



**APPLICATION
For
VOLUNTARY CLEAN UP PLAN**

**3630 WEST 73RD AVE AND 7227 & 7287 LOWELL BOULEVARD
- WESTMINSTER, COLORADO**



Presented to:

Mr Seth Plas & Jenni Grafton, LEED AP-ND
Economic Development Coordinator
City of Westminster
4800 West 92nd Avenue
Westminster, Colorado 80031

March 9, 2020

TABLE OF CONTENTS

1.0	INTRODUCTION	2
2.0	SITE BACKGROUND AND SETTING.....	4
3.0	SITE CHARACTERIZATION.....	6
4.0	APPLICABLE STANDARDS/RISK DETERMINATION.....	9
5.0	SOILS MANAGEMENT PLAN.....	11
6.0	CONCLUSIONS.....	18
7.0	REFERENCES	19

Figures:

- Figure 1 : Site Vicinity Map
- Figure 2 : Property Location Map
- Figure 3 : Well & Utility Location Map
- Figure 4 : Groundwater Test Results Map
- Figure 5 : Benzene Concentration Map
- Figure 6 : Soil Test Results Map
- Figure 7 : Geological Cross Section Map
- Figure 8 : Water Well Map

Tables:

- Table 1 : Groundwater Sample Data Summary

Appendices:

- Appendix A: Checklist
- Appendix B: Legal Description & County Parcel Information
- Appendix C: SCR Report – Pik Kwik – 7301 Lowell Blvd - March 27, 1997
- Appendix D: Phase I ESA - West 73rd Ave & Lowell Blvd - May 16, 2012
- Appendix E: Phase I ESA – 3630 W. 73rd Ave & 7287 Lowell Blvd- February 28, 2017
- Appendix F: Phase I ESA - 3630 W. 73rd Ave & 7287 Lowell Blvd - December 28, 2018.
- Appendix G: Limited Phase II Subsurface Investigation - March 15, 2019
- Appendix H: 3rd Q Monitoring & Remediation Report- Pik Kwik – October 10, 2019
- Appendix I: Asbestos Survey Report- 7287 Lowell Blvd – January 27, 2020
- Appendix J: Asbestos Survey Report- 3630 W. 73rd Ave – January 27, 2020
- Appendix K: Qualified Environmental Professional Resume

1.0 INTRODUCTION

Strategic Environmental Management (SEM) has prepared this Application for inclusion into the Voluntary Clean-up Program on behalf of City of Westminster, the current registered owner. The registered address for the owner is 4800 West 92nd Avenue, Westminster, Colorado 80031. The property is located at 3630 E. 73rd Avenue and 7227 & 7287 Lowell Boulevard, Westminster, Colorado (Site).

This report is being submitted to the Colorado Department of Public Health and Environment (CDPHE) for inclusion in the Voluntary Clean-Up Program (VCUP). This application outlines historic activities at the Site, identifies potential areas of concern at the Site where the impact to soil and groundwater due to chemical releases that may have occurred at or up gradient of the Site, reviews remediation activities and evaluates the risks posed by soils and groundwater found at the Site.

This report has been prepared in accordance with the requirements set forth under the Colorado Voluntary Clean-Up Program checklist. The page where each item listed in the checklist can be found in the report is noted and can be found in Appendix A.

1.1 Previous Environmental Investigations

Several environmental investigations have been completed at the Site including:

An Initial Site Characterization Report entitled “**Former Pik Kwik – 7301 Lowell Boulevard, Westminster, CO**” was prepared by Walsh/McGlothlin & Associates on March 27, 1997. A copy of a summary of this report is included in Appendix C.

A Phase I ESA report entitled “**Phase I Environmental Assessment West 73rd Avenue & Lowell Boulevard, Westminster, Colorado 80030**” was prepared by Strategic Environmental Management, LLC (SEM) on May 16, 2012. A copy of a summary of this report is included in Appendix D.

A Phase I ESA report entitled “**Phase I — Environmental Assessment – 3630 West 73rd Avenue & 7287 Lowell Boulevard, Westminster, Colorado 80030**” was prepared by SEM on February 28, 2017. A copy of a summary of this report is included in Appendix E.

A Phase I ESA report entitled “**Phase I ESA Report**” was prepared by AEI Consultants on December 28, 2018. A copy of a summary report is included in Appendix F.

A Phase II ESA report entitled “**Limited Phase II Subsurface Investigation**” was prepared by AEI Consultants on March 15, 2019. A copy of a summary of this report is included in Appendix G.

A “3rd Q Monitoring & Remediation Report- Former Pik Kwik” was prepared by CGRS on October 10, 2019. A copy of a summary of this report is included in Appendix H.

A report entitled “Asbestos Survey & Sampling Report – 7287 Lowell Boulevard, Westminster, Colorado 80030” was prepared by SEM on January 27, 2020. A copy of a summary of this report is included in Appendix I.

A report entitled “Asbestos Survey & Sampling Report – 3630 West 73rd Avenue, Westminster, Colorado 80030” was prepared by SEM on January 27, 2020. A copy of a summary of this report is included in Appendix J.

NOTE: A complete copy of each report listed above can be found in the electronic version of this VCUP application.

1.2 Eligibility for Inclusion in the Colorado Voluntary Clean-Up Program

Inclusion in the Voluntary Clean-Up Program is dependant on the property not being subject to actions under other environmental statutes or regulations. As per the Voluntary Clean-Up Plan and Redevelopment Act (Colorado Revised Statues CRS 25-16-301, 1994) inclusion is appropriate because the following criteria have been satisfied:

- The property is not listed on the National Priorities List under CERCLA;
- No portion of the property is subject to corrective action under orders or agreements issued pursuant to the provisions of Part 3 of Article 15 of CRS 25-16-301 or the Federal Resource Conservation and Recovery Act (RCRA) of 1976 as amended;
- The property is not a facility that has or should have a permit or interim status pursuant to Part 3 of Article 15 of RCRA Subtitle C for treatment, storage or disposal of hazardous waste; and,

1.3 Ownership and Contact Information

Name of Owner: Ms. Jenni Grafton
Housing Policy & Development Manager
City of Westminster
4800 West 92nd Avenue
Westminster, Colorado
Telephone: 303-658-2400
Email: jgrafton@cityofwestminster.us

Technical Consultant: Mr. Patrick Lee
Strategic Environmental Management, LLC
720-841-2200
Email: patlee@strategicenviro.com

2.0 SITE BACKGROUND AND SETTING

2.1 Site Setting

The Site consists of three parcels of land totaling 0.62-acres. The northern portion of the Site is developed with two single-story commercial buildings. The southern portion of the site is vacant land. The areas to the north and east of the commercial buildings are paved with asphalt or concrete. There are several monitoring wells located on the eastern and southern portions of the Site associated with the adjacent leaking underground storage tank (LUST) site, located to the north. A soil vapor extraction (SVE) system, associated with the LUST site to the north, is located on the northeastern portion of the site. The Site is located on the southwest corner of 73rd Avenue and Lowell Boulevard in a mixed commercial and residential area of Westminster, Colorado. A legal description of the property is included in Appendix B.

The area around the Site is made up of mostly retail buildings and commercial structures. Detailed descriptions of the adjoining and surrounding properties are as follows:

North – The Subject Property is bounded to the north by West 73rd Avenue followed by a commercial building occupied by the Gateway Plaza to the north east and an office building to the north west.

South – A commercial building known as the Penguin Building borders the Subject Property to the south of the Subject Property.

East – The Subject Property is bounded to the east by Lowell Boulevard followed the Hidden Lakes High School property.

West – The Subject Property is bordered to the west by an alleyway followed by a residential structure located at 3660 West 73rd Avenue.

2.2 Site Geology and Hydrogeology

The elevation of the Subject Property is approximately 5,311 feet above mean sea level and the surface is relatively flat. The topography described in the EDR report indicates that, in general, the site is relatively flat with the gradient in the general area appearing to slope from the west to east and north to south. Storm water flow is routed via sheet flow over the hardscapes across the property to the south and then south east into the street gutters on the west side of Lowell Boulevard.

The overall geology for the Site as defined by P.G. Schruben, R.E. Arndt and W.J. Bawiec, *Geology of the Conterminous U.S. at 1:2,500,000 Scale* - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994). Based on this information the underlying geology consists of the following:

Era: Mesozoic
System: Cretaceous
Series: Navarro Group
Code: uK4 (decoded above as Era, System & Series)
Cenozoic Category: Stratified Sequence

Information for soil in this area was obtained from the US Department of Agriculture. The dominant soil type in the area is the Platner loam. This material consists of a well-drained silty clay/loam mixture with. The USGS indicated that the local geology is mapped as Quaternary (Pleistocene) loess deposits overlying Palocene to bedrock in the Upper Cretaceous Denver Formation. Based on an engineering report prepared on October 10, 2019 by CGRS Environmental Services on the property to the north of the Subject Property, the depth to the water table was determined to be approximately 15 feet below ground surface. A copy of the engineering report can be found in Appendix H.

2.3 Site Operational History

The Subject Property appears to have been occupied by a retail fuel station from 1959 to 1978 then from at least 1988 the facility was occupied by auto service tenants until 2011. Following that time, the building was occupied by a playhouse theater for approximately five years prior to being vacated through to present day. Based on the nature of operations, it is presumed that hazardous substances and/or petroleum products were likely associated with the former gasoline station and auto repair operations. Additionally, according to city directories records, the building at 3630 West 73rd Avenue was formerly occupied by Westminster Econo-Wash, reportedly a coin operated laundromat from 1959 through 1983. Since that time, the building has been used for storage for the theater materials and sets.

The site to the north of the Subject Property, 7301 Lowell Boulevard, is listed on the Leaking Underground Storage Tank (LUST) database with a release that was reported on September 15, 1992 and the site is still implementing the corrective action plan. Based on an October 10, 2019 3rd Quarter Monitoring and Remediation Report prepared by CGRS that summarizes all sampling results and remediation activities, 7301 Lowell Boulevard was developed with a gas station that operated from approximately 1976 until 1992. On August 28, 1992, two 8,000-gallon UST systems were removed and excavated soil was placed back in the tank basin and covered with imported backfill. After use as a gas station, the property was expanded and operated as a bowling alley and then the existing building was constructed in 2007.

2.4 Site Remediation History

While there has been no remedial activities on the Subject Property per se, a soil vapor extraction (SVE) system was installed as part of the remedial activities for both on the release site (7301 Lowell) and the Subject Property and was activated on November 29, 2007. The system ran on the Subject Property from that time until March 2013 when the system was found to be inoperable on the Subject Property area. The system was not repaired in this area and the overall system was shut down in August 2015.

A series of remedial efforts have been deployed over the last decade, including chemically oxygenated granular activated carbon (COGAC™) injections, PersulfOxR injections, RegenOx, and ORC-A injections.

2.5 Proposed Future Use

As shown in Appendix B, the Site is currently zoned C-1 – Commercial. While it is currently zoned commercial, the City of Westminster is expecting to convert the zoning to be PUD1 as the redevelopment is for the Harris Park Senior Apartments. This development will consist of two two-story, possibly slab-on-grade building with a total of 17 senior housing apartment units. A community space is also proposed for the building interiors and the remaining Subject Property areas are proposed for paved surface parking.

3.0 SITE CHARACTERIZATION

3.1 Initial Site Characterization Report— Pik Kwik – 7301 Lowell Blvd - March 27, 1997

This Phase II ESA report was prepared by Walsh/McGlothlin on March 27, 1997. The report indicated that four groundwater monitoring wells were installed on the site to determine the nature and extent of impacted soil and groundwater after two 8,000 gallon tanks were removed from the site in 1992. Groundwater tests indicated that all four wells tested with elevated levels of benzene and that the plume was undefined and migrating south as per the groundwater gradient at 12 to 15 feet below ground surface. The report recommended that additional investigation be conducted to determine the aerial extent of the plume. A copy of a summary of this report is included in Appendix C.

3.2 Phase I—West 73rd Avenue & Lowell Boulevard - May 16, 2012.

This Phase I ESA report was prepared by SEM at the request of the City of Westminster. The report identified the Pik Kwik site to the north as a REC as a plume of MTBE and benzene has migrated across the street and under the Subject Property. Indoor air testing was recommended for the existing structure on the Subject Property. In addition, it was recommended that due to the age of the buildings that asbestos may be an issue. A copy of a summary of this report is included in Appendix D.

3.3 Phase I– 3630 West 73rd Avenue & 7287 Lowell Boulevard - February 28, 2017

This Phase I ESA report was prepared by SEM at the request of the City of Westminster. This report also identified the Pik Kwik site to the north as a REC as a plume of MTBE and benzene has migrated across the street and under the Subject Property. Indoor air testing was recommended for the existing structure on the Subject Property. In addition, preliminary testing indicated that in the buildings contain asbestos containing materials that would need to be addressed before demolition of the buildings could occur. A copy of a summary of this report is included in Appendix E.

3.4 Phase I - 3630 West 73rd Avenue & 7287 Lowell Boulevard - December 28, 2018.

This Phase I was prepared by AEI Consultants (AEI) at the request of the City of Westminster. The report identified the same RECs as found in the earlier Phase I ESA reports except that a possible oil/water separator may be on site that will need to be handled during the building demolition. It also recommended a subsurface survey to determine if USTs are present on the Site. In addition, this report also provided a HUD Environmental Review Online System (HEROS) review of the Harris Park Senior Housing for Westminster. This report addressed additional environmental issues including Floodplain Management, Air Quality, Historic Preservation, Noise and Airport Hazards among others. A copy of a summary of this report is included in Appendix F.

3.5 Phase II — 3630 West 73rd Avenue & 7287 Lowell Boulevard - March 15, 2019

After reviewing the recommendations of the December 28, 2018 Phase I, AEI was commissioned to complete a ground penetrating radar study (GPRS) of the subsurface areas and on February 20, 2019, two soil borings (SB-1 and SB-2) were drilled. Boring SB-1 was advanced through the location of the former suspected UST basin, identified by the disturbed soils during the GPRS survey, for the collection of soil and groundwater samples. Boring SB-2 was advanced to the south of the former repair area in the building for the collection of soil and groundwater samples. While the results are shown in detail on Table 1, a summary of the key results is as follows:

- Benzene was not reported above the Laboratory detection level in boring SB-1, however benzene was reported at concentrations of 31.6 and 157 micrograms per liter ($\mu\text{g/L}$) in boring SB-2 and monitoring well MW-20, respectively. The concentrations of benzene reported in boring SB-2 and MW-20 exceed the OPS Tier 1 Risk Based Screening Level (RBSL), the Oil and Public Safety (OPS) Groundwater to indoor air screening level and the Colorado Basic Standards for Groundwater (CBSGW).
- Fifteen additional VOCs were reported in the groundwater samples, however the concentrations were below the OPS Tier 1 RBSL and the OPS Groundwater to indoor air.
- 1-Methylnaphthalene, 2-methylnaphthalene and naphthalene were reported in boring SB- 2 and monitoring well MW-20 at concentrations below the OPS Tier 1 RBSL, the OPS Groundwater to indoor air screening level and the CBSGW.

A copy of a summary of this report is included in Appendix G.

3.6 3rd Quarter Monitoring & Remediation Report- Pik Kwik – October 10, 2019

This report was completed by CGRS on the site to the north of the Subject Property, 7301 Lowell Boulevard, that is listed on the LUST database with a release that was reported on September 15, 1992. The release site and surrounding area adjacent properties have been assessed in connection with the reported release from 1992-2015. Soils, groundwater and soil vapor concerns have been assessed at the Subject Property, which is located down-gradient of the release site, through the advancement of on-site soil borings and installation of groundwater monitoring and soil vapor wells as shown on Figure 3.

The following subsurface sampling and remediation features are located on the Subject Property: Soil Borings SB-01 to SB-11; Monitoring Wells MW-11 to MW-22, O-09-13, CHMW-01 & 01A; Soil Vapor Extraction Wells SVE-06 to SVE-10; and Soil Vapor Well VP-03. A soil vapor extraction (SVE) system was installed as part of the remedial activities both on the release site and the Subject Property from November 2006-November 2007 and was activated on November 29, 2007. The system ran until the overall system was shut down in August 2015 due to asymptotic performance

As shown on Figures 4 and 5, the groundwater, that is approximately 15 feet below ground surface, has been impacted by a contaminated plume that is migrating south onto the Subject Property. Currently, there are benzene and ethylbenzene concentrations in groundwater that exceed the respective Tier 1 RBSLs on-site and off-site. The benzene plume extends from approximately 25 feet northeast of well SVE-04 (7301 Lowell) to approximately five feet south of well MW-22 (7287 Lowell).

As shown on Figure 6, soil tests indicate elevated levels of benzene and total petroleum hydrocarbons (TPH) in deep tests on the northern eastern edges of the Subject Property with SB-06 at 1,664 mg/Kg for TPH at 20 feet bgs, SB-09 at 1,772 mg/Kg for TPH and benzene at 2.33 mg/Kg at 18.5 feet bgs and MW-14 for TPH at 498 mg/Kg at 20 feet bgs.

The report also indicates that a number of remedial injection systems have been in operation and estimates that the anticipated closure date for the Site is March 31, 2021. A copy of this report is in Appendix H.

3.7 Asbestos Survey & Sampling Report – 7287 Lowell Boulevard - January 27, 2020

This report summarizes the results of an inspection and asbestos sampling at 7287 Lowell Boulevard that was completed by SEM at the request of the City of Westminster. The laboratory results of the potential ACM sampled at the Subject Property indicate that eleven (11) samples in the structure tested positive for chrysotile asbestos. Details concerning the materials identified are listed in Appendix I.

