.85	15	25	10
MCSV-06 – intermediate screen				30	35	5
MCSV-06 – intermediate screen				40	45	5
MCSV-06 – intermediate screen				50	55	5
MCSV-06 – intermediate screen				60	65	5
MCSV-06 – lower screen				70	80	10
MCSV-07 – upper screen	431,308.585	3,686,167.041	338.62	15	50	35
MCSV-07 – lower screen				75	80	5
MCSV-08	431,277.191	3,686,194.175	339.887	51	81	30
MCSV-09	431,320.147	3,686,209.038	337.55	50	80	30
MCSV-10	431,336.278	3,686,181.809	336.564	15	55	40
MCSV-11	431,383.657	3,686,149.697	330.341	55	85	30
MCSV-12	431,368.997	3,686,152.466	332.922	55	85	30
MCSV-13	431,320.744	3,686,172.337	338.071	20	50	30
MCSV-14	431,347.959	3,686,134.427	336.498	68	88	20
MCSV-15 – upper screen	431,349.123	3,686,201.887	334.411	50	70	20
MCSV-15 – lower screen				80	100	20
MCSV-16	431,335.487	3,686,141.283	336.761	40	70	30
MCSV-17 – upper screen	431,338.008	3,686,157.116	336.821	15	50	35
MCSV-17 – lower screen				75	80	5
MCSV-18	431,357.083	3,686,162.966	334.199	55	70	15
MCSV-19 – upper screen	431,316.481	3,686,156.959	337.746	15	50	35
MCSV-19 – lower screen				75	80	5
MCSV-20	431,365.996	3,686,170.283	333.381	55	70	15
MCSV-21	431,354.048	3,686,171.351	334.523	55	70	15
MCSV-22	431,327.679	3,686,162.193	337.088	20	70	50
MCSV-23	431,371.738	3,686,188.657	332.497	55	75	20
MCSV-24	431,301.588	3,686,156.502	339.139	60	90	30
MCSV-25 – upper screen	431,327.922	3,686,195.857	337.024	55	70	15
MCSV-25 – lower screen				80	95	15
MCSV-26 – upper screen	431,304.040	3,686,177.862	339.546	30	35	5
MCSV-27	431,329.482	3,686,186.662	336.89	64	99	35

Table 7. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas PCE Results

Collection Date	Station ID — PCE Soil-Gas Concentration (ppmV)							
	MCSV-01	MCSV-03A	MCSV-04	MCSV-05	MCSV-06	MCSV-07	MCSV-08	MCSV-09
2/24/04	0.007	0.000	0.570	0.014	0.070	1.294	0.004	0.015
3/16/04	nr	0.002	0.637	nr	0.043	0.843	nr	nr
3/31/04	0.004	0.037	0.941	0.008	0.038	0.091	nr	0.008
6/10/04	0.007	0.355	<b>18.601</b>	0.045	0.111	0.126	0.014	0.013
8/5/04	0.006	0.063	3.602	0.006	0.061	0.246	0.002	0.006
9/7/04	0.004	ND	nr	0.006	0.056	0.752	0.007	0.004
12/7/04	0.005	ND	2.539	0.010	0.212	1.016	0.002	0.007
1/5/05	0.006	ND	1.424	0.012	0.142	0.656	0.002	0.006
2/16/05	nr	ND	0.828	nr	nr	0.542	nr	nr
3/23/05	nr	0.000	1.493	nr	0.118	0.869	nr	nr
7/7/05	nr	0.004	2.050	nr	0.022	5.775	nr	nr
8/30/05	0.003	0.002	2.536	nr	NR	5.624	nr	nr
9/26/05	0.042	0.007	2.009	nr	0.037	6.469	nr	nr
10/6/05	0.024	0.000	2.909	nr	1.033	8.247	nr	nr
1/30/06	0.081	0.000	1.270	nr	0.040	4.308	nr	nr
5/2/06	ND	0.000	0.918	nr	0.010	7.550	nr	nr
6/26/06	nr	0.000	1.963	0.123	0.052	5.624	nr	nr
11/15/06	nr	0.000	0.677	0.018	0.025	5.893	nr	0.032
11/30/06	nr	0.000	0.018	0.107	0.115	0.018	nr	0.345
12/15/06	nr	0.000	0.904	0.035	0.052	3.992	nr	0.049
9/27/07	nr	0.000	nr	0.022	0.056	7.063	nr	0.044
4/18/08	ND	nr	0.040	0.010	ND	5.354	nr	0.020
6/26/08	nr	nr	0.018	0.020	0.002	5.524	0.016	0.016
9/22/08	0.013	0.014	0.596	0.026	0.040	0.195	0.003	0.019
11/17/08	0.004	0.013	0.226	0.026	0.009	5.995	0.008	0.010
1/27/09	0.008	0.024	0.348	ND	0.039	6.370	0.007	nr
4/21/09	0.014	ND	0.380	0.041	0.536	0.720	0.003	0.036
7/16/09	0.003	0.003	nr	0.016	0.015	2.506	0.007	0.006
10/28/09	ND	ND	0.082	ND	ND	0.116	ND	ND
1/19/10	ND	ND	ND	ND	ND	0.785	ND	ND
4/19/10	ND	ND	ND	ND	ND	0.429	ND	ND
7/19/10	ND	ND	ND	ND	ND	1.432	ND	ND
10/19/10	ND	ND	ND	ND	ND	1.065	ND	ND
1/18/11	ND	ND	ND	ND	ND	0.576	ND	ND
4/18/11	ND	ND	ND	ND	ND	0.558	ND	ND
7/12/11	ND	ND	ND	ND	ND	0.421	ND	ND
10/19/11	ND	ND	ND	ND	ND	0.861	ND	ND
1/24/12	ND	ND	ND	ND	ND	ND	ND	ND
4/23/12	ND	ND	ND	ND	ND	0.740	ND	ND
7/16/12	ND	ND	ND	ND	ND	0.605	ND	ND
10/16/12	ND	ND	ND	ND	ND	0.693	ND	ND
1/14/13	ND	ND	ND	ND	ND	0.887	ND	ND
4/15/13	ND	ND	ND	ND	ND	0.704	ND	ND
7/17/13	ND	ND	ND	ND	ND	0.562	ND	ND
11/18/13	ND	ND	ND	ND	ND	1.320	ND	ND

**Table 7. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas PCE Results**  
(Continued)

Collection Date	Station ID — PCE Soil-Gas Concentration (ppmV)							
	MCSV-01	MCSV-03A	MCSV-04	MCSV-05	MCSV-06	MCSV-07	MCSV-08	MCSV-09
2/19/14	ND	ND	ND	ND	ND	0.382	ND	ND
4/22/14	ND	ND	ND	ND	ND	0.543	ND	ND
8/12/14	ND	ND	ND	ND	ND	1.001	ND	ND
10/14/14	ND	ND	ND	ND	ND	0.957	ND	ND
2/9/15	ND	ND	ND	ND	ND	0.888	ND	ND
4/28/15	ND	ND	ND	ND	ND	0.558	ND	ND
7/21/15	ND	ND	ND	ND	ND	0.828	ND	ND
12/8/15	ND	ND	ND	ND	ND	0.787	ND	ND
2/8/16	ND	ND	ND	ND	ND	1.083	ND	ND
5/17/16	ND	ND	ND	ND	ND	0.068	ND	ND
9/13/16	ND	ND	ND	ND	ND	1.393	ND	ND
12/14/16	ND	ND	ND	ND	ND	0.285	ND	ND
2/14/17	ND	ND	ND	ND	ND	1.492	ND	ND
5/16/17	ND	ND	ND	ND	ND	ND	ND	ND
9/14/17	ND	ND	ND	ND	ND	ND	ND	ND
12/13/17	ND	ND	ND	ND	ND	ND	ND	ND
2/13/18	ND	ND	ND	ND	ND	ND	ND	ND
5/15/18	ND	ND	ND	ND	ND	0.844	ND	ND
9/17/18	ND	ND	ND	ND	ND	0.378	ND	ND
12/18/18	ND	ND	ND	ND	ND	1.252	ND	ND
2/11/19	ND	ND	ND	ND	ND	1.517	ND	ND
5/14/19	ND	ND	ND	ND	ND	0.860	ND	ND
9/24/19	ND	ND	ND	ND	ND	0.943	ND	ND
12/16/19	ND	ND	ND	ND	ND	0.347	ND	ND
2/10/20	ND	ND	ND	ND	ND	ND	ND	ND
5/11/20	ND	ND	ND	ND	ND	0.842	ND	ND
9/28/20	ND	ND	ND	ND	ND	0.550	ND	ND
12/14/20	ND	ND	ND	ND	ND	0.263	ND	ND
2/22/21	ND	0.014	ND	ND	ND	1.490	ND	ND
8/20/21	ND	ND	ND	0.012	0.050	0.635	ND	ND
11/22/21	ND	0.010	ND	ND	ND	1.810	ND	ND
3/7/22	0.073	0.018	ND	0.012	ND	ND	0.027	ND
6/1/22	ND	0.013	0.108	ND	ND	ND	ND	ND
8/15/22	ND	0.011	0.032	0.010	ND	ND	ND	ND
10/13/22	ND	0.012	0.029	ND	ND	1.390	ND	ND
2/20/23	ND	ND	0.025	ND	ND	1.700	ND	ND
5/16/23	ND	0.012	ND	ND	ND	1.170	ND	ND
9/6/23	ND	ND	ND	ND	ND	1.230	ND	ND
12/10/23	0.014	ND	0.011	ND	ND	1.570	ND	ND
1/24/24	ND	0.010	ND	ND	ND	1.440	ND	ND
5/14/24	ND	ND	ND	ND	ND	0.669	ND	ND
8/7/24	ND	ND	0.011	ND	ND	1.610	ND	ND
11/11/24	ND	ND	ND	ND	ND	0.572	ND	ND

**Table 7. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas PCE Results**  
(Continued)

Collection Date	Station ID — PCE Soil-Gas Concentration (ppmV)								
	MCSV-10	MCSV-11	MCSV-12	MCSV-13	MCSV-14	MCSV-15	MCSV-16	MCSV-17	MCSV-18
2/24/04	0.050	0.020	0.023	4.158	0.003	0.006	nr	nr	0.016
3/16/04	0.043	nr	nr	9.980	nr	nr	nr	0.063	nr
3/31/04	0.034	0.015	0.011	5.704	0.002	0.004	nr	0.019	0.017
6/10/04	0.058	0.018	0.016	3.672	0.021	0.018	nr	0.032	nr
8/5/04	0.051	nr	0.012	11.154	0.002	0.003	0.026	nr	nr
9/7/04	0.040	0.010	0.009	6.459	0.020	0.010	nr	0.057	nr
12/7/04	0.044	0.014	0.013	3.565	nr	0.004	nr	0.025	nr
1/5/05	0.037	0.015	nr	9.207	0.002	0.004	nr	0.033	nr
2/16/05	0.040	nr	nr	1.112	nr	nr	nr	0.014	nr
3/23/05	nr	nr	nr	6.979	nr	nr	nr	0.025	nr
7/7/05	0.071	nr	nr	1.897	nr	nr	nr	0.031	nr
8/30/05	0.101	nr	nr	5.751	nr	nr	nr	NR	nr
9/26/05	0.122	nr	nr	1.568	nr	nr	nr	0.059	nr
10/6/05	0.164	0.591	nr	3.955	nr	nr	nr	0.724	nr
1/30/06	0.083	nr	nr	6.119	nr	nr	nr	0.068	nr
5/2/06	0.064	nr	nr	0.727	nr	nr	nr	0.055	nr
6/26/06	0.080	nr	0.032	3.292	nr	nr	nr	nr	nr
11/15/06	0.075	nr	0.014	1.818	0.010	0.009	0.009	0.064	nr
11/30/06	0.146	nr	0.031	0.001	1.055	0.997	0.579	5.368	nr
12/15/06	0.080	nr	0.016	2.815	0.017	0.011	0.019	0.105	nr
9/27/07	0.267	0.028	nr	0.060	0.010	0.013	0.022	0.160	0.024
4/18/08	0.000	ND	ND	0.058	ND	ND	0.000	0.180	0.043
6/26/08	0.049	0.002	0.011	0.341	0.003	0.008	0.007	0.157	ND
9/22/08	0.012	0.002	0.007	0.044	0.002	0.008	0.003	0.038	0.004
11/17/08	0.042	0.003	0.009	0.007	0.002	0.005	0.002	0.078	0.005
1/27/09	nr	0.011	ND	nr	ND	0.002	ND	0.069	ND
4/21/09	0.024	ND	0.004	0.033	ND	ND	ND	0.046	0.008
7/16/09	ND	0.007	0.006	ND	ND	ND	ND	0.050	ND
10/28/09	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/19/10	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/19/10	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/19/10	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/19/10	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/18/11	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/18/11	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/12/11	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/19/11	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/24/12	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/23/12	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/16/12	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/16/12	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/14/13	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/15/13	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/17/13	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/18/13	ND	ND	ND	ND	ND	ND	ND	ND	ND

