



Environment

Prepared for:  
NYSDEC  
Albany, NY

Prepared by:  
AECOM  
Latham, NY  
60273289  
September 2017

# Periodic Review Report

## June 15, 2016 through June 15, 2017

**Korkay, Inc.**  
**Site No. 5-18-014**

# Periodic Review Report

## June 15, 2016 through June 15, 2017

Korkay, Inc.  
Site No. 5-18-014

### Engineering Certification

For each institutional or engineering control identified for the site, I certify that all of the following statements are true:

- a) the institutional control and/or engineering control employed at this site is unchanged from the date the control was put in place, or last approved by DER;
- b) nothing has occurred that would impair the ability of such control to protect public health and the environment;
- c) nothing has occurred that would constitute a violation or failure to comply with any Site Management Plan for this control; and,
- d) access to the site will continue to be provided to DER to evaluate the remedy, including access to evaluate the continued maintenance of this control.

Respectfully submitted,

AECOM Technical Services Northeast, Inc.

Daniel Servetas  
Registered Professional Engineer  
New York License No. 079068



9/6/2017

Date

## Contents

<b>1.0 Site Overview .....</b>	<b>1-1</b>
<b>2.0 Evaluation of Remedy Performance, Effectiveness and Protectiveness.....</b>	<b>2-1</b>
2.1    Description of Monitoring Activities Completed .....	2-1
2.2    Monitoring Results .....	2-1
2.2.1    Groundwater Flow.....	2-1
2.2.2    Analytical Results.....	2-1
2.3    Summary of Groundwater Remedy Performance .....	2-3
<b>3.0 Institutional and Engineering Controls Plan Compliance Report .....</b>	<b>3-1</b>
3.1    Institutional and Engineering Controls Requirements and Compliance .....	3-1
3.2    Institutional and Engineering Controls Certification Forms.....	3-1
<b>4.0 Monitoring Plan Compliance Report.....</b>	<b>3-2</b>
4.1    Site Management Plan Reporting .....	3-2
4.1.1    Site Inspection .....	3-2
4.1.2    Post-remediation Groundwater Monitoring.....	3-2
<b>5.0 Operation, Maintenance and Monitoring Plan Compliance Report.....</b>	<b>5-1</b>
<b>6.0 Overall PRR Conclusions and Recommendations .....</b>	<b>6-1</b>
<b>7.0 References .....</b>	<b>7-2</b>

## List of Figures

- Figure 1 Site Location Plan
- Figure 2 Existing Conditions (Monitoring Well Location Map)
- Figure 3a Total VOC Isoconcentration Contour Map –September 14, 2016
- Figure 3b Total VOC Isoconcentration Contour Map – December 6, 2016
- Figure 3c Total VOC Isoconcentration Contour Map – March 12, 2017
- Figure 4 PFOA/PFOS Contaminant Plume Limit Map – March 12, 2017

## List of Tables

- Table 1 Groundwater Analytical Results – August 2007 to March 2017
- Table 2 Summary of PFOA/PFOS and 1,4-Dioxane Groundwater Analytical Results

## List of Charts

- Chart 1 Historical Groundwater TVOC Concentration Trends – Source Area Wells
- Chart 2 Post ISCO Injection Groundwater VOC Concentration Trends

## List of Appendices

Appendix A Environmental Notice

Appendix B IC/EC Certification Forms

Appendix C TVOC Isoconcentration Contour Maps from Previous Sampling Events (2007 to May 2016)

Appendix D Annual Monitoring Well Inspection Logs

Appendix E PRR Photolog

## Acronyms and Abbreviations

AS	Air Sparging
AWQS	New York State Ambient Water Quality Standards and Guidance Values
bgs	Below Grade Surface
CDM	Camp, Dresser, and McKee
COCs	Contaminants of Concern
DER-10	NYSDEC Technical Guidance for Site Investigation and Remediation
EC	Engineering Controls
EN	Environmental Notice
FFS	Focused Feasibility Study
FS	Feasibility Study
ft	Foot/Feet
HAL	USEPA Health Advisory Limit
IC	Institutional Controls
ISCO	<i>In Situ</i> Chemical Oxidation
Korkay	Korkay, Incorporated
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Conservation
NYSDOH	New York State Department of Health
OM&M	Operations, Maintenance and Monitoring
ORC	Oxygen Releasing Compound
PCE	Tetrachloroethene
PFAS	Perfluorinated Alkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid
PRR	Periodic Review Report
RI	Remedial Investigation
ROD	Record of Decision
RSO	Remedial System Optimization
SCGs	Standards, Criteria And Guidance Values
SCO	Soil Cleanup Objective
SMP	Site Management Plan
SVE	Soil Vapor Extraction
SVOCs	Semivolatile Organic Compound
TOGS	NYSDEC Technical and Operational Guidance Series
TVOCs	Total Volatile Organic Compounds
µg/L	Micrograms per Liter
USEPA	United States Environmental Protection Agency
VEWs	Vapor Extraction Wells
VOCs	Volatile Organic Compounds

## Executive Summary

This Periodic Review Report (PRR) has been prepared for the Korkay, Incorporated (Korkay) Site (Site No. 518014). The PRR provides annual documentation of the controls implemented for the Site as well as the inspections and monitoring activities conducted at the Site, as required by the Site Management Plan (SMP) (AECOM, November 2016b). The reporting period covered in this PRR is June 15, 2016 through June 15, 2017. This PRR was prepared by AECOM under Work Assignment number D007626-20.

Korkay supplied products to the automotive industry from 1969 to 1980 that resulted in the discharge of chemicals and contamination of soil and groundwater. A Record of Decision (ROD) was entered by the NYSDEC in March 1996. The selected remedy, including removal of grossly contaminated surface soil, installation and operation of a soil vapor extraction (SVE) and air sparge (AS) system and annual groundwater monitoring, was completed between 1997 and 2003.

Post-remediation groundwater sampling results indicated that groundwater in the former source area remained contaminated in excess of applicable standards. Additional soil and groundwater investigations conducted between 2007 and 2013 identified that the contamination was more widespread on site than previously known, and extended off-Site.

An Environmental Notice (EN) for the Site was filed with Fulton County on January 25, 2013 (Appendix A).

A supplemental remedial action, consisting of in-situ chemical oxidation (ISCO) injection, was conducted in October 2015. The purpose of the ISCO injection was to attempt to further remediate residual soil and groundwater contamination to meet the remedial goals established for the Site.

The SMP (AECOM, November 2016b) specifies that 6 wells will be monitored on a quarterly basis to provide the data to evaluate the effectiveness of the ISCO injection program. In addition, all monitoring wells at the Site will be sampled every five quarters to monitor plume conditions. All monitoring and reporting requirements stipulated in the SMP were met for this PRR reporting period. Two quarterly post-ISCO injection sampling events (September and December 2016) and one site-wide 5-quarter groundwater sampling event (March 2017) were conducted during this reporting period. At the request of NYSDEC, samples collected during the March 2017 event were analyzed for Perfluorinated Alkyl Substances (PFAS), including Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS), and 1,4-Dioxane, in addition to the contaminants of concern (COCs).

Compliance with each required component of the SMP and the remedy performance evaluation for this reporting period are summarized as follows:

- This PRR includes certification that the IC/ECs complied with the requirements of the EN. A copy of the IC/EC certification is included in Appendix B.
- All monitoring and reporting requirements stipulated in the SMP were met.
- The groundwater data generated during this PRR monitoring period demonstrates that groundwater contamination persists in some of the same areas as discussed in previous PRRs. The data show that the lateral extent of significant contaminant concentrations (i.e.,

greater than 1,000 µg/L) has decreased since administering the ISCO treatment, however the concentration in the former source area in the southwest quadrant of the Site remains relatively static and significantly above AWQS.

- The amount of residual chemicals from the ISCO injection (i.e., persulfate and ORC) in the treatment area is low and likely inadequate to promote further aerobic degradation of the contaminant mass.
- PFOA and/or PFOS were detected in several wells above the 70 nanograms per liter (ng/L) Health Advisory Limit (HAL) established by the United States Environmental Protection Agency (USEPA). It is important to note the probability that the past introduction of aerobic bioremediation alternatives at the Site, including air sparging and ISCO, potentially triggered PFAS precursors to transform to and terminate as PFOA/PFOS. The discovery of high concentrations of PFOA/PFOS will present additional challenges to further remediating the groundwater plume.

AECOM recommends the following:

- Annual periodic review is recommended in order to determine the compliance of the facility with the EC/IC's in place.
- Continue monitoring PFAS as part of future sampling events and update the SMP accordingly.
- Continue groundwater sampling in accordance with the SMP to monitor the groundwater plume.
- Continue to monitor and evaluate changes in groundwater quality for evidence of contaminant reduction during future quarterly sampling events. The review of changes in groundwater quality and additional recommendations will be provided as deemed necessary.
- Continue to follow the requirements of the SMP, in accordance with current DER-10 guidance, to assure that appropriate and comprehensive Site management is completed throughout the remaining post-remediation monitoring period.
- Consider conducting an evaluation of treatment alternatives to address the PFOA/PFOS in groundwater.

## 1.0 Site Overview

This Periodic Review Report (PRR) has been prepared for the Korkay, Incorporated Site (Site No. 5-18-014). The Korkay Site is located at 70 West Main Street in the Village of Broadalbin, Fulton County, New York (Figure 1). The reporting period covered in this report is June 15, 2016 through June 15, 2017. This PRR was prepared by AECOM under Work Assignment number D007626-20.

The Village of Broadalbin, approximately one square mile in size, is located almost entirely within the limits of the Town of Broadalbin. The Site is approximately 0.9 acres in size. Land uses surrounding the Site include a lumber yard and residences to the north, a residence to the west, a church to the east, and West Main Street to the south (Figure 2). Kenneyetto Creek is the nearest surface water body, located approximately 600 feet south of the Site.

Korkay supplied products to the automotive industry from 1969 to 1980 that resulted in the discharge of chemicals and contamination of soil and groundwater. The New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) inspected the Site in 1979 and documented the occurrence of these activities. NYSDEC conducted a Site inspection in 1992, at which time numerous drums of hazardous waste were found and secured for removal. A Remedial Investigation (RI) and Feasibility Study (FS) of the Site were conducted between 1993 and 1995.

A Record of Decision (ROD) was issued in March 1996 that set forth the following remediation goals for the Site:

1. To eliminate, to the greatest extent possible, on-Site soils as a source of groundwater contamination.
2. To eliminate or reduce human exposure to on-Site soil contamination.

To accomplish these goals, based upon the results of the RI/FS and the evaluation of alternatives, the NYSDEC selected: excavation and off-Site disposal of the top six inches of contaminated surface soil; backfilling excavated areas with clean, compacted and re-vegetated soil; installation and operation of a soil vapor extraction (SVE) system, with an optional air sparging (AS) system or Site dewatering; imposition of deed restrictions to exclude the use of Site groundwater; and Site environmental monitoring for five years.

Site closure criteria include reducing concentrations of the Contaminants of Concern (COCs) in soil and groundwater to below applicable Standards, Criteria and Guidance values (SCGs). The COCs as identified in the ROD include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and pesticides. The SCGs for soil are the relevant NYSDEC Soil Cleanup Objectives (SCOs) based on regulation 6 NYCRR Part 375-6 (Part 375). The Unrestricted Use SCOs are the most conservative and provide for protection of groundwater, human health and the environment, and are considered appropriate for Site soils. NYSDEC's long-term goal for groundwater is to reduce COC concentrations "to the extent practical based on technological limitations" to below SCGs. The SCGs for groundwater are the NYSDEC Technical and Operational Guidance Series (TOGS 1.1.1) Ambient Water Quality Standards and Guidance Values, dated October 22, 1993, with June 1998 and January 1999 updates (AWQS).

Site remediation was initiated in 1997 with the building demolition and remediation of contaminated surface soils. Operation of the SVE system began in November 1998. The NYSDEC assumed responsibility for Site operations in July 2000, and discontinued operation of the SVE system in 2003.

Results of post-remediation groundwater sampling conducted through 2003 indicated that COC concentrations in groundwater in the former source area had decreased, but remained well above relevant SCGs.

A remedial system optimization (RSO) with a focused feasibility study (FFS) was completed in 2008 in order to determine an effective mechanism to address the residual contamination in the saturated soil and groundwater. The RSO report recommended the removal of soil from an approximate 3,200 sq. ft. area near the former source area and SVE/AS system.

A soil boring program was conducted in 2010 to further delineate soil impacts for the planned soil removal (AECOM, January 2010). Field and laboratory data collected during that investigation indicated that widespread subsurface soil impacts remained at the Site and that in comparison to the FFS, over 11,000 cubic yards of contaminated soil would need to be excavated and disposed off-Site. Based on the findings, it was determined that additional soil excavation would not be a cost-effective measure to further remediate soil and groundwater contamination at the Site; recommendations were made for additional investigation to define the extent of off Site impacts and that soil gas vapor intrusion sampling should be considered for properties near the Site.

An Environmental Notice (EN) for the Site was filed with Fulton County on January 25, 2013 (Appendix A).

Annual (5-quarter) groundwater sampling events are performed as required in the SMP to provide data from all Site monitoring wells (Figure 2) to evaluate trends in groundwater quality at the Site through the Site management phase. The 5-quarter events performed in January 2012 and June 2013 demonstrated that groundwater contamination persisted in some of the same areas as discussed in the 1988 RI report, primarily beneath the southwest quadrant of the Site, in the former source area; groundwater results from the deep wells at the Site continued to be below relevant SCGs.

Groundwater investigations were conducted at the Site in July 2014 and August 2015 using direct-push drilling techniques with the collection and analysis of grab groundwater samples. The purpose of the investigations was to further delineate and characterize on-Site and off-Site dissolved-phase groundwater impacts. In September 2015, 8 new monitoring wells (MW-17 through MW-24) were installed to aid in monitoring the nature and extent of groundwater impacts on and off Site.

A supplemental remedial action, consisting of in-situ chemical oxidation (ISCO) injection, was conducted in October 2015. The purpose of the ISCO injection was to attempt to further remediate residual soil and groundwater contamination to meet the remedial goals established for the Site. The remediation included the installation of 95 injection points. The points were installed with a direct push Geoprobe® unit. The oxidant that was used was activated persulfate, specifically, PersulfOx® from Regenesis Remediation Services. This oxidant has been shown to effectively reduce VOC mass, and has been shown to degrade some pesticides as well. PersulfOx® is a catalyzed persulfate which does not require any additional activation. The PersulfOx® was applied concurrently with oxygen release compound Advanced (ORC-A®), a product that provides a sustained release of oxygen which will allow for polishing of COCs through aerobic bioremediation.

An annual (5-quarter) groundwater sampling event was conducted in October 2015, one week before the ISCO injection, and thus provided baseline groundwater quality data against which post-ISCO injection groundwater monitoring results would be compared. The results of that sampling documented the extent of the groundwater contaminant plume in the shallow aquifer.

Also under the SMP, in addition to the 5-quarter monitoring program, post-ISCO groundwater sampling is being conducted on a quarterly basis to evaluate the effects of the ISCO remedial action performed in October 2015. During these events, six monitoring wells (ASW, MW-17, MW-18, MW-21, MW-22, and MW-23) are sampled to monitor the effectiveness of the ISCO treatment. Three rounds of sampling were conducted during the previous (June 15, 2015 to June 15, 2016) PRR reporting period. The sampling events were completed in December, 2015, and March and May, 2016.

Isoconcentration contour maps of total volatile organic compounds (TVOCs) concentrations detected in the shallow aquifer wells during each sampling event performed between August 2007 and the last sampling event completed during the prior PRR reporting period (May, 2016) are included in Appendix C.

## 2.0 Evaluation of Remedy Performance, Effectiveness and Protectiveness

This section presents a summary of the effectiveness of the remedy in achieving the remedial goals for the Site.

### 2.1 Description of Monitoring Activities Completed

Two quarterly post-ISCO sampling event were conducted during this annual reporting period, one in September 2016 and the second in December 2016. In addition, an annual (5-quarter) groundwater sampling event was conducted from March 15-17, 2017. The March 2017 event coincided with and therefore also served as the Spring 2017 post-ISCO quarterly sampling event. At the request of NYSDEC, samples collected during the March 2017 event were analyzed for Perfluorinated Alkyl Substances (PFAS), including Perfluoroctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS), and 1,4-Dioxane, in addition to the COCs. Separate reports for the September 2016 (AECOM, November 2016) and December 2016 (AECOM, June 2017) post-ISCO sampling events were submitted to NYSDEC during the reporting period to present the sampling results. The results for the March 2017 5-quarter sampling event have been presented in a draft report (AECOM, July 2017) to NYSDEC for review.

### 2.2 Monitoring Results

#### 2.2.1 Groundwater Flow

Water level measurements were obtained from all monitoring wells at the beginning of each sampling event. These depth-to-water measurements were converted to water table elevations using top-of-casing elevations that were surveyed in November 2015. The groundwater elevation data was used to produce a water table contour map for each sampling event. The maps are included in the report for each event. All contour maps demonstrated the groundwater flow direction in the shallow water-bearing zone to be from northeast to southwest, as historically observed.

#### 2.2.2 Analytical Results

The analytical results for the two post-ISCO sampling events (September and December 2016) and the March 2017 5-quarter sample event groundwater sampling event are presented in Tables 1 and 2. Table 1 includes the results of all VOC, SVOC and organochlorine pesticide analyses conducted between 2007 and March 2017. Table 2 includes the PFAS and 1,4-Dioxane analytical results for the March 2017 event; groundwater was not analyzed for these compounds prior to the March 2017 event.

In Table 1, concentrations above relevant AWQS are in a shaded cell with bold typeface for ease of identification. Bolded text alone indicates a detection of the compound above the method detection limit, but below the individual AWQS. Table 1 also includes the field parameter readings for dissolved oxygen (DO) and oxidation-reduction potential (ORP), and the persulfate test kit results. In Table 2, PFOA and PFOS concentrations above the Health Advisory Limit (HAL) of 70 nanograms per liter

(ng/L), or parts per trillion, established by the United States Environmental Protection Agency (USEPA) are in a shaded cell with bold typeface.

### Volatile Organic Compounds

Isoconcentration contour maps of the TVOC concentrations reported for the shallow wells from the September 2016, December 2016 and March 2017 sampling events are presented in Figures 3a, 3b and 3c, respectively. The maps show that the contaminant plume in the shallow aquifer extends from northeast to southwest across the Site with the highest concentrations (TVOCs above 1,000 mg/L) in the area between wells ASW and MW-23. TVOC isoconcentration contour maps from previous sampling events conducted between August 2007 and May, 2016 (including the quarterly post-ISCO sampling events) are included in Appendix C for comparison purposes. Review of the figures show that the lateral extent of significant TVOC plume concentrations (i.e., greater than 1,000 µg/L) has decreased since administering the ISCO treatment in October 2015, although the concentration in the former source area in the southwest quadrant of the Site has remained relatively static through this PRR reporting period.