3.8 Asbestos Survey & Sampling Report – 3630 W. 73rd Avenue - January 27, 2020

This report summarizes the results of an inspection and asbestos sampling at 3630 W. 73rd Avenue that was completed by SEM at the request of the City of Westminster. The laboratory results of the potential ACM sampled at the Subject Property indicate that eight (8) samples in the structure tested positive for chrysotile asbestos. Details concerning the materials identified are listed in Appendix J.

4.0 APPLICABLE STANDARDS/RISK DETERMINATION

4.1 Introduction

The VCUP Application requires that existing Site conditions be compared to promulgated State of Colorado or other appropriate risk-based criteria if no promulgated standards exist. The Colorado Department of Public Health and Environment (CDPHE), Hazardous Materials and Waste Management Division (HMWMD) had established Colorado Soil Evaluation Values (CSEVs) for a large number of contaminants. This set of standards has now been replaced by USEPA Region 3 – Regional Screening Level (RSL) Resident Soil Table (TR=1E-06, HQ=0.1) November 2019. The contaminants detected in the soil and groundwater at this Site has been compared to these standards in the paragraphs that follow.

4.2 Extent of Soil and Groundwater Contamination

There have been several Phase II investigations conducted at the Subject Property from 1992-2015 that have involved the installation of 17 groundwater monitoring wells, 11 soil borings and 1 soil vapor well. All wells except for two have been advanced as a result of the release that occurred at 7301 Lowell Boulevard. In addition, there are 5 soil vapor extraction wells and 2 oxygen diffusion wells associated with the remedial activities aimed at reducing contaminant concentrations in groundwater.

Based on the results that have been summarized on the Monitoring and Remediation Report in Appendix H, Figure 5 indicates the size and extent of the plume of benzene as it exists beneath the Subject Property. However the groundwater is at approximately 15 feet and the depth of soil removal at the site during redevelopment is not expected to be deeper than 5 feet bgs. As shown on Figure 7, soil test results indicate exceedances for benzene and TPH at depths ranging from 18.5 to 20 feet bgs. Based on the results of the soil sampling analysis, relatively high TPH concentrations, above the EPA Regional Screening Level (RSL) for Resident Soil, were observed in the soil samples analyzed from SB-06 (20 feet), SB-09 (18.5 feet) and MW-14 (20 feet). It should be noted that a test at the 10 foot level in MW-14 tested Non-Detect indicating that the elevated levels below were created due to groundwater migration from the apparent “smear” zone, indicating that the source of contamination is located off-site and up gradient of this area of the Subject Property.

As shown on Figure 7, the groundwater has contaminated the soil at depth but not in the levels from ground surface to 5 feet deep, the maximum depth of soil excavation at the site for redevelopment. The soil to be excavated is expected to be clean, however a Soil Management Plan will be developed in Section 5 to provide guidelines on how to manage soils and materials during the redevelopment excavation. In addition, there is a report of a possible oil/water separator under the building. This feature will be removed once the building has been demolished and will be managed as per the Soil Management Plan.

4.3 Future Potential Human and/or Environmental Exposure

4.3.1 Direct Contact Soil Exposure

Concentrations of petroleum hydrocarbons in samples collected in the deep soils in the north east portion of Site exceed cleanup standards. In order to prevent this contaminated soil from posing an unacceptable risk based on direct contact to either human health or the environment a Soil Management Plan has been developed to manage the residual environmental impacts. This Soil Management Plan is provided in Section 5.

4.3.2 Vapor Inhalation

Phase II investigations indicated elevated concentrations of petroleum hydrocarbons on the Site and as a result, vapor intrusion may be an issue. While the SMP may address the removal of elevated concentrations of hydrocarbon contaminated soils, it is suggested that the indoor air pathway be made incomplete through the use of sub-slab vapor mitigation systems and once installed, confirmed effective with post construction indoor air testing. This vapor intrusion prevention system will be designed and stamped by a Professional Engineer who will certify and provide oversight during the installation of the system (ie. smoke test etc.) that the system is working as designed. Since it is a passive system, an ambient indoor air test using SUMMA canisters will be required to further show the system is working as designed.

4.3.3 Groundwater Exposure

The Site currently receives drinking water from the public water supply and there are no future plans to install a drinking water well at the Site. A review of the February 10, 2017 EDR report published for this area provides a detailed list of 60 water wells located within one mile of the Site and none of these wells are used for supplying drinking water. Figure 8, taken from the EDR report, also provides evidence that there are no Public Water Supply Wells within a mile of the Site. Therefore, contamination of groundwater at the Site does not present an unacceptable risk to either on-site or off-site receptors now or under future use for the Site.

5.0 SOIL MANAGEMENT PLAN

The purpose of this Soil Management Plan (SMP) is to provide comprehensive, but flexible, procedures for managing the removal, relocation and/or disposal of materials that are reasonably expected to be encountered during the development of the property located at 3630 West 73rd Avenue and 7287 Lowell Boulevard, Westminster, Colorado, in accordance with state, federal and local regulations. The SMP also describes confirmation and waste characterization sampling and analysis protocol. The SMP is being prepared for submittal to the Colorado Department of Public Health and Environment (CDPHE) within the VCUP program to obtain regulatory concurrence on the principal methods for waste handling. Upon CDPHE approval, the SMP will be provided to the contractor for implementation of the VCUP to facilitate project development.

Based on the available data, most of the soils that will be removed from the Subject Property during excavation are not considered a regulated waste and these soils will be reused on site or disposed of off-site to a local landfill to be used as daily cover. However, because it is expected that the construction activities will encounter soils or materials that may pose an environmental concern, it is the responsibility of personnel conducting intrusive activities on the Subject Property to adhere to the SMP in the event of the discovery of regulated waste conditions. The personnel conducting intrusive activities will also follow applicable regulations, obtain proper permits, and work with the trained field personnel provided by the developer to identify potentially-impacted soil conditions.

The primary goals of the SMP are as follows:

- Limit worker exposure to contaminated materials;
- Prevent any potentially contaminated materials which may be generated during the renovation from impacting human health and the environment;
- Ensure that the disposition of all contaminated or potentially contaminated materials is conducted according to all Local, State and Federal environmental regulations;
- Provide the basis for a Health & Safety program for the field activities involving soil excavation at the Site; and,
- A qualified environmental professional will be required to implement the SMP and provide any of the required monitoring activities.

The tasks and responsibilities required to minimize exposure to potentially hazardous substances and properly manage the affected soils are as follows:

- Identify Chemicals of Concern and the Areas of Interest
- Field Monitoring
- Soil Management
- Transportation and Disposal
- Health and Safety

5.1 Identify Chemicals of Concern and Areas of Concern

As described above the Site has been characterized with the installation of 18 monitoring wells and 11 soil borings. The test results indicate that a benzene plume has migrated south beneath the Subject Property. While the upper levels of the soil on the Subject Property have not been impacted, groundwater contamination at 15 feet deep has adsorbed onto the soil particles above and below the groundwater interval. The actual amount of contaminated soil that will be identified during the excavation should be minimal as the onsite excavation is not expected to extend beyond 5 feet in depth. Oil, grease and total petroleum hydrocarbon are also of concern as they have the potential to be present once the oil/water separator is removed from the property.

5.2 Potential Waste Streams Associated with Site Redevelopment

This Section provides general work procedures for intrusive activities conducted within the Subject Property. It is expected that much of the Site will be excavated to a depth of approximately 5 feet below ground surface for compaction purposes for the development or for building foundations and storm water control features. These soils are not expected to contain significant environmental contamination and these soils may be re-used on site or disposed of off-site.

Soil and/or fill removal through excavation will be conducted as part of the redevelopment contract for the Site. Visual characterization, location information, process knowledge, and field screening tools and equipment will be utilized to identify potential known and unknown wastes. When contamination is found during soil disturbing activities, the protocol defined in this section of the SMP will be followed. While a qualified environmental professional (EP) will have the specific responsibility of identifying contaminants or non-native material in soil, all personnel on Site have the responsibility to look for and report evidence of contamination to the General Contractor.

5.2.1 General Procedures for Intrusive Activities

This Section provides general work procedures for intrusive activities conducted within the Subject Property. It is expected that much of the Site will be excavated to a depth of approximately 5 feet below ground surface for compaction purposes for the development or for building foundations. Based on the depth of the groundwater contamination, the soils down to a depth of 5 feet at the Site are not expected to contain significant environmental contamination; these soils may be re-used on site or disposed of off-site. It is important to note that foundation excavation for future development will be limited to 10 feet. Any excavation or penetration below 10 feet shall be prohibited.

Soil disturbed as part of the activity and contaminated with organic compounds above the CDPHE Action Levels will be segregated, profiled, manifested, transported, and disposed offsite at a licensed disposal facility. If analytical results indicate that contaminant concentrations are below the CDPHE Action Levels, the soil will be used as backfill on Site or will be segregated, profiled, manifested, transported, and disposed offsite at a licensed disposal facility.

Uncontaminated soil may be re-used onsite, reused offsite, or disposed at a disposal facility. The following subsections describe the categories of wastes that are anticipated to be encountered at the Site and define waste streams that are representative of these waste materials. Additionally, the following subsections provide definitions and waste occurrences.

5.2.1 Total Petroleum Hydrocarbons (“TPH”)

Soils with potential hydrocarbon or volatile organic compounds contamination that are excavated and exposed during the renovation construction activities will be field screened for organic vapors using a PID. Field monitoring of soil will be conducted throughout any invasive or earth moving activities by a qualified environmental professional. Samples for field screening will be collected at a rate of one grab sample per 10 cubic yards of soil excavated or disturbed. If any visible soil staining is observed or if the field screen concentrations exceed 50 parts per million (ppm) the soil will be temporarily stockpiled in the TPH Stockpile on plastic sheeting on the south side of the Site. This material must be placed on polyethylene sheeting, tarps, or other similar material in a bermed area. At the end of the day, the stockpile of suspect material must be covered with polyethylene sheeting, tarps, or other similar material. The stockpile must also be surrounded by snow fencing, survey ribbon, or similar barrier material and posted with signs directing personnel to stay out. All equipment and PPE that comes into contact with the suspect soil must be assumed to be contaminated and therefore decontaminated prior to leaving the Site. If soil field screening measurements are in excess of 500 ppm, the breathing zones of the excavation contractor personnel will immediately be screened. In addition, the excavation contractor supervisor and the Health and Safety Officer will be notified. If breathing zone concentrations exceed 500 ppm, work will cease, workers will leave the immediate area and this will allow the vapors to equilibrate with atmospheric conditions.

5.2.2 Clean Soils

Soils removed from areas other than the 2,500 square foot area of concern will be tested with the use of the Photo Ionization Detector (“PID”) meter to ensure that the soils do not contain TPHs. A meter reading over 50 ppm will require that the soils be taken to the TPH Stockpile. Soils testing below 50 ppm will be taken to an area defined as the Clean Soil Stockpile which can be located in an area that compliments the redevelopment.

5.2.3 Unknown Wastes

Unknown wastes are defined as wastes that have not been previously characterized, and may exhibit one or more of the following characteristics:

- Observed at a different location than may be expected
- Unexpected visual characteristics (staining)
- Unusual odors
- Unexpected containers, bottles, drums
- Unknown source area

The excavation and earthwork activities will be monitored in accordance with a site-specific Health and Safety Plan to ensure employee and safety. If unknown wastes are encountered, representatives of the CDPHE will be notified of the discovery. Wastes will be segregated and managed on Site until the wastes are characterized for waste profiling and subsequent off-site disposal. Identified impacted soil will be sampled in accordance with Section 5.3 of this document.

If the sampling data shows that contaminants remain at levels that are not protective of human health or the environment and cannot be removed during the construction excavation, a Response Action will be prepared to address proposed actions to either conduct additional contamination treatment or removal or to leave the contamination in place. The Response Action will be submitted to CDPHE for review and approval.

5.2.4 Confirmatory Post –Excavation Sampling

Confirmatory post-excavation soil samples will be collected from the base of the excavation at a frequency of one per 500 square feet with a minimum of two base samples. Composite confirmatory sidewall samples will be collected at a frequency of one per every 50 feet of wall with a minimum of one sample from each side wall.

5.3 Soil, Groundwater & Waste Management

As described above, the results of the laboratory testing indicate whether or not chemicals in Site soil present an unacceptable human health risk. Furthermore, dust from a construction site can present a nuisance if not controlled. Likewise, erosion of on-site soil during construction activities can increase the turbidity of surface water run-off. Therefore, the SMP will also provide guidelines for soil handling, stockpiling, dust and erosion minimization during site construction activities for the future renovation.

Following waste profiling activities, new waste streams (i.e., Unknown waste as described above) will be sampled at the following frequency:

- One 5-point composite sample per five 55-gallon drums, or
- One 5-point composite sample per 500 cubic yards soil stockpile.

If, during construction activities, soils are encountered which exceed the United States Environmental Protection Agency (EPA) Screening Levels table, appropriate steps must be followed to ensure the safe removal of the soil while protecting workers and the general public. The following describes the standards and cleanup thresholds used for soil and groundwater that may be encountered during development activities:

- EPA residential screening values November 2019 -
<https://semspub.epa.gov/work/HQ/197239.pdf>

In the unlikely event that groundwater exceeding the surface water impacted groundwater allowable is found, a Construction Dewatering Permit will be obtained from the CDPHE to

specify sampling criteria and management/disposal options. Impacted groundwater that is encountered during construction cannot be discharged or infiltrated back into the ground without a general permit or a remediation groundwater permit from CDPHE. Extracted impacted groundwater will be containerized in drums or Frac tanks to be sampled, treated (if necessary), prior to disposal or discharge. Discharge of treated or untreated groundwater to a storm sewer or surface water is prohibited without a Colorado Discharge Permit System (CDPS) permit. Discharge of treated or untreated groundwater to the sanitary sewer is prohibited without permission from the City of Westminster. Sampling frequency will be prescribed by the permit and workers will be required to manage the water in accordance with a site-specific Health and Safety Plan.

Impacted soils that have been excavated from the site and groundwater collected will be transported off-site and properly disposed of at a regulated landfill following all applicable regulations.

5.3.1 Notification

In order that an environmental professional will be available to monitor soil excavation activities at the Site and, an environmental professional will be notified by the Site contractor prior to the start of excavation. At that time, an area designated for the Temporary Storage Areas for Clean and TPH soils will be identified.

5.3.2 Dust Control

The dust control measures to be implemented at the Site consist of:

- Water all active construction areas at least twice daily or as necessary to prevent visible dust plumes from migrating outside of the Site limits.
- Mist or spray water while loading transportation vehicles.
- Minimize drop heights while loading transportation vehicles.
- Use tarpaulins or other effective covers for trucks carrying soils that travel on public streets.
- Sweep all paved access routes, parking areas and staging areas daily, if visibly soiled.
- Sweep street daily if visible soil material is transported onto public streets from the Site.

5.3.3 Erosion Control

An Erosion and Sediment Control Plan (ESC) will be developed by the general contractor prior to initiation of Site work that details procedures for minimizing erosion. The ESC will include elements such as silt traps and hay bales to minimize surface water runoff from the Site into storm drains, berms to control Site runoff, and covering soil stockpiles, as required, during the rain events to minimize sediment runoff.

5.3.4 Soil Stockpile Management

Temporary stockpiling of excavated soil will be necessary throughout site construction. Polyethylene sheeting will be used to stage all soils excavated during invasive activities. This method will serve to prevent infiltration of contamination to surface soils. The soil pile will be further isolated using hay bales to prevent contaminated runoff from spreading to the rest of the Site. Soil stockpiled at the Site will be lightly sprayed with water as needed to minimize dust. There will be two Temporary Storage Areas, one for soils suspected to TPH Stockpile and one for soils removed from all other areas called the Clean Soil Stockpile.

TPH Stockpile: Soils removed from the area of concern will be stored separately in the TPH Stockpile on the south east side of the Site. Soil will held there temporarily until its ultimate destination is determined as described in Section 5.4. If stored for more than 24 hours, erosion control measure will need to be installed along stockpile perimeter.

Clean Soil Stockpile: All soils removed from the Site that has been determined to be clean will be placed in this area until its ultimate destination has been determined.

In addition to field screening, composite samples will be collected from stockpiled soil for disposal characteristics. Depending upon the disposal facility used, samples may need to be analyzed for TPH, VOCs, SVOCs, metals and TCLP metals as well as reactivity, corrosively, ignitability and paint filter. The selected landfill will be consulted for the appropriate waste disposal characterization criteria.

5.3.5 Site Access Control

The construction site will be fenced to control pedestrian or vehicular entry, except at controlled points (i.e., gates). Gates will be closed and locked during non-construction hours. "No-trespassing" signs will be posted every 500 feet along the fencing.

5.3.4 Decontamination

Procedures must be followed to minimize the potential for cross-contamination. Contaminated materials must be segregated from uncontaminated materials. The following best management practices should be followed:

- Heavy equipment brought on to the Site must be clean of debris from other sites
- Dedicated equipment is to be used in contaminated areas
- Perform a thorough dry decontamination before transporting equipment out of the work area
- Wrap excavator bucket in plastic prior to transport across the Site
- Allow the environmental professional time to inspect equipment prior to removal from the work area
- Establish a decontamination pad and inspection area
- Avoid tracking mud and debris across the Site and off-site

Prior to demobilization from the Site, equipment that comes into contact with contaminated material will be decontaminated at a decontamination pad constructed by the general contractor.

Heavy accumulations of potentially contaminated materials will be removed by scraping with a shovel or similar tool and, where appropriate, by brushing with stiff bristle brushes or brooms.