**Table 7. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas PCE Results**  
 (Continued)

Collection Date	Station ID — PCE Soil-Gas Concentration (ppmV)								
	MCSV-10	MCSV-11	MCSV-12	MCSV-13	MCSV-14	MCSV-15	MCSV-16	MCSV-17	MCSV-18
2/19/14	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/22/14	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/12/14	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/14/14	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/9/15	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/28/15	ND	NA	ND	ND	ND	ND	ND	ND	ND
7/21/15	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/8/15	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/8/16	ND	ND	ND	0.086	ND	ND	ND	ND	ND
5/17/16	ND	ND	ND	ND	ND	ND	ND	0.030	ND
9/13/16	ND	ND	ND	ND	ND	ND	ND	0.033	ND
12/14/16	ND	ND	ND	ND	ND	ND	ND	0.033	ND
2/14/17	ND	ND	ND	0.065	ND	ND	ND	ND	ND
5/16/17	ND	ND	ND	ND	ND	ND	ND	0.035	ND
9/14/17	ND	ND	ND	ND	ND	ND	ND	0.031	ND
12/13/17	ND	ND	ND	ND	ND	ND	ND	0.031	ND
2/13/18	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/15/18	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/17/18	ND	ND	ND	ND	ND	ND	ND	0.435	ND
12/18/18	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/11/19	ND	ND	ND	0.055	ND	ND	ND	ND	ND
5/14/19	ND	ND	ND	ND	ND	ND	ND	0.031	ND
9/24/19	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/16/19	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/10/20	ND	ND	ND	ND	ND	ND	ND	0.014	ND
5/11/20	ND	ND	ND	ND	ND	ND	ND	0.016	ND
9/28/20	ND	ND	ND	ND	ND	ND	ND	ND	ND
12/14/20	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/22/21	ND	0.011	ND	ND	ND	ND	ND	0.015	ND
8/20/21	ND	ND	ND	ND	ND	ND	ND	0.018	0.033
11/22/21	ND	ND	ND	ND	ND	ND	ND	0.026	ND
3/7/22	ND	ND	0.021	0.025	ND	ND	0.049	0.014	ND
6/1/22	ND	0.012	ND	0.044	ND	ND	ND	ND	ND
8/15/22	ND	ND	ND	0.039	ND	ND	ND	ND	ND
10/13/22	ND	ND	ND	ND	ND	ND	ND	0.046	0.016
2/20/23	ND	ND	ND	ND	ND	ND	ND	0.024	ND
5/16/23	ND	ND	ND	ND	ND	ND	ND	0.019	ND
9/6/23	ND	ND	ND	ND	ND	ND	ND	0.023	ND
12/10/23	ND	ND	ND	ND	ND	ND	ND	0.023	ND
1/24/24	ND	ND	ND	ND	ND	ND	ND	0.029	ND
5/14/24	ND	ND	ND	ND	ND	ND	ND	0.015	ND
8/7/24	ND	ND	ND	ND	ND	ND	ND	0.017	ND
11/11/24	ND	ND	ND	ND	ND	ND	ND	0.014	ND

**Table 7. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas PCE Results**  
(Continued)

Collection Date	Station ID — PCE Soil-Gas Concentration (ppmV)								
	MCSV-19	MCSV-20	MCSV-21	MCSV-22	MCSV-23	MCSV-24	MCSV-25	MCSV-26	MCSV-27
2/24/04	0.051	0.053	0.060	0.048	0.007	0.011	0.110	0.073	nr
3/16/04	0.042	nr	nr	nr	nr	nr	0.081	0.051	0.311
3/31/04	0.045	0.040	0.043	0.050	0.005	0.008	0.062	0.043	nr
6/10/04	0.066	0.063	0.071	0.029	0.006	0.016	0.055	0.124	nr
8/5/04	0.162	0.038	0.042	0.058	0.006	0.008	0.053	0.090	0.014
9/7/04	0.064	0.039	0.037	0.062	0.004	0.006	nr	0.090	nr
12/7/04	0.112	0.052	0.036	0.262	0.007	0.012	0.030	0.142	0.265
1/5/05	0.064	0.034	0.037	0.088	0.005	0.009	0.040	0.084	0.183
2/16/05	0.030	nr	nr	0.037	nr	nr	0.016	0.094	0.138
3/23/05	0.090	nr	nr	0.051	nr	nr	nr	0.135	nr
7/7/05	0.119	nr	nr	0.113	nr	nr	0.056	0.196	0.026
8/30/05	0.193	nr	nr	0.157	nr	nr	0.096	0.176	0.208
9/26/05	0.212	nr	nr	0.254	nr	nr	0.080	0.286	0.337
10/6/05	0.789	nr	0.112	0.830	nr	nr	2.488	0.962	0.468
1/30/06	0.043	nr	0.065	0.154	nr	nr	0.087	0.384	0.489
5/2/06	0.033	nr	nr	0.063	nr	nr	0.042	0.241	0.081
6/26/06	0.077	nr	0.083	0.238	nr	nr	nr	0.330	0.013
11/15/06	0.048	0.053	0.047	0.085	0.011	0.019	0.055	0.328	0.067
11/30/06	0.111	0.381	1.910	0.197	0.185	0.165	0.183	0.108	0.037
12/15/06	0.074	0.053	0.063	0.152	0.011	0.014	0.073	0.337	0.004
9/27/07	0.085	nr	nr	0.158	0.014	0.020	0.504	nr	0.050
4/18/08	0.020	0.040	ND	0.010	0.000	nr	ND	ND	0.210
6/26/08	0.020	0.051	0.080	0.034	0.006	0.008	0.054	0.249	0.304
9/22/08	0.022	0.017	0.055	0.015	0.007	0.002	0.017	0.170	1.866
11/17/08	0.061	0.011	0.038	0.021	0.008	0.003	0.006	0.058	0.064
1/27/09	0.054	ND	0.007	0.004	0.012	0.004	nr	0.101	0.114
4/21/09	ND	0.031	0.017	0.056	0.005	ND	0.182	0.193	0.274
7/16/09	ND	ND	0.003	0.011	0.006	0.002	0.025	0.043	0.012
10/28/09	ND	ND	ND	ND	ND	ND	0.224	ND	0.129
1/19/10	ND	ND	ND	ND	ND	ND	0.101	ND	ND
4/19/10	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/19/10	ND	ND	ND	ND	ND	ND	ND	ND	ND
10/19/10	ND	ND	ND	ND	ND	ND	ND	0.000	0.000
1/18/11	ND	ND	ND	ND	ND	ND	ND	ND	0.072
4/18/11	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/12/11	ND	ND	ND	0.041	ND	ND	ND	ND	ND
10/19/11	ND	ND	ND	ND	ND	ND	0.087	ND	0.069
1/24/12	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/23/12	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/16/12	ND	ND	ND	ND	ND	ND	0.046	ND	0.044
10/16/12	ND	ND	ND	ND	ND	ND	ND	ND	ND
1/14/13	ND	ND	ND	ND	ND	ND	0.050	ND	ND
4/15/13	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/17/13	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/18/13	ND	ND	0.031	ND	ND	ND	0.034	ND	ND



Table 8. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas TCE Results

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)							
	MCSV-01	MCSV-03A	MCSV-04	MCSV-05	MCSV-06	MCSV-07	MCSV-08	MCSV-09
2/24/04	0.007	0.000	2.310	0.050	0.183	0.547	0.003	0.031
3/16/04	nr	0.009	3.551	nr	0.158	0.577	nr	nr
3/31/04	0.005	0.411	3.085	0.026	0.112	0.306	nr	0.021
6/10/04	nr	0.414	37.345	0.052	0.227	0.098	0.008	0.029
8/5/04	0.008	0.531	11.379	0.030	0.314	0.462	0.006	0.038
9/7/04	0.011	ND	nr	0.023	0.143	0.466	0.020	0.021
12/7/04	0.018	ND	7.119	0.018	0.237	0.389	nr	0.018
1/5/05	0.011	ND	6.190	0.020	0.212	0.350	nr	0.016
2/16/05	nr	ND	5.095	nr	nr	0.340	nr	nr
3/23/05	nr	0.000	6.053	nr	0.171	0.412	nr	nr
7/7/05	nr	0.055	7.373	nr	0.048	3.145	nr	nr
8/30/05	0.007	0.010	14.000	nr	0.162	4.848	nr	nr
9/26/05	0.302	0.034	7.768	nr	0.067	3.705	nr	nr
10/6/05	0.041	0.000	15.478	nr	0.899	5.275	nr	nr
1/30/06	0.483	0.000	5.689	nr	0.123	3.227	nr	nr
5/2/06	0.110	0.000	3.947	nr	0.033	4.997	nr	nr
6/26/06	nr	0.000	8.918	0.572	0.088	3.685	nr	nr
11/15/06	nr	0.000	3.363	0.023	0.062	4.322	nr	0.058
11/30/06	nr	0.000	0.059	0.290	0.269	0.026	nr	0.081
12/15/06	nr	0.000	4.670	0.038	0.118	2.879	nr	0.067
9/27/07	nr	0.000	nr	0.009	0.068	5.439	nr	0.061
4/18/08	0.110	nr	0.020	0.050	0.030	4.354	nr	0.060
6/26/08	nr	nr	0.082	0.013	0.006	4.605	0.009	0.045
9/22/08	0.037	0.212	3.159	0.086	0.052	1.088	0.006	0.064
11/17/08	0.027	0.186	1.332	0.045	0.020	5.909	0.010	0.042
1/27/09	0.071	0.385	1.385	ND	0.054	4.904	0.009	nr
4/21/09	0.134	ND	1.088	0.356	0.627	0.737	ND	0.159
7/16/09	0.026	0.058	nr	0.086	0.026	2.104	0.009	0.033
10/28/09	ND	ND	0.584	ND	ND	ND	ND	ND
1/19/10	ND	0.139	0.289	ND	ND	0.793	ND	ND
4/19/10	ND	ND	ND	ND	ND	0.429	ND	ND
7/19/10	ND	ND	ND	ND	ND	1.160	ND	ND
10/19/10	ND	ND	ND	ND	ND	0.855	ND	0.187
1/18/11	ND	0.174	ND	ND	ND	0.442	ND	0.129
4/18/11	ND	ND	ND	ND	ND	0.430	ND	ND
7/12/11	ND	ND	ND	ND	ND	0.427	ND	ND
10/19/11	ND	ND	ND	0.145	ND	0.718	ND	ND
1/24/12	ND	ND	ND	ND	ND	ND	ND	ND
4/23/12	ND	ND	ND	ND	ND	0.962	ND	ND
7/16/12	ND	ND	ND	ND	ND	0.566	ND	0.193
10/16/12	ND	ND	ND	ND	ND	0.667	ND	ND
1/14/13	ND	0.111	ND	ND	ND	0.891	ND	ND
4/15/13	ND	ND	ND	ND	ND	0.739	ND	ND
7/17/13	ND	ND	ND	ND	ND	0.698	ND	ND
11/18/13	ND	0.122	ND	ND	ND	1.080	ND	ND