Chart 1 depicts TVOC concentration trends to date in five wells located in the former source area (ASW, VEW-1, VEW-2, VEW-3 and VEW-4). The chart shows that TVOC concentrations in well ASW have remained fairly consistent with levels that were observed prior to the ISCO injection and there has been no upward or downward trend in concentrations since the injection work. The graphs indicate that TVOC concentrations have decreased appreciably in the four VEW wells since the ISCO injection, although this is based on only one (March 2017) post-ISCO event.

Chart 2 includes six individual graphs (A – F). Each graph depicts contaminant concentration trends of three groups of VOCs at key monitoring well locations within the groundwater plume. The graphs depict concentration trends of the two VOC groups that historically have exhibited the highest fraction of TVOCs, including total xylenes and combined 1,2,4 trimethylbenzene and 1,3,5-trimethylbenzene (total trimethylbenzene). The graphs also depict the trends in total chlorinated volatile organic compounds (CVOCs) and show that CVOCs represent a relatively small fraction of detected VOCs. The locations and monitoring wells represented are listed on each graph and include: Graph A) Upgradient Site Boundary (MW-17); Graph B) Mid-Site Area (MW-18); Graph C) Western Cross-Gradient Site Boundary (MW-22); Graph D) Primary On-Site Source Area (ASW); Graph E) Downgradient Site Boundary (MW-23); and, Graph F) Downgradient Off-Site (MW-21).

### Semi-Volatile Organic Compounds and Organochlorine Pesticides

As shown in Table 1, the SVOC analytical results from the three sampling events for this PRR reporting period were similar to the previous sample results. In the 20 wells sampled, SVOCs were non-detect or detected at concentrations less than AWQS in all wells except ASW, MW-17 and MW-23. These are all shallow on-Site wells. Naphthalene was the only compound reported above the guidance value in these wells.

For the organochlorine pesticide sample results, six wells were found to have exceedances of one or more organochlorine pesticide compounds. MW-17 had an exceedance for Aldrin. ASW, K-3, MW-22 and MW-23 had exceedances of alpha-BHC. K-2 and MW-22 had exceedances of delta-BHC. Three other wells, MW-15S, MW-15D, and MW-18, were found to have detections of organochlorine pesticides, but all were below the AWQSSs. The rest of the wells sampled had no detections of organochlorine pesticides.

### Perfluorinated Alkyl Substances (PFAS) and 1,4-Dioxane

All twenty wells were sampled for PFAS for the first time during the March 2017 monitoring event. The PFAS sample results are summarized in Table 2. Thirteen of the twenty samples had an exceedance of PFOA and/or PFOS, with concentrations as high as 1,500 ng/L (PFOS in well K-2). The highest PFOA/PFOS concentrations were detected in wells located in the former source area, including K-2, and VEW-1 through VEW-4. The inferred limit of the PFOA/PFOS groundwater plume relative to the TVOC isoconcentration map is presented in Figure 4.

All wells were also sampled for 1,4-Dioxane for the first time as part of the March 2017 event. A summary of the results are included on Table 2. At a laboratory reporting limit of 0.40 mg/L, 1,4-Dioxane was not detected in any of the twenty samples. Based on these results, 1,4-Dioxane is not considered to be of concern at the Site.

## **2.3 Summary of Groundwater Remedy Performance**

The VOC groundwater data generated during this PRR monitoring period demonstrates that groundwater contamination at the Site persists in some of the same areas as discussed in previous PRRs. The contaminant plume extends from northeast to southwest across the Site, with highest concentrations in the former source area (southwest quadrant of the Site). Review of the data acquired during this reporting period (September 2016, December 2016, and March 2017) in conjunction with historical data show that the lateral extent of significant TVOC plume concentrations (i.e., greater than 1,000 µg/L) has decreased since administering the ISCO treatment in October 2015, however the concentration in the former source area in the southwest quadrant of the Site remains relatively static and significantly above AWQS.

Groundwater results from the deep wells at the Site continue to be below AWQS, most likely a result of the confining clay layer found at approximately 12 to 14 feet below grade. A review of boring logs from the RI report and the soil borings completed by AECOM for the RSO in August 2007 suggests that this clay layer may be continuous beneath the Site, and may extend off-Site as well.

PFOA and/or PFOS were detected in several wells above the 70 ng/L USEPA HAL. Wells with the highest reported concentrations (over 1,000 ng/L) are located in the former source area. It is important to note the probability that the past introduction of aerobic bioremediation alternatives at the Site, including air sparging and ISCO, potentially triggered PFAS precursors to transform to and terminate as PFOA/PFOS. The discovery of high concentrations of PFOA/PFOS will present additional challenges to further remediating the Korkay, Inc. Site plume.

## **3.0 Institutional and Engineering Controls Plan Compliance Report**

Since remaining contamination exists at the Site, Institutional Controls (ICs) and Engineering Controls (ECs) are required to protect human health and the environment. A detailed description of the ICs/ECs and procedures for evaluating the compliance as part of Site inspections and periodic review are included in the SMP. This section describes IC/EC compliance for this reporting period.

### **3.1 Institutional and Engineering Controls Requirements and Compliance**

ICs have been established for the Site to: (1) implement, maintain and monitor EC systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the Site to commercial and industrial uses only. The ICs for the Site are specified in the EN filed with Fulton County on January 25, 2013 (Appendix A).

ECs for the Site are limited to maintaining the integrity of the groundwater monitoring wells so they remain reliable for collecting representative samples to monitor groundwater contaminant concentrations. Inspection of the monitoring wells is conducted as part of the Site-wide inspection, as described in Section 4.

Determination of compliance with the Institutional and Engineering controls at the Site is made based on the following criteria:

- The IC/ EC(s) applied at the Site are in place as documented in this report.
- Nothing has occurred that would impair the ability of such controls to protect the public health and the environment, or constitute a violation or failure to comply with any element of the SMP for such controls.
- Access to the Site will continue to be provided to the Department, to evaluate the remedy including access to evaluate the continued maintenance of such controls.

Currently certification that the Site IC/ECs are in compliance with the requirements stated above can be completed.

### **3.2 Institutional and Engineering Controls Certification Forms**

The completed Institutional and Engineering Controls Certification form is included in Appendix B.

## 4.0 Monitoring Plan Compliance Report

### 4.1 Site Management Plan Reporting

As a requirement of the remedial program for the site, a Site Management Plan (SMP), (AECOM, November 2016), was prepared to manage remaining contamination at the Site. The SMP includes a monitoring and sampling plan, and reporting requirements. All monitoring and reporting requirements stipulated in the SMP were met for this PRR reporting period.

In accordance with the SMP the components of the monitoring plan include:

	Frequency	Method	Monitoring Locations
Site Wide Inspection	Annually	Visual Observation Form and photos	Site-wide
Site-wide Groundwater Monitoring and Reporting	Every 5-Quarters	VOCs (8260B), SVOCs (8270C), Organochlorine Pesticides ( 8081A)	ASW, VEW-1, VEW-2, K-2, K-3, MW-8D, MW-8S, MW-15D, MW-15S, and MW-16D, MW-17 through MW-24
Post-ISCO Groundwater Monitoring and Reporting	Quarterly through Fall 2017	VOCs (8260B), SVOCs (8270C), Organochlorine Pesticides (8081A)	ASW, MW-17, MW-18, MW-22, MW-23, MW-21

#### 4.1.1 Site Inspection

The annual Site inspection for this reporting period was completed on September 14, 2016. The completed Site inspection form is provided in Appendix D. A photo log documenting surface casings and seals of the monitoring wells and site conditions during the inspection is provided in Appendix E.

#### 4.1.2 Post-remediation Groundwater Monitoring

As stated above, all monitoring and reporting requirements stipulated in the SMP were met for this PRR reporting period. One Site-wide 5-quarter groundwater sampling event (March 2017) and two quarterly post-ISCO injection sampling events (September and December 2016) were conducted during this reporting period. The locations of the sampled wells are presented on Figure 2. Details of each sampling event were included in sample event monitoring reports. A summary of the results from these events are discussed in Section 2 as part of the evaluation of the effectiveness of the Site remedy.

## **5.0 Operation, Maintenance and Monitoring Plan Compliance Report**

The Site does not rely on any mechanical systems, such as groundwater treatment systems, sub-slab depressurization systems or AS/SVE system to protect public health and the environment. Therefore, the SMP currently does not include an Operations, Maintenance and Monitoring (OM&M) Plan.

## 6.0 Overall PRR Conclusions and Recommendations

Compliance with each required component of the SMP and the remedy performance evaluation for this reporting period are summarized as follows.

- This PRR includes certification that the IC/ECs complied with the requirements of the EN.
- All monitoring and reporting requirements stipulated in the SMP were met.
- The VOC groundwater data generated during this PRR monitoring period demonstrates that groundwater contamination persists in some of the same areas as discussed in previous PRRs. The data show that the lateral extent of significant TVOC plume concentrations (i.e., greater than 1,000 µg/L) has decreased since administering the ISCO treatment in October 2015, however the concentration in the former source area in the southwest quadrant of the Site remains relatively static and significantly above AWQS.
- The amount of residual chemicals from the ISCO injection (i.e., persulfate and ORC) in the treatment area is low and likely inadequate to promote further aerobic degradation of the contaminant mass.
- PFOA and/or PFOS were detected in several wells above the 70 ng/L USEPA HAL. It is important to note the probability that the past introduction of aerobic bioremediation alternatives at the Site, including air sparging and ISCO, potentially triggered PFAS precursors to transform to and terminate as PFOA/PFOS. The discovery of high concentrations of PFOA/PFOS will present additional challenges to further remediating the groundwater plume.

AECOM recommends the following:

- Annual periodic review is recommended in order to determine the compliance of the facility with the EC/IC's in place.
- Update the SMP to include PFAS in future groundwater sampling events.
- Continue groundwater sampling in accordance with the SMP to monitor the groundwater plume.
- Continue to monitor and evaluate changes in groundwater quality for evidence of contaminant reduction during future quarterly sampling events. The review of changes in groundwater quality and additional recommendations will be provided as deemed necessary.
- Continue to follow the requirements of the SMP, accordance with current DER-10 guidance, to assure that appropriate and comprehensive Site management is completed throughout the remaining post-remediation monitoring period.
- PFAS should continue to be monitored as part of future sampling events.
- Consider conducting an evaluation of treatment alternatives to address the PFOA/PFOS in groundwater.

## 7.0 References

AECOM, January 2010. March 2010 Soil Boring Summary Report. January 31, 2010.

AECOM, September 2016. Periodic Review Report, June 15, 2015 through June 15, 2016. September 30, 2016.

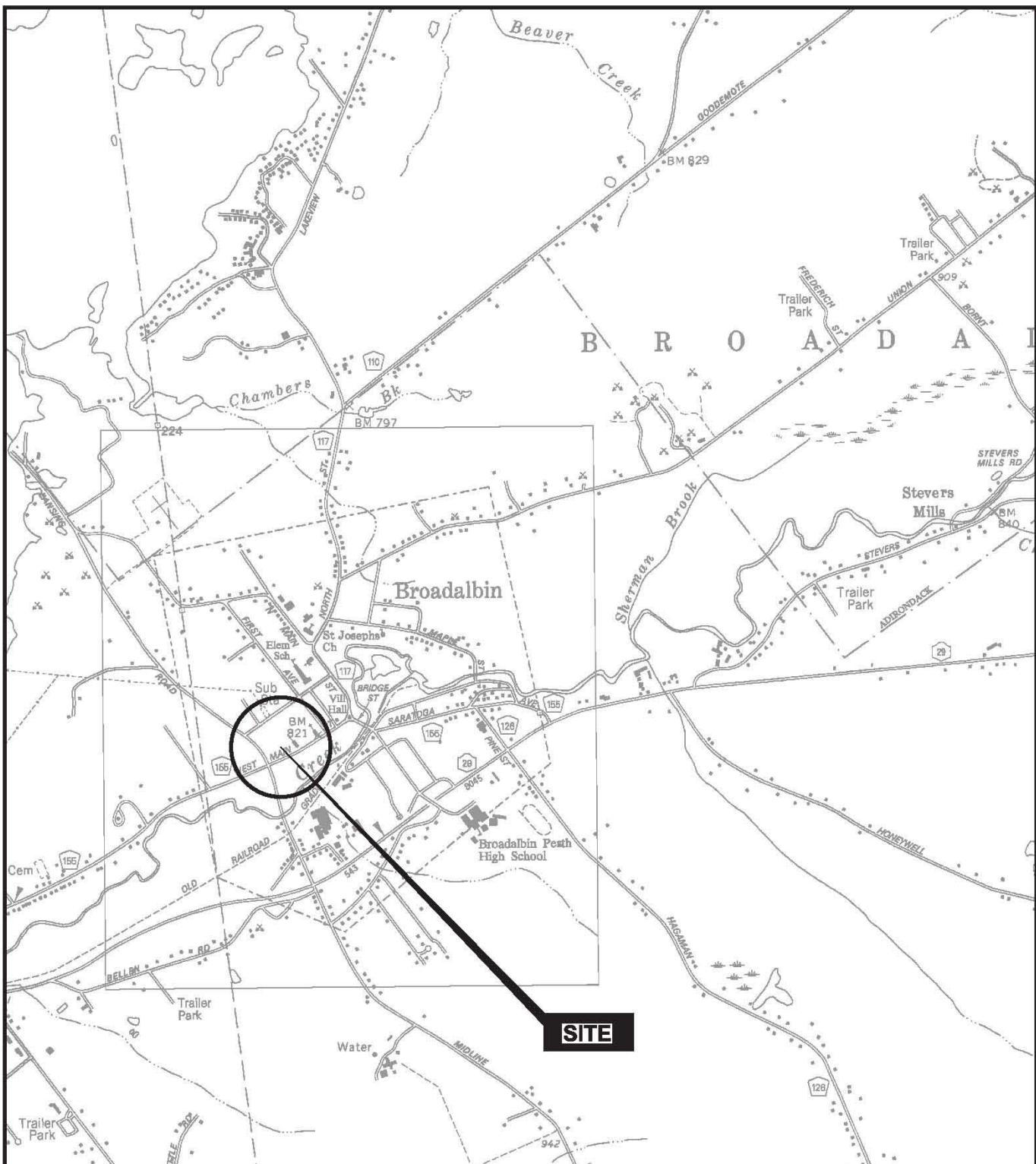
AECOM, November 2016a. Groundwater Monitoring Report, Post-ISCO Quarterly Sampling Event, September 14, 2016. November 4, 2016-DRAFT.

AECOM, November 2016b. Site Management Plan. November 22, 2016.

AECOM, June 2017. Groundwater Monitoring Report, Post-ISCO Quarterly Sampling Event, December , 2016. June 1, 2017.

AECOM, July 2017. Groundwater Monitoring Report, 5-Quarter Sampling Event, March 2017. July 10, 2017-DRAFT.

## **Figures**



MAP REFERENCE: NYSDOT 7.5 MIN. QUADRANGLE  
BROADALBIN SERIES

PLAN



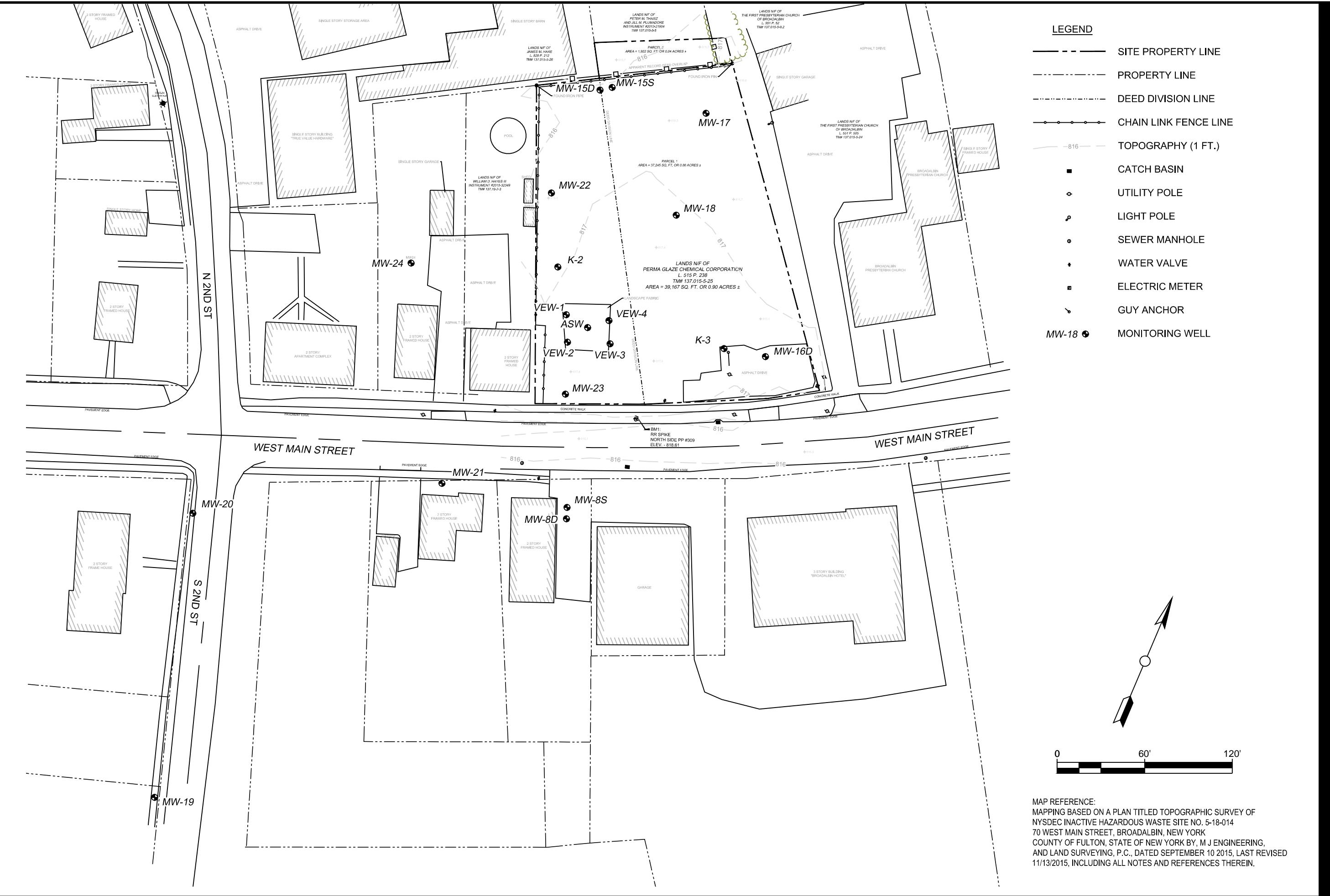
Scale in Feet  
0 1000' 2000'