5.4 Transportation and Disposal

Based upon sample analytical results, excavated concrete and soil will be classified as one of the following:

- Uncontaminated- Unrestricted Use
- Uncontaminated- restricted use
- Health Risk – restricted reuse or disposal; or
- Hazardous waste disposal

The disposition of soil in each of these four categories is outlined in the following subsections

5.4.1 Uncontaminated- Unrestricted Use

Soils with TPH below the respective residential or groundwater protection may be reused at any location on-site or off-site. Detailed documentation of the on-site or off-site disposition will be maintained by the contractor and the EP implementing this SMP. Documentation should include analytical data, how and where the soils are used on the project.

5.4.2 Uncontaminated- Restricted Use

Soils testing above the screening levels for residential land use but below the screening levels for worker protection may not be reused at another residential property even if the soil is capped by an engineered barrier such as asphalt or concrete. Soil to be removed from the site will be taken to a licensed disposal facility.

5.4.3 Health Risk-Restricted Reuse or Disposal

Soils that exceed worker protection screening levels for TPH will be placed in the TPH Stockpile on top of 10 millimeter plastic sheeting. This stockpile will be maintained by the contractor to prevent any runoff from migrating offsite. Detailed documentation will be required.

5.4.4 Hazardous Waste Disposal

If sample analysis indicates that the soil is designated as hazardous waste, the soil will be containerized immediately in a lined roll-off box, labeled and transported to a hazardous waste disposal facility. These wastes will be manifested and transported to the disposal facility in accordance with State and Federal regulations. Once identified as hazardous waste, this material may not be stored onsite longer than 90 days.

5.5 Health and Safety

In addition to the guidelines specified within this SMP, all construction and demolition contractors and subcontractors working at the Site will develop a Health and Safety Plan (HASP) adequate to ensure safe work practices. The HASPs will be reviewed and signed by a Certified Industrial Hygienist.

All personnel entering or working at the Site will be trained in appropriate safety procedures. If contaminated environmental media is encountered, personnel involved in the handling this material will be trained in appropriate safety procedures as set forth in Title 29 of the Code of Federal Regulations (CFR), specifically 29 CFR 1910, also known as the Hazardous Waste and Emergency Response (HAZWOPER) standard. Personnel entering or working at the Site will also be familiar with first aid and cardiopulmonary resuscitation.

Personnel will be dressed in personal protective equipment (PPE) as appropriate to the activity being performed in accordance with guideline in the HASP. If Site conditions or the results of air monitoring performed during on-site activities warrant higher level of protection, field personnel withdraw from the Site and wait for further instructions from the environmental professional.

6.0 CONCLUSIONS

At the conclusion of the implementation of the SMP and VCUP activities, a VCUP - Site Closure Report will be prepared by the EP and submitted to CDPHE for review and approval.

7.0 REFERENCES

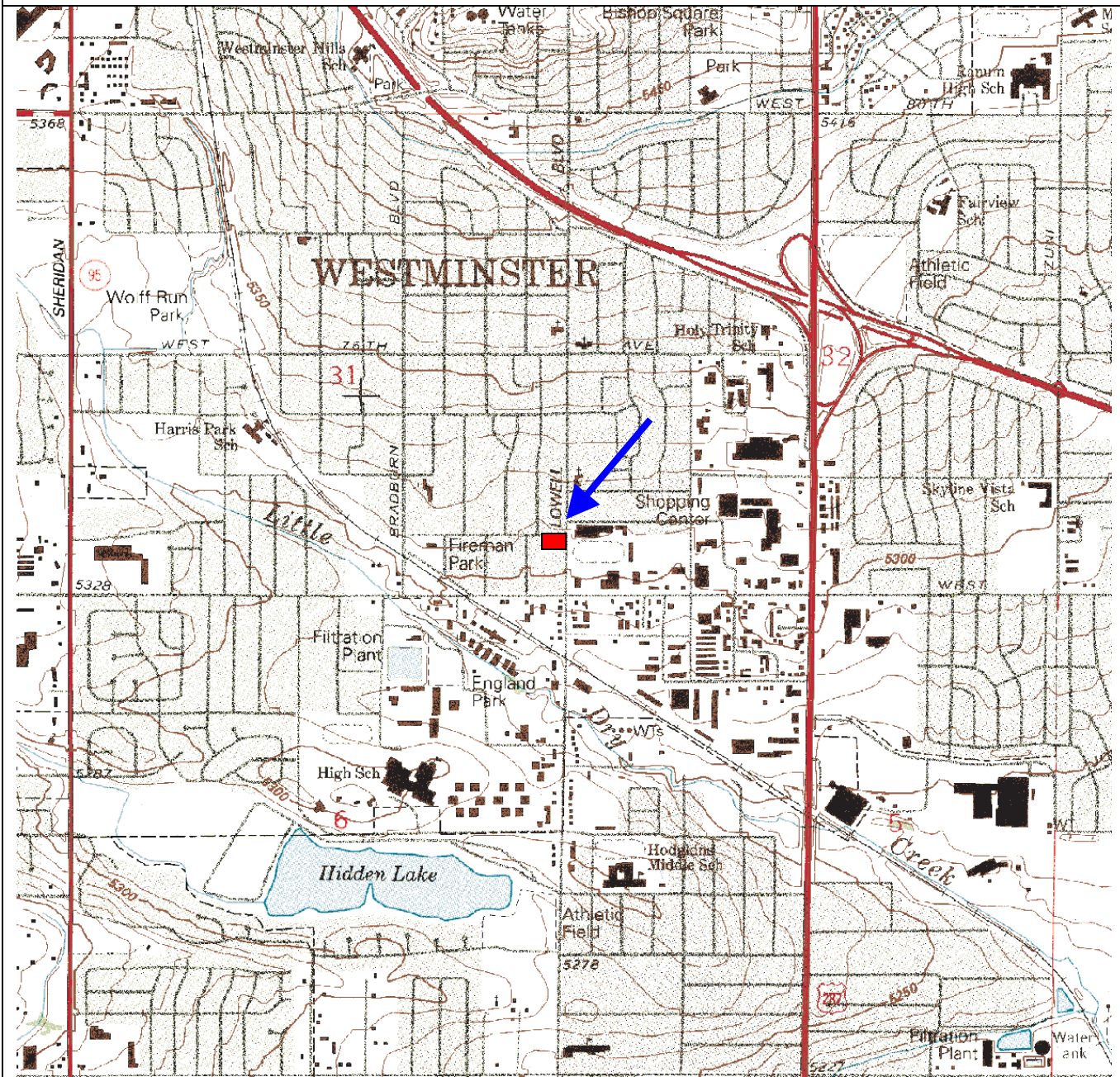
Department of Agriculture, Soil Conservation Service, Soil Survey of Denver County, Colorado, John J. Sampson et al., October 1974.


Department of Interior, US Geological Survey, Geologic Map of Colorado, compiled by Ogden Tweto, 1979.

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman. Map, USGS Digital Data Series DDS - 11 (1994).

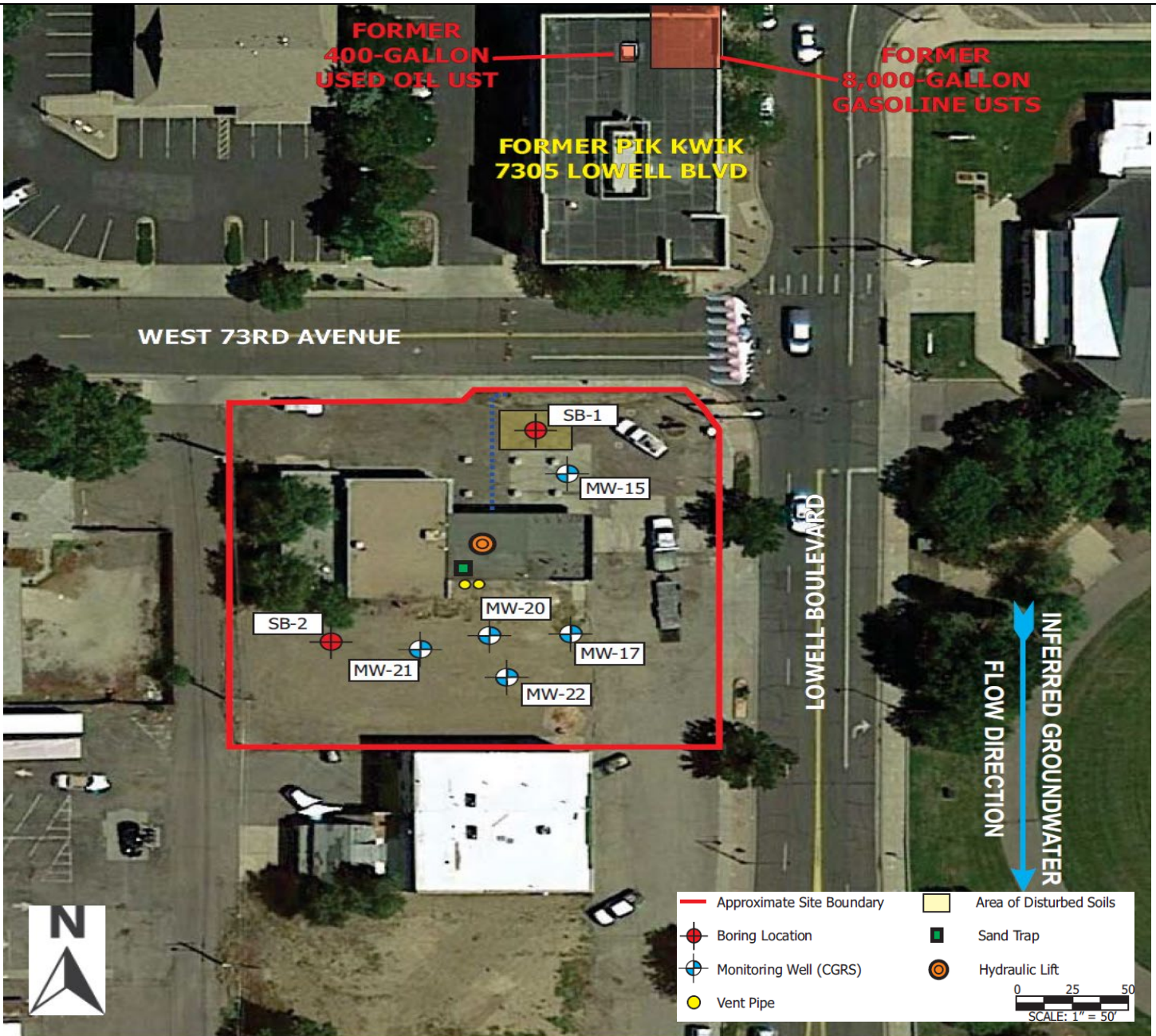
Colorado Department of Public Health and Environment. Voluntary Clean-Up Roadmap, May 2008.

SITE VICINITY MAP



<p>3630 W. 73rd AVE & 7287 LOWELL BOULEVARD</p>		<p>Scale: 1" = ¼ Mile</p>
<p>WESTMINSTER, COLORADO</p>	<p>FIGURE 1</p>	

PROPERTY LOCATION MAP



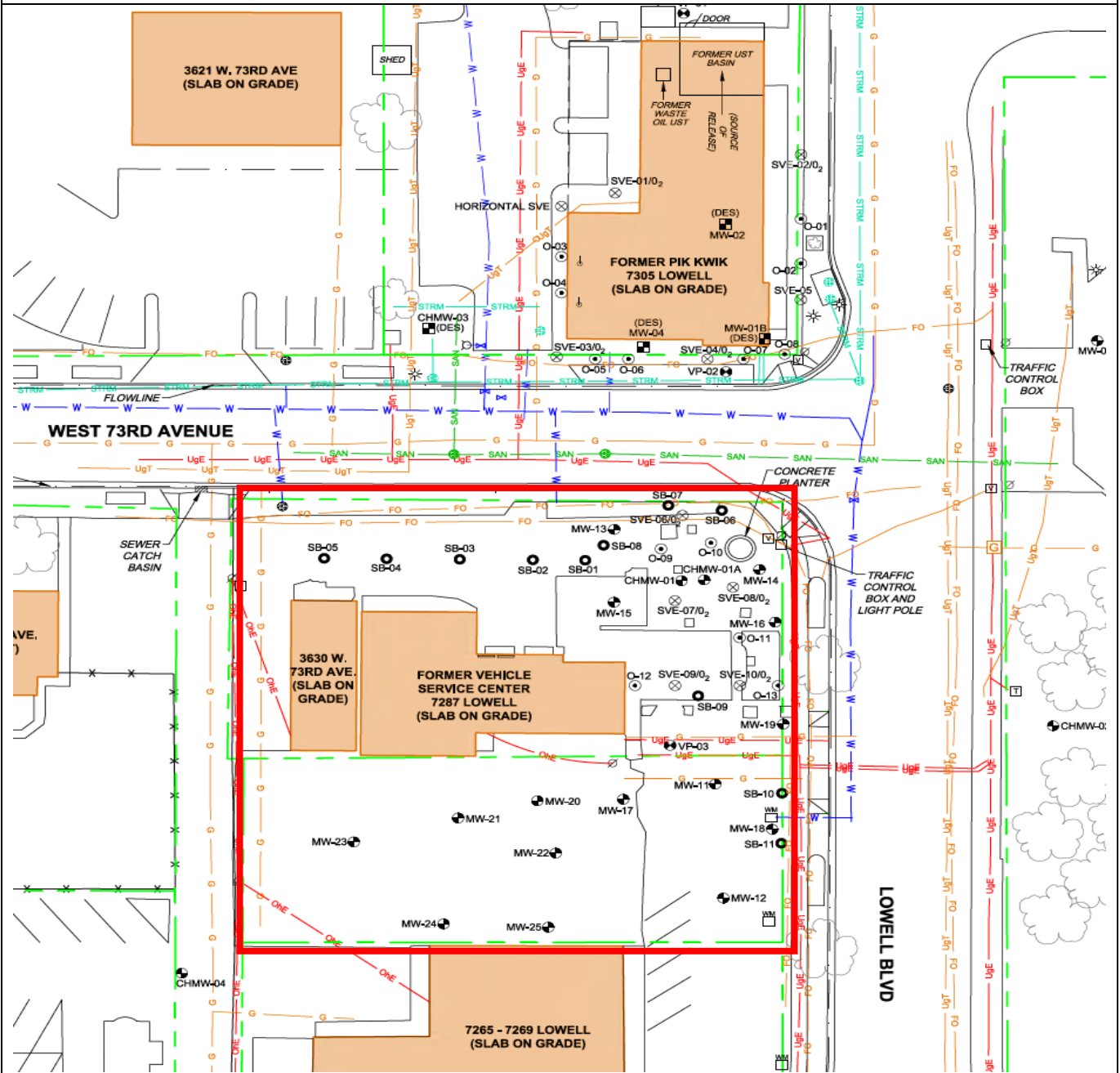
3630 W. 73rd AVE &
7287 LOWELL
BOULEVARD
WESTMINSTER,
COLORADO