**Table 8. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas TCE Results**  
(Continued)

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)							
	MCSV-01	MCSV-03A	MCSV-04	MCSV-05	MCSV-06	MCSV-07	MCSV-08	MCSV-09
2/19/14	ND	0.130	ND	ND	ND	0.520	ND	ND
4/22/14	ND	0.134	ND	ND	ND	0.581	ND	ND
8/12/14	ND	ND	ND	ND	ND	0.780	ND	ND
10/14/14	ND	ND	ND	ND	ND	0.831	ND	ND
2/9/15	ND	ND	ND	0.099	ND	0.660	ND	ND
4/28/15	ND	ND	ND	ND	ND	0.533	ND	ND
7/21/15	ND	ND	ND	0.070	ND	0.829	ND	ND
12/8/15	ND	0.099	ND	0.123	ND	0.772	ND	0.103
2/8/16	ND	0.184	0.069	0.099	0.044	0.803	ND	0.142
5/17/16	ND	0.092	ND	ND	ND	0.081	ND	ND
9/13/16	ND	0.086	0.083	0.047	ND	1.002	ND	ND
12/14/16	ND	0.229	0.070	0.079	ND	0.192	ND	0.074
2/14/17	ND	0.260	0.057	0.075	ND	1.023	ND	0.094
5/16/17	ND	ND	0.029	ND	ND	1.153	ND	ND
9/14/17	ND	0.060	ND	ND	ND	1.047	ND	ND
12/13/17	ND	ND	0.057	ND	ND	1.130	ND	ND
2/13/18	ND	ND	ND	ND	ND	ND	ND	ND
5/15/18	ND	0.208	0.036	0.147	ND	0.484	ND	0.092
9/17/18	ND	0.037	0.037	ND	ND	0.281	ND	ND
12/18/18	ND	ND	0.069	0.067	ND	0.678	ND	0.054
2/11/19	ND	0.227	0.089	0.064	ND	1.143	ND	ND
5/14/19	ND	ND	0.041	0.037	ND	0.611	ND	ND
9/24/19	ND	0.214	0.060	0.055	ND	0.709	ND	0.045
12/16/19	ND	0.030	ND	ND	ND	0.285	ND	ND
2/10/20	ND	0.011	ND	ND	ND	ND	ND	ND
5/11/20	ND	0.126	ND	0.025	ND	0.552	ND	ND
9/28/20	ND	0.132	ND	0.027	ND	0.660	ND	0.036
12/14/20	ND	0.093	ND	0.013	ND	0.130	ND	0.015
2/22/21	ND	0.165	ND	ND	ND	1.040	ND	0.014
8/20/21	ND	0.101	ND	0.032	ND	0.386	ND	ND
11/22/21	ND	0.111	ND	0.032	ND	0.970	ND	ND
3/7/22	ND	0.089	ND	0.040	ND	ND	ND	ND
6/1/22	ND	0.153	0.059	0.030	ND	ND	ND	ND
8/15/22	ND	0.124	0.035	0.089	ND	ND	ND	ND
10/13/22	ND	0.129	0.027	0.024	ND	0.854	ND	0.017
2/20/23	ND	0.110	0.035	0.033	ND	1.140	ND	0.012
5/16/23	ND	0.121	0.012	0.023	ND	0.668	ND	0.011
9/6/23	ND	0.109	ND	0.027	ND	0.753	ND	ND
12/10/23	ND	0.083	0.020	0.028	ND	0.849	ND	0.012
1/24/24	ND	0.130	ND	0.014	ND	0.734	ND	0.011
5/14/24	ND	0.073	ND	ND	ND	0.424	ND	ND
8/7/24	ND	0.095	0.026	0.019	ND	0.827	ND	ND
11/11/24	ND	0.080	ND	ND	ND	0.292	ND	ND

**Table 8. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas TCE Results**  
(Continued)

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)								
	MCSV-10	MCSV-11	MCSV-12	MCSV-13	MCSV-14	MCSV-15	MCSV-16	MCSV-17	MCSV-18
2/24/04	0.284	0.180	0.251	4.674	0.017	0.037	nr	nr	0.129
3/16/04	0.286	nr	nr	11.465	nr	nr	nr	1.408	nr
3/31/04	0.195	0.085	0.084	6.445	0.012	0.025	nr	0.691	0.163
6/10/04	0.231	0.092	0.148	3.742	0.019	0.030	nr	1.309	nr
8/5/04	0.710	nr	0.204	14.074	0.031	0.043	3.059	nr	nr
9/7/04	0.302	0.103	0.126	10.914	0.035	0.030	nr	3.327	nr
12/7/04	0.220	0.085	0.083	3.696	nr	0.026	nr	1.438	nr
1/5/05	0.226	0.084	nr	9.929	0.008	0.026	nr	2.060	nr
2/16/05	0.207	nr	nr	1.598	nr	nr	nr	0.505	nr
3/23/05	nr	nr	nr	6.681	nr	nr	nr	1.134	nr
7/7/05	0.432	nr	nr	2.594	nr	nr	nr	1.960	nr
8/30/05	0.889	nr	nr	10.232	nr	nr	nr	3.693	nr
9/26/05	0.771	nr	nr	2.250	nr	nr	nr	2.965	nr
10/6/05	1.268	0.517	nr	7.321	nr	nr	nr	3.386	nr
1/30/06	0.481	nr	nr	7.589	nr	nr	nr	4.562	nr
5/2/06	0.236	nr	nr	0.997	nr	nr	nr	3.227	nr
6/26/06	0.255	nr	0.052	4.351	nr	nr	nr	nr	nr
11/15/06	0.521	nr	0.071	3.681	0.042	0.041	0.124	4.416	nr
11/30/06	0.348	nr	0.024	NR	0.831	0.818	0.853	1.247	nr
12/15/06	0.529	nr	0.074	4.217	0.050	0.045	0.203	7.557	nr
9/27/07	1.373	0.104	nr	0.080	0.042	0.039	0.108	8.019	0.267
4/18/08	0.010	ND	0.030	0.076	0.050	0.010	0.020	7.510	0.509
6/26/08	0.264	0.009	0.060	0.588	0.038	0.027	0.065	6.795	0.030
9/22/08	0.070	0.006	0.087	0.088	0.012	0.044	0.043	2.078	0.054
11/17/08	0.245	0.007	0.068	0.033	0.006	0.030	0.006	3.816	0.052
1/27/09	nr	0.019	ND	nr	ND	0.015	0.022	3.196	0.022
4/21/09	0.119	ND	0.044	0.026	ND	0.010	0.013	1.205	0.073
7/16/09	ND	0.008	0.011	ND	ND	ND	ND	1.346	ND
10/28/09	ND	ND	ND	ND	ND	ND	ND	2.153	ND
1/19/10	ND	ND	ND	ND	ND	ND	ND	0.708	ND
4/19/10	ND	ND	ND	ND	ND	ND	ND	0.900	ND
7/19/10	ND	ND	ND	ND	ND	ND	ND	0.734	ND
10/19/10	ND	ND	ND	ND	ND	ND	ND	1.346	ND
1/18/11	ND	ND	ND	ND	ND	ND	ND	0.050	ND
4/18/11	ND	ND	ND	ND	ND	ND	ND	0.868	ND
7/12/11	ND	ND	ND	ND	ND	ND	ND	1.045	ND
10/19/11	ND	ND	ND	ND	ND	ND	ND	1.734	ND
1/24/12	ND	ND	ND	ND	ND	ND	ND	0.428	ND
4/23/12	ND	ND	ND	ND	ND	ND	ND	0.972	ND
7/16/12	ND	ND	ND	ND	ND	ND	ND	1.182	ND
10/16/12	ND	ND	ND	ND	ND	ND	ND	0.897	ND
1/14/13	ND	ND	ND	ND	ND	ND	ND	0.896	ND
4/15/13	ND	ND	ND	ND	ND	ND	ND	0.810	ND
7/17/13	ND	ND	ND	ND	ND	ND	ND	0.931	ND
11/18/13	ND	ND	ND	ND	ND	ND	ND	0.972	ND

**Table 8. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas TCE Results**

(Continued)

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)								
	MCSV-10	MCSV-11	MCSV-12	MCSV-13	MCSV-14	MCSV-15	MCSV-16	MCSV-17	MCSV-18
2/19/14	ND	ND	ND	ND	ND	ND	ND	0.878	ND
4/22/14	ND	ND	ND	ND	ND	ND	ND	0.765	ND
8/12/14	ND	ND	ND	ND	ND	ND	ND	1.057	ND
10/14/14	ND	ND	ND	ND	ND	ND	ND	1.121	ND
2/9/15	ND	ND	ND	ND	ND	ND	ND	1.112	ND
4/28/15	ND	NA	ND	ND	ND	ND	ND	0.744	ND
7/21/15	ND	0.045	ND	ND	ND	ND	ND	1.018	ND
12/8/15	ND	ND	ND	ND	ND	ND	ND	0.983	0.029
2/8/16	ND	ND	ND	0.132	ND	ND	ND	1.125	0.028
5/17/16	ND	ND	ND	ND	ND	ND	ND	0.954	ND
9/13/16	ND	ND	ND	ND	ND	ND	ND	1.361	ND
12/14/16	ND	ND	ND	0.033	ND	ND	ND	0.993	ND
2/14/17	ND	ND	ND	0.119	ND	ND	ND	1.063	0.027
5/16/17	ND	ND	ND	ND	ND	ND	ND	0.987	ND
9/14/17	ND	ND	ND	ND	ND	ND	ND	1.180	ND
12/13/17	ND	ND	ND	ND	ND	ND	ND	1.057	ND
2/13/18	ND	ND	ND	ND	ND	ND	ND	0.050	ND
5/15/18	ND	ND	ND	ND	ND	ND	ND	0.897	ND
9/17/18	ND	ND	ND	ND	ND	ND	ND	0.609	ND
12/18/18	ND	ND	ND	ND	ND	ND	ND	0.943	ND
2/11/19	ND	ND	ND	0.071	0.047	ND	ND	0.586	ND
5/14/19	ND	ND	ND	ND	ND	ND	ND	0.771	ND
9/24/19	ND	ND	ND	ND	ND	ND	ND	0.808	ND
12/16/19	ND	ND	ND	ND	ND	ND	ND	0.201	ND
2/10/20	ND	ND	ND	ND	ND	ND	ND	0.568	ND
5/11/20	ND	ND	ND	ND	ND	ND	ND	0.591	ND
9/28/20	ND	ND	ND	ND	ND	ND	ND	0.302	ND
12/14/20	ND	ND	ND	ND	ND	ND	ND	0.178	0.013
2/22/21	ND	0.012	ND	0.012	ND	ND	ND	0.414	ND
8/20/21	ND	ND	ND	ND	ND	ND	ND	0.713	ND
11/22/21	ND	ND	ND	ND	ND	ND	ND	0.810	0.017
3/7/22	ND	ND	ND	0.013	ND	ND	ND	0.601	ND
6/1/22	ND	ND	ND	0.032	0.020	ND	ND	0.175	ND
8/15/22	ND	ND	ND	0.027	ND	ND	ND	0.175	ND
10/13/22	ND	ND	ND	ND	ND	ND	ND	0.801	ND
2/20/23	ND	ND	ND	ND	ND	ND	ND	0.706	0.017
5/16/23	ND	ND	ND	ND	ND	ND	ND	0.480	ND
9/6/23	ND	ND	ND	ND	ND	ND	ND	0.723	ND
12/10/23	ND	ND	ND	ND	ND	ND	ND	0.844	0.012
1/24/24	ND	ND	ND	ND	ND	ND	ND	0.955	ND
5/14/24	0.012	ND	ND	ND	ND	ND	ND	0.380	ND
8/7/24	ND	ND	ND	ND	ND	ND	ND	0.565	0.013
11/11/24	ND	ND	ND	ND	ND	ND	ND	0.516	ND

**Table 8. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas TCE Results**  
(Continued)

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)								
	MCSV-19	MCSV-20	MCSV-21	MCSV-22	MCSV-23	MCSV-24	MCSV-25	MCSV-26	MCSV-27
2/24/04	0.088	0.067	0.207	1.029	0.039	0.059	0.558	0.066	nr
3/16/04	0.117	nr	nr	nr	nr	nr	0.537	0.079	3.061
3/31/04	0.075	0.054	0.159	1.574	0.027	0.043	0.312	0.053	nr
6/10/04	0.094	0.082	0.217	0.477	0.026	0.079	0.168	0.092	nr
8/5/04	0.378	0.195	0.448	0.674	0.066	0.107	0.714	0.189	0.245
9/7/04	0.121	0.083	0.183	2.147	0.029	0.053	nr	0.092	nr
12/7/04	0.121	0.054	0.150	3.766	0.025	0.049	0.130	0.088	2.210
1/5/05	0.082	0.048	0.133	2.533	0.022	0.038	0.199	0.074	2.093
2/16/05	0.066	nr	nr	0.636	nr	nr	0.094	0.080	1.367
3/23/05	0.086	nr	nr	1.289	nr	nr	nr	0.099	nr
7/7/05	0.206	nr	nr	2.413	nr	nr	0.343	0.202	0.195
8/30/05	0.508	nr	nr	4.985	nr	nr	1.023	0.214	2.893
9/26/05	0.331	nr	nr	2.415	nr	nr	0.493	0.306	2.543
10/6/05	0.777	nr	0.179	6.656	nr	nr	2.663	0.814	3.053
1/30/06	0.076	nr	0.282	2.576	nr	nr	0.526	0.449	3.460
5/2/06	0.074	nr	nr	0.932	nr	nr	0.239	0.266	0.537
6/26/06	0.118	nr	0.318	3.603	nr	nr	nr	0.257	0.049
11/15/06	0.163	0.089	0.460	1.334	0.035	0.079	0.393	0.394	0.297
11/30/06	0.099	0.251	0.230	0.637	0.648	0.575	0.243	0.076	0.238
12/15/06	0.229	0.103	0.590	2.456	0.037	0.086	0.483	0.440	0.006
9/27/07	0.229	nr	nr	1.834	0.026	0.077	0.552	nr	0.284
4/18/08	0.030	0.100	0.040	0.030	0.010	nr	0.010	ND	0.540
6/26/08	0.026	0.138	1.251	0.208	0.016	0.045	0.269	0.243	0.993
9/22/08	0.071	0.029	0.786	0.033	0.013	0.013	0.061	0.191	1.949
11/17/08	0.170	0.008	0.244	0.029	0.013	0.028	0.024	0.061	0.434
1/27/09	0.183	ND	0.026	0.007	0.007	0.041	nr	0.107	0.727
4/21/09	ND	0.014	0.034	0.107	ND	0.014	1.503	0.218	1.522
7/16/09	ND	ND	ND	ND	ND	0.006	0.260	0.066	0.173
10/28/09	ND	ND	ND	ND	ND	ND	2.570	ND	1.874
1/19/10	ND	ND	ND	ND	ND	ND	1.530	ND	0.331
4/19/10	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/19/10	ND	ND	ND	ND	ND	ND	0.210	ND	ND
10/19/10	ND	ND	ND	ND	ND	ND	ND	0.000	0.000
1/18/11	ND	ND	ND	ND	ND	ND	ND	ND	1.122
4/18/11	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/12/11	ND	ND	ND	ND	ND	ND	0.357	ND	0.124
10/19/11	ND	ND	ND	ND	ND	ND	1.228	ND	1.122
1/24/12	ND	ND	ND	ND	ND	ND	0.217	ND	ND
4/23/12	ND	ND	ND	ND	ND	ND	ND	ND	0.220
7/16/12	ND	ND	ND	ND	ND	ND	0.747	ND	0.895
10/16/12	ND	ND	ND	ND	ND	ND	0.142	ND	0.374
1/14/13	ND	ND	ND	ND	ND	ND	0.807	ND	ND
4/15/13	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/17/13	ND	ND	ND	ND	ND	ND	ND	ND	0.163
11/18/13	ND	ND	ND	ND	ND	ND	0.507	ND	0.213