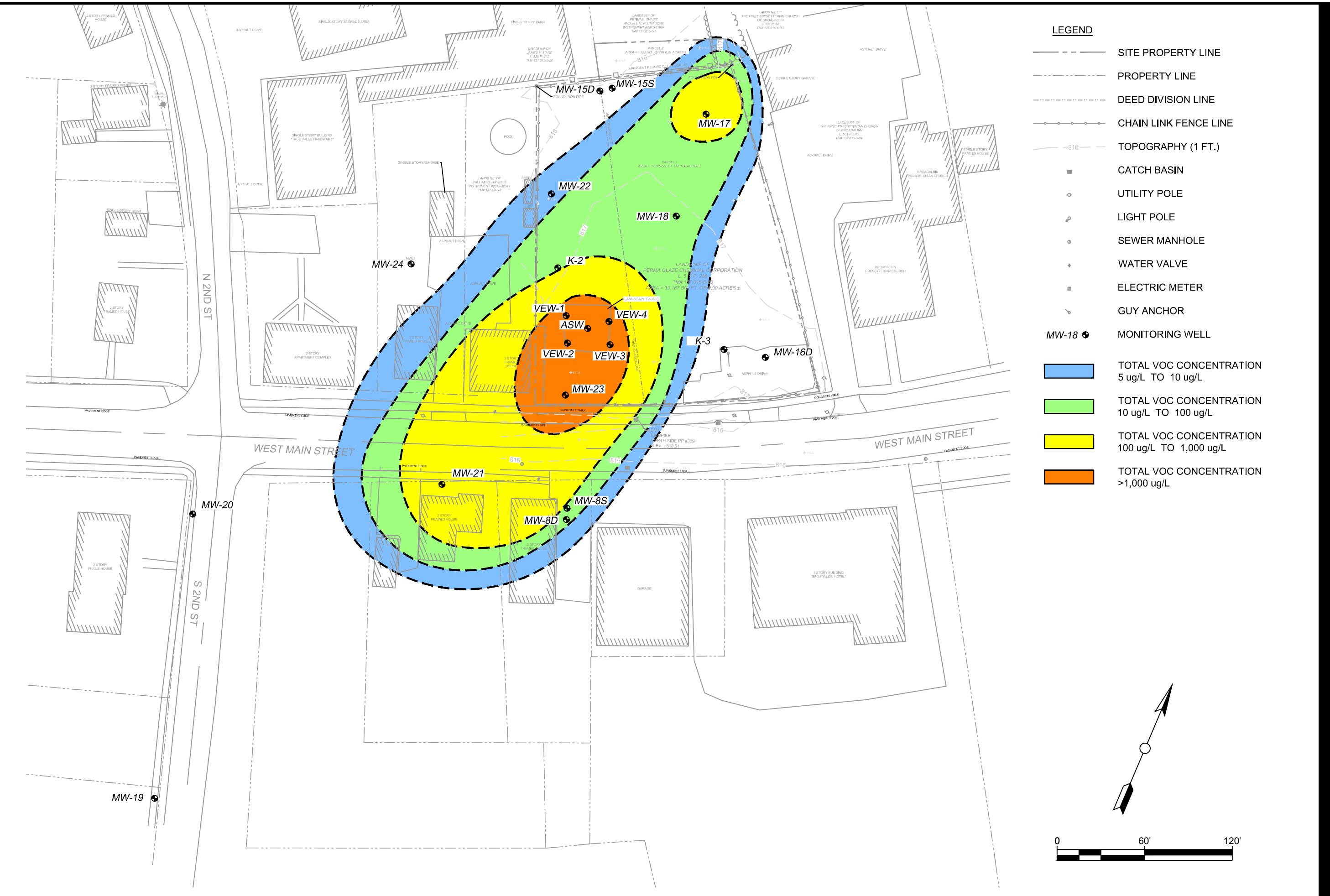
**AECOM**

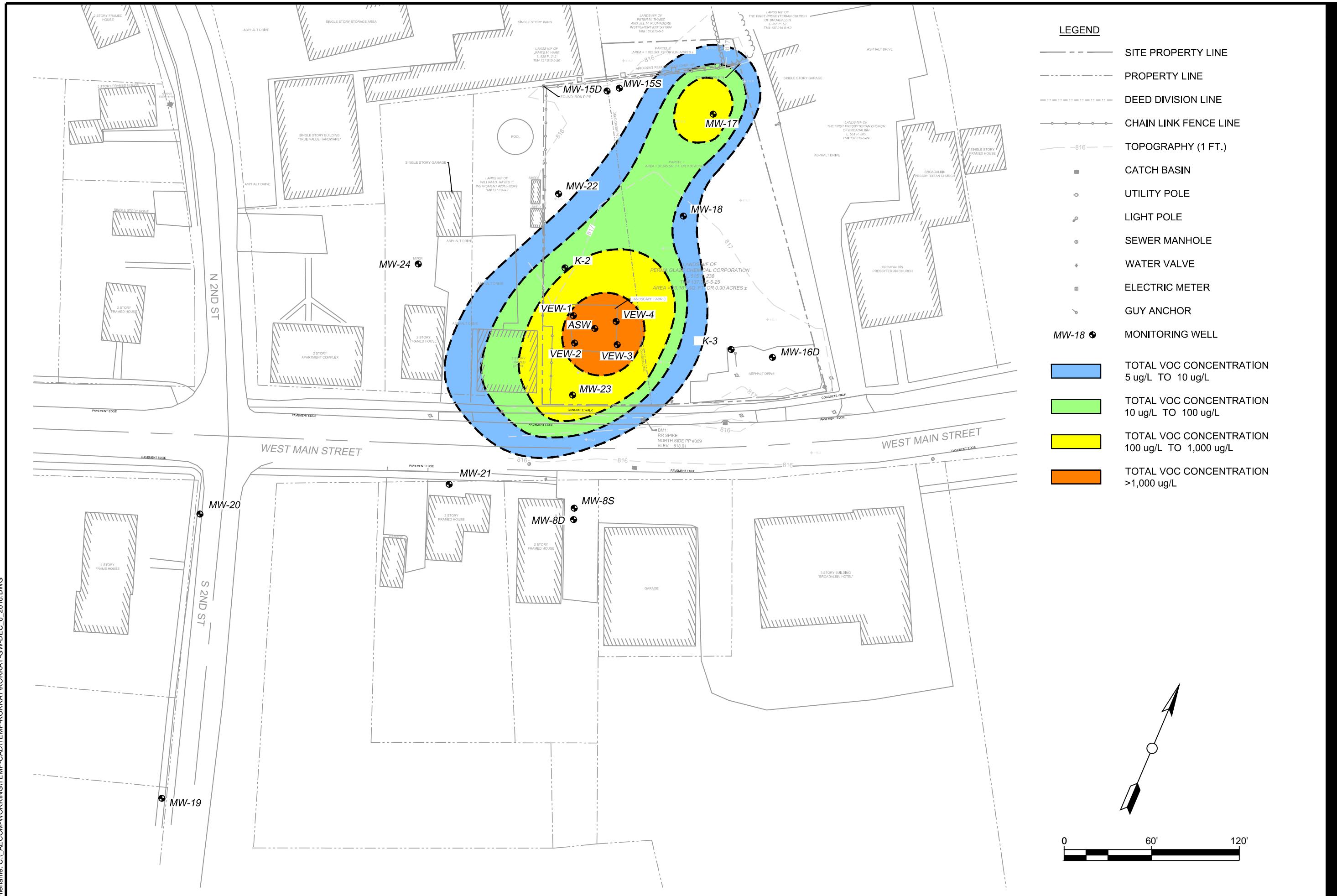
**FIGURE 1**  
SITE LOCATION PLAN  
NYSDEC SITE ID: 5-18-014  
**KORKAY INC.**  
70 WEST MAIN STREET  
BROADALBIN, NEW YORK

DATE: OCTOBER 2013

PROJECT NO.: 60273289

**EXISTING CONDITIONS**


**TOTAL VOC ISOCONCENTRATION  
CONTOUR MAP  
SEPTEMBER 14, 2016**


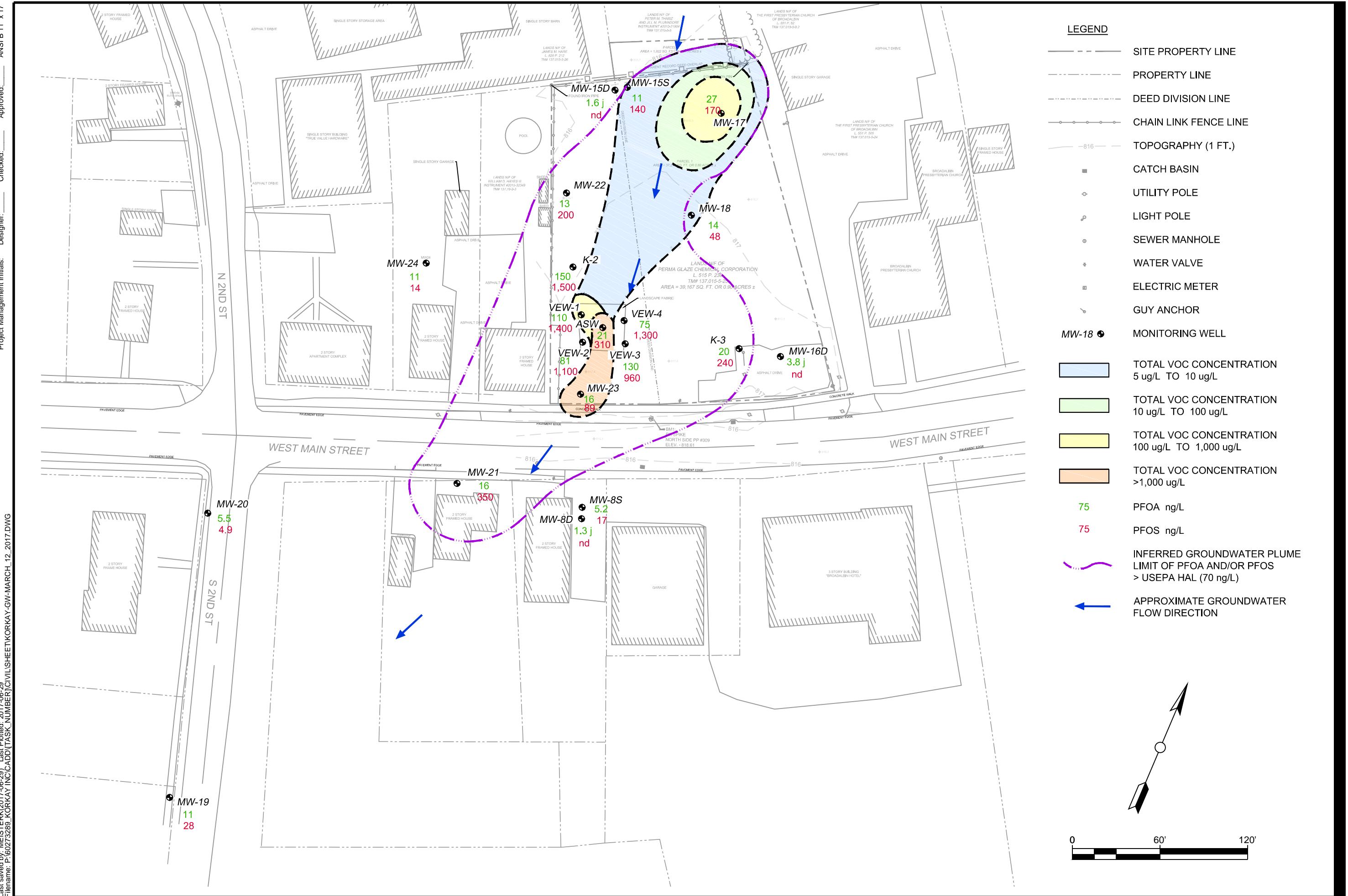
**TOTAL VOC ISOCONCENTRATION  
CONTOUR MAP  
DECEMBER 6, 2016**


**Figure 3c**



**PFOA / PFOS CONTAMINANT  
PLUME LIMIT MAP**  
MARCH 12, 2017

KORKAY INC.  
NYSDEC SITE ID: 518014  
BROADALBIN, NEW YORK  
Project No.: 60273289 Date: JUNE 2017



## **Tables**





**Table 1**  
**Groundwater Analytical Results**

Korkay, Inc.  
Broadalbin, New York (Site #518014)

August 2007 to March 2017

Well ID	MW-16D										K-2										K-3																										
	AWQS or GV		8/14/07		11/25/08		3/25/10		1/10/12		6/25/13		10/14/15		3/17/17		8/14/07		8/14/2007 <sup>1</sup>		11/25/08		3/25/10		1/10/12		6/25/13		10/14/15		3/16/17		8/14/07		11/25/08		3/25/10		1/10/12		6/25/13		10/14/15		3/16/17		
<b>Volatile Organic Compounds (µg/L)</b>																																															
1,2,4-Trimethylbenzene	5	5	U	5	U	5	U	NA	10	U	1.0	U	1	U	60	60	81	2.5	J	NA	10	U	16	1	U	5	U	5	U	NA	10	U	10	U	1	U	1										
1,2-Dichlorobenzene	3	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	1.0	U	10	U	5.0	U	1	U	5	U	1.0	U	10	U	1	U	1											
1,3,5-Trimethylbenzene	5	5	U	5	U	5	U	NA	10	U	1.0	U	1	U	3	J	3	8.4	5	U	NA	10	U	5.0	U	1	U	5	U	1.0	U	10	U	1	U	1											
1,1-Dichloroethane	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	1.0	U	10	U	5.0	U	1	U	5	U	1.0	U	10	U	1	U	1											
1,4-Dichlorobenzene	3	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	1.0	U	10	U	5.0	U	1	U	5	U	1.0	U	10	U	1	U	1											
2-Butanone (MEK)	50 (GV)	5	U	5	U	5	U	1	U	10	U	1.4	J	1	U	5	U	5	U	1.0	U	10	U	7.4	J	1	U	5	U	5	U	1.0	U	10	U	1	U	1									
4-Isopropyltoluene	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	2	J	2	J	5	U	5	U	1.0	U	10	U	3.4	J	1	U	5	U	5	U	1.0	U	10	U	1	U	1					
Acetone	50 (GV)	5	U	5	U	5	U	10	U	10	U	1.0	U	10	U	5	U	5	U	3.7	J	10	U	50	U	10	U	5	U	5	U	10	U	10	U	10	U	10	U	10	U	10					
Carbon Disulfide	60	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	1.0	U	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	1	U	1									
Chloroform	7	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	1.0	U	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	1	U	1									
Chloroethane	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	0.67	J	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	1	U	1									
Chloromethane	NS	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	2.5	J	1.0	U	10	U	5.0	U	1	U	5	U	4.8	J	1.0	U	10	U	1	U	1							
cis-1,2-Dichloroethene	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	4	J	4	J	6.2	5	U	4.2	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	1	U	1							
Cyclohexane	NS	NA	NA	NA	NA	NA	NA	1	U	10	U	1.0	U	1	U	NA	NA	NA	NA	1.0	U	10	U	5.0	U	1	U	NA	NA	NA	NA	1.0	U	10	U	1	U	1									
Ethylbenzene	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	12	J	13	9.3	5	U	13	10	U	7.1	1	U	5	U	5	U	1.0	U	10	U	1	U	1									
Isopropylbenzene	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	4	J	4	J	5.7	5	U	2.6	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	1	U	1							
Methylcyclohexane	NS	NA	NA	NA	NA	NA	NA	1	U	10	U	1.0	U	1	U	NA	NA	NA	NA	2.3	10	U	5.0	U	1	U	NA	NA	NA	NA	1.0	U	10	U	1	U	1										
m,p-Xylene	5	5	U	5	U	5	U	2	U	NA	2.0	U	2	U	16	16	14	5	U	19	NA	28	2	U	5	U	5	U	2.0	U	NA	10	2	U	2												
n-Butylbenzene	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	8	8	23	1.3	J	1.0	U	10	U	4.6	J	1	U	5	U	5	U	1.0	U	10	U	1	U	1								
n-Propylbenzene	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	4	J	13	5	U	1.0	U	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	1	U	1								
Methylene Chloride	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	1.0	U	10	U	NA	1	U	5	U	5	U	1.0	U	10	U	NA	1	U	1									
Naphthalene	10 (GV)	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	10	B	8	B	5.4	5	U	1.0	U	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	1	U	1						
o-Xylene	5	5	U	5	U	5	U	1	U	NA	1.0	U	1	U	30	30	17	5	U	24	NA	32	1	U	5	U	5	U	1.0	U	NA	NA	1	U	1												
Styrene	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	1.0	U	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	1	U	1									
sec-Butylbenzene	5	5	U	5	U	5	U	NA	10	U	1.0	U	1	U	6	6	18	5	U	NA	10	U	5.0	U	1	U	5	U	5	U	NA	10	U	10	U	1	U	1									
tert-Butylbenzene	5	5	U	5	U	5	U	NA	10	U	1.0	U	1	U	5	U	5	U	NA	10	U	5.0	U	1	U	5	U	5	U	NA	10	U	10	U	1	U	1										
Tetrachloroethene (PCE)	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	2	JB	2	JB	1.5	J	5	U	0.64	J	10	U	5.0	U	1	U	5	U	1.2	J	5	U	0.77	J	ND	10	U	10	U	0.45	J	1
Trichloroethene	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	1	J	5	U	5	U	1.0	U	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	1	U	1							
Toluene	5	5	U	5	U	5	U	1	U	10	U	1.0	U	1	U	5	U	5	U	0.59	J	10	U	5.0	U	1	U	5	U	5	U	1.0	U	10	U	0.59	J	1									
Xylene (Total)	NS	5	U	5	U	5	U	2	U	10	U	2.0	U	2	U	46	46	31	5	U	43	5	J	60	2	U	5	U	5	U	2.0	U	10	U	4	J	2										
Total VOCs <sup>2</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	J	ND	162	JB	157	JB	203	J	6	J	70.7	J	5	J	98.5	J	ND	ND	1.2	J	5	J	0.77	J	ND	4	J	14.04	J	ND		
<b>Field Parameter Results</b>																																															
DO (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.59								
ORP (MeV)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	166	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	187.3								
Sodium Persulfate (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0									
<b>Semi-Volatile Organic</b>																																															
1,2-Dichlorobenzene	3	10	U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	U	10	U	NA	NA	NA</																										

1

Results compared to the New York State Ambient Water Quality Standards (AWQS) and Guidance Values (GV) (TOGs 1.1.1, NYS-NY-001, 2016, GVR)

ND - Non-detectable concentration

ND - Non-detectable concentration  
NA - Not applicable

NA - Not applicable  
BOLD font indicates compound code

**BOLD** font indicates compound concentrations detected above method detection limit  
Shaded cells indicate exceedance of AWQS or CV

Shaded cells indicate exceedance of AW  
II - Compound analyzed for but not detected

U - Compound analyzed for but not detected  
I - Estimated concentration for compound

J - Estimated concentration for compound  
B - For organic analyses - compound de-

B - For organic analyses - compound de

B - For organic analyses - compound de  
E1 - MS and/or MSD recovery is outside

E1 - MS and/or MSD recovery is outside E2 - MS/MSD RPD exceeds control limit

P2 - MS/MSD RPD exceeds control limit  
ne - Not evaluated

nt - Not tested

<sup>1</sup> - Duplicate Sample

<sup>2</sup> - Sum of all VOC concentrations detected

Sum of all VOC concentrations detected

**Table 1**  
**Groundwater Analytical Results**

Korkay, Inc.  
Broadalbin, New York (Site #518014)