Scale : 1" = 50 Feet

FIGURE 2

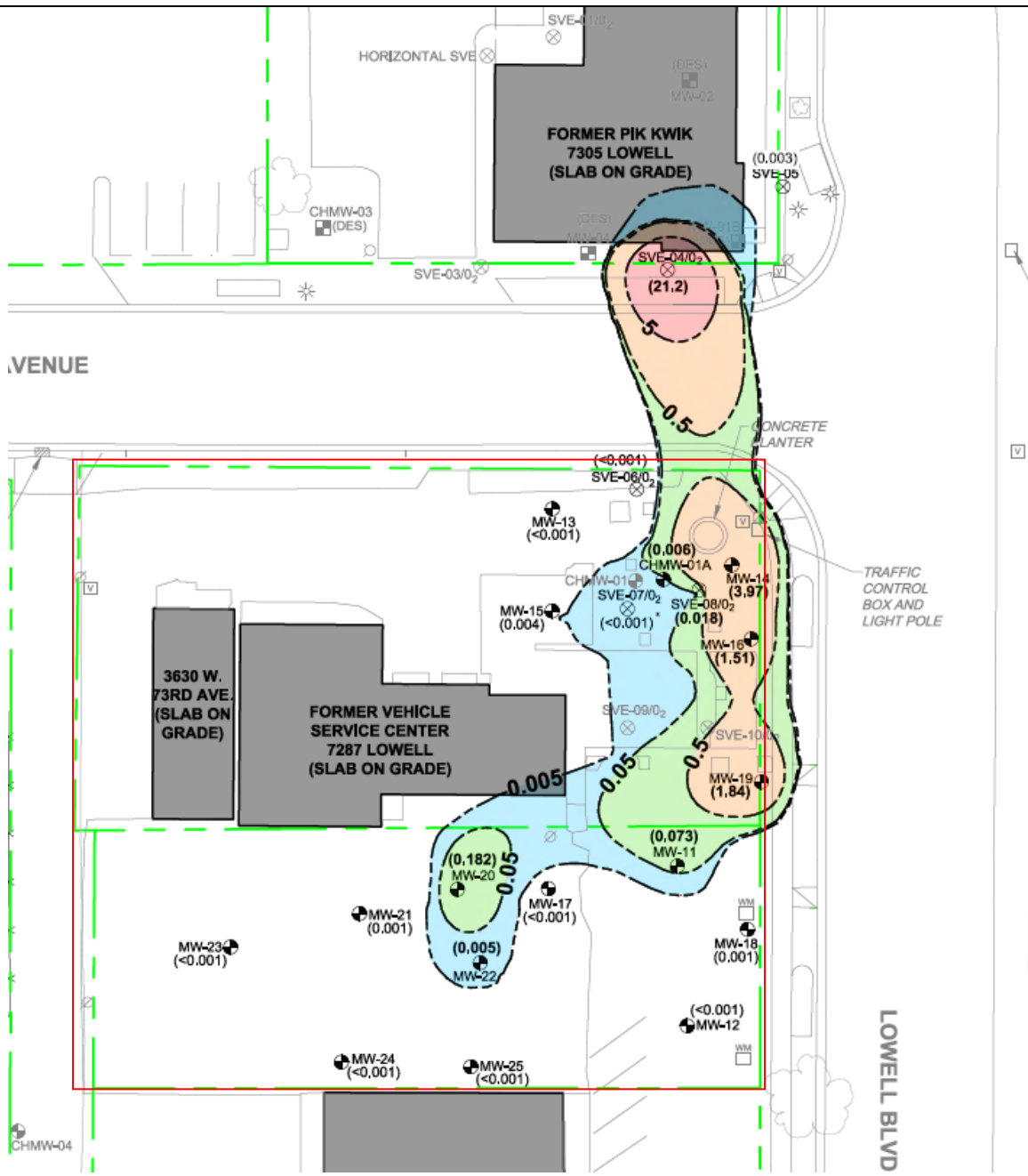



WELL & UTILITY LOCATION MAP



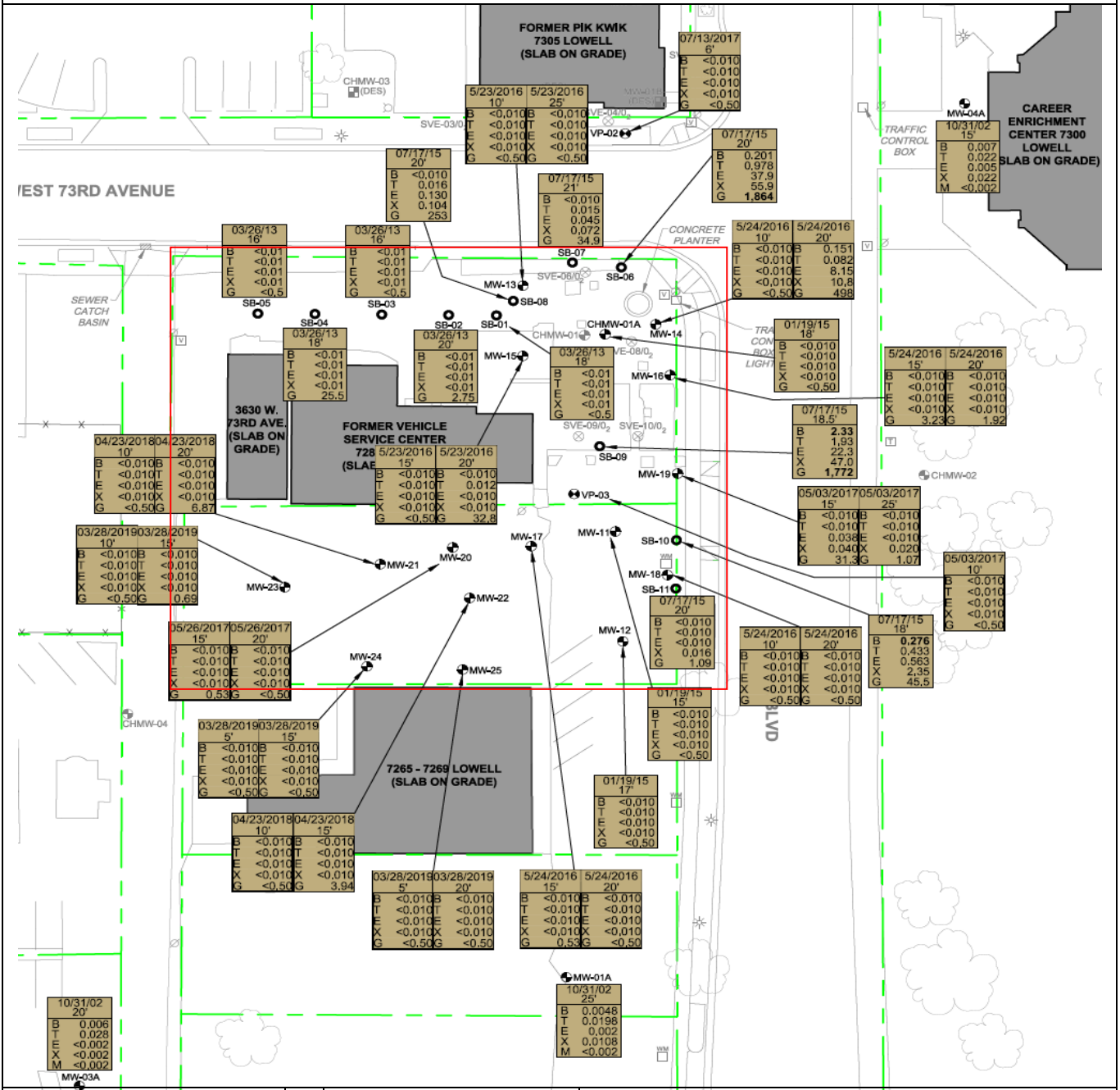
<p>3630 W. 73rd AVE & 7287 LOWELL BOULEVARD</p>	<p>Scale: 1" = 1/4 Mile</p>	
<p>WESTMINSTER, COLORADO</p>	<p>FIGURE 3</p>	


BENZENE CONCENTRATION PLUME



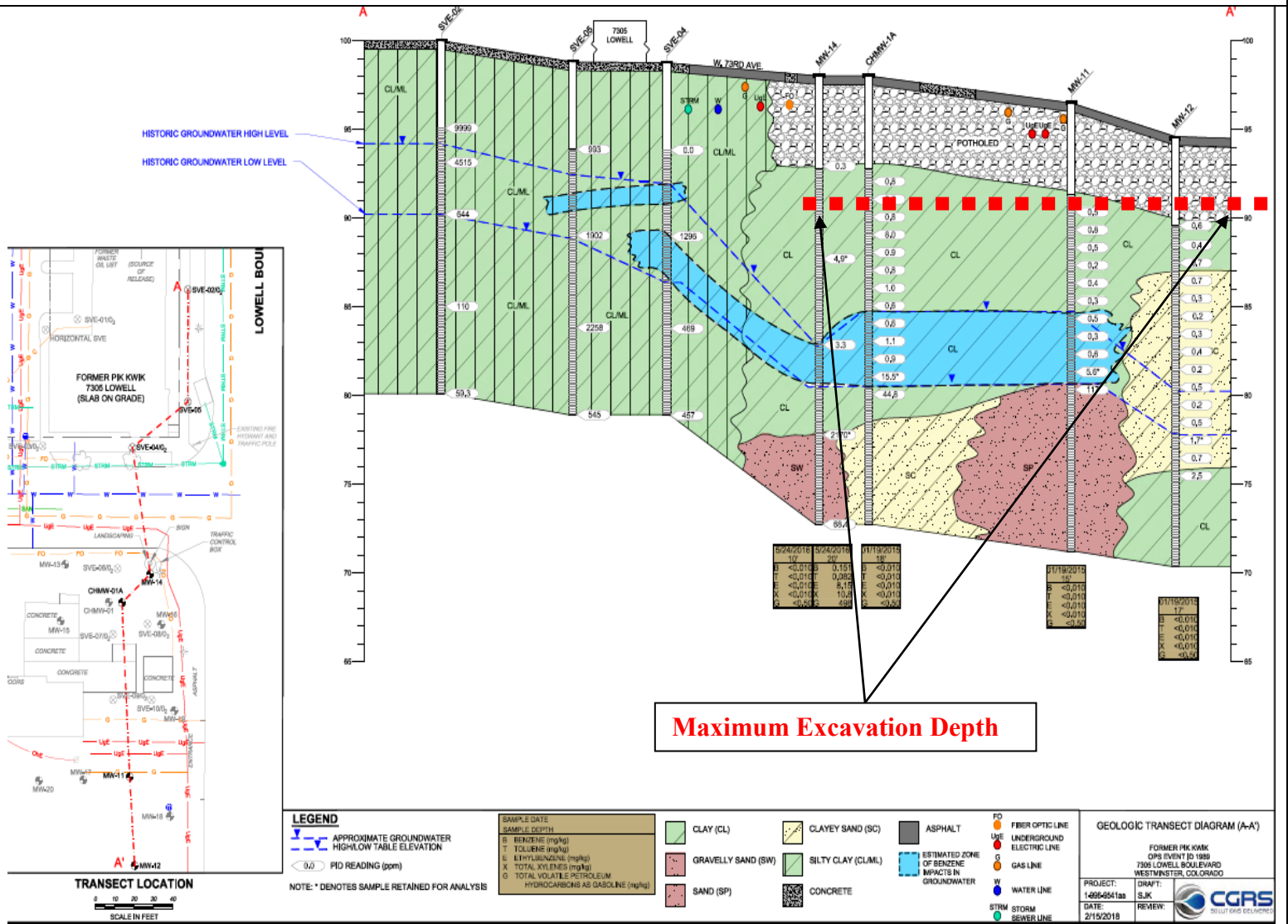
<p>3630 W. 73rd AVE & 7287 LOWELL BOULEVARD</p>	<p>Scale: 1" = 1/4 Mile</p>	
<p>WESTMINSTER, COLORADO</p>	<p>FIGURE 5</p>	

SOIL TEST RESULTS MAP



<p>3630 W. 73rd AVE & 7287 LOWELL BOULEVARD</p>	<p>Scale: 1" = 1/4 Mile</p>	
<p>WESTMINSTER, COLORADO</p>	<p>FIGURE 6</p>	

GEOLOGICAL CROSS SECTION MAP



Maximum Excavation Depth

3630 W. 73rd AVE &
7287 LOWELL
BOULEVARD

Scale: 1" = 1/4 Mile

WESTMINSTER,
COLORADO

FIGURE 7



TABLE 1

GROUNDWATER SAMPLE DATA SUMMARY

**3630 W. 73RD and 7287 LOWELL BOILEVARD
WESTMISTER, COLORADO**

Analysis	Units	SB-1	SB-2	MW-20	Comparison Value		
		2/20/2019 17.8 (feet bgs)	2/20/2019 15.8 (feet bgs)	2/20/2019 15.35 (feet bgs)	OPS Tier 1 RBSL	OPS GW to IA	CDPHE CBSGW
VOCs							
Benzene	µg/L	< 0.50	31.6	157	5	16	5
n-Butylbenzene	µg/L	< 0.51	88.7	1.8	N/A	N/A	N/A
sec-Butylbenzene	µg/L	< 0.52	61.8	7.8	N/A	N/A	N/A
tert-Butylbenzene	µg/L	< 0.53	< 0.50	0.73 J	N/A	N/A	N/A
Carbon disulfide	µg/L	< 0.54	0.85 J	< 0.70	N/A	N/A	N/A
Ethylbenzene	µg/L	< 0.55	338	102	700	26,000	700
Isopropylbenzene	µg/L	< 0.56	198	29.4	N/A	N/A	N/A
p-Isopropyltoluene	µg/L	< 0.57	25.6	0.84 J	N/A	N/A	N/A
4-Methyl-2-pentanone	µg/L	< 0.58	2.5 J	< 2.5	N/A	N/A	N/A
MTBE	µg/L	6	9.9	14.9	20	N/A	N/A
Naphthalene	µg/L	< 2.0	112	3.4 J	140	900	140
n-Propylbenzene	µg/L	< 1.0	586	30.8	N/A	N/A	N/A
Toluene	µg/L	< 1.0	1.9	5.2	100	10,000	560
1,2,4-TMB	µg/L	< 0.50	1,440	37.2	N/A	N/A	N/A
1,3,5-TMB	µg/L	< 0.50	92.4	< 1.0	N/A	N/A	N/A
Xylenes	µg/L	< 1.0	467	49.4	1,400	2,900	1,400
Remaining VOCs	µg/L	< MDL	<MDL	<MDL	varies	N/A	varies
PAHs							
1-Methylnaphthalene	µg/L	< 0.70	434	5.8	N/A	N/A	N/A
2-Methylnaphthalene	µg/L	< 0.70	104	< 0.70	N/A	N/A	N/A
Naphthalene	µg/L	< 0.80	137	2.3	140	900	140
Remaining PAHs	µg/L	< MDL	<MDL	<MDL	varies	N/A	varies

Notes:

µg/L	micrograms per liter
< MDL	less than the method detection limit
bgs	below ground surface
N/A	not applicable
VOCs	volatile organic compounds
PAHs	polynuclear aromatic hydrocarbons
MTBE	methyl tertiary butyl ether
TMB	trimethylbenzene
Bold	Result exceeds applicable Comparison Value
J	estimated value, analyte detected below the quantitation limit

Comparison Values:

OPS: Colorado Department of Labor and Employment Division of Oil and Public Safety

Tier 1 RBSL: Tier 1 Risk Based Screening Levels

GW to IA: Groundwater to Indoor Air Exposure Pathway

CDPHE CBSGW: Colorado Department of Public Health and Environment Colorado Basic Standards for Groundwater

APPENDIX A

VCUP / NAD APPLICATION

Check List

VOLUNTARY CLEAN-UP AND REDEVELOPMENT ACT CHECKLIST AND INFORMATION COMPARISON TABLE

This table provides a checklist of information that may be included in a Voluntary Clean-up Program application. Although not all information requirements apply to all sites, the applicant should review this list carefully and include in the application any information that is relevant to the property in question. The table should be submitted in the application, with the page numbers in the application where this information can be found inserted into the last column. This is not an application requirement, but it does greatly assist the reviewer.

This table may also be used to compare the information normally contained in Phase I and Phase II Environmental Audits, with the requirements of the Voluntary Clean-up Program application. Since these audits are commonly performed, the table will assist owners in determining any additional information that may be needed, if you have already performed a Phase I or Phase II audit.

DIRECTIONS FOR COMPARISON TABLE INTERPRETATION

The table that follows is organized like the one below.

P I	P II	VC	I. General Information	Page
-----	------	----	------------------------	------

The first three columns provide the comparison between the information requirements of Phase I (PI) and Phase II (P II) Environmental Audits and the Voluntary Clean-up Program application (VC). In each column you will either see a blank space, a zero (0), a plus sign (+) or a minus sign (-). These can be interpreted as follows:

+ means requirements are more detailed than other documents

- means requirements are less detailed than other documents

0 means requirements are similar to other documents

a blank means that the requirement does not exist for that document

So, for example, if you saw a (+) in the VC column, it means that there are additional information requirements for the Voluntary Clean-up Program application in comparison to the audit reports for that item. If there was a (0) in the VC column, then the information contained in the Phase I or Phase II audit is adequate for the Voluntary Clean-up Program application.

The fourth column provides the checklist of information items required in the Voluntary Clean-up Program application.

The fifth column provides a place for you to insert the page number from the Voluntary Clean-up Program application that pertains to this informational item. If the applicant fills this portion out and returns the table with the application, it greatly assists the reviewer in finding information within the application.

VOLUNTARY CLEAN-UP, ASTM PHASE I, ASTM PHASE II COMPARISON

PI	P II	VC	I. GENERAL INFORMATION	Page
0	0	0	Name and address of owner	2
0	0	0	Contact person and phone number	3
0	0	0	Location of property	4
-	+	+	Type and source of contamination	
		+	Voluntary Clean-up (VC) or No Action Determination (NAD)	VCUP
0		0	Current Land Use	
		+	Proposed Land Use. Proposed future land use is not covered in a Phase I or II assessment. A voluntary clean-up approval is contingent upon this item.	6

PI	P II	VC	II. PROGRAM INCLUSION	Page
-		+	Is the applicant the owner of the property for the submitted VC or NAD? In a Phase I assessment, the owner is not always the party preparing the assessment. The Voluntary Clean-up Program requires owner/designated representative to complete the submittal.	YES Pg 1
-		+	Is the property submitted for the VC or NAD the subject of corrective action under orders or agreements issued pursuant to provisions of Part 3 of Article 15 of this Title or the federal RCRA 1976 as amended? Although Phase I assessments review state records for RCRA corrective actions, the Voluntary Clean-up Program requires details of a corrective action for an eligibility determination.	NO Pg 2
-		+	Is the property submitted for the VC or NAD subject to an order issued by or an agreement with the Water Quality Control Division pursuant to Part 6 of Article 8 of this Title? Although Phase I assessments review state records, detail is not discussed. If Water Quality has issued a permit, the applicant is ineligible.	NO Pg 2
-		+	Is the property submitted for the VC or NAD a facility that has or should have a permit or interim status pursuant to Part 3 of Article 15 of this Title for treatment, storage or disposal of hazardous waste? Although Phase I assessments review state records, detail is not discussed. For the Voluntary Clean-up Program, details of permits or interim status are necessary for an eligibility determination. Based on the site specifics of the permitted facility, the applicant may qualify for the program.	NO Pg 2
-		+	Is the property submitted for the VC or NAD subject to the provisions of Part 5 of Article 20 of Title 8 (Underground Storage Tanks) CRS or of Article 18 of this Title (RCRA)? Although Phase I assessments review state records, detail is not discussed. For the Voluntary Clean-up Program details of Underground Storage Tank or RCRA requirements are necessary to make an evaluation. In some cases (e.g., tanks were removed prior to 12/22/88), the applicant may be eligible for the program.	NO Pg 2
-		+	Is the property submitted for the VC or NAD listed or proposed for listing on the National Priorities List of Superfund sites established under the federal act (CERCLA)? Although Phase I assessments review state records, detail is not discussed. For the Voluntary Clean-up Program, details of CERCLA action are necessary to make an evaluation. In some cases, the applicant may not be eligible for the program.	NO Pg 2