**Table 8. MCB MicroBlowers™ and BaroBalls™ Well Exhaust Gas TCE Results**  
(Continued/End)

Collection Date	Station ID — TCE Soil-Gas Concentration (ppmV)								
	MCSV-19	MCSV-20	MCSV-21	MCSV-22	MCSV-23	MCSV-24	MCSV-25	MCSV-26	MCSV-27
2/19/14	ND	ND	ND	ND	ND	ND	0.291	ND	0.139
4/22/14	ND	ND	ND	ND	ND	ND	0.672	ND	0.281
8/12/14	ND	ND	ND	ND	ND	ND	0.542	ND	0.490
10/14/14	ND	ND	ND	ND	ND	ND	0.205	ND	ND
2/9/15	ND	ND	ND	ND	ND	ND	0.588	ND	0.457
4/28/15	ND	ND	ND	ND	ND	ND	ND	ND	ND
7/21/15	ND	ND	ND	ND	ND	ND	0.333	ND	0.063
12/8/15	ND	ND	ND	ND	ND	ND	0.147	ND	0.318
2/8/16	ND	ND	ND	0.056	ND	ND	0.612	ND	0.369
5/17/16	ND	ND	ND	ND	ND	ND	0.043	NA	NA
9/13/16	ND	ND	ND	ND	ND	ND	ND	ND	0.074
12/14/16	ND	ND	ND	0.035	ND	ND	0.371	ND	ND
2/14/17	ND	ND	ND	ND	ND	ND	0.371	ND	0.317
5/16/17	ND	ND	ND	ND	ND	ND	0.028	ND	ND
9/14/17	ND	ND	ND	ND	ND	ND	0.049	0.059	ND
12/13/17	ND	ND	ND	ND	ND	ND	0.097	ND	ND
2/13/18	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/15/18	ND	ND	ND	ND	ND	ND	0.378	ND	0.492
9/17/18	ND	ND	ND	ND	ND	ND	ND	ND	0.069
12/18/18	ND	ND	ND	ND	ND	ND	0.261	ND	0.361
2/11/19	ND	ND	ND	ND	ND	ND	0.218	ND	0.135
5/14/19	ND	ND	ND	ND	ND	ND	ND	ND	0.215
9/24/19	ND	ND	ND	ND	ND	ND	0.234	ND	0.336
12/16/19	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/10/20	ND	ND	ND	ND	ND	ND	ND	ND	ND
5/11/20	ND	ND	ND	ND	ND	ND	0.071	ND	0.104
9/28/20	ND	ND	ND	ND	ND	ND	0.111	ND	0.101
12/14/20	ND	ND	ND	ND	ND	ND	0.110	ND	0.264
2/22/21	ND	ND	ND	ND	ND	0.022	0.030	ND	ND
8/20/21	ND	ND	ND	ND	ND	ND	0.110	ND	0.011
11/22/21	ND	ND	ND	ND	ND	ND	0.131	ND	0.103
3/7/22	ND	ND	ND	ND	ND	ND	0.079	ND	0.061
6/1/22	ND	ND	ND	ND	ND	ND	0.068	ND	0.068
8/15/22	ND	ND	ND	ND	NA	ND	0.142	ND	0.298
10/13/22	ND	ND	ND	ND	ND	ND	0.048	ND	0.166
2/20/23	ND	ND	ND	ND	ND	ND	0.109	ND	0.056
5/16/23	ND	ND	ND	ND	ND	ND	0.023	ND	0.066
9/6/23	ND	ND	ND	ND	ND	ND	0.078	ND	0.192
12/10/23	ND	ND	ND	ND	ND	ND	0.085	ND	0.143
1/24/24	ND	ND	ND	0.015	ND	ND	0.066	ND	0.042
5/14/24	ND	ND	ND	ND	ND	ND	0.038	ND	0.027
8/7/24	ND	ND	ND	ND	ND	ND	0.072	ND	0.149
11/11/24	ND	ND	ND	ND	ND	ND	0.066	ND	ND

ND – Non-Detect  
MicroBlower™

MCSV – Miscellaneous Chemical Soil Vapor  
Capped for Rebound Testing

nr – no result

**Table 9. ABRP Total Mass Removed**

<u>ASVE and PSVE Combined</u>		
<b>Year</b>	<b>TCE (lb)</b>	<b>TCE (kg)</b>
2005	9.0	4.1
2006	24.7	11.2
2007	25.6	11.6
2008	84.1	1.2
2009	32.7	2.1
2010	11.8	2.2
2011	22.4	2.8
2012	11.7	1.8
2013	13.6	5.8
2014	0.3	0.0
2015	0.5	0.0
2016	1.1	0.5
2017	0.3	0.1
2018	1.2	0.5
2019	0.8	0.3
2020	1.1	0.5
2021	1.2	0.5
2022	1.0	0.4
2023	1.2	0.5
<b>2024</b>	<b>0.9</b>	<b>0.4</b>

**Grand Totals 245.1 46.7**

Table 10. MCB Total Mass Removed

<u>BaroBalls™</u>		
Year	TCE (lb)	TCE (kg)
1996	20.0	9.1
1997	60.0	27.2
1998	45.0	20.4
1999	30.0	13.6
2000	15.0	6.8
2001	11.0	5.0
2002	8.0	3.6
2003	5.0	2.3

<u>ASVE</u>		
2001-2002	170.0	77.1

Table 10. MCB Total Mass Removed (Continued/End)

<u>ASVE and PSVE Combined</u>		
Year	PCE & TCE (lb)	PCE & TCE (kg)
2004	5.4	2.5
2005	8.1	3.7
2006	10.1	4.6
2007	2.7	1.2
2008	1.4	0.6
2009	2.4	1.1
2010	1.9	0.8
2011	0.9	0.4
2012	0.1	0.1
2013	0.1	0.0
2014	0.1	0.1
2015	0.1	0.0
2016	1.6	0.7
2017	2.0	0.9
2018	1.0	0.5
2019	1.9	0.8
2020	0.8	0.4
2021	2.1	1.0
2022	1.0	0.4
2023	2.2	1.0
<b>2024</b>	<b>2.3</b>	<b>1.1</b>

**Grand  
 Totals      412.4      187.0**

**Table 11. ABRP and MCB PSVE Well Performance Sampling Requirements**

Sample Location	Sample Media	Sample Parameters	Minimum Frequency*	Comments
PSVE System	Vapor	Effluent Flow Rate, Pressure	Quarterly	Air flow per flow meter reading.
		TCE, PCE	Quarterly	Vapor analyses with portable gas analyzer (e.g., Bruel and Kjaer or Innova) or other approved equipment/technique.

\*Notes:

ABRP/MCB/MBP CMI/RAIP (WSRC 2006)

Minimum frequency may be increased at Design Authority discretion. The MicroBlowers™ are sampled monthly for flowrate and pressure.

Innova – Innova Electronics Corp

**Table 12. Summary of ABRP Soil Sampling Results**

ABRP	Quantity	EQL Range (µg/kg)	MDL Range (µg/kg)	Max Result	Cleanup Level (µg/kg)
Regular Soil Samples	381	0.2-360	0.076-140	360	610
Split Soil Samples (SPL)	19	4.95-12	0.964-8.76	12.0	610
Field Duplicate Soil Samples (FD)	22	170-230	65-93	240	610

**Table 13. Summary of MCB Soil Sampling Results**

MCB	Quantity	EQL Range (µg/kg)	MDL Range (µg/kg)	Max Result	Cleanup Level (µg/kg)
Regular Soil Samples	350	160-430	62-160	430	344
Split Soil Samples (SPL)	18	4.62-34.1	0.899-7.63	34.1	344
Field Duplicate Soil Samples (FD)	15	180-280	70-110	280	344

**Table 14. ABRP Soil Sampling Results**

4/24/2024			4/29/2024		
ARP-001-SB			ARP-002-SB		
Soil Sample	Depth (ft)	TCE (µg/kg)	Soil Sample	Depth (ft)	TCE (µg/kg)
ABRPMCBSOIL-01305	49.0	[190]	ABRPMCBSOIL-01339	38.5	[210]
ABRPMCBSOIL-01306	51.6	[170]	ABRPMCBSOIL-01340	41.5	[200]
ABRPMCBSOIL-01307	56.5	[200]	ABRPMCBSOIL-01341	46.5	[180]
ABRPMCBSOIL-01308	62.3	[190]	ABRPMCBSOIL-01342	50.3	[210]
ABRPMCBSOIL-01309	64.0	[190]	ABRPMCBSOIL-01343	52.7	[210]
ABRPMCBSOIL-01310	66.5	[230]	ABRPMCBSOIL-01344	56.6	[170]
ABRPMCBSOIL-01311	72.3	[200]	ABRPMCBSOIL-01345	60.8	[190]
ABRPMCBSOIL-01312	74.6	[220]	ABRPMCBSOIL-01346	62.8	[180]
ABRPMCBSOIL-01313	76.8	[210]	ABRPMCBSOIL-01347	66.3	[190]
ABRPMCBSOIL-01314	82.0	[210]	ABRPMCBSOIL-01348	73.0	[200]
ABRPMCBSOIL-01315	84.8	[220]	ABRPMCBSOIL-01349	75.2	[210]
ABRPMCBSOIL-01316	86.7	[200]	ABRPMCBSOIL-01350	76.5	[210]
ABRPMCBSOIL-01317	92.6	[180]	ABRPMCBSOIL-01351	84.8	[210]
ABRPMCBSOIL-01318	94.4	[240]	ABRPMCBSOIL-01352	86.5	[200]
ABRPMCBSOIL-01319	96.5	[230]	ABRPMCBSOIL-01353	92.0	[210]
ABRPMCBSOIL-01320	102.5	[270]	ABRPMCBSOIL-01354	94.0	[200]
ABRPMCBSOIL-01321	105.0	[240]	ABRPMCBSOIL-01355	95.5	[210]
ABRPMCBSOIL-01322	106.8	[270]	ABRPMCBSOIL-01356	96.6	[230]
ABRPMCBSOIL-01323	114.7	[210]	ABRPMCBSOIL-01357	102.5	[240]
ABRPMCBSOIL-01324	115.3	[170]	ABRPMCBSOIL-01358	103.8	[220]
ABRPMCBSOIL-01325	116.5	[230]	ABRPMCBSOIL-01359	106.5	[220]
ABRPMCBSOIL-01326	122.6	[200]	ABRPMCBSOIL-01360	113.5	[170]
ABRPMCBSOIL-01327	125.0	[180]	ABRPMCBSOIL-01361	114.5	[210]
ABRPMCBSOIL-01328	126.5	[200]	ABRPMCBSOIL-01362	116.5	[200]
ABRPMCBSOIL-01329	135.5	[190]	ABRPMCBSOIL-01363	123.0	[190]
ABRPMCBSOIL-01330	136.7	[210]	ABRPMCBSOIL-01364	125.2	[230]
ABRPMCBSOIL-01331	137.3	[200]	ABRPMCBSOIL-01365	126.2	[200]
ABRPMCBSOIL-01332	139.0	[220]	ABRPMCBSOIL-01366	134.6	[210]
ABRPMCBSOIL-01333	139.8	[210]	ABRPMCBSOIL-01367	136.8	[190]
ABRPMCBSOIL-01334	56.5	<sup>2</sup> [170]	ABRPMCBSOIL-01368	137.2	[220]
ABRPMCBSOIL-01335	96.5	<sup>2</sup> [210]	ABRPMCBSOIL-01369	138.5	[220]
ABRPMCBSOIL-01336	126.5	<sup>2</sup> [200]	ABRPMCBSOIL-01370	139.8	[220]
ABRPMCBSOIL-01302	43.1	[220]	ABRPMCBSOIL-01371	41.6	<sup>2</sup> [200]
ABRPMCBSOIL-01303	45.0	[180]	ABRPMCBSOIL-01372	76.5	<sup>2</sup> [200]
ABRPMCBSOIL-01304	46.5	[170]	ABRPMCBSOIL-01373	116.5	<sup>2</sup> [230]
ABRPMCBSOIL-01337	66.5	<sup>3</sup> [5.05]	ABRPMCBSOIL-01374	125.2	<sup>2</sup> [170]
ABRPMCBSOIL-01338	106.8	<sup>3</sup> [10.3]	ABRPMCBSOIL-01375	66.3	<sup>1,3</sup> 6.82
			ABRPMCBSOIL-01376	96.6	<sup>3</sup> [9.79]