August 2007 to March 2017

Well ID		VEW-1							VEW-2							VEW-3							VEW-4																																
	AWQS or GV	8/14/07	11/25/08	3/25/10	1/10/12	6/25/13	10/13/15	3/16/17	8/14/07	11/25/08	3/25/10	1/10/12	6/25/13	10/13/15	3/16/17	3/16/2017 <sup>1</sup>	8/14/07	11/25/08	3/25/10	1/10/12	6/25/13	10/14/15	3/16/17	8/14/07	11/25/08	3/25/10	1/10/12	6/25/13	10/14/15	3/16/17																									
<b>Volatile Organic Compounds (µg/L)</b>																																																							
1,2,4-Trimethylbenzene	5	230	D	410	D	220		NA	10	U	240		51		22	9.8	5	U	NA	10	U	170	1	U	1	U	130	130	2	J	NA	37	JN	NA	1	U	12	170	3.1	J	NA	28	JN	NA	1	U									
1,2-Dichlorobenzene	3	23		34		19		24	17		19		3.9		1	J	1.2	J	5	U	1.0	U	18	1	U	1	U	30	25	5	J	NA	5	J	NA	1	U	2	J	16	5	U	3.9	1	J	NA	1	U							
1,3,5-Trimethylbenzene	5	230	D	410	D	200		NA		240	JN	270		62		1	J	5	U	5	U	NA	10	U	57	1	U	1	U	110	110	1.8	J	NA	28	JN	NA	1	U	6	100	2.1	J	NA	20	JN	NA	1	U						
1,1-Dichloroethane	5	5	U	5	U	13	U	1.0		10	U	NA	2	U	5	U	5	U	5	U	1.0	U	10	U	NA	1	U	1	U	5	U	5	U	1.0	U	10	U	1	U	5	U	5	U	1.0	U	10	U	1	U						
1,4-Dichlorobenzene	3	1	J	2.3	J	13	U	1.0		10	U	2	U	2	U	5	U	5	U	5	U	1.0	U	10	U	1	U	1	U	5	U	5	U	1.0	U	10	U	1	U	5	U	5	U	1.0	U	10	U	1	U						
2-Butanone (MEK)	50 (GV)	13		17		13	U	2.5	J	10	U	15	J	2	U	5	U	5	U	5	U	1.0	U	10	U	10	U	10	U	9		11	5	U	3.2	J	10	U	NA	1	U	5	U	8.1	5	U	3.0	J	10	U	NA	1	U		
4-Isopropyltoluene	5	36		5	U	59		1.0	U	10	U	45		10		5	U	5	U	5	U	1.0	U	10	U	3.8		1	U	1	U	12	12	5	U	1.0	U	10	U	5	U	1.0	U	10	U	NA	1	U							
Acetone	50 (GV)	10		34		13	U	6.2	J	10	U	37		6.5	J	5	U	5	U	5	U	1.0	U	10	U	11	3	J	10	U	NA	3.2	J	70	8.8	5	U	5.2	J	10	U	NA	3	J											
Carbon Disulfide	60	1	J	5	U	13	U	1.0		10	U	2	U	2	U	5	U	5	U	5	U	1.0	U	10	U	1	U	1	U	5	U	5	U	1.0	U	10	U	NA	1	U															
Chloroform	7	5	U	5	U	13	U	1.0		10	U	2	U	2	U	5	U	5	U	5	U	1.0	U	10	U	1	U	1	U	5	U	5	U	1.0	U	10	U	NA	1	U															
Chloroethane	5	5	U	5	U	4.7	J	1.0		10	U	2	U	2	U	5	U	5	U	5	U	1.0	U	10	U	1	U	1	U	5	U	5	U	1.0	U	10	U	NA	1	U															
Chloromethane	NS	5	U	5	U	6.7	J	1.0		10	U	2	U	2	U	5	U	5	U	5	U	1.0	U	10	U	1	U	1	U	5	U	5	U	1.0	U	10	U	NA	1	U															
cis-1,2-Dichloroethene	5	130		84		39		22		5	J	19		2	U	39		4.6	J	5	U	1.0	U	10	U	9.9		1	U	1	U	4	J	2.6	J	5	U	1.0	U	10	U	NA	1	U											
Cyclohexane	NS	NA	NA	NA	NA	0.47	J	10	U	2	U	2	U	NA	NA	NA	NA	1.0	U	10	U	1.3		1	U	1	U	NA	NA	1.0	U	10	U	NA	1	U																			
Ethylbenzene	5	28		54		28		25		24		28		3.6		5		1.6	J	5	U	1.0	U	10	U	45		1	U	1	U	32	38	5	U	6.6	10		NA	1	U	5	U	4.3	J	10	U	NA	1	U					
Isopropylbenzene	5	11		23		12	J	13		11		12		2.1		5	U	5	U	5	U	1.0	U	10	U	11		1	U	1	U	6	6.9	5	U	0.87	J	1	J	NA	1	U	5	U	4.5	J	5	U	2.0	J	10	U	NA	1	U
Methylcyclohexane	NS	NA	NA	NA	NA	3.4		3	JZ	1.8	J	0.51	JF1F2	NA	NA	NA	NA	1.0	U	10	U	0.83	J	1	U	1	U	NA	NA	1.0	U	10	U	NA	1	U	NA	NA	0.81	J	10	U	NA	1	U										
m,p-Xylene	5	49		100		51		47		NA		58		7.7		5		1.8	J	5	U	2.0	U	NA	150	2	U	2	U	120	150	2.9	J	22	NA	U	NA	2	U	4	J	84	1.5	J	18	NA	NA	2	U						
n-Butylbenzene	5	54		5	U	47		1.0		10	U	62		14		5	U	5	U	5	U	1.0	U	10	U	1	U	1	U	17	15	5	U	1.0	U	10	U	NA	1	U															
n-Propylbenzene	5	14		30		19		1.0		10	U	10	U	18		3.5		1	J	1.1	J	5	U	1.0	U	10	U	15		1	U	1	U	7	8.9	5	U	1.0	U	10	U	NA	1	U											
Methylene Chloride	5	5	U	5	U	13																																																	

Table 1  
Groundwater Analytical Results

Korkay, Inc.  
Broadalbin, New York (Site #518014)

August 2007 to March 2017

Well ID	AWQS or GV	MW-17												MW-18																									
		10/14/15	12/8/15	12/8/15 <sup>1</sup>	3/8/16	5/31/16	5/31/2016 <sup>1</sup>	9/14/16	9/14/16 <sup>1</sup>	12/6/16	12/6/16 <sup>1</sup>	3/15/17	10/14/15	12/8/15	3/8/16	5/31/16	9/14/16	12/6/16	3/15/17	10/15/15	3/15/17	10/15/15	3/15/17																
<b>Volatile Organic Compounds (µg/L)</b>																																							
1,2,4-Trimethylbenzene	5	220	5	U	5	U	61	U	170	U	200	87	100	U	200	U	200	92	440	15	10	U	10	U	3.3	J	1	U	1	U	1	U	1	U					
1,2-Dichlorobenzene	3	28	15	14	10	U	14	20	U	11	12	15	15	7.3	26	10	U	10	U	4	U	1	U	1	U	1	U	1	U	1	U								
1,3,5-Trimethylbenzene	5	140	5	U	5	U	54	100	U	120	37	51	85	40	180	10	U	10	U	4	U	1	U	1	U	1	U	1	U	1	U								
1,1-Dichloroethane	5	5	U	5	U	5	U	10	U	10	U	20	U	5	U	5	U	2	U	5	U	10	U	10	U	4	U	1	U	1	U								
1,4-Dichlorobenzene	3	5	U	5	U	5	U	10	U	10	U	20	U	5	U	5	U	2	U	4.4	J	10	U	10	U	4	U	1	U	1	U								
2-Butanone (MEK)	50 (GV)	50	U	50	U	50	U	100	U	100	U	200	U	5	U	5	U	9.2	J	50	U	20	U	100	U	100	U	40	U	10	U	1	U						
4-Isopropyltoluene	5	28	5	U	5	U	6.6	J	19	25	9.7	12	18	19	8.3	31	3.5	J	10	U	10	U	4	U	1	U	1	U	1	U	1	U							
Acetone	50 (GV)	50	U	25	J	24	J	100	U	100	U	200	U	50	U	50	U	15	J	50	U	73	J	100	U	100	U	16	J	10	U	10	U	3	J				
Carbon Disulfide	60	5	U	5	U	5	U	2.7	J	4.4	J	20	U	1.3	J	2.3	J	1.6	J	5	U	0.65	J	5	U	10	U	4	U	1	U	1	U	1	U				
Chloroform	7	5	U	5	U	5	U	10	U	10	U	20	U	5	U	5	U	2	U	5	U	10	U	10	U	4	U	1	U	1	U	1	U						
Chloroethane	5	5	U	5	U	5	U	10	U	10	U	20	U	5	U	5	U	2	U	5	U	17	U	10	U	10	U	4	U	1	U	1	U						
cis-1,2-Dichloroethene	5	5	U	5	U	5	U	10	U	10	U	20	U	5	U	5	U	2	U	5	U	10	U	10	U	4	U	1	U	1	U	1	U						
Cyclohexane	NS	5	U	5	U	5	U	10	U	10	U	20	U	5	U	5	U	2	U	5	U	10	U	10	U	4	U	1	U	1	U	1	U						
Ethylbenzene	5	4	J	5	U	5	U	10	U	10	U	20	U	5	U	5	U	2	U	46	U	10	U	10	U	4	U	1	U	1	U	1	U						
Isopropylbenzene	5	9.1	5	U	5	U	10	U	10	U	20	U	5	U	5	U	5	U	4.4	J	2.5	21	10	U	10	U	4	U	1	U	1	U	1	U					
Methylcyclohexane	NS	4.8	J	5	U	5	U	10	U	10	U	20	U	5	U	3	J	1.2	J	5	U	0.93	J	7	10	U	10	U	4	U	1	U	1	U	1	U			
m,p-Xylene	5	21	10	U	10	U	20	U	20	U	40	U	3.3	J	4	J	11	12	6.8	220	20	U	20	U	2.6	J	2.5	U	2	U	1	U	1	U	1	U			
n-Butylbenzene	5	36	5	U	5	U	10	U	22	27	12	10	10	U	7.5	23	9.4	41	10	U	10	U	4	U	1	U	1	U	1	U	1	U	1	U					
n-Propylbenzene	5	16	5	U	5	U	10	U	10	U	20	U	4.8	J	6.2	7.9	7.9	4.5	42	10	U	10	U	4	U	1	U	1	U	2	U	2	U						
Methylene Chloride	5	5	U	5	U	5	U	5.7	J	10	U	20	U	5	U	5	U	5	U	2	U	5	U	4.5	J	6.3	J	10	U	4	U	1	U	1	U	1	U		
Naphthalene	10 (GV)	32	5	U	6.9	J	26	27	11	12	26	24	11	55	9.2	J	10	U	10	U	4	U	1	U	1	U	1	U	1	U	1	U	1	U					
o-Xylene	5	32	8.2	7.8	11	23	25	5.6	5.6	21	23	11	120	10	U	10	U	10	U	8.5	1	U	1	U	1	U	1	U	1	U	1	U	1	U					
Styrene	5	5	U	5	U	5	U	10	U	10	U	20	U	5	U	5	U	2	U	5	U	10	U	10	U	4	U	1	U	1	U	1	U	1	U				
sec-Butylbenzene	5	16	5	U	5	U	10	U	7.9	J	20	U	5.3	7.8	9.4	4.1	21	1	U	10	U	10	U	4	U	1	U	1	U	1	U	1	U	1	U				
tert-Butylbenzene	5	5	U	5	U	5	U	10	U	10	U	20	U	5	U	5	U	5	U	2	U	5	U	10	U	10	U	4	U	1	U	1	U	1	U				
Tetrachloroethene (PCE)	5	4.6	J	4.1	J	3.6	J	10	U	10	U	20	U	3	J	4.3	J	2.5	J	5	U	1.7	J	18	10	U	3.6	J	10	U	11	6.9	5.4	5.4	J	1	U	1	U
Trichloroethene	5	5	U	5	U	5	U	10	U	10	U	20	U	5	U	5	U	2	U	5	U	10	U	10	U	4	U	1	U	1	U	1	U	1					

Table 1  
Groundwater Analytical Results

Korkay, Inc.  
Broadalbin, New York (Site #518014)

August 2007 to March 2017

Well ID	MW-21							MW-22							MW-23							MW-24																				
	AWQS or GV	10/15/15	3/8/16	5/31/16	9/14/16	12/6/16	3/17/17	10/14/15	12/8/15	3/8/16	3/08/16 <sup>1</sup>	5/31/16	9/14/16	12/6/16	3/15/17	10/14/15	12/8/15	3/8/16	5/31/16	9/14/16	12/6/16	3/16/17	10/15/15	3/17/17																		
<b>Volatile Organic Compounds (µg/L)</b>																																										
1,2,4-Trimethylbenzene	5	140	0.91	J	1	U	130	1	U	1	U	21	26	19	13	5.9	5	U	5	U	1	U	110	160	770	570	570	45	250	E	1	U	1	U								
1,2-Dichlorobenzene	3	20	U	1.1	1	U	12	1	U	1	U	5	U	10	U	5	U	5	U	5	U	1	U	18	8.6	47	34	30	2.3	25	1	U	1	U								
1,3,5-Trimethylbenzene	5	39	1	U	1	U	1	U	1	U	1	U	11	13	15	16	5.2	5	U	5	U	1	U	66	49	260	200	200	15	110	E	1	U	1	U							
1,1-Dichloroethane	5	20	U	1	U	1	U	0.9	J	1	U	1	U	5	U	10	U	5	U	5	U	1	U	5	U	5	U	5	U	10	U	1	U	1	U							
1,4-Dichlorobenzene	3	20	U	1	U	1	U	1	U	1	U	1	U	5	U	10	U	5	U	5	U	1	U	5	U	5	U	5	U	10	U	1	U	1	U							
2-Butanone (MEK)	50 (GV)	200	U	10	U	10	U	10	U	10	U	10	U	14	J	100	U	10	U	50	U	50	U	1	U	50	U	24	J	63	J	28	J	100	U	10	U	25	1	U	1	U
4-Isopropyltoluene	5	12	J	1	U	1	U	1	U	1	U	1	U	6.3	8.2	J	5.8	5.1	3.1	J	1.7	J	5	U	1	U	16	9	38	35	26	3.4	15	1	U	1	U					
Acetone	50 (GV)	200	U	10	U	10	U	10	U	10	U	10	U	50	U	100	U	10	U	50	U	50	U	10	U	50	U	140	390	48	J	4	J	19	2.2	J	10	U				
Carbon Disulfide	60	20	U	1	U	1	U	1	U	1	U	1	U	5	U	10	U	5	U	5	U	1	U	5	U	5	U	10	U	2	J	2.2	J	1	U	2.2	1	U	1	U		
Chloroform	7	20	U	1	U	1	U	1	U	1	U	1	U	5	U	10	U	5	U	5	U	1	U	5	U	5	U	10	U	1	U	1	U	1	U							
Chloroethane	5	20	U	1	U	1	U	1	U	1	U	1	U	0.72	J	1	U	1	U	5	U	5	U	5	U	5	U	1	U	5	U	27	8.1	J	6.3	J	0.58	J	2.8	10	U	
Chloromethane	NS	20	U	1	U	1	U	1	U	1	U	1	U	5	U	10	U	5	U	5	U	1	U	5	U	5	U	10	U	1	U	1	U	1	U							
cis-1,2-Dichloroethene	5	20	U	2.5	1.8	14	1	U	1	U	1	U	5	U	10	U	5	U	5	U	5	U	1	U	5.3	10	9.2	J	10	U	14	2.2	4.7	1	U	1	U					
Cyclohexane	NS	20	U	1	U	1	U	1.7	1	U	1	U	5	U	10	U	5	U	5	U	5	U	1	U	5	U	5	U	10	U	3.6	J	1	U	3.2	1	U	1	U			
Ethybenzene	5	43	1	U	1	U	70	1	U	1	U	5.5	U	10	U	5	U	5	U	5	U	1	U	24	40	190	120	110	15	79	1	U	1	U								
Isopropylbenzene	5	20	U	1	U	1	U	19	1	U	1	U	5	U	10	U	5	U	5	U	5	U	1	U	7.7	10	49	41	33	3.2	25	1	U	1	U							
Methylcyclohexane	NS	20	U	1	U	1	U	4.2	0.22	J	1	U	3.1	J	10	U	5	U	5	U	5	U	1	U	6.1	2.1	J	19	20	12	1.3	7.9	1	U	1	U						
m,p-Xylene	5	54	2	U	2	U	1.2	J	2	U	2	U	22	20	U	10	U	10	U	10	U	10	U	2	U	100	160	890	540	580	54	240	E	1	U	1	U					
n-Butylbenzene	5	30	1	U	1	U	18	1	U	1	U	8	9.8	J	3.3	J	3.5	J	5	U	5	U	5	U	22	15	34	53	15	4.6	20	1	U	1	U							
n-Propylbenzene	5	15	J	1	U	1	U	28	1	U	1	U	5	U	10	U	5	U	5	U	5	U	1	U	12	17	79	68	53	5	38	2	U	2	U							
Methylene Chloride	5	20	U	1	U	1	U	1	U	1	U	1	U	5	U	10	U	5	U	3.7	J	5	U	1	U	5	U	8.8	J	10	U	9.3	J	1	U	1	U	1	U			
Naphthalene	10 (GV)	20	U	1	U	1	U	1	U	1	U	5	U	4.3	J	2.8	J	5	U	5	U	5	U	1	U	21	25	120	85	82	6.9	72	1	U	1	U						
o-Xylene	5	120	1	U	1	U	42	1	U	1	U	14	10	U	5	U	5	U	5	U	5	U	1	U	99	84	440	260	300	34	170	E	1	U	1	U						
Styrene	5	20	U	1	U	1	U	1	U	1	U	1	U	5	U	10	U	5	U	5	U	5	U	1	U	5	U	5	U	10	U	1.1	5.5	1	U	1	U					
sec-Butylbenzene	5	20	U	1	U	1	U	1	U	1	U	1	U	5	U	10	U	5	U	5	U	5	U	1	U	8	7.2	10	U	27	10	U	2.9	11	1	U	1	U				
tert-Butylbenzene	5	20	U	1	U	1	U	1	U</																																	

Table 2

**Summary of PFOA/PFOS and 1,4-Dioxane Groundwater Analytical Results**  
**Korkay, Inc.**  
**Broadalbin, New York (Site #518014)**

March 2017

Well ID		MW-8D	MW-8S	MW-15D	MW-15S	ASW	MW-16D	K-2	K-3	VEW-1	VEW-2	VEW-2 <sup>1</sup>										
	Health Advisory Limits	3/17/17	3/17/17	3/15/17	3/15/17	3/16/17	3/17/17	3/16/17	3/16/17	3/16/17	3/16/17	3/16/17										
<b>PFAS - Perfluorinated Alkyl Substances (ng/L)</b>																						
Perfluorobutanesulfonic acid (PFBS)	NS	2	U	<b>6.9</b>		2	U	<b>1.8</b>	J	2	U	<b>1.8</b>	J									
Perfluorohexanesulfonic acid (PFHxS)	NS	2	U	<b>2.4</b>		2	U	<b>2.9</b>		5.4		2	U	<b>15</b>		37		14		16	16	
Perfluoroheptanoic acid (PFHpA)	NS	2	U	<b>1.7</b>	J	2	U	<b>4.6</b>		11		2	U	<b>12</b>		2.7		20		11	11	
Perfluorononanoic acid (PFNA)	NS	2	U	2	U	2	U	<b>0.75</b>	J	5		2	U	<b>5</b>		0.8	J	2.5		3.3	3.3	
Perfluorooctanoic acid (PFOA)	<b>70</b>	<b>1.3</b>	J	<b>5.2</b>		1.6	J	<b>11</b>		21		3.8		<b>150</b>		20		110		81	80	
Perfluorooctanesulfonic acid (PFOS)		2	U	<b>17</b>		2	U	<b>140</b>		310		2	U	<b>1500</b>		240		1400		1100	1100	
Total PFOA/PFOS	<b>70</b>	<b>1.3</b>	J	<b>22.2</b>		1.6	J	<b>151</b>		331		3.8		<b>1650</b>		260		1510		1181	1180	
<b>1,4 - Dioxane (ug/L)</b>																						
1,4 - Dioxane	NS	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4

PFAS results compared to the USEPA Health Advisory Limits of 70 parts per trillion (ng/L) for PFOA and PFOS, individually and combined.