PI	PII	VC	III. ENVIRONMENTAL ASSESSMENT	Page
0	0	0	Qualified environmental professionals must submit environmental assessments. The applicant must submit documentation, in the form of a statement of qualifications or resume.	APP K
0	0	0	The applicant should provide the address and legal description of the site and a map of appropriate scale identifying the location and size of the property.	FIG 2 APP B
0		0	The applicant should describe the operational history of the property in detail, including the most current use of the property.	5
0		0	A description of all business/activities that occupy or occupied the site as far back as record/knowledge allows.	5
-		+	A brief description of all operations that may have resulted in the release of hazardous substances or petroleum products at the site, both past and present, including the dates activities occurred at the property and dates during which the contaminants were released into the environment. Although Phase I & II assessments may reveal the release of hazardous substances or petroleum products, the exact dates and quantities may not be discussed. For the Voluntary Clean-up Program, the dates of activities, releases, etc., are necessary for an evaluation of eligibility.	5 4 6
-		+	A list of all site-specific notifications made as a result of any management activities of hazardous substances conducted at the site, including any and all Environmental Protection Agency ID numbers obtained for management of hazardous substances at the site from either the state or the Environmental Protection Agency. The Phase I assessment will reveal whether a facility has an Environmental Protection Agency ID number, but will not list the notifications made as a result of management activities of hazardous substances. This information is necessary for a Voluntary Clean-up Program evaluation.	
0		0	A list of all notifications to county emergency response personnel for the storage of reportable quantities of hazardous substances required under Emergency Planning and Community Right-to-Know statutes.	NA
0		0	A list of all notifications made to state and/or federal agencies, such as reporting of spills and/or accidental releases, including notifications to the State Oil Inspection Section (OIS) required under 8-20-506 and 507 and 25-18-104 CRS 1989 as amended and 6 CCR 1007-5 subpart 280.50 Part 3 of the OIS regulations, etc.	2 4 3
-	-	+	A list of all known hazardous substances used at the site with volume estimates and discussion of relative toxicities. A Phase I & II assessment does not require such detail, however, the hazardous substances used, volumes and toxicities are important for a VC in the overall evaluation of risk and sampling efforts.	2 4 3
-		+	A list of all wastes generated by current activities conducted at the site and manifests for shipment of hazardous wastes off site. A Phase I & II assessment does not require such detail, however, the manifest information is important for a VC evaluation, as in the above item.	7 8 9
		+	A list of all permits obtained from state or federal agencies required as a result of activities conducted at the site. A listing of all permits is beyond a Phase I or II assessment. These are important for the Voluntary Clean-up Program so the Department can evaluate what potential sources may be at the site.	NA
0		0	A brief description of the current land uses, zoning and zoning restrictions of all areas contiguous to the site.	6

PI	P II	VC	III. ENVIRONMENTAL ASSESSMENT	Page
			The applicant shall describe the physical characteristics of the site, including a map to scale, and an accompanying narrative showing and describing the following, utilizing historic knowledge as well as current data:	FIG 1
0	0	0	• Topography	FIG 1
0	-	0	• All surface water bodies and waste water discharge points	NA
0	-	0	• Ground water monitoring and supply wells	
0	-	0	• Facility process units and loading docks	
0		0	• Chemical and/or fuel transfer and pumping stations	
0		0	• Railroad tracks and rail car loading areas	
0		0	• Spill collection sumps and/or drainage collection areas	
0		0	• Wastewater treatment units	
0		0	• Surface and storm water runoff retention ponds and discharge points	
0		0	• Building drainage or wastewater discharge points	
0		0	• All above or below ground storage tanks	
0		0	• Underground or above ground piping	
0		0	• Air emission control scrubber units	
0		0	• Water cooling systems or refrigeration units	
0		0	• Sewer lines	
0		0	• French drain system	
0		0	• Water recovery sumps and building foundations	
0		0	• Surface impoundments	
0		0	• Waste storage and/or disposal areas/pits, landfills	
0		0	• Chemical or product storage areas	
0		0	• Leach fields	
0		0	• Dry wells or waste disposal sumps	NA
			If ground water contamination exists or the release has the potential to impact ground water, the applicant should provide the following information for areas within a one-half mile radius of the site:	
	0	0	• The state engineers office listing of all wells within one-half mile radius of the site, together with a map to scale showing the locations of these wells.	FIG 8
	0	0	• Documentation of due diligence in verifying the presence or absence of unregistered wells supplying ground water for domestic use, when the potential for such wells is deemed likely as in older residential neighborhoods, or in rural areas.	"
	0	0	• A statement about each well within the half-mile radius of the site, stating whether the well is used as a water supply well or ground water monitoring well.	"
	0	0	• Lithologic logs for all on-site wells; copies of field log notes may be appropriate.	"
	0	0	• Well construction diagrams for all on-site wells showing screened interval, casing type and construction details including gravel pack, interval, bentonite seal thickness and cemented interval.	"

PI	P II	VC	III. ENVIRONMENTAL ASSESSMENT	Page
	0	0	<ul style="list-style-type: none"> Description of the current and proposed use of on-site ground water in sufficient detail to evaluate human health and environmental risk pathways. In addition, the applicant will provide a discussion of any state and/or local laws that restrict the use of onsite ground water. 	PS 10
			The applicant should provide information concerning the nature and extent of any contamination and releases of hazardous substances or petroleum products that have occurred at the site, including but not limited to:	
	-	+	<ul style="list-style-type: none"> Identification of the chemical nature and extent, both onsite and offsite, of contamination that has been released into soil, ground water or surface water at the property, and/or releases of substances from each of the source areas identified, including estimated volumes and concentrations of substances discharged at each area, discharge point, or leakage point as per Section 25.16.308(2)(b). Although Phase II assessments identify the nature of contamination, the extent is not always fully defined. For Voluntary Clean-up Program purposes, the source, nature, extent and estimated volumes of the release are important in the overall evaluation of risk and eligibility. 	APP H 0 G
	0	0	<ul style="list-style-type: none"> A map to scale showing the depth to ground water across the site, direction and rate of ground water movement across the site using a minimum of three measuring points. 	FIG 7
	0	0	<ul style="list-style-type: none"> A discussion of all hydraulic tests performed at the site to characterize the hydrogeologic properties of any aquifers onsite and in the area. 	APP H
	0	0	<ul style="list-style-type: none"> All reports and/or correspondence, which detail site soil, ground water and/or surface water conditions at the site, including analytical laboratory reports for all samples and analyses. 	
	0	0	<ul style="list-style-type: none"> A discussion of how all environmental samples were collected, including rationale involved in sampling locations, parameters and methodology, a description of sampling locations, sampling methodology and analytical methodology and information on well construction details and lithologic logs. All sample analyses performed and presented as part of the environmental assessment should be appropriate and sufficient to fully characterize all constituents of all contamination that may have impacted soil, air, surface water and/or ground water on the property. The applicant should use Environmental Protection Agency approved analytical methods when characterizing the soil, air, surface water and/or ground water. 	APP G 4 H

PI	P II	VC	IV. APPLICABLE STANDARDS/RISK DETERMINATION	Page
	-	+	The applicant should provide a description of any applicable standards/guidance (federal, state, or other) establishing acceptable concentrations of constituents in soils, surface water, or ground water, for the proposed land use. Although a Phase II assessment evaluates applicable regulations for the current land use, it does not cover the proposed land use that may be different (e.g., the current land use is industrial and the proposed land use is residential, which likely has more conservative levels for contaminant concentrations).	10 & 11

PI	P II	VC	IV. APPLICABLE STANDARDS/RISK DETERMINATION	Page
	-	+	The applicant should provide a description of the human and environmental exposure to contamination at the site based on the property's current use and any future use proposed by the property owner, including:	
	0	0	<ul style="list-style-type: none"> A table or list for site contaminants indicating which media are contaminated and the estimated vertical and areal extent of contamination in each medium. 	TABLE 1
	-	+	<ul style="list-style-type: none"> A table or list of site contaminants, indicating the maximum concentrations of each contaminant detected onsite in the area where contaminant was discharged to the environment, and/or where the worst effects of the discharge are believed to exist. A Phase II assessment will evaluate the extent of site contaminants, not the maximum point or worst effects. The Voluntary Clean-up Program requests this item so that an understanding of the source and nature of the contaminants can be made as it relates to risk. 	FIGS 4 5 6
	-	+	<ul style="list-style-type: none"> A table or list for site contaminants indicating whether the contaminant has a promulgated state standard, the promulgated standard and the medium the standard applies to. A Phase II assessment will not necessarily compare the site contaminants with state standards. This is important to evaluate whether the remedy will meet risk-based clean-up objectives. 	11
	-	+	<ul style="list-style-type: none"> A description and list of potential human and/or environmental exposure pathways pertinent to the present use of the property. A risk determination is not usually completed as part of a Phase II assessment; the VC will use risk as part of the overall evaluation. 	11
		+	<ul style="list-style-type: none"> A description and list of potential human and/or environmental exposure pathways pertinent to the future use of the property. (A risk determination is not usually completed as part of a Phase II assessment; the Voluntary Clean-up Program will use risk as noted above. Phase II assessments also do not evaluate future use of the property.) 	11
	-	+	<ul style="list-style-type: none"> A list and map defining all source areas, areas of contamination or contaminant discharge areas. Phase II assessments do not always show source areas. The Voluntary Clean-up Program requires that these areas be defined to indicate the proximity of contaminant with respect to receptors and sampling efforts. 	FIG 5
	-	+	<ul style="list-style-type: none"> A discussion of contaminant mobilities, including estimates of contaminants to be transported by wind, volatilization, or dissolution in water. For those contaminants that are determined to be mobile and have the potential to migrate and contaminate the underlying ground water resources, the applicant should also evaluate the leach ability/mobility of the contaminants. This evaluation should consider, but not be limited to the following: leachability/mobility of the contamination, health-based ground water standards for the contamination; geological characteristics of the vadose zone that would enhance or restrict contaminant migration to ground water, including but not limited to grain size, fractures and carbon content; and depth to ground water. This evaluation, and any supporting documentation, should be included in the plan submitted. A Phase II assessment usually does not include a risk determination. However, the Voluntary Clean-up Program will evaluate the risk involved with the proposed clean-up in order to evaluate the application. 	FIG 11

PI	PII	VC	IV. APPLICABLE STANDARDS/RISK DETERMINATION	Page
		+	The applicant should then provide, using the information contained in the application, a risk-based analysis of all exposure pathways, which details how the proposed remediation will obtain acceptable risk levels. A Phase II assessment usually does not include a risk analysis, however, the Voluntary Clean-up Program requires this analysis to show that the remediation propose will attain an acceptable risk or break pathways.	10 + 11
		+	The Voluntary Clean-up Program includes remediation whereas a Phase I or II assessment does not. Usually remediation is considered a Phase III assessment. The following are the requirements for the clean-up proposal.	NA
		+	<ul style="list-style-type: none"> A detailed description of the remediation alternative, or alternatives selected, which will be used to remove or stabilize contamination released into the environment or threatened to be released into the environment 	NA
		+	<ul style="list-style-type: none"> A map identifying areas to be remediated, the area where the remediation system will be located if it differs from the contaminated areas, the locations of confirmation samples, the locations of monitoring wells, areas where contaminated media will temporarily be stores/staged and areas where contamination will not be remediated. 	NA
		+	<ul style="list-style-type: none"> Remediation system design diagrams showing how the system will be constructed in the field. 	NA
		+	<ul style="list-style-type: none"> A remediation system operation and maintenance plan that describes, at a minimum, how the system will be operated to ensure that it functions as designed without interruptions and a sampling program that will be used to monitor its effectiveness in achieving the desired goal. 	NA
		+	<ul style="list-style-type: none"> The plan should describe the sampling program that will be used to verify that treatment of the contaminated media has resulted in attainment of the proposed clean-up goals. 	NA
		+	<ul style="list-style-type: none"> The plan should include a schedule of implementation 	
		+	The clean-up completion report is necessary to demonstrate that the remediation was completed according to the application. Again, since remediation is involved, the report is beyond the scope of a Phase I or II assessment. The following items should be included in the completion report.	APP I-5
		+	<ul style="list-style-type: none"> A final list of all site contaminants, along with the remaining concentrations, and any deviations from the original plan. 	FIG 5
		+	<ul style="list-style-type: none"> A final list defining which media are contaminated and the estimated vertical and areal extent of contamination to each medium. 	FIG 7
		+	<ul style="list-style-type: none"> A final list and map defining all source areas, areas of contamination or contaminant discharge areas. 	FIG 5 + 7
			Soil Contamination: Remediation by Excavation Only:	
		+	<ul style="list-style-type: none"> One confirmation sample per 500 ft² as measured at the base on the excavation OR two confirmatory samples, whichever method results in the collection of the most samples. 	PS 15

PI	P II	VC	IV. APPLICABLE STANDARDS/RISK DETERMINATION	Page
		+	<ul style="list-style-type: none"> One composite sample from each wall of the excavation. In excavations of an irregular shape, one composite sample for every 100 lineal feet of wall. For excavations greater than 5000 ft², preparation of a grid for randomization of sampling. 	PS 15
		+	<ul style="list-style-type: none"> Explanation of the sampling method in the narrative as well as any modifications to 1 and 2 above used to better characterize the remedial efforts. 	15
		+	<ul style="list-style-type: none"> If contamination is to be left in place, an additional sample should be collected from the area of the worst contamination, as verified or with a field-sampling device. 	15
		+	<ul style="list-style-type: none"> Depth of samples collected 	15
		+	<ul style="list-style-type: none"> Provision of waste disposal manifests 	15
			In-Situ Soil Remediation	
		+	<ul style="list-style-type: none"> Completion of a minimum of two soil borings, with at least one completed in the area identified in the site assessment as the area of highest contamination. For larger areas of contamination, one boring per 10,000 ft² of plume area. 	NA
		+	<ul style="list-style-type: none"> Completion of the borings should employ a field-screening device and borings should be logged. 	
		+	<ul style="list-style-type: none"> Soil sample submitted for analysis from each boring would be the sample with the highest field screening or one located at the ground water interface for each boring. 	
		+	Ground Water Remediation	
		+	<ul style="list-style-type: none"> Field testing should include aquifer and contaminant characteristics such as gradient, partition coefficients, original contaminant levels, etc. 	
		+	<ul style="list-style-type: none"> At each regular monitoring event, a map showing ground water flow direction, depth to ground water and sampling locations 	
		+	<ul style="list-style-type: none"> Tabular presentation of data collected 	
		+	Summary of Voluntary Clean-up Program participation	
		+	Summary of field activities, remedial activities, any deviations from original plans	
		+	Pertinent figures and drawings of remedial system	
		+	Conclusions made after remedial activities are completed	NA

APPENDIX B

Legal Description & County Parcel Information

Adams County

Exempt Property Profile

Parcel Number: 0171931416013

Owners Name and Address:	Property Address:
CITY OF WESTMINSTERATTN COMMUNITY DEVELOPMENT 4800 W 92ND AVE WESTMINSTER CO 80031-6399	7287 LOWELL BLVD WESTMINSTER CO

Account Summary

Legal Description

SUB:HARRIS PARK BLK:43 DESC: THE E 137 FT OF THE N 88/33 FT OF

Subdivision Plat

HARRIS PARK

Account Summary

Account Numbers	Date Added	Tax District	Mill Levy
R0065335	On or Before 01/01/1996	555	102.653

Permits

Permit Cases

N/A

Sales Summary

Sale Date	Sale Price	Deed Type	Reception Number	Book	Page	Grantor	Grantee	Doc. Fee	Doc. Date
03/16/1995	\$175,000.00	BLK	45315	4482	748			\$0	01/01/1900
01/22/1996	\$8,500.00	WD	C0247904	4924	485	BELLM H JOSEPH III	CITY OF WESTMINSTER	\$0.85	01/23/1997
06/25/2004	\$550,000.00	BLK	2004000684410	2004	0729	BELLM III H JOSEPH	WESTMINSTER HOUSING AUTHORITY	\$55	07/29/2004
08/20/2004	\$10.00	SWD	2004000810940	2004	0824	BELLM III H JOSEPH	WESTMINSTER HOUSING AUTHORITY	\$0	08/24/2004
12/31/2014	\$450,600.00	BLK	2015000002257	2015		WESTMINSTER HOUSING AUTHORITY C/O DEPARTMENT OF COMM DEVELOPMENT	CITY OF WESTMINSTER ATTN COMMUNITY DEVELOPMENT	\$45.06	01/12/2015

Click [here](#) to go to Clerk / Recorder search page

Valuation Summary

Land Valuation Summary

Account Number	Land Type	Unit of Measure	Number of Units	Fire District	School District	Vacant/Improved	Actual Value	Assessed Value
R0065335	Exempt	Acres	0.2700		Westminster Public Schools	I	\$55,016.00	\$15,950.00
Land Subtotal:							\$55,016.00	\$15,950.00

Improvements Valuation Summary

Account Number	Actual Value	Assessed Value
R0065335	\$93,520.00	\$27,120.00
Improvements Subtotal:	\$93,520.00	\$27,120.00

Total Property Value	\$148,536.00	\$43,070.00
-----------------------------	---------------------	--------------------

Building Summary

Building Number: 1

Individual Built As Detail

Built As:	Service Garage
Year Built:	1986
Building Type:	Commercial
Construction Type:	
Built As SQ Ft:	2704
Number of Rooms:	0
Number of Baths:	0.00
Number of Bedrooms:	0
Attached Garage SQ Ft:	0
Detached Garage Square Ft:	0
Basement SQ Ft:	0
Finished Basement SQ Ft:	0