**Table 14. ABRP Soil Sampling Results (Continued)**

4/22/2024			4/17/2024		
ARP-003-SB			ARP-004-SB		
Soil Sample	Depth (ft)	TCE (µg/kg)	Soil Sample	Depth (ft)	TCE (µg/kg)
ABRPMCBSOIL-01377	41.0	[170]	ABRPMCBSOIL-01417	55.6	[170]
ABRPMCBSOIL-01378	43.2	[190]	ABRPMCBSOIL-01418	62.0	[210]
ABRPMCBSOIL-01379	46.5	[180]	ABRPMCBSOIL-01419	63.1	[170]
ABRPMCBSOIL-01380	50.6	[190]	ABRPMCBSOIL-01420	65.5	[200]
ABRPMCBSOIL-01381	54.7	[200]	ABRPMCBSOIL-01421	71.0	[200]
ABRPMCBSOIL-01382	56.3	[210]	ABRPMCBSOIL-01422	72.7	[180]
ABRPMCBSOIL-01383	64.6	[210]	ABRPMCBSOIL-01423	75.5	[220]
ABRPMCBSOIL-01384	66.5	[260]	ABRPMCBSOIL-01424	82.0	[200]
ABRPMCBSOIL-01385	73.0	[190]	ABRPMCBSOIL-01425	83.8	[220]
ABRPMCBSOIL-01386	75.0	[210]	ABRPMCBSOIL-01426	85.5	[210]
ABRPMCBSOIL-01387	76.7	[210]	ABRPMCBSOIL-01427	92.8	[210]
ABRPMCBSOIL-01388	82.5	[210]	ABRPMCBSOIL-01428	94.2	[190]
ABRPMCBSOIL-01389	84.7	[190]	ABRPMCBSOIL-01429	95.6	[200]
ABRPMCBSOIL-01390	86.8	[180]	ABRPMCBSOIL-01430	101.0	[170]
ABRPMCBSOIL-01391	99.0	[210]	ABRPMCBSOIL-01431	103.0	[240]
ABRPMCBSOIL-01392	100.5	[210]	ABRPMCBSOIL-01432	105.5	[180]
ABRPMCBSOIL-01393	102.5	[220]	ABRPMCBSOIL-01433	110.5	[190]
ABRPMCBSOIL-01394	103.5	[320]	ABRPMCBSOIL-01434	111.7	[190]
ABRPMCBSOIL-01395	106.5	[190]	ABRPMCBSOIL-01435	115.5	[210]
ABRPMCBSOIL-01396	113.0	[170]	ABRPMCBSOIL-01438	125.5	[180]
ABRPMCBSOIL-01397	114.5	[220]	ABRPMCBSOIL-01439	133.5	[230]
ABRPMCBSOIL-01398	116.5	[230]	ABRPMCBSOIL-01440	135.8	[210]
ABRPMCBSOIL-01399	120.3	[200]	ABRPMCBSOIL-01441	136.5	[210]
ABRPMCBSOIL-01400	123.2	[210]	ABRPMCBSOIL-01442	138.0	[210]
ABRPMCBSOIL-01401	125.6	[250]	ABRPMCBSOIL-01443	139.7	[210]
ABRPMCBSOIL-01402	126.7	[210]	ABRPMCBSOIL-01444	105.5	<sup>2</sup> [180]
ABRPMCBSOIL-01403	132.5	[200]	ABRPMCBSOIL-01445	75.5	<sup>3</sup> [5.59]
ABRPMCBSOIL-01404	134.0	[230]	ABRPMCBSOIL-01446	125.5	<sup>3</sup> [7.48]
ABRPMCBSOIL-01405	136.5	[240]	ABRPMCBSOIL-01412	39.5	[190]
ABRPMCBSOIL-01406	137.2	[200]	ABRPMCBSOIL-01413	43.0	[210]
ABRPMCBSOIL-01407	138.8	[210]	ABRPMCBSOIL-01414	45.0	[210]
ABRPMCBSOIL-01408	140.0	[220]	ABRPMCBSOIL-01415	52.6	[210]
ABRPMCBSOIL-01409	125.6	<sup>2</sup> [240]	ABRPMCBSOIL-01416	54.4	[230]
ABRPMCBSOIL-01410	56.3	<sup>3</sup> [12]	ABRPMCBSOIL-01436	122.4	[260]
ABRPMCBSOIL-01411	103.5	<sup>3</sup> [6.48]	ABRPMCBSOIL-01437	123.7	[190]

**Table 14. ABRP Soil Sampling Results (Continued)**

4/15/2024			4/12/2024		
ARP-005-SB			ARP-006-SB		
Soil Sample	Depth (ft)	TCE (µg/kg)	Soil Sample	Depth (ft)	TCE (µg/kg)
ABRPMCBSOIL-01480	56.5	<sup>3</sup> [6.94]	ABRPMCBSOIL-01482	40.0	[180]
ABRPMCBSOIL-01481	85.5	<sup>3</sup> [11.1]	ABRPMCBSOIL-01484	45.8	[200]
ABRPMCBSOIL-01479	135.5	<sup>2</sup> [190]	ABRPMCBSOIL-01485	51.0	[200]
ABRPMCBSOIL-01478	139.8	[210]	ABRPMCBSOIL-01486	52.6	[190]
ABRPMCBSOIL-01477	138.3	[210]	ABRPMCBSOIL-01487	55.5	[260]
ABRPMCBSOIL-01476	137.0	[220]	ABRPMCBSOIL-01489	64.6	[240]
ABRPMCBSOIL-01475	135.5	[220]	ABRPMCBSOIL-01491	71.3	[200]
ABRPMCBSOIL-01474	134.0	[210]	ABRPMCBSOIL-01493	75.5	[190]
ABRPMCBSOIL-01473	132.7	[200]	ABRPMCBSOIL-01494	82.0	[230]
ABRPMCBSOIL-01472	125.6	[220]	ABRPMCBSOIL-01495	83.5	[180]
ABRPMCBSOIL-01471	124.4	[220]	ABRPMCBSOIL-01496	85.5	[230]
ABRPMCBSOIL-01470	115.5	[200]	ABRPMCBSOIL-01497	90.0	[210]
ABRPMCBSOIL-01469	113.7	[230]	ABRPMCBSOIL-01498	92.3	[210]
ABRPMCBSOIL-01468	111.4	[190]	ABRPMCBSOIL-01499	94.2	[200]
ABRPMCBSOIL-01467	105.5	[210]	ABRPMCBSOIL-01501	101.5	[300]
ABRPMCBSOIL-01466	103.1	[250]	ABRPMCBSOIL-01488	63.5	[230]
ABRPMCBSOIL-01465	101.3	[210]	ABRPMCBSOIL-01483	44.4	[230]
ABRPMCBSOIL-01464	95.2	[220]	ABRPMCBSOIL-01500	95.7	[190]
ABRPMCBSOIL-01463	91.8	[220]	ABRPMCBSOIL-01492	73.1	[200]
ABRPMCBSOIL-01462	88.2	[230]	ABRPMCBSOIL-01490	65.8	[190]
ABRPMCBSOIL-01461	85.5	[180]	ABRPMCBSOIL-01516	94.2	<sup>3</sup> [5.06]
ABRPMCBSOIL-01460	82.8	[220]	ABRPMCBSOIL-01515	55.5	<sup>3</sup> [6.06]
ABRPMCBSOIL-01459	80.9	[210]	ABRPMCBSOIL-01514	75.5	<sup>2</sup> [220]
ABRPMCBSOIL-01458	75.5	[200]	ABRPMCBSOIL-01513	140.0	[220]
ABRPMCBSOIL-01457	72.7	[220]	ABRPMCBSOIL-01512	139.3	[240]
ABRPMCBSOIL-01456	70.9	[180]	ABRPMCBSOIL-01511	135.6	[0.2]
ABRPMCBSOIL-01455	65.8	[180]	ABRPMCBSOIL-01510	133.3	[260]
ABRPMCBSOIL-01454	65.0	[220]	ABRPMCBSOIL-01509	125.5	[190]
ABRPMCBSOIL-01453	62.7	[0.23]	ABRPMCBSOIL-01508	123.2	[240]
ABRPMCBSOIL-01452	56.5	[160]	ABRPMCBSOIL-01507	121.0	[210]
ABRPMCBSOIL-01451	51.3	[170]	ABRPMCBSOIL-01506	115.5	[200]
ABRPMCBSOIL-01450	50.2	[180]	ABRPMCBSOIL-01505	113.2	[220]
ABRPMCBSOIL-01447	41.0	[210]	ABRPMCBSOIL-01504	111.2	[200]
ABRPMCBSOIL-01448	43.0	[200]	ABRPMCBSOIL-01503	105.5	[230]
ABRPMCBSOIL-01449	45.5	[170]	ABRPMCBSOIL-01502	103.0	[240]

**Table 14. ABRP Soil Sampling Results (Continued)**

4/3/2024			4/4/2024		
ARP-007-SB			ARP-008-SB		
Soil Sample	Depth (ft)	TCE (µg/kg)	Soil Sample	Depth (ft)	TCE (µg/kg)
ABRPMCBSOIL-01553	86.7	<sup>3</sup> [8.28]	ABRPMCBSOIL-01554	36.5	[180]
ABRPMCBSOIL-01552	126.8	<sup>1,3</sup> 1.97	ABRPMCBSOIL-01588	96.8	<sup>3</sup> [5.36]
ABRPMCBSOIL-01551	96.4	<sup>2</sup> [190]	ABRPMCBSOIL-01587	126.5	<sup>2</sup> [220]
ABRPMCBSOIL-01550	66.5	<sup>2</sup> [190]	ABRPMCBSOIL-01586	46.5	<sup>2</sup> [180]
ABRPMCBSOIL-01549	43.7	<sup>2</sup> [190]	ABRPMCBSOIL-01585	139.7	[210]
ABRPMCBSOIL-01545	139.8	[270]	ABRPMCBSOIL-01584	136.6	[210]
ABRPMCBSOIL-01544	138.1	[190]	ABRPMCBSOIL-01583	135.0	[220]
ABRPMCBSOIL-01543	136.7	[230]	ABRPMCBSOIL-01582	133.0	[190]
ABRPMCBSOIL-01542	134.3	[170]	ABRPMCBSOIL-01581	126.5	[190]
ABRPMCBSOIL-01541	126.8	[200]	ABRPMCBSOIL-01580	123.3	[210]
ABRPMCBSOIL-01540	125.6	[210]	ABRPMCBSOIL-01579	121.2	[180]
ABRPMCBSOIL-01539	124.6	[200]	ABRPMCBSOIL-01578	116.8	[180]
ABRPMCBSOIL-01538	116.2	[210]	ABRPMCBSOIL-01577	114.8	[250]
ABRPMCBSOIL-01537	106.8	[220]	ABRPMCBSOIL-01576	112.7	[220]
ABRPMCBSOIL-01536	104.1	[240]	ABRPMCBSOIL-01575	106.8	[210]
ABRPMCBSOIL-01535	96.4	[210]	ABRPMCBSOIL-01574	104.2	[200]
ABRPMCBSOIL-01534	93.0	[200]	ABRPMCBSOIL-01573	101.6	[180]
ABRPMCBSOIL-01533	90.8	[190]	ABRPMCBSOIL-01572	96.8	[230]
ABRPMCBSOIL-01532	86.7	[220]	ABRPMCBSOIL-01571	93.8	[220]
ABRPMCBSOIL-01531	84.2	[210]	ABRPMCBSOIL-01570	92.0	[200]
ABRPMCBSOIL-01530	82.1	[240]	ABRPMCBSOIL-01569	89.2	[200]
ABRPMCBSOIL-01529	76.5	[220]	ABRPMCBSOIL-01568	86.5	[190]
ABRPMCBSOIL-01528	74.1	[190]	ABRPMCBSOIL-01567	84.4	[220]
ABRPMCBSOIL-01527	71.9	[210]	ABRPMCBSOIL-01566	81.5	[210]
ABRPMCBSOIL-01526	66.5	[210]	ABRPMCBSOIL-01565	76.7	[290]
ABRPMCBSOIL-01525	64.4	[200]	ABRPMCBSOIL-01564	75.2	[210]
ABRPMCBSOIL-01524	62.6	[210]	ABRPMCBSOIL-01563	74.0	[200]
ABRPMCBSOIL-01523	56.5	[210]	ABRPMCBSOIL-01562	66.8	[180]
ABRPMCBSOIL-01522	53.5	[190]	ABRPMCBSOIL-01561	65.4	[180]
ABRPMCBSOIL-01521	52.4	[220]	ABRPMCBSOIL-01560	64.0	[240]
ABRPMCBSOIL-01520	46.4	[210]	ABRPMCBSOIL-01559	56.0	[180]
ABRPMCBSOIL-01519	43.7	[180]	ABRPMCBSOIL-01558	55.3	[190]
ABRPMCBSOIL-01518	42.5	[180]	ABRPMCBSOIL-01557	46.5	[190]
ABRPMCBSOIL-01517	36.0	[190]	ABRPMCBSOIL-01556	43.0	[190]
			ABRPMCBSOIL-01555	43.0	[180]