NS - No standard or GV.

**BOLD** font indicates compound concentrations detected above method detection limits

Shaded cells indicate exceedance of Health Advisory Limits

U - Compound analyzed for but not detected

J - Estimated concentration for compound detected below the reporting limit

<sup>1</sup> - Duplicate Sample

Table 3

**Summary of PFOA/PFOS and 1,4-Dioxane Groundwater Analytical Results**  
**Korkay, Inc.**  
**Broadalbin, New York (Site #518014)**

March 2017

Well ID		VEW-3		VEW-4		MW-17		MW-18		MW-19		MW-20		MW-21		MW-22		MW-23		
	Health Advisory Limits	3/16/17	3/16/17	3/15/17	3/15/17	3/15/17	3/15/17	3/15/17	3/15/17	3/15/17	3/15/17	3/15/17	3/15/17	3/17/17	3/17/17	3/15/17	3/16/17	3/16/17	3/17/17	
<b>PFAS - Perfluorinated Alkyl Substances (ng/L)</b>																				
Perfluorobutanesulfonic acid (PFBS)	NS	2		1.1	J	2	U	2	U	3.2		1.2	J	1.1	J	1.4	J	2	U	2
Perfluorohexanesulfonic acid (PFHxS)	NS	21		12		1.7	J	2		1.9	J	2	U	1.5	J	4.1		2.6		1.2
Perfluoroheptanoic acid (PFHpA)	NS	11		9.4		12		3.2		4.9		1.7	J	2	U	1.6	J	3.7		3.1
Perfluorononanoic acid (PFNA)	NS	4.3		5.5		2.4		0.89	J	0.9	J	2	U	1.4	J	7		1.7	J	2
Perfluorooctanoic acid (PFOA)	70	130		75		27		14		11		5.5		16		13		16		11
Perfluorooctanesulfonic acid (PFOS)		960		1300		170		48		28		4.9		350		200		89		14
Total PFOA/PFOS	70	1090		1375		197		62		39		10.4		366		213		105		25
<b>1,4 - Dioxane (ug/L)</b>																				
1,4 - Dioxane	NS	0.4	U	0.4																

PFAS results compared to the USEPA Health Advisory Limits

NS - No standard or GV.

**BOLD** font indicates compound concentrations detected above Health Advisory Limits

Shaded cells indicate exceedance of Health Advisory Limits

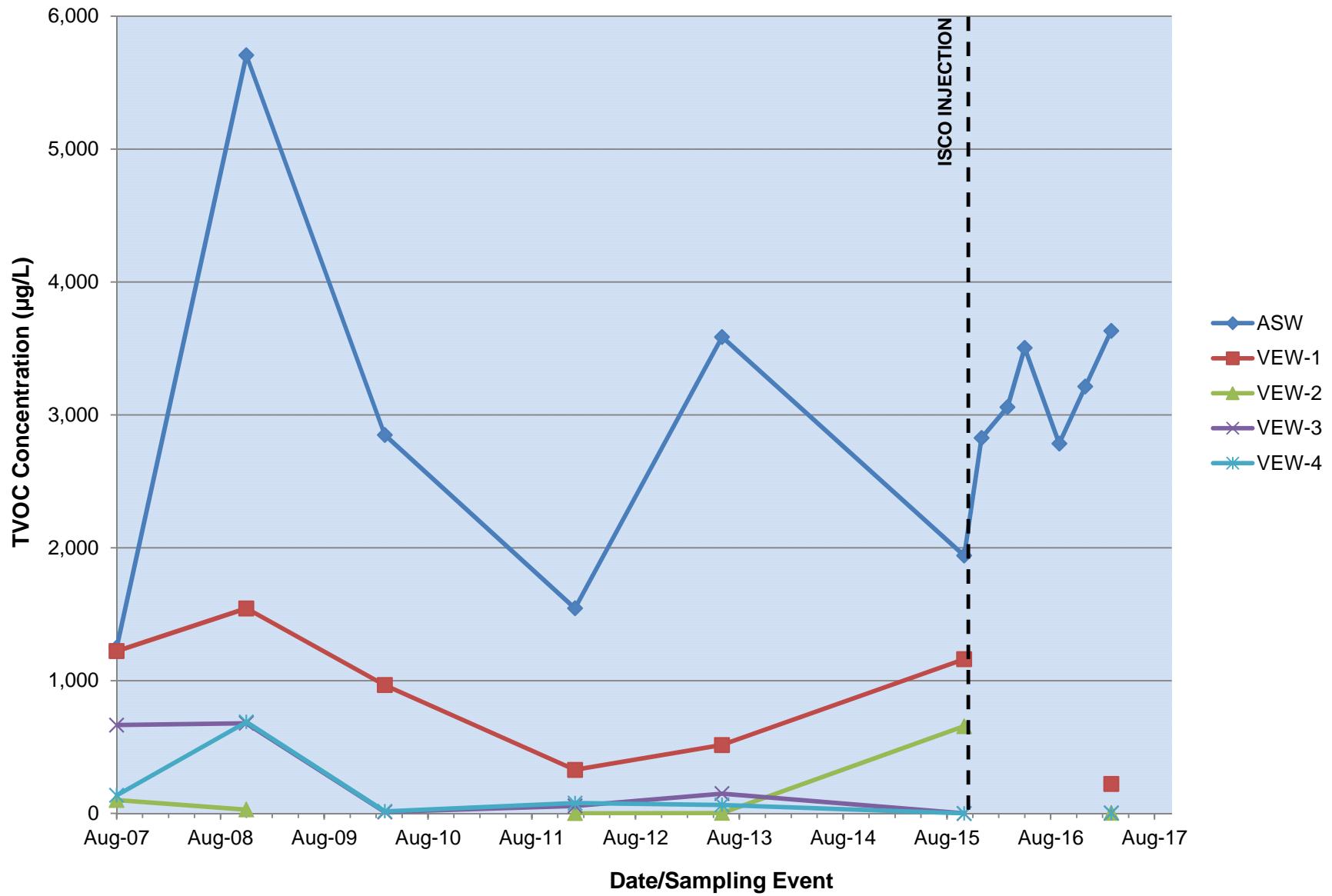
U - Compound analyzed for but not detected

J - Estimated concentration for compound detected below the Health Advisory Limit

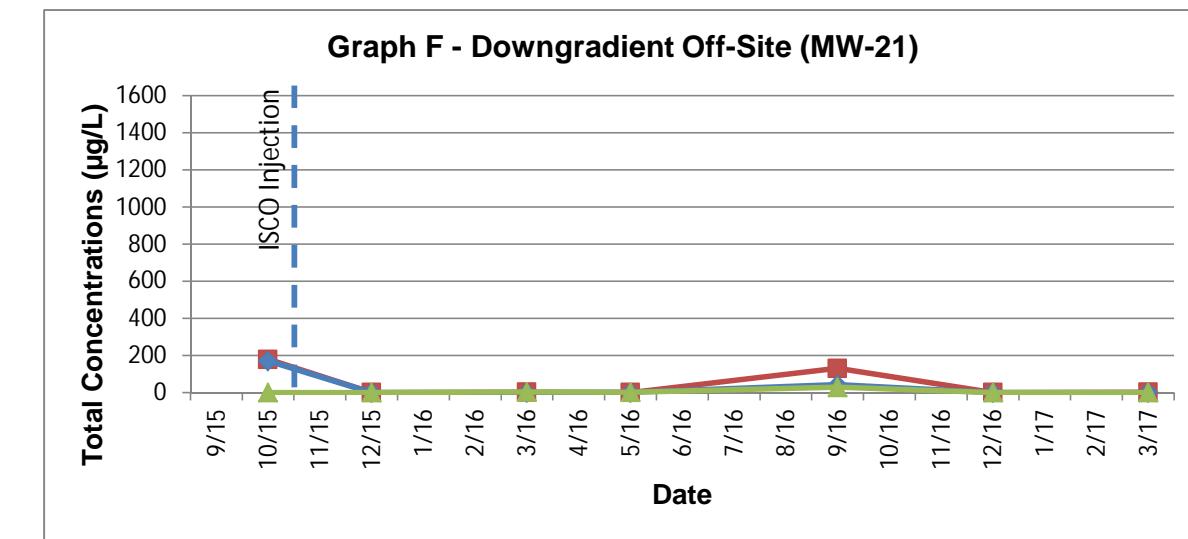
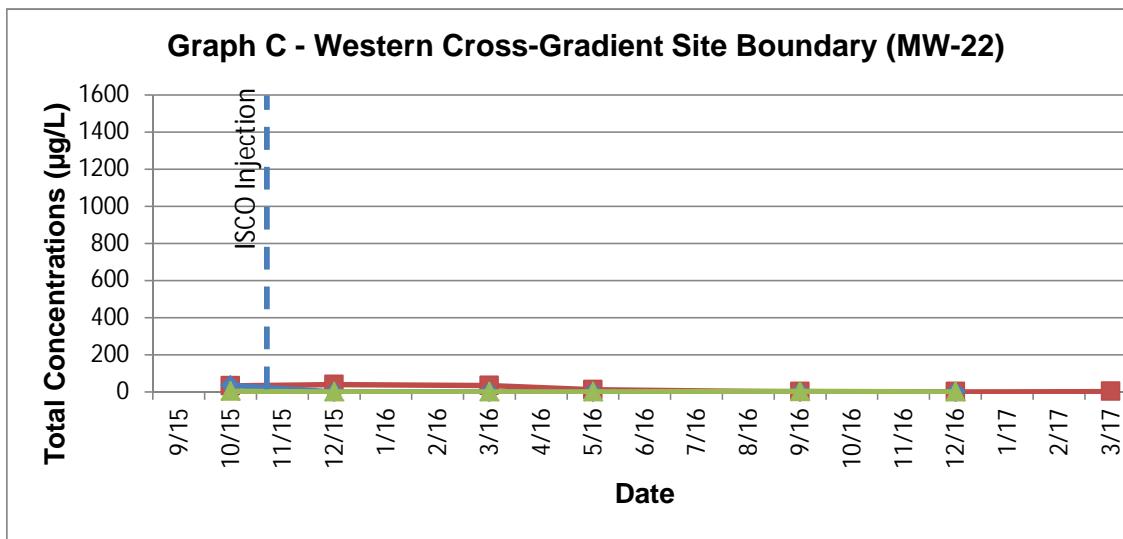
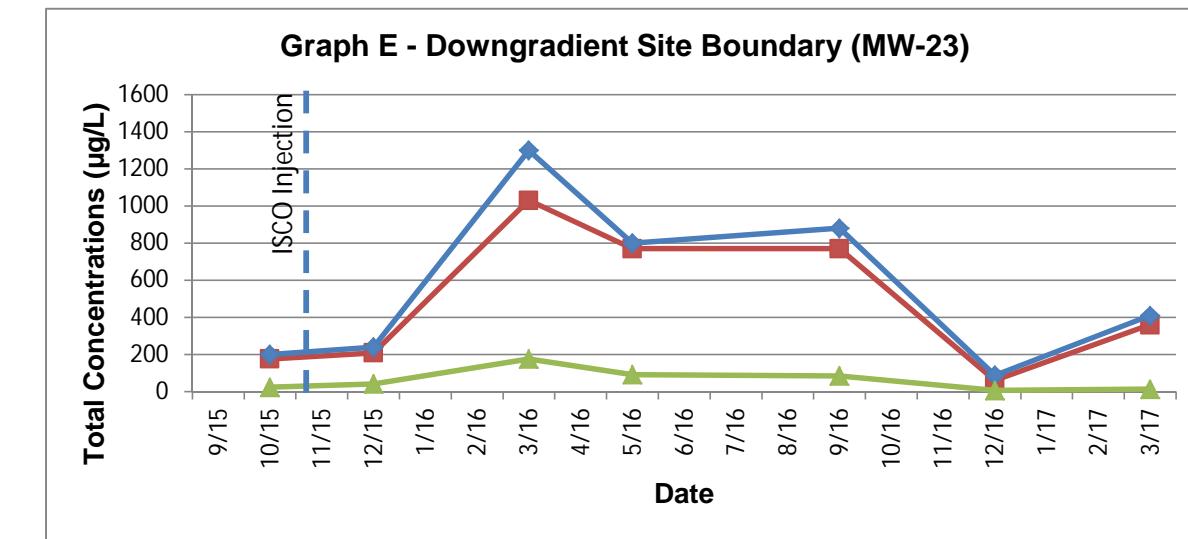
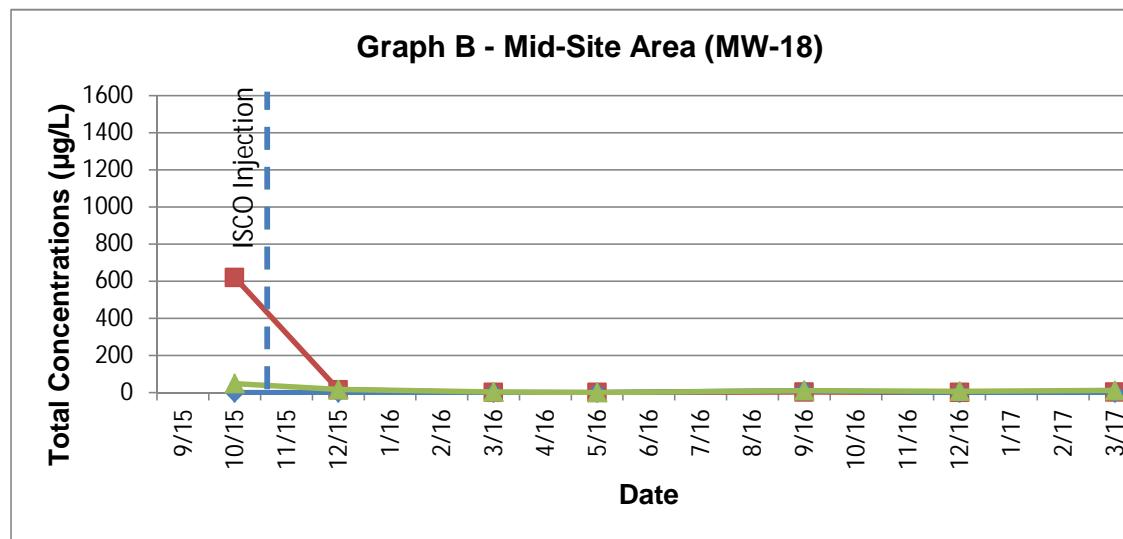
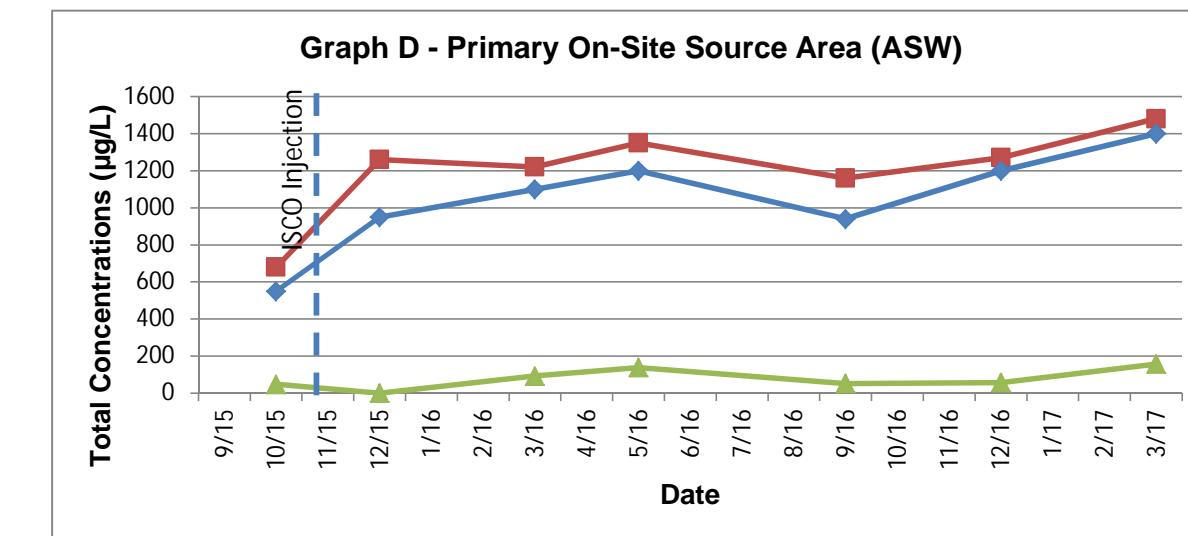
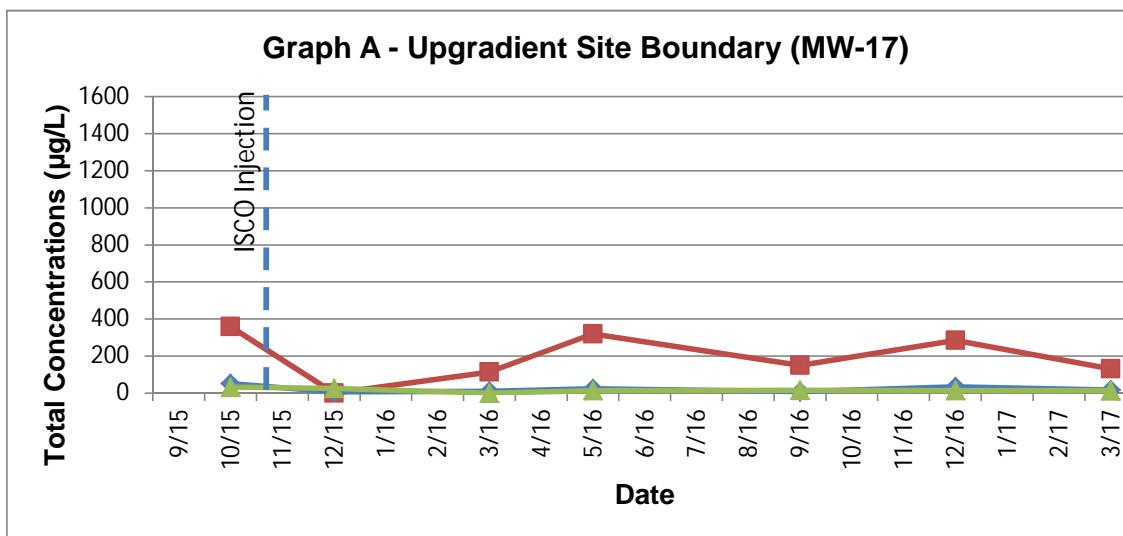
<sup>1</sup> - Duplicate Sample

## **Charts**

**Chart 1**  
**Historical Groundwater Total VOC Concentration Trends - Source Area Wells**  
**Korkay Inc.**



**Chart 2**  
**Post-ISCO Injection Groundwater VOC Concentration Trends**  
**Korkay Inc.**



- ■ Total Trimethylbenzene
- ▲ Total Xylenes
- ▲ Total CVOCs

## **Appendix A**

## **Environmental Notice**

# **FULTON COUNTY CLERK**

**WILLIAM E. ESCHLER**

## *Receipt*

---

Receipt Date: 02/01/2013 11:38:20 AM  
RECEIPT # 2013229249

Recording Clerk: FC  
Cash Drawer: CASH1  
Rec'd Frm: INDEPENDENT

Instr#: 2013-18049  
DOC: MISC DOCUMENT  
OR Party: NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION DEPARTMENT  
EE Party: PERMA GLAZE CHEMICAL  
CORPORATION

STANDARD

Cover Page	\$5.00
Recording Fee	\$50.00
Cultural Ed	\$14.25
Records Management - County	\$1.00
Records Management - State	\$4.75

DOCUMENT TOTAL: ----> \$75.00

Receipt Summary

TOTAL RECEIPT:	---->	\$75.00
TOTAL RECEIVED:	---->	\$75.00
<hr/>		
CASH BACK:	---->	\$0.00

PAYMENTS

Check # 3612 ->	\$75.00
-----------------	---------

**CCPY**

FILED  
FULTON COUNTY  
CLERK'S OFFICE

Korkay, Incorporated  
Site No. 518014  
70 West Main Street  
Broadalbin, Fulton County, NY  
Tax Map: 137.15-5-25

ENVIRONMENTAL NOTICE

RECEIVED

THIS ENVIRONMENTAL NOTICE is made the 25<sup>th</sup> day of January, 20 13 by the New York State Department of Environmental Conservation (Department), having an office for the transaction of business at 625 Broadway, Albany, New York 12233.