Tax Summary

Click [here](#) to go to Treasurer's search page

Enterprise Zone Summary

Property within Enterprise Zone

True

Precincts and Legislative Representatives Summary

Precinct

013

Commissioner Representative

Commissioner District	Link to Representative
4	Click Here

State House Representative

House District	Link to Representative
35	Click Here

State Senate Representative

Senate District	Link to Representative
21	Click Here

US Congress Representative

Congressional District	Link to Representative
7	Click Here

Zoning Summary

Zoning Summary

Zoning Authority	Zoning
WESTMINSTER	WESTMINSTER

Note: Data is updated daily. Above data was updated as of: 03/06/20

Legal Disclaimer: Although every reasonable effort has been made to ensure the accuracy of the public information data and graphic representations, Adams County cannot be responsible for consequences resulting from any omissions or errors contained herein. Adams County assumes no liability whatsoever associated with the use or misuse of this data

Adams County

Exempt Property Profile

Parcel Number: 0171931416014

Owners Name and Address:	Property Address:
CITY OF WESTMINSTERATTN COMMUNITY DEVELOPMENT 4800 W 92ND AVE WESTMINSTER CO 80031-6399	3630 W 73RD AVE WESTMINSTER CO

Account Summary

Legal Description

SUB:HARRIS PARK BLK:43 DESC: PARC BEG 137 FT W OF NE COR BLK 43 TH S 88/33 FT TH W 40 FT TH N 88/33 FT TH E 40 FT TO BEG

Subdivision Plat

HARRIS PARK

Account Summary

Account Numbers	Date Added	Tax District	Mill Levy
R0065336	On or Before 01/01/1996	555	102.653

Permits

Permit Cases

N/A

Sales Summary

Sale Date	Sale Price	Deed Type	Reception Number	Book	Page	Grantor	Grantee	Doc. Fee	Doc. Date
03/16/1995	\$175,000.00	WD	45314	4482	748			\$17.5	01/01/1900
06/25/2004	\$550,000.00	BLK	2004000684410	2004	0729	BELLM III H JOSEPH	WESTMINSTER HOUSING AUTHORITY	\$55	07/29/2004
08/20/2004	\$10.00	SWD	2004000810940	2004	0824	BELLM III H JOSEPH	WESTMINSTER HOUSING AUTHORITY	\$0	08/24/2004
12/31/2014	\$450,600.00	BLK	2015000022257	2015		WESTMINSTER HOUSING AUTHORITY C/O DEPARTMENT OF COMM DEVELOPMENT	CITY OF WESTMINSTER ATTN COMMUNITY DEVELOPMENT	\$45.06	01/12/2015

Click [here](#) to go to Clerk / Recorder search page

Valuation Summary

Land Valuation Summary

Account Number	Land Type	Unit of Measure	Number of Units	Fire District	School District	Vacant/Improved	Actual Value	Assessed Value
R0065336	Exempt	Acres	0.0700		Westminster Public Schools	I	\$16,000.00	\$4,640.00
Land Subtotal:							\$16,000.00	\$4,640.00

Improvements Valuation Summary

Account Number	Actual Value	Assessed Value
R0065336	\$48,221.00	\$13,980.00
Improvements Subtotal:	\$48,221.00	\$13,980.00

Total Property Value	\$64,221.00	\$18,620.00
-----------------------------	--------------------	--------------------

Building Summary

Building Number: 1

Individual Built As Detail

Built As:	Laundromat
Year Built:	1959
Building Type:	Commercial
Construction Type:	
Built As SQ Ft:	1000
Number of Rooms:	0
Number of Baths:	0.00
Number of Bedrooms:	0
Attached Garage SQ Ft:	0
Detached Garage Square Ft:	0
Basement SQ Ft:	0
Finished Basement SQ Ft:	0

Tax Summary

Click [here](#) to go to Treasurer's search page

Enterprise Zone Summary

Property within Enterprise Zone

True

Precincts and Legislative Representatives Summary

Precinct

013

Commissioner Representative

Commissioner District	Link to Representative
4	Click Here

State House Representative

House District	Link to Representative
35	Click Here

State Senate Representative

Senate District	Link to Representative
21	Click Here

US Congress Representative

Congressional District	Link to Representative
7	Click Here

Zoning Summary

Zoning Summary

Zoning Authority	Zoning
WESTMINSTER	WESTMINSTER

Note: Data is updated daily. Above data was updated as of: 03/06/20

Legal Disclaimer: Although every reasonable effort has been made to ensure the accuracy of the public information data and graphic representations, Adams County cannot be responsible for consequences resulting from any omissions or errors contained herein. Adams County assumes no liability whatsoever associated with the use or misuse of this data

Adams County Residential Property Profile

Parcel Number: 0182506100003

Owners Name and Address:	Property Address:
SMITH L ERIC ANDSMITH STEPHANY 4771 W 89TH WAY WESTMINSTER CO 80031-3587	7185 LOWELL BLVD WESTMINSTER CO

Account Summary

Legal Description

SECT,TWN,RNG:6-3-68 DESC: COM 80 FT S AND 30 FT W OF NE COR SEC 6 TH S 60 FT TH W 204 FT TH N 25 FT TH E 85 FT TH N 35 FT TH E 119 FT TO BEG EXC RD 6/3/68 0/32A

Subdivision Plat

N/A

Account Summary

Account Numbers	Date Added	Tax District	Mill Levy
R0100823	On or Before 01/01/1996	555	102.653

Permits

Permit Cases

N/A

Sales Summary

Sale Date	Sale Price	Deed Type	Reception Number	Book	Page	Grantor	Grantee	Doc. Fee	Doc. Date
08/22/1996	\$0	QC	C 205877	4822	19	JEFFRIES MICHAEL	JEFFRIES MICHAEL AND CINDY	\$0	08/22/1996
08/22/1996	\$0	QC	C0205877	4822	19	JEFFRIES MICHAEL	JEFFRIES MICHAEL AND CINDY	\$0	08/22/1996
08/13/1997	\$9,110.00	WD	C0309207	5080	112-114	JEFFRIES MICHAEL	CITY OF WESTMINSTER	\$0.91	08/18/1997
12/11/2000	\$240,000.00	WD	C0748971			JEFFRIES MICHAEL	SMITH LENNARD ERIC AND	\$24	01/08/2001
09/16/2002	\$10.00	QC	C1024304			SMITH LENNARD ERIC AND	SMITH LENNARD ERIC	\$0	09/16/2002
01/10/2014	\$0	QC	2014000005084	2014		SMITH LENNARD ERIC	SMITH L ERIC AND SMITH STEPHANY	\$0	01/23/2014

Click [here](#) to go to Clerk / Recorder search page

Valuation Summary

Land Valuation Summary

Account Number	Land Type	Unit of Measure	Number of Units	Fire District	School District	Vacant/Improved	Actual Value	Assessed Value
R0100823	Residential	Acres	0.3200		Westminster Public Schools	I	\$111,514.00	\$7,970.00
Land Subtotal:							\$111,514.00	\$7,970.00

Improvements Valuation Summary

Account Number	Actual Value	Assessed Value
R0100823	\$176,147.00	\$12,590.00
Improvements Subtotal:	\$176,147.00	\$12,590.00

Total Property Value	\$287,661.00	\$20,560.00
-----------------------------	---------------------	--------------------

Building Summary

Building Number: 1

Individual Built As Detail

Built As:	Ranch 1 Story
Year Built:	1902
Building Type:	Residential
Construction Type:	Frame Siding
Built As SQ Ft:	802
Number of Rooms:	5
Number of Baths:	1.00
Number of Bedrooms:	2
Attached Garage SQ Ft:	0
Detached Garage Square Ft:	315
Basement SQ Ft:	0
Finished Basement SQ Ft:	0

Tax Summary

Click [here](#) to go to Treasurer's search page

Enterprise Zone Summary

Property within Enterprise Zone

True

Precincts and Legislative Representatives Summary

Precinct

010

Commissioner Representative

Commissioner District	Link to Representative
4	Click Here

State House Representative

House District	Link to Representative
35	Click Here

State Senate Representative

Senate District	Link to Representative
21	Click Here

US Congress Representative

Congressional District	Link to Representative
7	Click Here

Zoning Summary

Zoning Summary

Zoning Authority	Zoning
WESTMINSTER	WESTMINSTER

Note: Data is updated daily. Above data was updated as of: 03/06/20

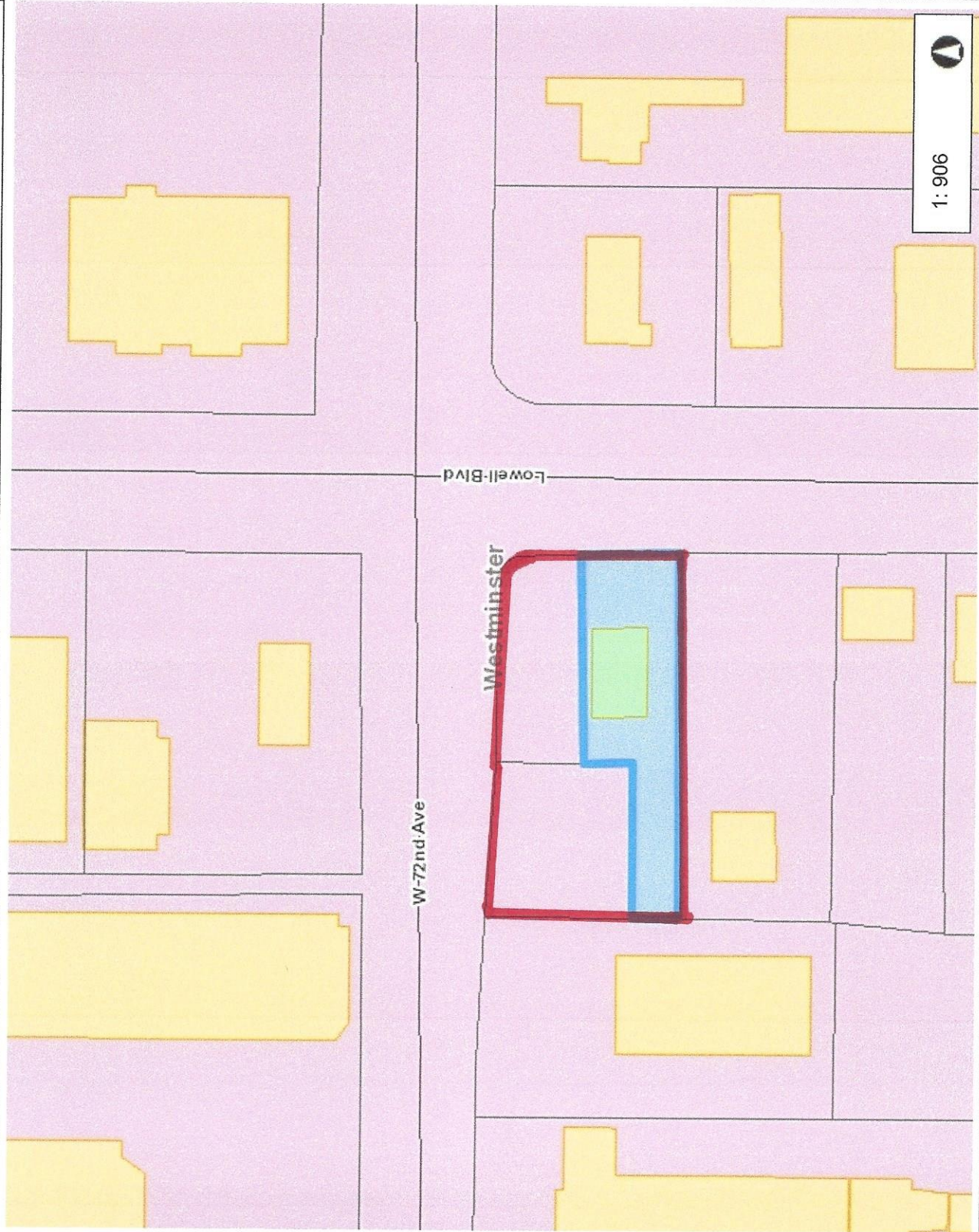
Legal Disclaimer: Although every reasonable effort has been made to ensure the accuracy of the public information data and graphic representations, Adams County cannot be responsible for consequences resulting from any omissions or errors contained herein. Adams County assumes no liability whatsoever associated with the use or misuse of this data



Legend

- Lake
- Lake
- River
- Parks and Open Space
- Highways (> 1,000)
- Interstate
- Highway
- Tollway
- Parcels
- Building
- County Boundary
- City
- Arvada
- Aurora
- Bennett
- Brighton
- Commerce City
- Federal Heights
- Lochbuie
- Northglenn
- Thornton
- Westminster

Notes



1: 906



This map is a user generated static output from an internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

APPENDIX C

Site Characterization Report

**Quick Pics
7301 Lowell Boulevard**

March 27, 1997

RECEIVED
APR 29 1997
OIL INSPECTION SECTION


INITIAL SITE CHARACTERIZATION REPORT

**FORMER QUICK PICS
7301 LOWELL BOULEVARD
WESTMINSTER, CO**

MARCH 27, 1997

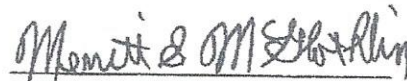
**PREPARED FOR: WILLIAM PRESCOTT
GENESEE RESERVATION, LLC.
4788 SOUTH BLUE SPRUCE
EVERGREEN, CO 80439**

PREPARED BY:


**CHARLEY ADAMS, CPG
PRINCIPAL GEOLOGIST**



REVIEWED BY:


**MERRITT MCGLOTHLIN
MANAGING DIRECTOR**

WMA PROJECT NO. 2125-010

EXECUTIVE SUMMARY

WALSH/McGlothlin & Associates, L.L.C., (WMA) has prepared this Initial Site Characterization Report for the property located at 7301 Lowell Boulevard, Westminster, Colorado. This report has been prepared at the request of Genesee Reservation, LLC. (Reservation). In February, 1997, WMA completed an initial assessment for the above-referenced site. This assessment included drilling and installation of four ground-water monitoring wells to identify the nature and extent of impacted ground water and soil, performing an elevation survey of the newly-installed wells, gathering soil and ground-water samples for analysis, and calculating ground-water elevation data. Data collected during this study were compiled to develop this Initial Site Characterization Report.

Materials encountered beneath the site included approximately 5.5 to 13.5 feet of clay over 4.0 to 7.0 feet of silty sand, with sandy claystone/clayey sandstone bedrock encountered at approximately 15.0 to 17.0 feet below ground surface (bgs). Ground-water levels measured in wells varied between 6.48 and 11.43 feet bgs. The general ground-water flow direction at the site is estimated to be south-southwest, at an approximate gradient of 0.059 feet/foot.

Field soil-vapor screening was conducted with a calibrated photoionization detector during the monitoring well installations. Visual staining and volatile organic compounds were detected during field screening of soil samples. Laboratory results from this investigation indicated that the concentrations of petroleum-related compounds in all soil samples were just below Remedial Action Category I (RAC I) cleanup levels. Ground-water analytical results from three of the four wells (MW-2 through MW-4) indicated the presence of dissolved hydrocarbon compounds in excess of Colorado Ground-Water Standards (CGWSs).

From this evaluation, WMA believes that petroleum hydrocarbon impacted ground water occurs in a plume that originates from the UST area, and migrates in a south-southwest direction. In addition, analytical results indicate that the extent of the plume has not been completely defined.

Federal UST Regulations, 40 CFR, Parts 280, require complete delineation of hydrocarbon-impacted ground water and soil. Based on the results of this investigation, WMA recommends additional subsurface investigation on and off site to delineate the extent of hydrocarbon impacted soil and ground water.

INITIAL SITE CHARACTERIZATION REPORT

FORMER QUICK PICS
7301 LOWELL BOULEVARD
WESTMINSTER, CO

1.0 INTRODUCTION

At the request of Genesee Reservation, LLC. (Reservation), WALSH/McGlothlin & Associates, L.L.C. (WMA) has developed this Initial Site Characterization Report for the former Quick Pics property located at 7301 Lowell Boulevard, Westminster, CO. Reservation retained WMA to conduct an investigation to determine the potential impact to soil and ground water beneath the site as a result of the storage and sale of petroleum products at the site. Findings made during the removal of the site's underground storage tanks (USTs) (August, 1992) indicated that impacted soil which exceeded Remedial Action Category III (RAC III) cleanup guideline concentrations were still in place on site. Based on these conditions, UST regulations (Parts 6, 7, and 8 of the State Regulations 6 CCR § 1007-5, Subpart 280) mandate that the magnitude and extent of impacted soil and ground water be defined. The purpose of this investigation was to begin the collection of data necessary to define the extent and magnitude of impacted soil and ground water beneath the site.

On behalf of Reservation, WMA geologists completed initial investigation during February and March, 1997, results of which have been summarized in the following report.

1.1 Site Location

The Former Quick Pics site is located at 7301 Lowell Boulevard, at the northwest corner of Lowell Boulevard and 73rd Street in Westminster, Colorado (Figure 1). The site is located in the SE 1/4 of the SE 1/4 of Section 31, Township 2 South, Range 68 West of the 6th PM.

1.2 General Site Conditions and Land Use

WMA understands the property is currently owned by Reservation. The facility had operated as a gas station from at least 1976 until 1992. The site is presently occupied by a closed bowling alley attached to the vacant gas station structure. There is also a second, unoccupied structure on the site (7305 Lowell) which appears to have been an ice cream store (Figure 2). The site's two underground storage tanks and ancillary piping and dispensers were removed in August, 1992. The gasoline USTs were located east of the main structure. WMA understands that both tanks were extensively corroded when they were removed.

The site, approximately 30,000 square feet in area, is located in a predominantly residential area mixed with light commercial just off the commercial zone on 72nd Avenue south of the site. The site is bordered by residential properties to the west, an automotive repair facility to the south, a public school to the east, and a medical practice to the north.