**Table 14. ABRP Soil Sampling Results (Continued)**

3/19/2024			3/20/2024		
ARP-009-SB			ARP-010-SB		
Soil Sample	Depth (ft)	TCE (µg/kg)	Soil Sample	Depth (ft)	TCE (µg/kg)
ABRPMCBSOIL-01622	91.0	<sup>3</sup> [45]	ABRPMCBSOIL-01623	15.2	[200]
ABRPMCBSOIL-01589	16.2	[210]	ABRPMCBSOIL-01624	16.7	[210]
ABRPMCBSOIL-01590	21.4	[190]	ABRPMCBSOIL-01625	19.0	[200]
ABRPMCBSOIL-01591	24.5	[200]	ABRPMCBSOIL-01626	23.4	[270]
ABRPMCBSOIL-01592	27.5	[200]	ABRPMCBSOIL-01627	26.5	[250]
ABRPMCBSOIL-01593	31.0	[210]	ABRPMCBSOIL-01628	29.0	[190]
ABRPMCBSOIL-01594	34.7	[180]	ABRPMCBSOIL-01629	32.5	[190]
ABRPMCBSOIL-01595	38.5	[180]	ABRPMCBSOIL-01630	36.5	[180]
ABRPMCBSOIL-01596	42.0	[200]	ABRPMCBSOIL-01631	40.4	[180]
ABRPMCBSOIL-01597	44.0	[220]	ABRPMCBSOIL-01632	41.0	[200]
ABRPMCBSOIL-01598	44.8	[190]	ABRPMCBSOIL-01633	46.4	[200]
ABRPMCBSOIL-01599	48.0	[200]	ABRPMCBSOIL-01634	53.0	[190]
ABRPMCBSOIL-01600	51.0	[210]	ABRPMCBSOIL-01635	54.0	[200]
ABRPMCBSOIL-01601	54.5	[220]	ABRPMCBSOIL-01636	56.5	[210]
ABRPMCBSOIL-01602	58.0	[240]	ABRPMCBSOIL-01637	62.0	[230]
ABRPMCBSOIL-01603	61.5	[270]	ABRPMCBSOIL-01638	64.5	[220]
ABRPMCBSOIL-01604	64.2	[190]	ABRPMCBSOIL-01639	66.5	[220]
ABRPMCBSOIL-01605	70.3	[200]	ABRPMCBSOIL-01640	73.6	[210]
ABRPMCBSOIL-01606	73.0	[230]	ABRPMCBSOIL-01641	75.7	[240]
ABRPMCBSOIL-01607	74.9	[210]	ABRPMCBSOIL-01642	76.6	[220]
ABRPMCBSOIL-01608	78.7	[220]	ABRPMCBSOIL-01643	82.5	[200]
ABRPMCBSOIL-01609	82.0	[200]	ABRPMCBSOIL-01644	83.8	[230]
ABRPMCBSOIL-01621	42.0	<sup>2</sup> [200]	ABRPMCBSOIL-01645	86.5	[210]
ABRPMCBSOIL-01620	120.8	[210]	ABRPMCBSOIL-01646	92.1	[190]
ABRPMCBSOIL-01619	120.2	[250]	ABRPMCBSOIL-01647	93.6	[340]
ABRPMCBSOIL-01618	114.7	[290]	ABRPMCBSOIL-01648	96.5	[200]
ABRPMCBSOIL-01617	112.6	[250]	ABRPMCBSOIL-01649	100.8	[220]
ABRPMCBSOIL-01616	104.2	[220]	ABRPMCBSOIL-01650	103.8	[210]
ABRPMCBSOIL-01615	102.7	[220]	ABRPMCBSOIL-01651	106.5	[230]
ABRPMCBSOIL-01614	101.5	[230]	ABRPMCBSOIL-01652	113.5	[230]
ABRPMCBSOIL-01613	94.5	[190]	ABRPMCBSOIL-01653	116.5	[240]
ABRPMCBSOIL-01612	91.0	[210]	ABRPMCBSOIL-01654	121.0	[210]
ABRPMCBSOIL-01611	89.6	[220]	ABRPMCBSOIL-01655	56.5	<sup>3</sup> [4.95]
ABRPMCBSOIL-01610	84.5	[220]			

**Table 14. ABRP Soil Sampling Results (Continued)**

4/1/2024			3/26/2024		
ARP-011-SB			ARP-012-SB		
Soil Sample	Depth (ft)	TCE (µg/kg)	Soil Sample	Depth (ft)	TCE (µg/kg)
ABRPMCBSOIL-01690	105.5	<sup>2</sup> [210]	ABRPMCBSOIL-01692	16.5	[210]
ABRPMCBSOIL-01689	84.0	<sup>2</sup> [180]	ABRPMCBSOIL-01693	20.5	[220]
ABRPMCBSOIL-01688	55.7	<sup>2</sup> [200]	ABRPMCBSOIL-01694	23.0	[190]
ABRPMCBSOIL-01687	119.6	[200]	ABRPMCBSOIL-01695	26.5	[260]
ABRPMCBSOIL-01686	118.2	[200]	ABRPMCBSOIL-01696	31.3	[200]
ABRPMCBSOIL-01685	115.6	[200]	ABRPMCBSOIL-01697	34.8	[180]
ABRPMCBSOIL-01684	113.0	[210]	ABRPMCBSOIL-01698	36.5	[210]
ABRPMCBSOIL-01683	105.5	[250]	ABRPMCBSOIL-01699	43.6	[200]
ABRPMCBSOIL-01682	103.0	[210]	ABRPMCBSOIL-01700	45.6	[220]
ABRPMCBSOIL-01681	101.5	[260]	ABRPMCBSOIL-01701	46.8	[220]
ABRPMCBSOIL-01680	95.5	[250]	ABRPMCBSOIL-01702	54.6	[200]
ABRPMCBSOIL-01679	93.0	[270]	ABRPMCBSOIL-01703	56.8	[200]
ABRPMCBSOIL-01678	89.0	[210]	ABRPMCBSOIL-01704	62.0	[220]
ABRPMCBSOIL-01677	84.0	[210]	ABRPMCBSOIL-01705	64.3	[360]
ABRPMCBSOIL-01676	81.5	[220]	ABRPMCBSOIL-01706	66.5	[340]
ABRPMCBSOIL-01675	79.8	[200]	ABRPMCBSOIL-01707	69.8	[250]
ABRPMCBSOIL-01674	75.7	[240]	ABRPMCBSOIL-01708	73.5	[220]
ABRPMCBSOIL-01673	73.0	[220]	ABRPMCBSOIL-01709	76.5	[230]
ABRPMCBSOIL-01672	70.9	[230]	ABRPMCBSOIL-01710	79.0	[180]
ABRPMCBSOIL-01671	65.6	[210]	ABRPMCBSOIL-01711	82.0	[240]
ABRPMCBSOIL-01670	62.5	[230]	ABRPMCBSOIL-01712	85.0	[180]
ABRPMCBSOIL-01669	59.7	[250]	ABRPMCBSOIL-01713	86.5	[220]
ABRPMCBSOIL-01668	55.7	[190]	ABRPMCBSOIL-01714	92.0	[210]
ABRPMCBSOIL-01667	53.5	[350]	ABRPMCBSOIL-01715	93.7	[200]
ABRPMCBSOIL-01666	50.5	[200]	ABRPMCBSOIL-01716	96.5	[220]
ABRPMCBSOIL-01665	45.6	[230]	ABRPMCBSOIL-01717	104.3	[190]
ABRPMCBSOIL-01664	43.1	[230]	ABRPMCBSOIL-01718	106.6	[220]
ABRPMCBSOIL-01663	42.0	[210]	ABRPMCBSOIL-01719	115.0	[310]
ABRPMCBSOIL-01662	35.5	[200]	ABRPMCBSOIL-01720	116.4	[250]
ABRPMCBSOIL-01661	32.5	[200]	ABRPMCBSOIL-01721	116.9	[330]
ABRPMCBSOIL-01660	30.2	[210]	ABRPMCBSOIL-01722	118.2	[200]
ABRPMCBSOIL-01659	25.5	[220]	ABRPMCBSOIL-01723	119.9	[200]
ABRPMCBSOIL-01658	21.4	[230]	ABRPMCBSOIL-01724	36.5	<sup>2</sup> [170]
ABRPMCBSOIL-01657	17.0	[230]	ABRPMCBSOIL-01725	115.0	<sup>2</sup> [210]
ABRPMCBSOIL-01656	15.8	[230]	ABRPMCBSOIL-01726	76.5	<sup>3</sup> [5.1]
ABRPMCBSOIL-01691	35.5	<sup>3</sup> [6.69]			

**Table 14. ABRP Soil Sampling Results (Continued/End)**

Notes:

<sup>1</sup> Qualified as J or UJ which are estimated values

<sup>2</sup> Field duplicate (FD): highest result reported

<sup>3</sup> Split sample (SPL), sent to two laboratories; highest result reported

Values in brackets are equal to the quantitation limit and are qualified as non-detect

TCE MCL = 610 ug/L

**Table 15. MCB Soil Sampling Results**

3/11/2024				3/6/2024			
MCB-001-SB				MCB-002-SB			
Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)	Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)
ABRPMCBSOIL-01761	15.5	[190]	[190]	ABRPMCBSOIL-01797	15.2	[210]	[210]
ABRPMCBSOIL-01762	16.7	[260]	[260]	ABRPMCBSOIL-01798	16.7	[200]	[200]
ABRPMCBSOIL-01763	20.8	[190]	[190]	ABRPMCBSOIL-01799	19.5	[200]	[200]
ABRPMCBSOIL-01764	23.1	[190]	[190]	ABRPMCBSOIL-01800	21.9	[190]	[190]
ABRPMCBSOIL-01765	26.5	[230]	[230]	ABRPMCBSOIL-01801	26.5	[210]	[210]
ABRPMCBSOIL-01766	30.0	[210]	[210]	ABRPMCBSOIL-01802	32.1	[210]	[210]
ABRPMCBSOIL-01767	33.0	[190]	[190]	ABRPMCBSOIL-01803	34.4	[210]	[210]
ABRPMCBSOIL-01768	36.5	[210]	[210]	ABRPMCBSOIL-01804	36.5	[190]	[190]
ABRPMCBSOIL-01769	42.5	[230]	[230]	ABRPMCBSOIL-01805	41.6	[220]	[220]
ABRPMCBSOIL-01770	44.4	[210]	[210]	ABRPMCBSOIL-01806	44.0	[190]	[190]
ABRPMCBSOIL-01771	46.5	[230]	[230]	ABRPMCBSOIL-01807	46.6	[210]	[210]
ABRPMCBSOIL-01772	52.3	[200]	[200]	ABRPMCBSOIL-01808	52.0	[190]	[190]
ABRPMCBSOIL-01773	54.3	[210]	[210]	ABRPMCBSOIL-01809	54.0	[220]	[220]
ABRPMCBSOIL-01774	54.3	[260]	[260]	ABRPMCBSOIL-01810	56.5	[260]	[260]
ABRPMCBSOIL-01775	62.6	[310]	[310]	ABRPMCBSOIL-01811	66.8	[200]	[200]
ABRPMCBSOIL-01776	64.6	[240]	[240]	ABRPMCBSOIL-01812	71.6	[190]	[190]
ABRPMCBSOIL-01777	66.5	[280]	[280]	ABRPMCBSOIL-01813	73.5	[220]	[220]
ABRPMCBSOIL-01778	76.5	[350]	[350]	ABRPMCBSOIL-01814	75.4	[250]	[250]
ABRPMCBSOIL-01779	79.0	[270]	[270]	ABRPMCBSOIL-01815	76.9	[200]	[200]
ABRPMCBSOIL-01780	82.3	[300]	[300]	ABRPMCBSOIL-01816	81.5	[240]	[240]
ABRPMCBSOIL-01781	84.6	[220]	[220]	ABRPMCBSOIL-01817	83.2	[260]	[260]
ABRPMCBSOIL-01782	86.5	[200]	[200]	ABRPMCBSOIL-01818	85.0	[190]	[190]
ABRPMCBSOIL-01783	93.4	[220]	[220]	ABRPMCBSOIL-01819	86.5	[210]	[210]
ABRPMCBSOIL-01784	95.0	[220]	[220]	ABRPMCBSOIL-01820	95.2	[170]	[170]
ABRPMCBSOIL-01785	96.8	[170]	[170]	ABRPMCBSOIL-01821	96.8	[260]	[260]
ABRPMCBSOIL-01786	104.7	[220]	[220]	ABRPMCBSOIL-01822	100.8	[200]	[200]
ABRPMCBSOIL-01787	105.7	[190]	[190]	ABRPMCBSOIL-01823	103.5	[200]	[200]
ABRPMCBSOIL-01788	106.8	[200]	[200]	ABRPMCBSOIL-01824	106.5	[210]	[210]
ABRPMCBSOIL-01789	114.5	[370]	[370]	ABRPMCBSOIL-01825	112.4	[380]	[380]
ABRPMCBSOIL-01790	115.5	[240]	[240]	ABRPMCBSOIL-01826	114.0	[210]	[210]
ABRPMCBSOIL-01791	116.7	[220]	[220]	ABRPMCBSOIL-01827	115.8	[230]	[230]
ABRPMCBSOIL-01792	119.5	[230]	[230]	ABRPMCBSOIL-01828	119.5	[220]	[220]
ABRPMCBSOIL-01793	46.5	<sup>2</sup> [240]	<sup>2</sup> [240]	ABRPMCBSOIL-01829	75.4	<sup>2</sup> [240]	<sup>2</sup> [240]
ABRPMCBSOIL-01794	119.5	<sup>2</sup> [210]	<sup>2</sup> [210]	ABRPMCBSOIL-01830	106.5	<sup>2</sup> [230]	<sup>2</sup> [230]
ABRPMCBSOIL-01795	36.5	<sup>3</sup> [34.1]	<sup>3</sup> [25.6]	ABRPMCBSOIL-01831	26.5	<sup>3</sup> [7.24]	<sup>3</sup> [5.43]
ABRPMCBSOIL-01796	84.6	<sup>3</sup> [9.12]	<sup>3</sup> [6.84]	ABRPMCBSOIL-01832	46.6	<sup>3</sup> [7.12]	<sup>3</sup> [5.34]