WHEREAS, that parcel of real property located at the address of 70 West Main Street in the Village of Broadalbin, County of Fulton and State of New York, known and designated on the tax map of the County Clerk of the County of Fulton as tax map parcel number: Section 137.15 Block 5 Lot 25 which is part of lands conveyed by Kaldar, Inc. to the Perma Glaze Chemical Corporation by deed dated March 31, 1970 and recorded on October 4, 1971, in Book Liber 515 of Deeds at page 238 from the County of Fulton, the property being more particularly described in the metes and bounds and tax map and attached hereto as Appendix "A" to this notice and made a part hereof, and hereinafter referred to as "the Property" and is the subject of a remedial program performed by the Department; and

WHEREAS, the Department approved a cleanup to address contamination disposed at the Property and such cleanup was conditioned upon certain limitations.

NOW, THEREFORE, the Department provides notice that:

FIRST, the part of lands subject to this Environmental Notice is as shown on a map attached to this Notice as Appendix "B" and made a part hereof.

SECOND, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where contamination remains at the Property subject to the provisions of the Operation and Maintenance ("O&M"), Plan there shall be no disturbance or excavation of the Property which threatens the integrity of the engineering controls or which results or may result in a significantly increased threat of harm or damage at any site as a result of exposure to soils. A violation of this provision is a violation of 6 NYCRR 375-1.1 1(b)(2).

THIRD, no person shall disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, including but not limited to those engineering controls described in the O&M Plan and listed below, unless in each instance they first obtain a written waiver of such prohibition from the Department or Relevant Agency.

FOURTH, the remedy was designed to be protective for Commercial or Industrial uses. Therefore, any use for purposes other than Commercial or Industrial uses without the express written waiver of such prohibition by the Relevant Agency may result in a significantly increased threat of harm or damage at the site.

Korkay, Incorporated  
Site No. 518014  
70 West Main Street  
Broadalbin, Fulton County, NY  
Tax Map: 137.15-5-25

FIFTH, no person shall use the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Department or Relevant Agency. Use of the groundwater without appropriate treatment may result in a significantly increased threat of harm or damage at the site.

SIXTH, it is a violation of 6 NYCRR 375-1.11(b) to use the Property in a manner inconsistent with this environmental notice.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

By:

Robert W. Schick, P.E., Director  
Division of Environmental Remediation

STATE OF NEW YORK ) ss:  
COUNTY OF ALBANY )

On the 20 day of January, in the year 2013, before me, Robert. W. Schick, the undersigned, personally appeared, and is personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Designee of the Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Notary Public - State of New York

David J. Chiusano  
Notary Public, State of New York  
No. 01CH5032146  
Qualified in Schenectady County  
Commission Expires August 22, 2014

Korkay, Incorporated  
Site No. 518014  
70 West Main Street  
Broadalbin, Fulton County, NY  
Tax Map: 137.15-5-25

**Appendix A**

Korkay, Incorporated  
Site No. 518014  
70 West Main Street  
Broadalbin, Fulton County, NY  
Tax Map: 137.15-5-25

**METES and BOUNDS Description**

ALL THAT TRACT, PIECE OR PARCEL OF LAND, situate, in the Town of Broadalbin, County of Fulton, and State of New York, bounded and described as follows:

**PARCEL NO. 1.**

Beginning at an iron post on Main Street, 640 feet westerly from the inside of the sidewalk on First Avenue, in the Village of Broadalbin, County of Fulton and State of New York; running thence north  $11^{\circ}10'$  west, to an iron post, and continuing thence northerly to an iron post which is 222 feet more or less northerly from the iron post on Main Street heretofore mentioned; running thence in a westerly direction along the lands now or formerly belonging to the Estate of George W. Hughest, deceased; running thence in a southerly direction along the lands formerly owned by William Kennedy, now or formerly owned by Etta Perkins; and running thence in an easterly direction along Main Street in said Village to the first mentioned iron post and point and place of beginning.

**PARCEL NO. 2.**

COMMENCING at a point on the northerly side of West Main Street in said Village at a point approximately 640 feet westerly from the inside of the sidewalk on First Avenue in said Village; running thence Northeasterly, along the east line of lands now owned or supposed to be by Crossley Glove Co., Inc., a distance of approximately 250 feet to the south line of lands of E. C. and K. Tanner; running thence EASTERLY along the south line of land of said E. C. and K. Tanner a distance of approximately 90 feet to the west line of the lands now owned or supposed to be by the First Presbyterian Church of Broadalbin, New York; running thence SOUTHEASTERLY along the westerly line of lands of said First Presbyterian Church a distance of approximately 250 feet to the north line of West Main Street in said Village; running thence WESTERLY along the north line of West Main Street a distance of approximately 120 feet to the point and place of beginning, together with dwelling-house thereon.

All measurements in the above description being the same more or less.

Being the same premises conveyed to Kaldar, Inc. by Warranty Deed from M&W Glove Corp., formerly known as Crossley Glove Co., Inc. dated May 26, 1969, and recorded May 27, 1969, in the Fulton County Clerk's Office in Book 502 of Deeds at Page 1129.

Korkay, Incorporated  
Site No. 518014  
70 West Main Street  
Broadalbin, Fulton County, NY  
Tax Map: 137.15-5-25

**Appendix B**



## Korkay Site Location Environmental Notice

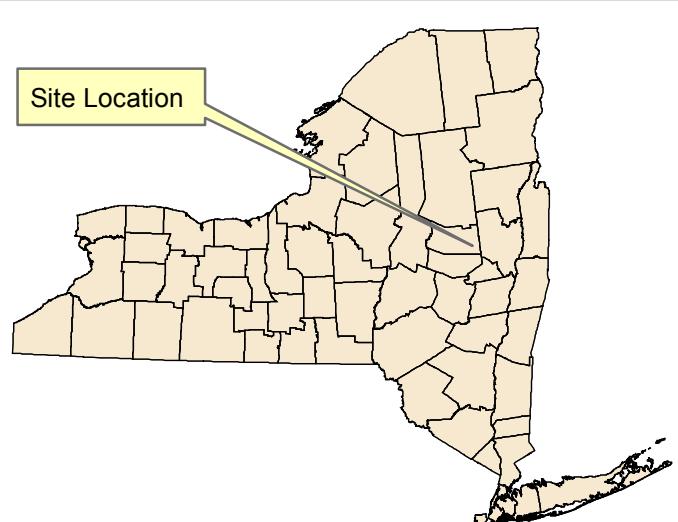
518014

70 West Main Street  
Broadalbin, NY



Project Manager: Payson Long  
Map Created By: Payson Long  
Date Created: February 17, 2012

0 12.5 25 50 75 100 Feet



<http://74.39.247.92/gis/main.asp>

Fulton County Map Viewer

File Edit View Favorites Tools Help

Free Hotmail Part375 Soil Cleanup Table

Fulton County iMap

Parcel Search Buffer Parcels Clear Full View Print

View Layers View Legend

Update Map

Base Map

Municipal Boundaries (checked)

Tax Parcels (checked)

Major Roads (checked)

County Roads (checked)

Roads (checked)

2001 Aerial Photos (unchecked)

2005 Color Aerial Photos (unchecked)

2005 Black and White Aerial Photos (unchecked)

2010 12inch Aerial Photos (unchecked)

2010 24inch Aerial Photos (unchecked)

Topographic Maps (unchecked)

Districts

Natural Resources / Recreation

Zoom to Muni: Select a municipality... ▾

100%

## **Appendix B**

### **IC/EC Certification Forms**



**Enclosure 1**  
**Engineering Controls - Standby Consultant/Contractor Certification Form**



Site Details	Box 1
Site No. <b>518014</b>	
Site Name <b>Korkay, Incorporated</b>	
Site Address: <b>70 West Main Street</b> Zip Code: <b>12025</b>	
City/Town: <b>Broadalbin</b>	
County: <b>Fulton</b>	
Site Acreage: <b>120.9 DS 9/6/17</b>	
Reporting Period: June 15, 2016 to June 15, 2017	
YES    NO	
1. Is the information above correct?	<input checked="" type="checkbox"/> <input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.	
2. To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/> <input checked="" type="checkbox"/>
3. To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/> <input checked="" type="checkbox"/>
4. To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/> <input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.	
5. To your knowledge is the site currently undergoing development?	<input type="checkbox"/> <input checked="" type="checkbox"/>
Box 2	
YES    NO	
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input type="checkbox"/> <input checked="" type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.	
Signature of Standby Consultant/Contractor	Date

SITE NO. 518014

Box 3

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
137.15-5-25	PERMA GLAZE CHEMICAL CORP	Ground Water Use Restriction Landuse Restriction Site Management Plan

The Environmental Notice includes restrictions on groundwater use and land use (allows only commercial or industrial use.)

Box 4

Description of Engineering Controls

-None Required

DS 9/6/17

Not Applicable/No EC's  
PARCEL ENGINEERING CONTROLS CURRENTLY INCLUDE TWENTY  
137.15-5-25 GROUND WATER MONITORING WELLS. THE INTEGRITY OF THE  
wells are INSPECTED ON ANNUAL BASIS.

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification, including data and material prepared by previous contractors for the current certifying period, if any;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES      NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

YES      NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.**

---

Signature of Standby Consultant/Contractor

---

Date

**IC/EC CERTIFICATIONS****Qualified Environmental Professional Signature**

I certify that all information in Boxes 2 through 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

Daniel Servetas at 40 British American Blvd.  
print name  
Latham, New York 12110

am certifying as a Qualified Environmental Professional.

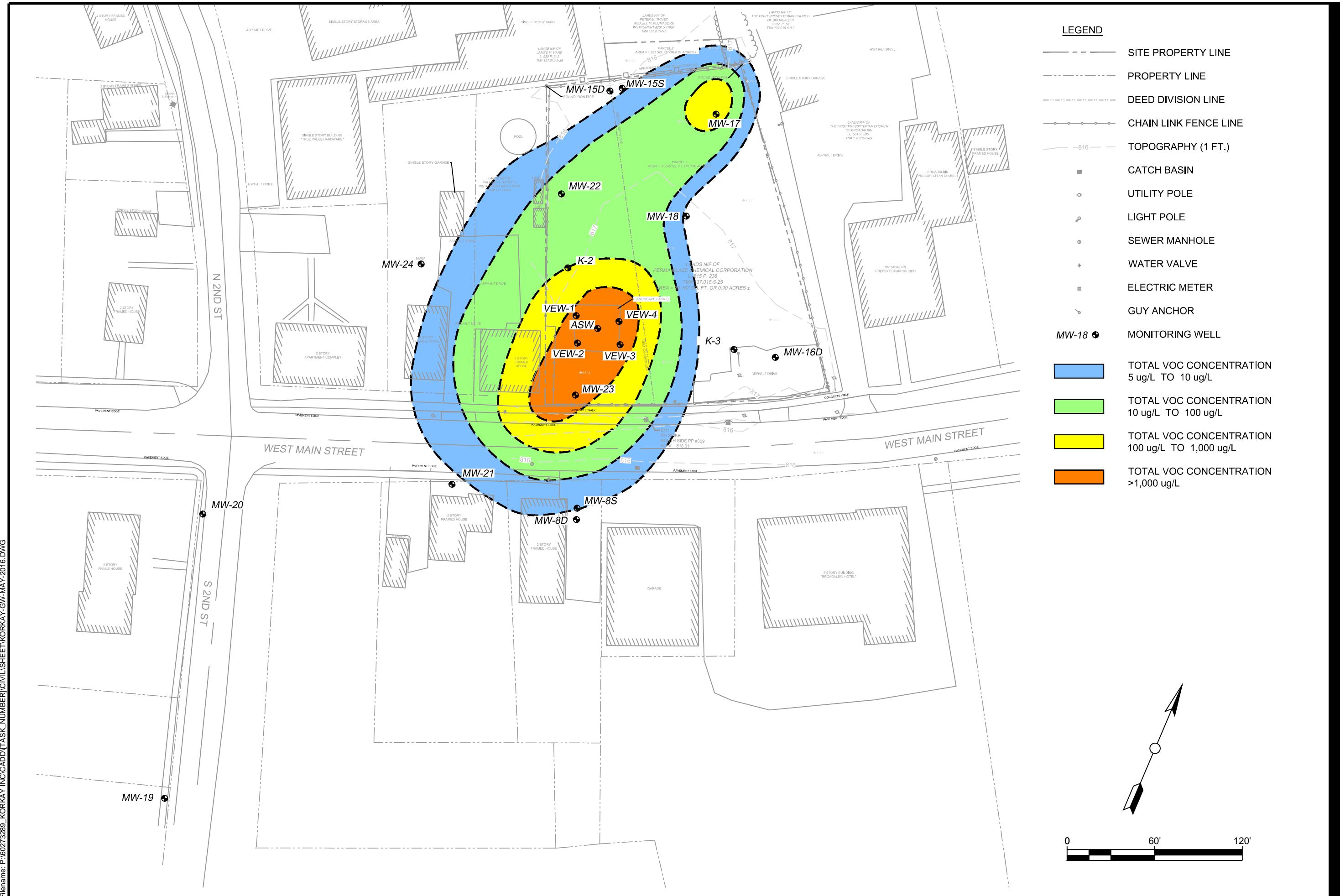
Daniel Servetas  
Signature of Qualified Environmental Professional