1.3 General Geologic Conditions

The site is located on gently rolling topography at an elevation of approximately 5,310 feet above sea level. Local geology is mapped as Quaternary (Pleistocene) loess deposits overlying Paleocene to Upper Cretaceous Denver Formation (USGS). The soils on site are mixed soft wind deposited clays, alluvial clays and silty sands, overlying sandy claystone and silty sandstone.

1.4 General Hydrologic Conditions

Surface drainage on the site is directed to roadside storm sewers, where runoff flows through the sewers eventually discharging to Dry Creek one-third mile south of the site. Dry Creek flows to a confluence with Clear Creek roughly 1.4 miles southeast from the site, and then to the South Platte River approximately 1 mile further downstream.

Ground-water recharge occurs predominantly via infiltration of precipitation in the vicinity of the site. Ground-water discharge probably occurs to Dry Creek and then eventually to the South Platte via Clear Creek. Ground water is present in the site vicinity within a shallow alluvial/colluvial zone. Information on seasonal ground-water level fluctuations within the shallow alluvial/colluvial water bearing zone is not available.

1.5 Climatological Data

The climate in the site vicinity is described as semiarid and characteristic of the Rocky Mountain front range. The average annual precipitation of the Denver area is 15.41 inches. The average annual temperature is 50.3°F, respectively (NOAA, 1997).



2.0 SUMMARY OF PREVIOUS INVESTIGATION ACTIVITIES

WMA understands that prior to this investigation, one assessment effort was made in conjunction with the tank removals at the subject site. That assessment was performed by Ecological Technologies, Inc. (Initial UST Findings Report, (October 11, 1992). Details of the study is summarized below.

2.1 UST Closure Investigation

The closure and removal of the site's USTs is documented in a letter report prepared by Ecological Technologies, Inc. (ECOTECH) dated October, 11, 1992, and which was directed to Joe'l Robinson of the Colorado Department of Health (CDH). As a result of ECOTECH's investigation and letter report, notification of the release was indirectly made to OIS (CDH in 1992).

Two 8,000 gallon USTs were removed by ECOTECH on August 28th, 1992. A Westminster Fire Department Representative was present on site during removal. The two tanks were located in the same excavation which measured 20x25 feet. All the soil removed from the excavation was discolored and had a strong gasoline odor. The material was stockpiled on concrete at the site.

Both fuel tanks had been installed in a coarse sand which was green in color. The USTs had no cathodic protection, and were both extensively corroded with 1- to 2-inch diameter holes on the ends and bottoms of the tanks. The USTs were disposed of at Du-Wald Steel.

Soil samples were collected from the excavation at six locations immediately beneath the tanks. Results of analytical testing on these samples ranged from 16 to >2,800 mg/Kg total volatile hydrocarbons (TVH), and from 0.7 to 487.9 mg/Kg combined BTEX. PID readings were generally in the 300-500 ppm range, with a high of 1000 ppm.

There is no indication in the report as to the disposition of excavated soils which were stockpiled on concrete at the site. However, a subsequent letter from the former owner of the property, Paul Dalpes, to Larry Delin of CDH, indicated that the excavated soils were placed back into the excavation and covered with imported backfill.



3.0 WMA INVESTIGATION RESULTS

Federal UST Regulations, 40 CFR, Parts 280, require complete delineation of petroleum hydrocarbons in both soil and ground water. This assessment included the following tasks to initiate assessment efforts toward meeting these federal requirements: a review of existing site data; and drilling and sampling of soil and ground water. WMA conducted the field investigation during the period from February to March, 1997.

3.1 Soil Boring and Sampling

In order to characterize and define the extent of impacted soil and ground water at the site, WMA installed four monitoring wells (MW-1 through MW-4) at the locations illustrated on Figure 2. Drilling services were provided by Custom Auger of Denver, CO. Drilling operations were completed with continuous-flight 4.25-inch inside diameter hollow-stem augers. Drilling tools were decontaminated by steam cleaning prior to drilling each boring to minimize cross-contamination. The borings were drilled to depths ranging from 15.5 to 19.5 feet bgs and completed as monitoring wells.

Soil samples were collected by split-spoon sampling techniques at five-foot intervals or where changes in lithology were detected. The samples were field-screened using a calibrated HNu photoionization detector (PID) and one sample from each boring (usually exhibiting the highest PID reading) was submitted for analytical testing to WALSH Analytical Laboratories in Boulder, CO. All field observations and measurements were recorded in a field notebook by the WMA geologist.

Soils encountered during WMA's investigation were mostly clays to a depth of 5.5 to 13.5 feet bgs overlying 4.0 to 7.0 feet of silty sand, overlying sandy claystone/silty sandstone at depths of 15.0 to 17.0 feet bgs. Hydrocarbon-like odors and staining were observed in MW-2, MW-3, and MW-4. Elevated PID readings were measured in MW-2, MW-3, and MW-4. Soil boring logs are contained in Appendix A.

Soil samples collected from borings MW-1 through MW-4 were analyzed for benzene, toluene, ethyl-benzene, xylenes (BTEX) by modified EPA Method 8100, and for total volatile hydrocarbons (TVH) by modified EPA Method 8015. Results of analytical data for soils are presented on Table I. These compounds are common indicators of releases from petroleum hydrocarbon storage systems. Laboratory results indicated that none of the soil samples collected from the four borings were close to but just below RAC-I concentrations in MW-4, and less than RAC I concentrations in the other three borings. Laboratory correspondence is included in Appendix B.



3.2 Monitoring Well Completion

The monitoring wells were completed in accordance with established industry-standards. The well casing is composed of 2-inch, flush joint, polyvinyl chloride (PVC) factory slot screen (0.020-inch) and pipe, which was installed by connecting individual sections as they were lowered into the borehole through the hollow center of the auger column. Pre-cleaned, pre-packaged 10/20 silica sand was used to fill the annulus between the screen and the borehole wall, to provide filter pack for the screen. A granular bentonite seal was placed on top of the filter pack to form an impervious barrier and prevent the downward migration of moisture. The remainder of the well annulus was completed flush to grade with load bearing concrete. A flush mounted water-tight well box, and locking cap completed the installations. Monitoring well completion data are provided in Appendix A.

3.3 Site Hydrologic Conditions

Ground water was encountered between 6.48 and 11.43 feet bgs in the alluvial soils on February 26, 1997 (Table II). Ground-water elevation contours, shown in Figure 3, indicate ground-water flow to be generally in a south-southwesterly direction at a gradient of approximately 0.059 feet/foot.

Based on aquifer characteristics in the water-bearing zone beneath the site, (granular alluvial material), the average hydraulic conductivity for the type of sediments in the vicinity is estimated at 3×10^{-3} centimeters per second (Driscoll, 1986). This value is indicative of moderate ground-water velocities.

3.4 Ground-Water Sampling and Analysis

Ground-water samples were collected from the four wells during the WMA investigation in accordance with established industry practices. Free product was not observed during this investigation, however a slight sheen was reported on the ground-water sample taken from MW-4. As required by the OIS, water samples were analyzed for BTEX/TVH/TEH by EPA Method 8020 and modified EPA Method 8015.

The laboratory results were compared to CGWSs to determine if the extent of petroleum hydrocarbons in ground water was defined. Benzene concentrations in ground-water samples collected from three of the four wells exceeded the 0.005 mg/L benzene ground-water standard. The benzene standard was exceeded in the three down-gradient wells. The estimated extent of benzene-impacted ground-water map (Figure 4) shows that the highest concentrations are in the sample collected from MW-3 down gradient property boundary from the former UST and pump island locations. The down-gradient extent of benzene-impacted ground water has not yet been defined by the results of samples collected from MW-1 through MW-4.



3.5 Potential Migration Pathways

The site and surrounding area were investigated with respect to potential migration pathways. The surface and near-surface geology of the area was studied in order to evaluate features that might act as a migration pathway, such as an old filled channel, fractures, etc. In addition, major pipelines and utility corridors were located within the vicinity of the site. Utility corridors often serve as a migration pathway for contaminants due to the higher permeability of the surrounding backfill than the undisturbed native soils. Transport generally occurs when the water table is at or above the level of the backfill trenches. The backfill trenches may then act as a drain drawing the impacted ground water into the utility trench.

The utilities in the area were located and have been plotted on a generalized utility corridor map showing their relative position with respect to the site (Figure 5). Several underground utilities exist in the site vicinity; underground natural gas and water lines are buried on the site leading to connections with utilities on the roads both east and south of the site including one buried electrical line in the tankpit excavation. Several overhead utilities are also located on the western side of the site. Given the location of the underground utilities, and the depth to ground water beneath the site (6.5 to 11.5 feet bgs), WMA believes that offsite migration of impacted ground water along the identified underground utilities is possible.

3.6 Potential Receptor Study

Potential receptors evaluated for this investigation included surrounding businesses and residences, water wells, and surface water bodies in the area. Surrounding land use and the location of surface water bodies was researched in an effort to evaluate potential receptors. In addition, an inventory of the wells within a one-half mile radius of the site was conducted. Results of the survey is discussed in the following section.

Surrounding land use was previously described as predominantly residential and light commercial. The area to the south, or downgradient, of the site is commercial. Commercial establishments that utilize water wells, downgradient of the site, could potentially be affected by the migration of petroleum hydrocarbons in ground water. Dry Creek appears to receive surface and ground water from the site, and, therefore is a possible receptor from this occurrence.

3.7 Registered Wells

WMA requested a list of registered wells in the vicinity of the site from the Office of the State Engineer. Registered well locations are shown in Figure 6. No registered wells were identified directly downgradient within a half-mile radius of the site. However, one domestic well located at 7190 Julian Way (117626) is cross gradient in the direction of Dry Creek and Clear Creek, which could be downgradient moving away from the site. Well registration data for this well indicates a depth of 700 feet, making potential impact on the well by the site very unlikely. Registered well information provided by the State Engineer is included in Appendix C.



According to the registered well survey, there are no registered wells in the nearest 1/4-1/4 section (NE-NE, Section 6 of T2S, R68W, 6th PM) downgradient of the site. WMA understands that area residents and businesses are served by the Westminster Municipal Water Supply System.

3.8 Risk Categorization

The general information discussed in the preceding subsections provides a basis for determining the applicable remedial action levels for the site, as required by the OIS. Table IV summarizes the three Colorado Department of Public Health and Environment (CDPHE) remedial action categories (RACs) that serve as guidelines in the subsequent development of an appropriate corrective action plan (CAP).

On the basis of the data WMA has collected to date, it appears that ground water in the vicinity of the site could possibly be used as a source of public or private drinking water. However, in the area in which the site has impacted ground water (thus far determined), beneficial use water needs are provided for the residences and businesses by the City of Westminster. Therefore, it is WMA's opinion that the site should be classified as a RAC II site.



4.0 CONCLUSIONS AND RECOMMENDATIONS

The soils encountered in this investigation were clays and sands over claystone and sandstone bedrock of the Denver Formation. Bedrock is encountered at approximately 17 feet bgs. Ground water appears to exist on the site between 6.5 and 11.4 feet bgs. Shallow ground-water elevation contours indicate a ground-water flow direction of south-southwest at an average hydraulic gradient of 0.059 feet/foot.

From the distribution of hydrocarbons on the site, it appears that the release of hydrocarbons to the subsurface originated from the UST system. To date, the downgradient impacts to ground water have not been fully defined to CGWS cleanup levels. The site locations where ground water analytical results exceeded CGWSs include MW-2, MW-3, and MW-4. WMA suspects that hydrocarbon-impacted ground water, originating from the UST system, has migrated in a south-southwest direction. Laboratory data on soils indicates that soils in the areas tested do not exceed RAC I criteria.

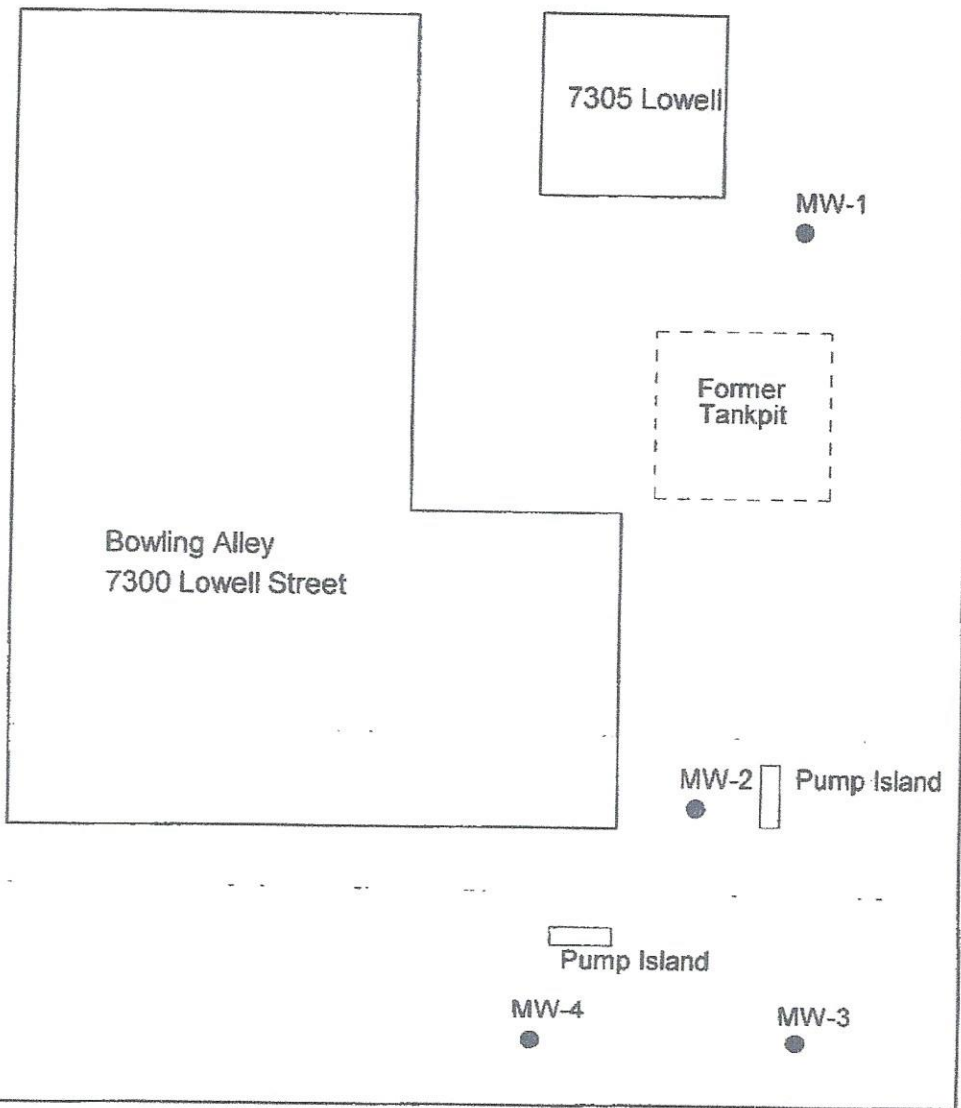
A list of wells within a one-mile radius of the site was obtained from the Office of State Engineer. No registered wells were identified directly downgradient within a half-mile radius of the site. However, one domestic well located at 7190 Julian Way (117626) is cross gradient in the direction of Dry Creek and Clear Creek, which could be downgradient moving away from the site. Well registration data for this well however, indicates a depth of 700 feet, making potential impact on the well by the site very unlikely.

Federal UST Regulations, 40CFR, Parts 280 require complete delineation of hydrocarbon impacted soil and ground water. Based on the results of this investigation and the limited scope of work proposed for this project, WMA recommends additional subsurface investigation to delineate the extent of hydrocarbon impacted soil and ground water. WMA proposes the installation of additional monitoring wells downgradient of the UST system to delineate this impact. In addition, due to the potential for migration of hydrocarbons along utility corridors at the site, as part of further subsurface investigation, the potential for migration along these corridors should be tested.

To comply with requirements of the OIS, Reservation should submit the information contained in this report to the OIS for their review. Provided with the information from this investigation and subsequent investigations, the OIS can work with WMA and Reservation to develop specific remedial objectives for the site. After these objectives are established, WMA will formulate a detailed CAP for the site.

Upon your review and approval, WMA will forward two copies of this report to OIS.