**Table 15. MCB Soil Sampling Results (*Ce*ontinued)**

2/5/2024				2/28/2024			
MCB-003-SB				MCB-004-SB			
Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)	Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)
ABRPMCBSOIL-01833	15.0	[240]	[240]	ABRPMCBSOIL-01870	15.0	[210]	[210]
ABRPMCBSOIL-01834	20.5	[260]	[260]	ABRPMCBSOIL-01871	16.4	[210]	[210]
ABRPMCBSOIL-01835	22.5	[260]	[260]	ABRPMCBSOIL-01872	20.0	[220]	[220]
ABRPMCBSOIL-01836	25.5	[250]	[250]	ABRPMCBSOIL-01873	23.0	[230]	[230]
ABRPMCBSOIL-01837	32.0	[280]	[280]	ABRPMCBSOIL-01874	26.5	[210]	[210]
ABRPMCBSOIL-01838	33.3	[260]	[260]	ABRPMCBSOIL-01875	32.0	[190]	[190]
ABRPMCBSOIL-01839	35.6	[250]	[250]	ABRPMCBSOIL-01876	34.0	[210]	[210]
ABRPMCBSOIL-01840	40.9	[280]	[280]	ABRPMCBSOIL-01877	36.0	[200]	[200]
ABRPMCBSOIL-01841	42.5	[240]	[240]	ABRPMCBSOIL-01878	40.6	[170]	[170]
ABRPMCBSOIL-01842	45.0	[260]	[260]	ABRPMCBSOIL-01879	43.5	[210]	[210]
ABRPMCBSOIL-01843	52.5	[300]	[300]	ABRPMCBSOIL-01880	16.5	[210]	[210]
ABRPMCBSOIL-01844	54.0	[250]	[250]	ABRPMCBSOIL-01881	51.8	[210]	[210]
ABRPMCBSOIL-01845	55.5	[250]	[250]	ABRPMCBSOIL-01882	54.0	[200]	[200]
ABRPMCBSOIL-01846	64.0	[290]	[290]	ABRPMCBSOIL-01883	56.5	[210]	[210]
ABRPMCBSOIL-01847	65.5	[250]	[250]	ABRPMCBSOIL-01884	66.5	[200]	[200]
ABRPMCBSOIL-01848	74.3	[280]	[280]	ABRPMCBSOIL-01885	75.5	[200]	[200]
ABRPMCBSOIL-01849	75.5	[250]	[250]	ABRPMCBSOIL-01886	76.8	[210]	[210]
ABRPMCBSOIL-01850	77.0	[260]	[260]	ABRPMCBSOIL-01887	80.5	[210]	[210]
ABRPMCBSOIL-01851	79.7	[260]	[260]	ABRPMCBSOIL-01888	81.5	[300]	[300]
ABRPMCBSOIL-01852	82.8	[270]	[270]	ABRPMCBSOIL-01889	84.2	[230]	[230]
ABRPMCBSOIL-01853	85.5	[240]	[240]	ABRPMCBSOIL-01890	86.5	[190]	[190]
ABRPMCBSOIL-01854	89.5	[270]	[270]	ABRPMCBSOIL-01891	91.4	[240]	[240]
ABRPMCBSOIL-01855	91.5	[270]	[270]	ABRPMCBSOIL-01892	93.5	[210]	[210]
ABRPMCBSOIL-01856	95.0	[260]	[260]	ABRPMCBSOIL-01893	96.5	[230]	[230]
ABRPMCBSOIL-01857	102.0	[260]	[260]	ABRPMCBSOIL-01894	103.4	[190]	[190]
ABRPMCBSOIL-01858	104.0	[310]	[310]	ABRPMCBSOIL-01895	104.8	[210]	[210]
ABRPMCBSOIL-01859	105.5	[260]	[260]	ABRPMCBSOIL-01896	106.5	[190]	[190]
ABRPMCBSOIL-01860	112.5	[290]	[290]	ABRPMCBSOIL-01897	114.6	[210]	[210]
ABRPMCBSOIL-01861	114.0	[290]	[290]	ABRPMCBSOIL-01898	115.5	[200]	[200]
ABRPMCBSOIL-01862	115.5	[290]	[290]	ABRPMCBSOIL-01899	116.5	[230]	[230]
ABRPMCBSOIL-01863	121.6	[270]	[270]	ABRPMCBSOIL-01900	117.5	[220]	[220]
ABRPMCBSOIL-01864	122.6	[280]	[280]	ABRPMCBSOIL-01901	119.5	[300]	[300]
ABRPMCBSOIL-01865	55.5	<sup>2</sup> [240]	<sup>2</sup> [240]	ABRPMCBSOIL-01902	106.5	<sup>2</sup> [210]	<sup>2</sup> [210]
ABRPMCBSOIL-01866	79.7	<sup>2</sup> [240]	<sup>2</sup> [240]	ABRPMCBSOIL-01903	84.2	<sup>3</sup> [6.36]	<sup>3</sup> [4.77]
ABRPMCBSOIL-01867	105.5	<sup>2</sup> [270]	<sup>2</sup> [270]	ABRPMCBSOIL-01904	26.5	<sup>3</sup> [6.84]	<sup>3</sup> [5.13]
ABRPMCBSOIL-01869	85.5	<sup>3</sup> [9.16]	<sup>3</sup> [6.87]				
ABRPMCBSOIL-01868	75.5	<sup>3</sup> [16.4]	<sup>3</sup> [12.3]				

**Table 15. MCB Soil Sampling Results (*Ce*ontinued)**

2/8/2024				2/14/2024			
MCB-005-SB				MCB-006-SB			
Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)	Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)
ABRPMCBSOIL-01905	15.5	[340]	[340]	ABRPMCBSOIL-01940	16.0	[300]	[300]
ABRPMCBSOIL-01906	18.5	[240]	[240]	ABRPMCBSOIL-01941	19.0	[260]	[260]
ABRPMCBSOIL-01907	21.5	[260]	[260]	ABRPMCBSOIL-01942	23.0	[250]	[250]
ABRPMCBSOIL-01908	25.0	[260]	[260]	ABRPMCBSOIL-01943	26.5	[250]	[250]
ABRPMCBSOIL-01909	32.5	[260]	[260]	ABRPMCBSOIL-01944	33.5	[270]	[270]
ABRPMCBSOIL-01910	35.5	[260]	[260]	ABRPMCBSOIL-01945	36.5	[260]	[260]
ABRPMCBSOIL-01911	41.5	[260]	[260]	ABRPMCBSOIL-01946	41.0	[240]	[240]
ABRPMCBSOIL-01912	43.0	[260]	[260]	ABRPMCBSOIL-01947	43.5	[270]	[270]
ABRPMCBSOIL-01913	45.5	[260]	[260]	ABRPMCBSOIL-01948	46.5	[290]	[290]
ABRPMCBSOIL-01914	50.0	[280]	[280]	ABRPMCBSOIL-01949	46.5	[410]	[410]
ABRPMCBSOIL-01915	52.0	[260]	[260]	ABRPMCBSOIL-01950	53.4	[280]	[280]
ABRPMCBSOIL-01916	55.5	[250]	[250]	ABRPMCBSOIL-01951	55.1	[250]	[250]
ABRPMCBSOIL-01917	62.5	[250]	[250]	ABRPMCBSOIL-01952	66.5	[260]	[260]
ABRPMCBSOIL-01918	65.5	[270]	[270]	ABRPMCBSOIL-01953	72.5	[260]	[260]
ABRPMCBSOIL-01919	70.0	[250]	[250]	ABRPMCBSOIL-01954	74.0	[260]	[260]
ABRPMCBSOIL-01920	73.0	[270]	[270]	ABRPMCBSOIL-01955	76.5	[250]	[250]
ABRPMCBSOIL-01921	75.7	[280]	[280]	ABRPMCBSOIL-01956	78.0	[300]	[300]
ABRPMCBSOIL-01922	79.5	[320]	[320]	ABRPMCBSOIL-01957	82.0	[270]	[270]
ABRPMCBSOIL-01923	83.0	[300]	[300]	ABRPMCBSOIL-01958	84.6	[280]	[280]
ABRPMCBSOIL-01924	85.5	[300]	[300]	ABRPMCBSOIL-01959	86.0	[320]	[320]
ABRPMCBSOIL-01925	92.0	[260]	[260]	ABRPMCBSOIL-01960	88.5	[280]	[280]
ABRPMCBSOIL-01926	95.5	[230]	[230]	ABRPMCBSOIL-01961	91.0	[270]	[270]
ABRPMCBSOIL-01927	99.0	[250]	[250]	ABRPMCBSOIL-01962	96.0	[430]	[430]
ABRPMCBSOIL-01928	100.0	[270]	[270]	ABRPMCBSOIL-01963	102.6	[420]	[420]
ABRPMCBSOIL-01929	102.5	[260]	[260]	ABRPMCBSOIL-01964	104.2	[250]	[250]
ABRPMCBSOIL-01930	105.5	[270]	[270]	ABRPMCBSOIL-01965	106.5	[290]	[290]
ABRPMCBSOIL-01931	110.0	[310]	[310]	ABRPMCBSOIL-01966	110.1	[300]	[300]
ABRPMCBSOIL-01932	112.5	[260]	[260]	ABRPMCBSOIL-01967	113.4	[210]	[210]
ABRPMCBSOIL-01933	115.5	[260]	[260]	ABRPMCBSOIL-01968	114.5	[270]	[270]
ABRPMCBSOIL-01934	116.5	[280]	[280]	ABRPMCBSOIL-01969	116.5	[270]	[270]
ABRPMCBSOIL-01935	118.2	[270]	[270]	ABRPMCBSOIL-01970	118.0	[290]	[290]
ABRPMCBSOIL-01936	120.0	[360]	[360]	ABRPMCBSOIL-01971	119.7	[310]	[310]
ABRPMCBSOIL-01937	55.5	<sup>2</sup> [250]	<sup>2</sup> [250]	ABRPMCBSOIL-01972	76.5	<sup>3</sup> [9.6]	<sup>3</sup> [7.2]
ABRPMCBSOIL-01938	65.5	<sup>3</sup> [9.84]	<sup>3</sup> [7.38]	ABRPMCBSOIL-01973	84.6	<sup>3</sup> [8.68]	<sup>3</sup> [6.51]
ABRPMCBSOIL-01939	105.5	<sup>3</sup> [7.52]	<sup>3</sup> [5.64]				