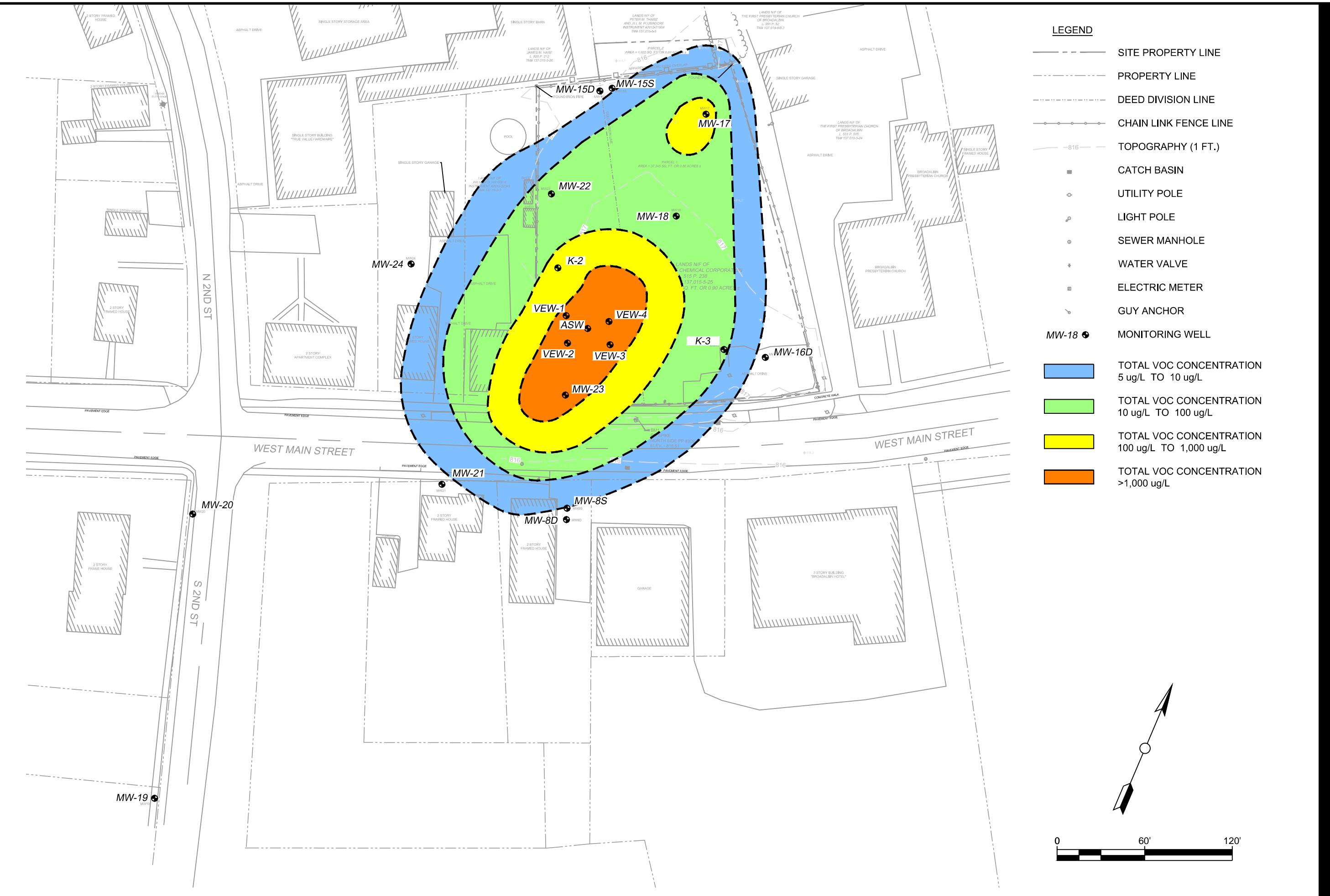


9/6/2017  
Date

## **Appendix C**

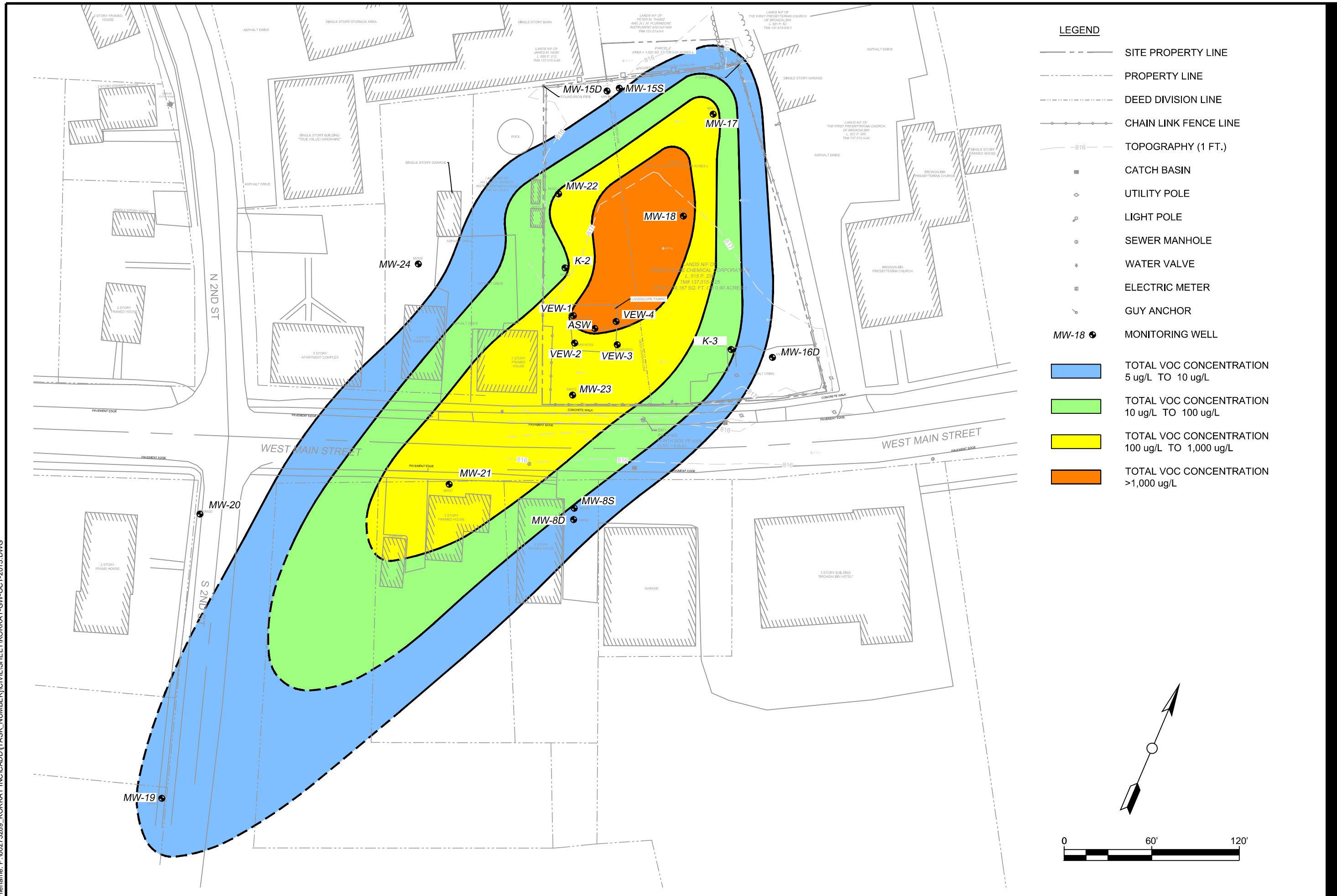
### **TVOC Isoconcentration Contour Maps from Previous Sampling Events (2007 to May 2016)**

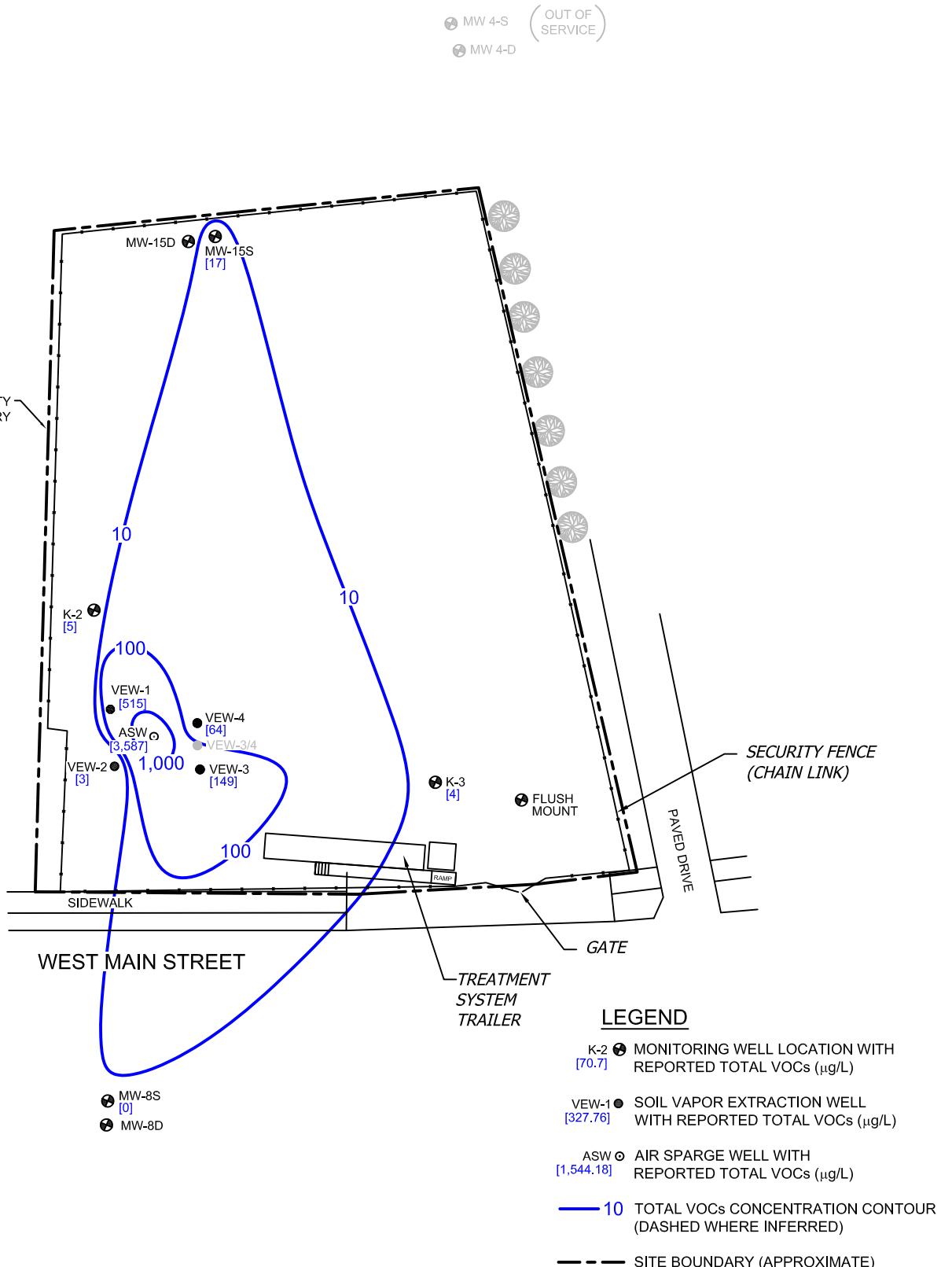
**TOTAL VOC ISOCONCENTRATION  
CONTOUR MAP**  
MAY 31, 2016


**TOTAL VOC ISOCONCENTRATION  
CONTOUR MAP  
MARCH 8, 2016**


**TOTAL VOC ISOCONCENTRATION  
CONTOUR MAP  
DECEMBER 8, 2015**

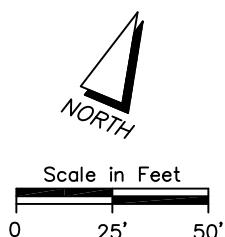


TOTAL VOC ISOCONCENTRATION  
 CONTOUR MAP  
 OCTOBER 14, 2015




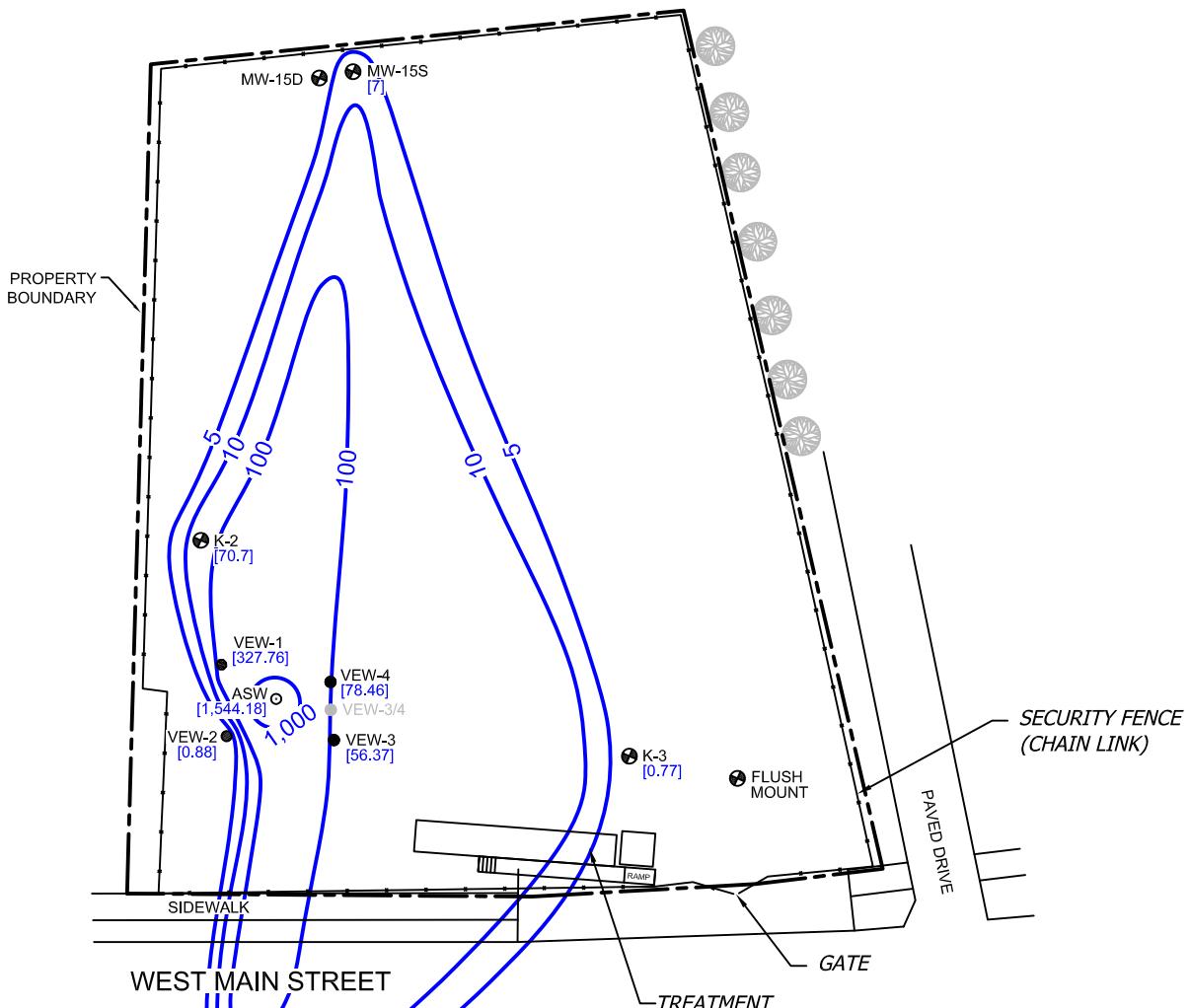
NOTE:  
FOR MAP REFERENCE INFORMATION,  
SEE FIGURE 1-2 "SITE LAYOUT".

## PLAN



**FIGURE 4D**  
TOTAL VOC  
ISOCONCENTRATION MAP - SHALLOW AQUIFER  
JUNE 25, 2013  
NYSDEC SITE ID: 5-18-014  
**KORKAY INC.**  
70 WEST MAIN STREET  
BROADALBIN, NEW YORK

MW 4-S (OUT OF SERVICE)  
MW 4-D



NOTE:  
FOR MAP REFERENCE INFORMATION,  
SEE FIGURE 1-2 "SITE LAYOUT".

## PLAN



Scale in Feet  
0 25' 50'

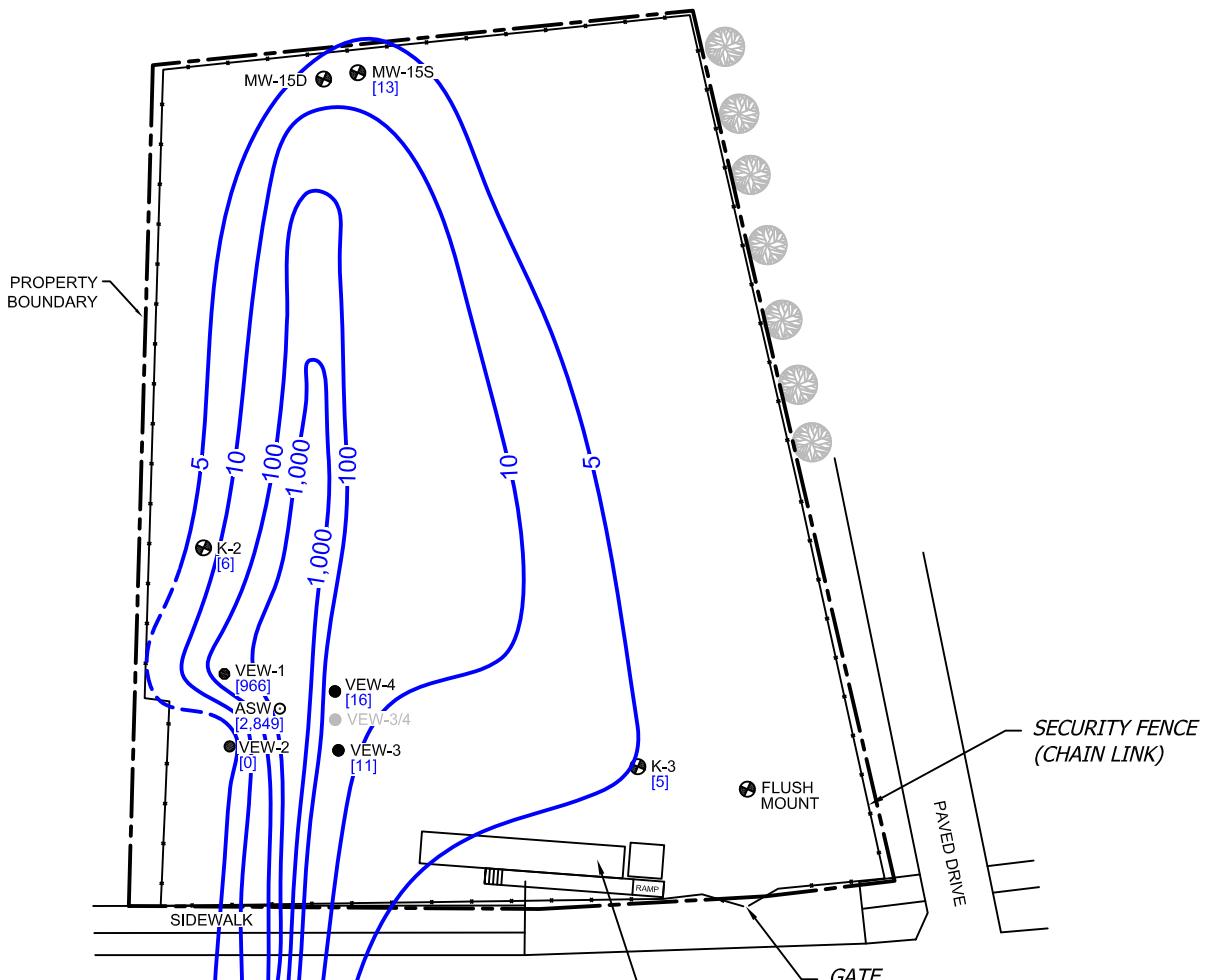
**FIGURE 4C**  
TOTAL VOC  
ISOCONCENTRATION MAP - SHALLOW AQUIFER  
JANUARY 10, 2012  
NYSDEC SITE ID: 5-18-014  
**KORKAY INC.**  
70 WEST MAIN STREET  
BROADALBIN, NEW YORK

**AECOM**

DATE: OCTOBER 2013

PROJECT NO.: 60273289

MW 4-S (OUT OF SERVICE)  
 MW 4-D



#### LEGEND

K-2 ● MONITORING WELL LOCATION WITH [6] REPORTED TOTAL VOCs ( $\mu\text{g}/\text{L}$ )

VEW-1 ● SOIL VAPOR EXTRACTION WELL [966] WITH REPORTED TOTAL VOCs ( $\mu\text{g}/\text{L}$ )

ASW ○ AIR SPARGE WELL WITH [2,849] REPORTED TOTAL VOCs ( $\mu\text{g}/\text{L}$ )

— 10 TOTAL VOCs CONCENTRATION CONTOUR (DASHED WHERE INFERRED)

— SITE BOUNDARY (APPROXIMATE)

NOTE:  
FOR MAP REFERENCE INFORMATION,  
SEE FIGURE 1-2 "SITE LAYOUT".

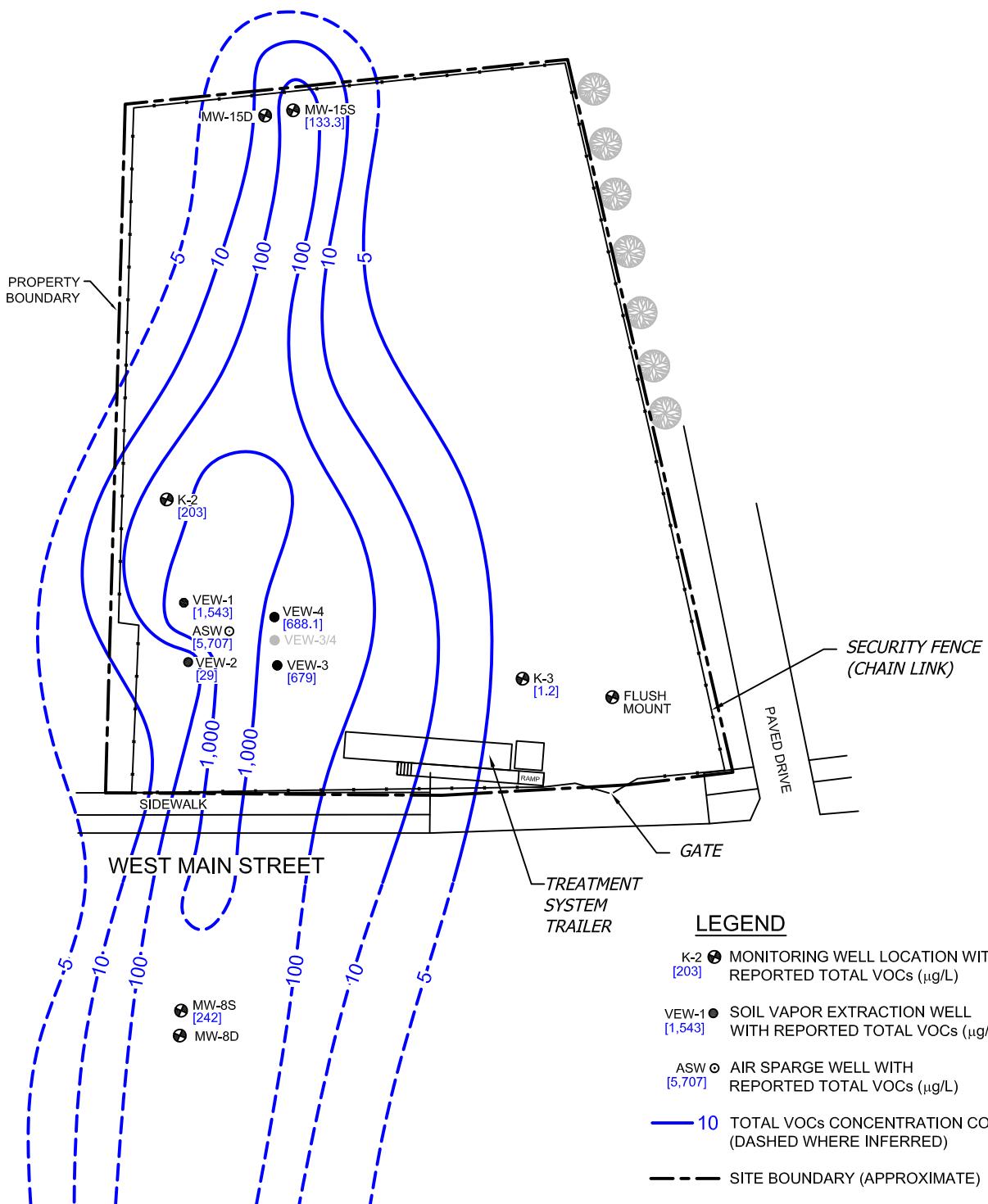
#### PLAN



Scale in Feet  
0 25' 50'

**FIGURE 4B**  
TOTAL VOC  
ISOCONCENTRATION MAP - SHALLOW AQUIFER  
MARCH 25, 2010  
NYSDEC SITE ID: 5-18-014  
**KORKAY INC.**  
70 WEST MAIN STREET  
BROADALBIN, NEW YORK

MW 4-S (OUT OF SERVICE)  
MW 4-D



NOTE:  
FOR MAP REFERENCE INFORMATION,  
SEE FIGURE 1-2 "SITE LAYOUT".

## PLAN



Scale in Feet  
0 25' 50'

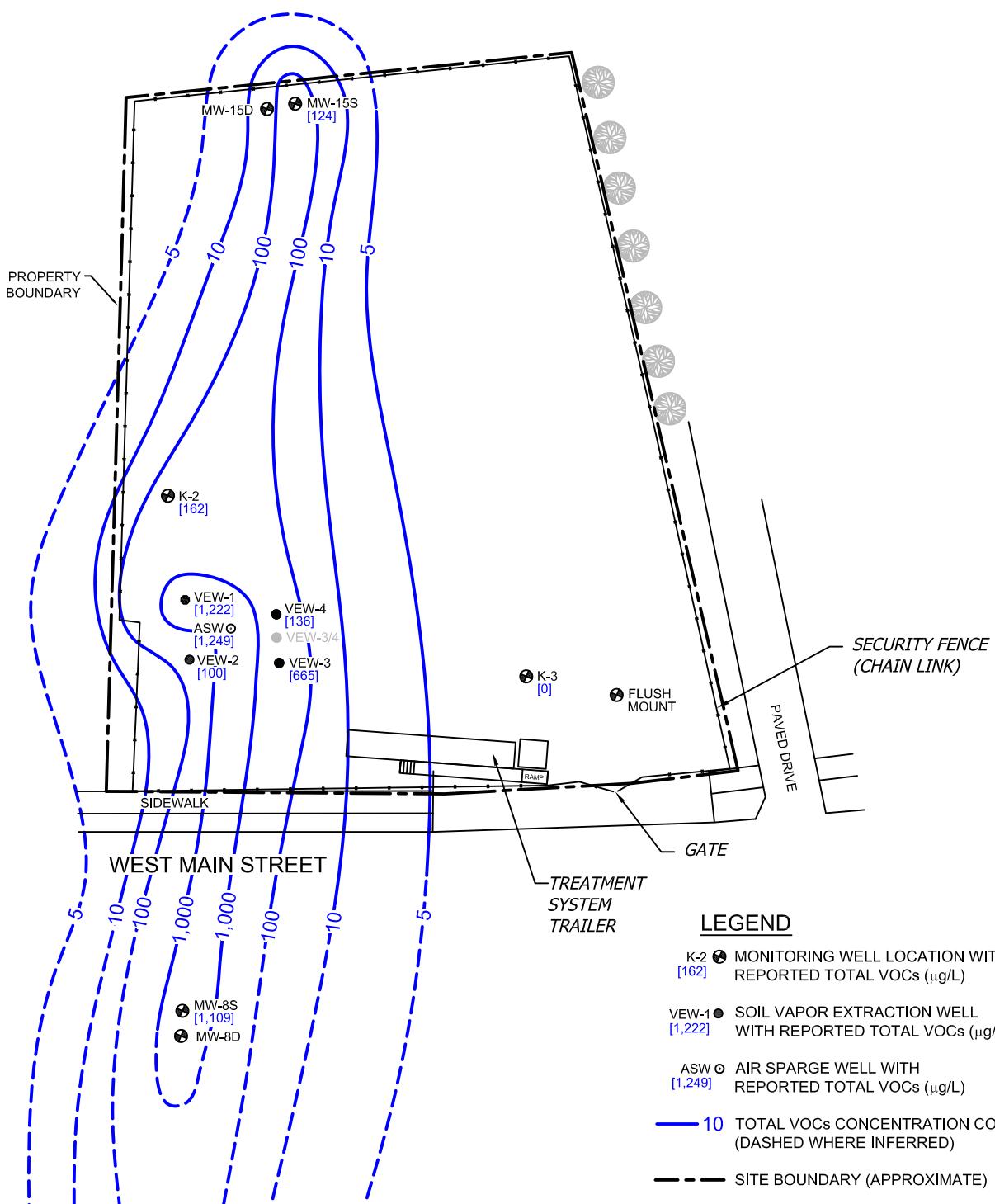
**FIGURE 4A**  
TOTAL VOC  
ISOCONCENTRATION MAP - SHALLOW AQUIFER  
NOVEMBER 25, 2008  
NYSDEC SITE ID: 5-18-014  
**KORKAY INC.**  
70 WEST MAIN STREET  
BROADALBIN, NEW YORK

**AECOM**

DATE: OCTOBER 2013

PROJECT NO.: 60273289

MW 4-S (OUT OF SERVICE)  
MW 4-D



NOTE:  
FOR MAP REFERENCE INFORMATION,  
SEE FIGURE 1-2 "SITE LAYOUT".

## PLAN



Scale in Feet  
0 25' 50'

**FIGURE 4**  
TOTAL VOC  
ISOCONCENTRATION MAP - SHALLOW AQUIFER  
AUGUST 14, 2007  
NYSDEC SITE ID: 5-18-014  
**KORKAY INC.**  
70 WEST MAIN STREET  
BROADALBIN, NEW YORK

## **Appendix D**

### **Annual Monitoring Well Inspection Logs**

SITE NAME: Korkay

SITE ID.: 518014

INSPECTOR: RM

DATE/TIME: 9/12/16 9:45

WELL ID.: ASW

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back) .....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

ASW	
YES	NO
✓	
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

N/A

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

N/A

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

LOCK PRESENT? .....

Y

N

LOCK FUNCTIONAL? .....

✓

DID YOU REPLACE THE LOCK? .....

✓

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

✓

WELL MEASURING POINT VISIBLE? .....

✓	
---	--

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

11.80

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

7.96

MEASURE WELL DIAMETER (Inches): .....

2

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Field, no obstructions near

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

INSPECTOR: RM

DATE/TIME:

WELL ID.:

518014

RM

7/13/16 1030

REV - 1

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satelites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	

REV - 1

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

N/A  
N/A

LOCK PRESENT? .....

Y	N
	✓
	✓
	✓
	✓
✓	

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

8.32

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

7.50

MEASURE WELL DIAMETER (Inches): .....

2

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Field, No obstructions

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

INSPECTOR: RM

DATE/TIME:

9/13/16 10:10  
VFW-2

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satelites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

ABW VFW-2

YES	NO
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

N/A  
N/A

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

Y	N
	✓
	✓
	✓
	✓
✓	

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

8.54

7.60

2

PVC

Good

N/A

None

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: .....

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Field, No obstructions

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

INSPECTOR: RM

DATE/TIME:

1/17/16 1045

WELL ID.: VEW-3

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satelites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	
✓	

~~VIEW-3~~

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

~~N/A~~  
~~N/A~~

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

Y	N
✓	
✓	
✓	
✓	
✓	

8.55

8.08

2"

PVC

Good

N/A

None

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: .....

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Field, No obstructions

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: \_\_\_\_\_

518014

INSPECTOR: \_\_\_\_\_

RM

DATE/TIME: \_\_\_\_\_

9/13/16 940

WELL ID.: \_\_\_\_\_

K2

**MONITORING WELL FIELD INSPECTION LOG**

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satelites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

N/A	N/A
-----	-----

LOCK PRESENT? .....

Y	N
✓	
✓	
✓	
✓	

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

14.22

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

7.30

MEASURE WELL DIAMETER (Inches): .....

2

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Field , No obstructions

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.:

518014

INSPECTOR:

Rm

**MONITORING WELL FIELD INSPECTION LOG**

DATE/TIME:

9/13/16 1100

WELL ID.:

K3

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satelites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back) .....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

ASW	K3
YES	NO
✓	
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

N/A  
N/A

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

LOCK PRESENT? .....

X	N
	✓
	✓
	✓
	✓
✓	

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

1052

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

7.73

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Driveway near open Field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

INSPECTOR: RM

DATE/TIME:

9/13/16 1120  
MW-BS**MONITORING WELL FIELD INSPECTION LOG**

WELL ID.: MW-BS

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	✓

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	

MW-BS

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

YES	NO
✓	
✓	
✓	

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

N/A

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

N/A

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

Y	N
✓	
✓	
✓	
✓	
✓	
✓	
✓	

LOCK PRESENT? .....

Y

LOCK FUNCTIONAL? .....

N

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

Y

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

N

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

Y

MEASURE WELL DIAMETER (Inches): .....

N

WELL CASING MATERIAL: .....

Y

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

N

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

Y

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

N

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy Access

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In pavement driveway, no obstructions

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

No plug on well, would not fit with road cover on

Sketch

SITE NAME: Korkay

SITE ID.: 518014

Rm

## MONITORING WELL FIELD INSPECTION LOG

INSPECTOR:

9/13/16 1115

DATE/TIME:

MW-BD

WELL ID.:

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satelites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
.	✓

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

ASW	YES	NO
	✓	
	✓	
	✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

N/A	N/A

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

Y	N
	✓
	✓
	✓
	✓
	✓
	✓

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

55.48

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

28.42

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

In Driveway, Easy Access

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Driveway (Pavement)

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

No plug on well, would not fit with road cover on

Sketch

SITE NAME: Korkay

SITE ID.: 518014  
 INSPECTOR: RM  
 DATE/TIME: 7/13/16 9:15  
 WELL ID.: MW-155

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satelites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

N/A

N/A

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

\* \*

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: .....

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

*Near fence, but still accessible*

\* \*

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

*\* Could not open well, cover sealed shut*

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

*No nearby hazards*

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014  
 INSPECTOR: RM  
 DATE/TIME: 9/13/16 900  
 WELL ID.: MW-15D

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satelites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

YES	NO
✓	
✓	
✓	
✓	
✓	

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

39.98

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

26.05

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.) ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Neer chain-link fence, but easy access

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

open field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

INSPECTOR: PAW

DATE/TIME:

9/13/16 11:00  
MW-16D

## MONITORING WELL FIELD INSPECTION LOG

WELL ID.: \_\_\_\_\_

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

YES	NO
✓	
✓	

WELL I.D. VISIBLE? .....

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back) .....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

N/A	
N/A	

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

Y	N
✓	
✓	
✓	
✓	
✓	
✓	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

54.50

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

29.50

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

In Driveway Near Empty field, Easy

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Driveway, lots of space around

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014  
 INSPECTOR: Rm  
 DATE/TIME: 9/12 8:00  
 WELL ID.: MW-17

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
<input checked="" type="checkbox"/>	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back) .....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
<input checked="" type="checkbox"/>	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

YES	NO
<input checked="" type="checkbox"/>	

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

N/AN/A

LOCK PRESENT? .....

<input checked="" type="checkbox"/>

LOCK FUNCTIONAL? .....

<input checked="" type="checkbox"/>

DID YOU REPLACE THE LOCK? .....

<input checked="" type="checkbox"/>

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

<input checked="" type="checkbox"/>

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

14.40

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

6.15

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

No

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy access, in open field

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In open field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

INSPECTOR: RM

## MONITORING WELL FIELD INSPECTION LOG

DATE/TIME:

9/13 8:30

WELL ID.: MW-18

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

N/A

LOCK PRESENT? .....

✓
✓
✓
✓
✓

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

14.32

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

7.24

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In open field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.:

518014

INSPECTOR:

RN

DATE/TIME:

9/13/16 1150

WELL ID.:

MW-19

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satelites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

N/A	
✓	

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

Y	N
✓	
✓	
✓	
✓	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

9.59

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

5.03

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

In between two driveways in cement, near road, would have to block traffic to drill

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In the middle of two driveways (pavement)

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

*Rm*

## MONITORING WELL FIELD INSPECTION LOG

INSPECTOR:

*9/17/16*

DATE/TIME:

*1145*WELL ID.: *MW-20*

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
<input checked="" type="checkbox"/>	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

~~MW-20~~

SURFACE SEAL PRESENT? .....

YES	NO
<input checked="" type="checkbox"/>	

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

*N/A*

LOCK PRESENT? .....

*N/A*

LOCK FUNCTIONAL? .....

*Y* *N*

DID YOU REPLACE THE LOCK? .....

*✓*

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

*✓* *✓*

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

*13.17*

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

*6.40*

MEASURE WELL DIAMETER (Inches): .....

*2*

WELL CASING MATERIAL: .....

*PVC*

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

*Good*

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

*N/A*

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

*None*

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

*In Shoulder of road, would have to block 1 lane of traffic for drilling, etc*

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

*In Pavement shoulder of road, no overhead utilities near*

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

*None*

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

INSPECTOR: RM

DATE/TIME: 9/13/16 11:30

WELL ID.: MW-71

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

Y	N
✓	
✓	
✓	
✓	
✓	
✓	

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

11.12

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

7.85

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

overhead ~30' up

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

In Front lawn, near Street, may have to block  
Sackra at road

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In ~~the~~ lawn near sidewalk and street

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

INSPECTOR: PM

## MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/13/16 9:30

WELL ID.: MW-22

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

Y	N
✓	
✓	
✓	
✓	
✓	
✓	
✓	

LOCK PRESENT? .....

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

9.28
5.93
2
PVC
Good
N/A
None

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

MEASURE WELL DIAMETER (Inches): .....

WELL CASING MATERIAL: .....

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy, Near fence but still accessible

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014  
 INSPECTOR: RM  
 DATE/TIME: 9/13/16 1000  
 WELL ID.: MW-23

## MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_  
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE: .....

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

N/A	N/A
-----	-----

LOCK PRESENT? .....

Y	N
	✓
	✓
	✓
	✓
✓	

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

14.27

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

8.10

MEASURE WELL DIAMETER (Inches): .....

2

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

NRA

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

near power line

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Easy, power lines ~ 20' away towards road,  
would not obstruct

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In Field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

SITE NAME: Korkay

SITE ID.: 518014

RM

## MONITORING WELL FIELD INSPECTION LOG

INSPECTOR:

DATE/TIME:

WELL ID.:

9/13/16 1200  
MW-24

WELL VISIBLE? (If not, provide directions below) .....

YES	NO
✓	

WELL COORDINATES? NYTM X \_\_\_\_\_ NYTM Y \_\_\_\_\_

PDOP Reading from Trimble Pathfinder: \_\_\_\_\_ Satellites: \_\_\_\_\_

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? .....

YES	NO
✓	
✓	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back).....

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: .....

YES	NO
✓	
✓	
✓	

MW-24

SURFACE SEAL PRESENT? .....

SURFACE SEAL COMPETENT? Concrete is cracked and heaved at grade, stick up broken off.

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below) .....

HEADSPACE READING (ppm) AND INSTRUMENT USED.....

-

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

N/A

PROTECTIVE CASING MATERIAL TYPE: .....

N/A

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): .....

LOCK PRESENT? .....

Y	N
	✓
	✓
	✓
✓	

LOCK FUNCTIONAL? .....

DID YOU REPLACE THE LOCK? .....

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE? .....

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): .....

11.20

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): .....

8.08

MEASURE WELL DIAMETER (Inches): .....

2"

WELL CASING MATERIAL: .....

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: .....

Good

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE .....

N/A

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES.....

None

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

In side yard, easy access, some trees

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In side yard of house in grass

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

None

REMARKS:

Sketch

## **Appendix E**

### **PRR Photolog**



1. ASW – 9/14/2016



2. VEW - 1 – 9/14/2016



3. VEW – 2 – 9/14/2016



4. VEW - 3 – 9/14/2016



5. VEW – 4 – 9/14/2016



6. K2 – 9/14/2016



7. K3 – 9/14/2016



8. MW – 8S – 9/14/2016



9. MW – 8D – 9/14/2016



10. MW – 15S – 9/14/2016



11. MW – 15D – 9/14/2016



12. MW – 16D – 9/14/2016



13. MW – 17 – 9/14/2016



14. MW - 18 – 9/14/2016



15. MW – 19 – 9/14/2016



16. MW - 20 – 9/14/2016



17. MW – 21 – 9/14/2016



18. MW - 22 – 9/14/2016



19. MW – 23 – 9/14/2016



20. MW - 24 – 9/14/2016



21. Site View 1 – 9/14/2016



22. Site View 2 – 9/14/2016