**Table 15. MCB Soil Sampling Results (*Ce*ontinued)**

2/20/2024				2/26/2024			
MCB-007-SB				MCB-008-SB			
Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)	Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)
ABRPMCBSOIL-01974	16.0	[240]	[240]	ABRPMCBSOIL-02010	16.5	[200]	[200]
ABRPMCBSOIL-01975	20.0	[240]	[240]	ABRPMCBSOIL-02011	21.5	[200]	[200]
ABRPMCBSOIL-01976	22.5	[240]	[240]	ABRPMCBSOIL-02012	23.0	[220]	[220]
ABRPMCBSOIL-01977	26.5	[230]	[230]	ABRPMCBSOIL-02013	27.0	[210]	[210]
ABRPMCBSOIL-01978	32.2	[250]	[250]	ABRPMCBSOIL-02014	32.0	[200]	[200]
ABRPMCBSOIL-01979	34.0	[420]	[420]	ABRPMCBSOIL-02015	34.0	[210]	[210]
ABRPMCBSOIL-01980	36.5	[240]	[240]	ABRPMCBSOIL-02016	36.5	[220]	[220]
ABRPMCBSOIL-01981	41.5	[310]	[310]	ABRPMCBSOIL-02017	42.7	[190]	[190]
ABRPMCBSOIL-01982	44.2	[250]	[250]	ABRPMCBSOIL-02018	46.5	[280]	[280]
ABRPMCBSOIL-01983	46.5	[250]	[250]	ABRPMCBSOIL-02019	49.5	[270]	[270]
ABRPMCBSOIL-01984	51.5	[240]	[240]	ABRPMCBSOIL-02020	51.4	[170]	[170]
ABRPMCBSOIL-01985	53.8	[260]	[260]	ABRPMCBSOIL-02021	54.3	[240]	[240]
ABRPMCBSOIL-01986	56.6	[250]	[250]	ABRPMCBSOIL-02022	56.5	[200]	[200]
ABRPMCBSOIL-01987	64.0	[260]	[260]	ABRPMCBSOIL-02023	64.5	[220]	[220]
ABRPMCBSOIL-01988	66.8	[230]	[230]	ABRPMCBSOIL-02024	66.5	[220]	[220]
ABRPMCBSOIL-01989	72.5	[260]	[260]	ABRPMCBSOIL-02025	74.0	[260]	[260]
ABRPMCBSOIL-01990	74.5	[250]	[250]	ABRPMCBSOIL-02026	76.5	[220]	[220]
ABRPMCBSOIL-01991	76.7	[250]	[250]	ABRPMCBSOIL-02027	79.3	[210]	[210]
ABRPMCBSOIL-01992	79.6	[260]	[260]	ABRPMCBSOIL-02028	85.2	[240]	[240]
ABRPMCBSOIL-01993	81.0	[330]	[330]	ABRPMCBSOIL-02029	86.6	[260]	[260]
ABRPMCBSOIL-01994	86.6	[280]	[280]	ABRPMCBSOIL-02030	91.3	[220]	[220]
ABRPMCBSOIL-01995	96.0	[240]	[240]	ABRPMCBSOIL-02031	93.2	[200]	[200]
ABRPMCBSOIL-01996	103.5	[260]	[260]	ABRPMCBSOIL-02032	94.7	[230]	[230]
ABRPMCBSOIL-01997	104.5	[250]	[250]	ABRPMCBSOIL-02033	96.5	[240]	[240]
ABRPMCBSOIL-01998	106.7	[250]	[250]	ABRPMCBSOIL-02034	100.0	[230]	[230]
ABRPMCBSOIL-01999	114.5	[270]	[270]	ABRPMCBSOIL-02035	102.8	[180]	[180]
ABRPMCBSOIL-02000	116.5	[290]	[290]	ABRPMCBSOIL-02036	105.6	[220]	[220]
ABRPMCBSOIL-02001	117.3	[290]	[290]	ABRPMCBSOIL-02037	112.6	[220]	[220]
ABRPMCBSOIL-02002	118.8	[370]	[370]	ABRPMCBSOIL-02038	113.7	[200]	[200]
ABRPMCBSOIL-02003	119.7	[270]	[270]	ABRPMCBSOIL-02039	114.5	[200]	[200]
ABRPMCBSOIL-02006	36.5	<sup>2</sup> [250]	<sup>2</sup> [250]	ABRPMCBSOIL-02040	116.6	[210]	[210]
ABRPMCBSOIL-02007	106.7	<sup>2</sup> [280]	<sup>2</sup> [280]	ABRPMCBSOIL-02041	119.5	[180]	[180]
ABRPMCBSOIL-02008	26.5	<sup>3</sup> [8.84]	<sup>3</sup> [6.63]	ABRPMCBSOIL-02042	27.0	<sup>3</sup> [8.72]	<sup>3</sup> [6.54]
ABRPMCBSOIL-02009	86.6	<sup>3</sup> [9.12]	<sup>3</sup> [6.84]				

**Table 15. MCB Soil Sampling Results (*Ce*ontinued)**

2/22/2024				3/4/2024			
MCB-009-SB				MCB-010-SB			
Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)	Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)
ABRPMCBSOIL-02043	16.0	[250]	[250]	ABRPMCBSOIL-02077	16.5	[200]	[200]
ABRPMCBSOIL-02044	18.5	[210]	[210]	ABRPMCBSOIL-02078	22.1	[210]	[210]
ABRPMCBSOIL-02045	22.0	[210]	[210]	ABRPMCBSOIL-02079	23.8	[200]	[200]
ABRPMCBSOIL-02046	26.5	[210]	[210]	ABRPMCBSOIL-02080	26.5	[200]	[200]
ABRPMCBSOIL-02047	31.0	[210]	[210]	ABRPMCBSOIL-02081	32.6	[210]	[210]
ABRPMCBSOIL-02048	34.0	[230]	[230]	ABRPMCBSOIL-02082	35.5	[210]	[210]
ABRPMCBSOIL-02049	36.7	[200]	[200]	ABRPMCBSOIL-02083	36.1	[250]	[250]
ABRPMCBSOIL-02050	41.6	[230]	[230]	ABRPMCBSOIL-02084	36.1	[200]	[200]
ABRPMCBSOIL-02051	43.8	[200]	[200]	ABRPMCBSOIL-02085	43.0	[220]	[220]
ABRPMCBSOIL-02052	46.6	[200]	[200]	ABRPMCBSOIL-02086	46.5	[210]	[210]
ABRPMCBSOIL-02053	50.5	[200]	[200]	ABRPMCBSOIL-02087	51.8	[190]	[190]
ABRPMCBSOIL-02054	53.0	[230]	[230]	ABRPMCBSOIL-02088	53.8	[200]	[200]
ABRPMCBSOIL-02055	56.6	[200]	[200]	ABRPMCBSOIL-02089	56.5	[190]	[190]
ABRPMCBSOIL-02056	64.0	[200]	[200]	ABRPMCBSOIL-02090	65.0	[190]	[190]
ABRPMCBSOIL-02057	66.5	[220]	[220]	ABRPMCBSOIL-02091	66.5	[240]	[240]
ABRPMCBSOIL-02058	70.9	[220]	[220]	ABRPMCBSOIL-02092	72.5	[210]	[210]
ABRPMCBSOIL-02059	72.5	[240]	[240]	ABRPMCBSOIL-02093	74.0	[210]	[210]
ABRPMCBSOIL-02060	74.6	[210]	[210]	ABRPMCBSOIL-02094	77.0	[220]	[220]
ABRPMCBSOIL-02061	77.0	[220]	[220]	ABRPMCBSOIL-02095	82.2	[200]	[200]
ABRPMCBSOIL-02062	80.0	[200]	[200]	ABRPMCBSOIL-02096	85.2	[200]	[200]
ABRPMCBSOIL-02063	81.7	[220]	[220]	ABRPMCBSOIL-02097	86.5	[210]	[210]
ABRPMCBSOIL-02064	83.1	[210]	[210]	ABRPMCBSOIL-02098	92.7	[200]	[200]
ABRPMCBSOIL-02065	86.0	[210]	[210]	ABRPMCBSOIL-02099	94.4	[210]	[210]
ABRPMCBSOIL-02066	90.0	[210]	[210]	ABRPMCBSOIL-02100	96.5	[220]	[220]
ABRPMCBSOIL-02067	93.0	[190]	[190]	ABRPMCBSOIL-02101	103.2	[200]	[200]
ABRPMCBSOIL-02068	96.5	[230]	[230]	ABRPMCBSOIL-02102	105.2	[190]	[190]
ABRPMCBSOIL-02069	102.6	[220]	[220]	ABRPMCBSOIL-02103	106.5	[220]	[220]
ABRPMCBSOIL-02070	105.0	[330]	[330]	ABRPMCBSOIL-02104	112.0	[220]	[220]
ABRPMCBSOIL-02071	106.4	[190]	[190]	ABRPMCBSOIL-02105	114.7	[200]	[200]
ABRPMCBSOIL-02072	114.0	[230]	[230]	ABRPMCBSOIL-02106	116.5	[240]	[240]
ABRPMCBSOIL-02073	116.5	[200]	[200]	ABRPMCBSOIL-02107	117.5	[210]	[210]
ABRPMCBSOIL-02074	119.8	[210]	[210]	ABRPMCBSOIL-02108	119.5	[210]	[210]
ABRPMCBSOIL-02075	26.5	<sup>2</sup> [210]	<sup>2</sup> [210]	ABRPMCBSOIL-02109	86.5	<sup>2</sup> [230]	<sup>2</sup> [230]
ABRPMCBSOIL-02076	36.7	<sup>3</sup> [8.16]	<sup>3</sup> [6.12]	ABRPMCBSOIL-02110	32.6	<sup>3</sup> [13]	<sup>3</sup> [9.78]

**Table 15. MCB Soil Sampling Results (*Ce*ontinued/*E*end)**  
 3/14/2024 **MCB-011-SB**

Soil Sample	Depth (ft)	PCE (µg/kg)	TCE (µg/kg)
ABRPMCB SOIL-02111	19.7	[190]	[190]
ABRPMCB SOIL-02112	23.0	[230]	[230]
ABRPMCB SOIL-02113	24.5	[260]	[260]
ABRPMCB SOIL-02114	29.8	[210]	[210]
ABRPMCB SOIL-02115	32.0	[230]	[230]
ABRPMCB SOIL-02116	34.5	[200]	[200]
ABRPMCB SOIL-02117	40.0	<sup>1</sup> 280	<sup>1</sup> 280
ABRPMCB SOIL-02118	42.0	[220]	[220]
ABRPMCB SOIL-02119	44.5	[200]	[200]
ABRPMCB SOIL-02120	51.5	[220]	[220]
ABRPMCB SOIL-02121	52.5	[210]	[210]
ABRPMCB SOIL-02122	54.5	[220]	[220]
ABRPMCB SOIL-02123	62.1	[200]	[200]
ABRPMCB SOIL-02124	64.6	[200]	[200]
ABRPMCB SOIL-02125	73.8	[200]	[200]
ABRPMCB SOIL-02126	74.9	[160]	[160]
ABRPMCB SOIL-02127	80.2	[380]	[380]
ABRPMCB SOIL-02128	81.3	[300]	[300]
ABRPMCB SOIL-02129	83.0	[200]	[200]
ABRPMCB SOIL-02130	84.5	[230]	[230]
ABRPMCB SOIL-02131	91.5	[180]	[180]
ABRPMCB SOIL-02132	92.6	[200]	[200]
ABRPMCB SOIL-02133	93.6	[220]	[220]
ABRPMCB SOIL-02134	94.8	[200]	[200]
ABRPMCB SOIL-02135	102.0	[210]	[210]
ABRPMCB SOIL-02136	103.6	<sup>1</sup> 190	<sup>1</sup> 190
ABRPMCB SOIL-02137	104.5	[210]	[210]
ABRPMCB SOIL-02138	106.5	[220]	[220]
ABRPMCB SOIL-02139	108.4	[230]	[230]
ABRPMCB SOIL-02140	109.9	[230]	[230]
ABRPMCB SOIL-02141	114.3	[240]	[240]
ABRPMCB SOIL-02142	119.5	[210]	[210]
ABRPMCB SOIL-02143	34.5	<sup>2</sup> [210]	<sup>2</sup> [210]
ABRPMCB SOIL-02144	108.4	<sup>2</sup> [180]	<sup>2</sup> [180]
ABRPMCB SOIL-02145	83.0	<sup>3</sup> [6.16]	<sup>3</sup> [4.62]

Notes:

<sup>1</sup> Qualified as J or UJ which are estimated values

<sup>2</sup> Field duplicate (FD): highest result reported

<sup>3</sup> Split sample (SPL), sent to two laboratories; highest result reported

Values in brackets are equal to the quantitation limit and are qualified as non-detect

PCE and TCE MCL = 344 µg/L