NORTH



0 30'
Approximate Scale

Explanation

MW-4
● Monitoring Well and Designation

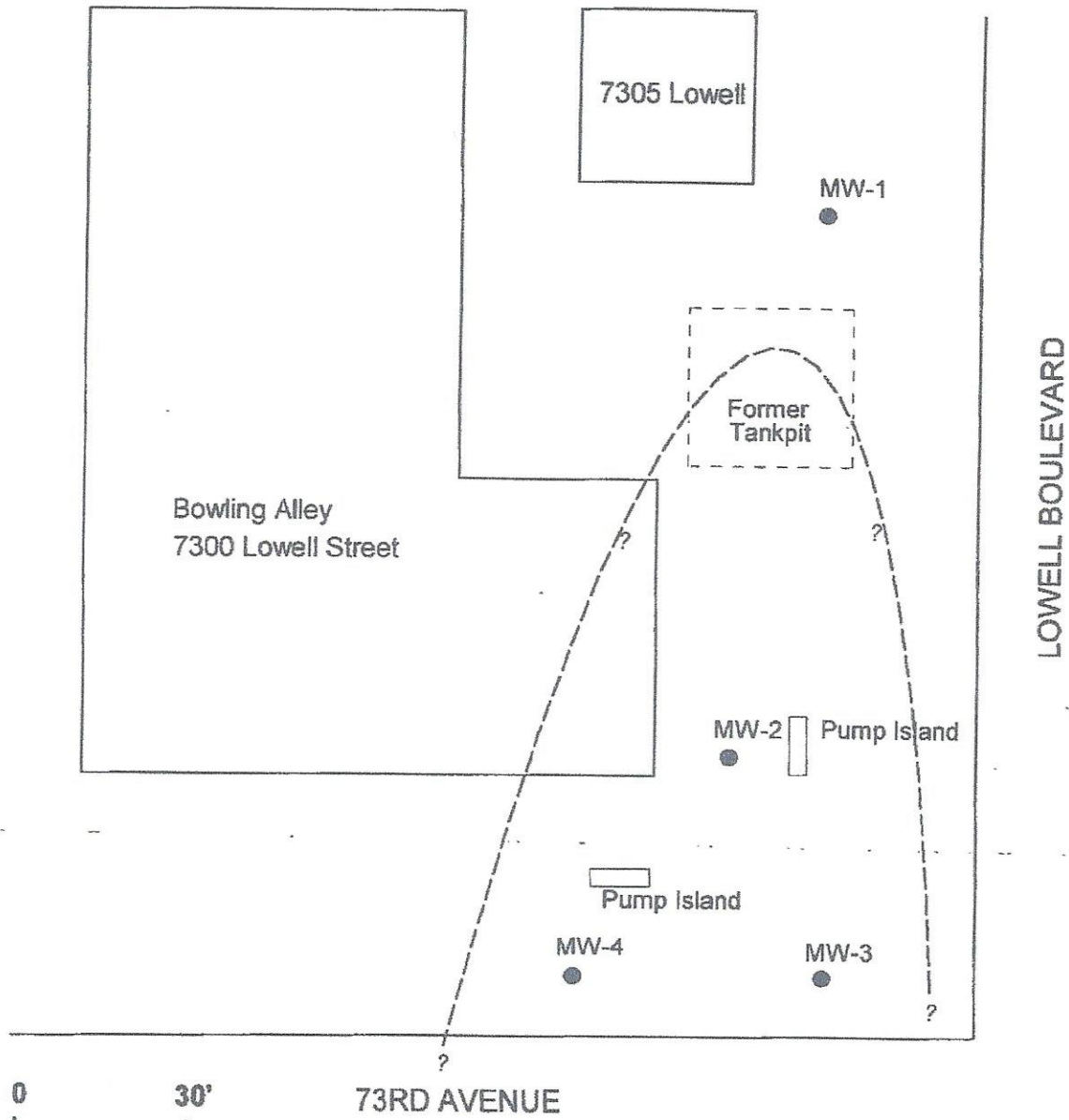
FIGURE 2 - SITE MAP

WMA Project No. 2125-010

7301 Lowell Blvd., Westminster, CO

3/27/97

NORTH



0 30'

Approximate Scale

73RD AVENUE

Explanation

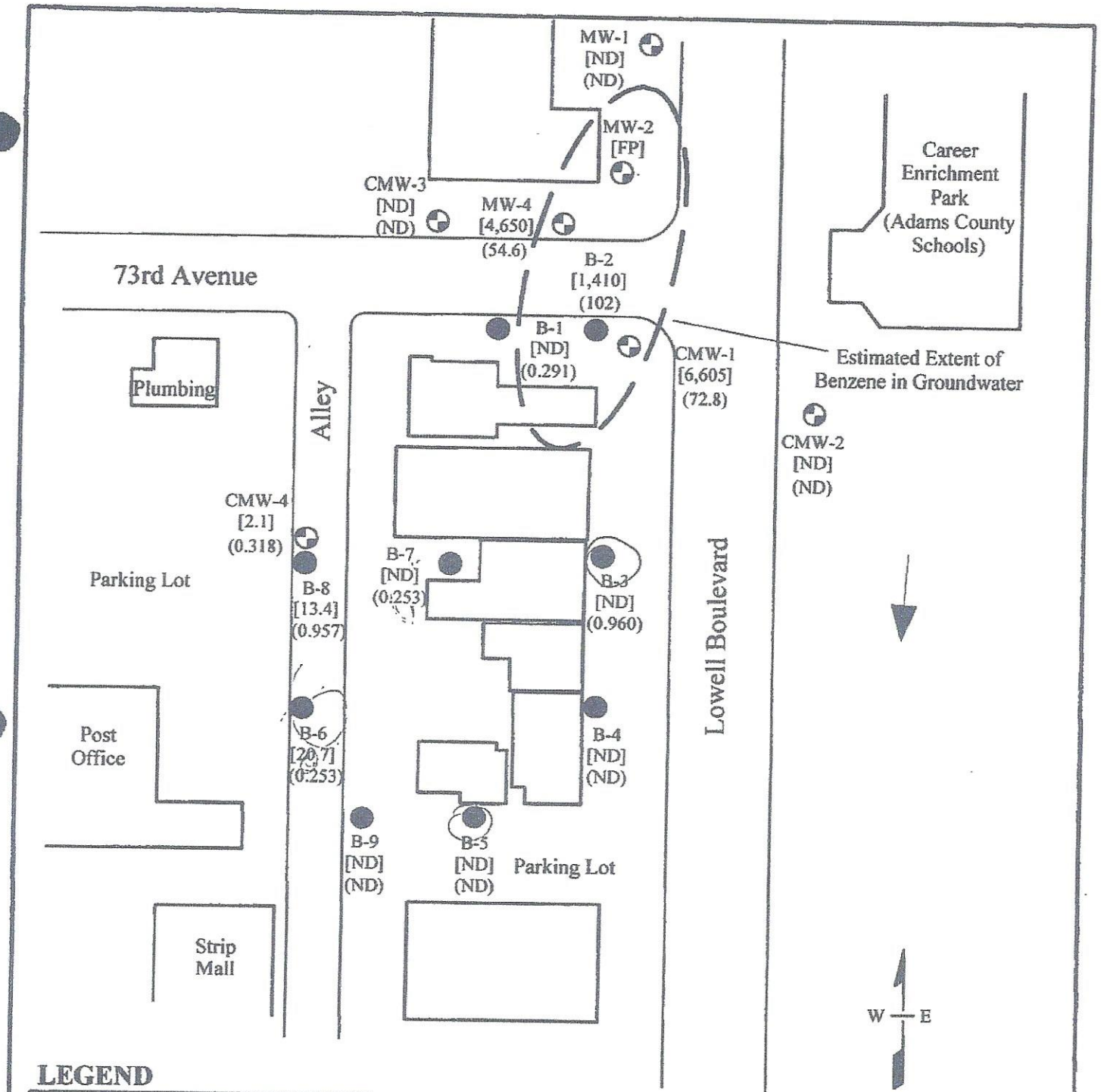
- MW-4
● Monitoring Well and Designation
- Estimated Area of Benzene-Impacted Ground Water
? ?

FIGURE 4 - Estimated Extent of Benzene-Impacted Water

WMA Project No. 2125-010

7301 Lowell Blvd., Westminster, CO

3/27/97



LEGEND

- Monitoring Well Location
- Temporary Well Point Location
- [1,410] Benzene Concentration (ug/l)
- (102) TVPH Concentration (mg/l)
- ND Analyte Not Detected
- FP Free Product Measured in Well
- Estimated Groundwater Flow Direction



City of Westminster	Date 12/4/01
	File COW-002
Former Quick Pics Groundwater Sample Location Map	Figure No.
<i>Corn & Associates</i>	4

APPENDIX D

**Phase I ESA
West 73rd Avenue Lowell Boulevard**

Strategic Environmental

May 16, 2012



Phase I

Environmental Site Assessment Report

WEST 73rd AVENUE & LOWELL BOULEVARD
WESTMINSTER, COLORADO
80030

Prepared for:

Mr. Tony Chacon
Revitalization Projects Coordinator
Department of Community Development
4800 West 92nd Avenue
Westminster, Colorado 80031

Prepared by

Strategic Environmental Management, LLC
5030 South Fulton Street
Greenwood Village, CO 80111

May 16, 2012

**PHASE I
ENVIRONMENTAL SITE ASSESSMENT
WEST 73RD AVENUE & LOWELL BOULEVARD
WESTMINSTER, COLORADO 80030**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	4
2.0 SITE DESCRIPTION	7
3.0 PHYSICAL SETTING	9
4.0 RECORDS REVIEW	10
5.0 HISTORICAL INFORMATION REVIEW.....	15
6.0 INTERVIEWS	22
7.0 SITE RECONNAISSANCE	24
8.0 OTHER ENVIRONMENTAL CONSIDERATIONS.....	26
9.0 RECOMMENDATIONS AND CONCLUSIONS	28
10.0 LIMITATIONS.....	29

Appendices:

Appendix A:	Figures – Site and Surrounding Properties Map
Appendix B:	EDR Report
Appendix C:	Photographic Documentation
Appendix D:	Historical Topographical, Aerial, Sanborn Maps, City Directory
Appendix E:	Other Reports
Appendix F:	Resumes and Declaration

EXECUTIVE SUMMARY

Environmental Management, LLC (SEM) has performed a Phase I Environmental Site Assessment (“ESA”) of West 73rd Avenue and Lowell Boulevard, Adams County, Westminster, Colorado (the “Subject Property”). SEM was authorized to perform this work on April 23, 2012 by Mr. Tony Chacon, Revitalization Projects Coordinator for the City of Westminster. The ESA was performed in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E 1527-05. This ESA has been performed by an environmental professional (see Declaration in Appendix F) as described in the ASTM standard and 40 C.F.R. Section 312.10. Any exceptions to, or deletions from, this practice are described Section 1.0 of this report.

The Subject Property is made up of five parcels of land that have been improved with five commercial structures, one single family home and a parking lot. Figures 1, 2, 3 and 4 in Appendix A provide the general and relative location of the parcels. Each parcel is described separately below.

3630 West 73rd Avenue:– A single-story, 1,000 square foot slab-on-grade, cement block commercial building with a flat rubber membrane roof that was built on a 3,050 square foot lot in 1959.

7287 Lowell Boulevard:- A single-story, 3,148 square foot slab-on-grade, cement block commercial building with a flat rubber membrane roof that was built on an 11,761 square foot lot in 1959 and later renovated in 1986.

7277 Lowell Boulevard:- A single-story, two-unit commercial building that was constructed in two phases on a 7,841 square foot lot. The south unit, occupied by The Carpet Rep, is a 3,420 square foot slab-on-grade, cement block with a stone veneer commercial building and a sheet metal roof that was built in 1942. The north unit, occupied by Hector’s Upholstery, is a 2,822 square foot slab-on-grade, cement block commercial building with a brick veneer that was added in 1947.

7253 Lowell Boulevard:- A two-story, slab-on-grade, cement block and brick veneer commercial building with a flat rubber membrane roof that was built on a 3,050 square foot lot in 1951. The main floor is an unoccupied 1,720 square foot commercial unit and the 1,720 square foot second floor unit has two residential apartments, one occupied and one vacant.

7247 Lowell Boulevard:- The property consists of an 9,583 square foot lot improved with two separate structures; one commercial building fronting on Lowell Boulevard and a single family residential structure with an alleyway entrance. The residential building is a 976 square foot wood frame building with a gabled roof and a crawl space that was built in 1945. The commercial building is a 2,000 square foot slab-on-grade, cement block and brick veneer commercial building with a flat rubber membrane roof that was built in 1951. The commercial building is occupied by a boxing club.

7235 Lowell Boulevard: The property consists of a 12,197 square foot parking lot.

The remainder of the Subject Property is made up of asphalt driveways and parking areas on the east and north sides. The legal description for each parcel is provided in Appendix A.

Recognized Environmental Conditions (“REC”)

SEM has performed an Environmental Site Assessment, in conformance with the Scope of Work developed in cooperation with the client and Recognized Environmental Conditions (RECs) are defined by the ASTM Standard Practice E1527-05 as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the Subject Property. This assessment has revealed evidence of a REC in connection with the Subject Property.

Recognized Environmental Condition

The former Pik Quik site (now the Community Resource & Housing Development Corporation building) located at 7301 Lowell Boulevard, adjacent and just across West 73rd Avenue to the north of the Subject Property is the location of a former gasoline service station. A review of the State of Colorado files at the Division of Oil and Public Safety (OPS) offices indicated that there was a gas station that operated at the site from 1976 to 1992. It has not been operated as a gasoline station since that time. Two leaking underground storage tanks were removed in 1992. The current status of the site is “State Lead”, which means that the State of Colorado is managing the site. Records indicate that 853 cubic yards of contaminated soil was removed and that a Corrective Action Plan for the site was approved in September 2007. Soil excavation and the installation of a soil vapor extraction system (SVE) was the accepted remedial strategy. A November 2011 engineering report indicated that a hydrocarbon plume extends across West 73rd Avenue and under the Subject Property and within 10 feet of the existing structure at 7287 Lowell Boulevard. This is inside the 30 foot critical distance for potential exposure to the vapor intrusion into structures. While the report shows that the concentrations of contaminants have declined over the years, concentrations of Benzene, Ethyl Benzene and Methyl Tert-Butyl Ether that exceed the State MCLs are in a hydrocarbon plume that has migrated under the Subject Property. As a result, the potential for indoor air quality issues exists in the Subject Property building located at 7287 Lowell Boulevard and this is a REC for the Subject Property.

Recommendations

1. In order to confirm that the quality of the indoor air in 7287 Lowell Boulevard is acceptable, it is recommended that an indoor air test for Volatile Organic Compounds including benzene and MTBE be conducted.

2. Vapor intrusion could be a potential concern for any buildings that are going to be constructed in future development on the Site due to the hydrocarbon groundwater plume that has migrated under the Site. It is recommended that sub-slab venting systems be installed on any future Site buildings to mitigate the effects of potential vapor intrusion issues and ensure safe indoor air levels.
3. Since the source of the existing hydrocarbon plume has been removed and the site is under an active remediation program, it is recommended that the State be requested to provide copies of biannual Monitoring and Remediation Reports to the City of Westminster so that the progress and concentrations of the contaminants under the Subject Properties can be actively monitored.
4. As the buildings were constructed prior to 1989, there is a possibility that the building contains asbestos containing building materials (“ACM”). Moreover, suspect ACM were observed throughout the building. In the event that renovation or building demolition was to occur, an asbestos survey will be required to maintain compliance with State and Federal regulations. That survey should be conducted by a state licensed firm and should include an assessment of all suspect ACM including those in areas which are not normally accessible. Any material found to be ACM should be handled in accordance with applicable regulations.

1.0 INTRODUCTION

Purpose of the Assessment:

Strategic Environmental Management, LLC (SEM) has performed a Phase I Environmental Site Assessment (“ESA”) of West 73rd Avenue and Lowell Boulevard, Adams County, Westminster, Colorado (the “Subject Property”). SEM was authorized to perform this work on April 23, 2012 by Mr. Tony Chacon, Revitalization Projects Coordinator for the City of Westminster. The ESA was performed in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E 1527-05. This ESA has been performed by an environmental professional (see Declaration in Appendix F) as described in the ASTM standard and 40 C.F.R. Section 312.10. Any exceptions to, or deletions from, this practice are described Section 1.0 of this report. The location of the Subject Property and surrounding properties is shown on Figures 1 through 4 in Appendix A.

Specifically, this ESA attempts to identify apparent or listed features, conditions or facilities constituting “Recognized Environmental Conditions” (RECs) in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E 1527-05. This ESA has been performed by an environmental professional as described in the ASTM standard and 40 C.F.R. Section 312.10 as the “presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property.” *De minimis* conditions and Historical RECs, as defined by ASTM, are excluded from the definition of Recognized Environmental Conditions for the purposes of an ESA.

Special Terms and Reliance:

It is SEM's understanding that this report is to be used and distributed exclusively for purposes connected with a financial transaction involving the Subject Property. This report of findings was prepared for the exclusive use of the City of Westminster and associates. The contents of this report may not be copied, provided or otherwise communicated to any party other than those associated with the City of Westminster without the express written consent of SEM.

Limiting Conditions and Exceptions to the ASTM Standard:

Review of historical research information was limited to available intervals. De minimus conditions are not listed in the Recommendations section of the report. The report format does not exactly follow the ASTM recommended format.

Scope of Work:

The scope-of-work for this investigation was consistent with the American Society for Testing and Materials (ASTM) Practice E 1527-05 and was designed to meet the objective above by performing the following tasks:

- Environmental Records Review;
- Site Reconnaissance; and
- Interviews.

Each of these tasks is more specifically described in greater detail below.

Task 1: Records Review

SEM examined reasonably available records in an effort to evaluate current and historic activities that suggest the potential for recognized environmental conditions at the site. The specific items implemented under this task were as follows:

- Review databases of federal, state and/or local agencies to identify past and current activities at the site, to the extent possible, with respect to the generation, treatment, storage, disposal and/or release of hazardous substances and/or petroleum products;
- Review and summarize of at least one of the following readily available sources: historic topographic maps, aerial photographs, fire insurance maps, city directories and/or other historic data of the site to identify previous uses; and
- Review of available federal, state and/or local publications regarding hydrogeology.

Task 2: Site Reconnaissance

SEM conducted a site reconnaissance of the property in an effort to identify recognized environmental conditions as indicated by:

- Stressed vegetation;
- Stained or disturbed soils and/or pavement;
- Sheen or iridescence on surface water;
- Unusual odors;
- Unusual corrosion;
- Drums and containers;
- Storage tanks;
- Pits, ponds, lagoons, pools, drains and sumps;
- Landfilling;
- Spills or releases;
- Storage, treatment and/or disposal of hazardous substances and/or petroleum products;
- Wastes generated at the subject site and associated waste disposal practices;
- Oil, gas or water wells;
- Heating system(s) and cesspools;
- Hydraulic lifts;
- Parts washers; and
- PCB-containing devices.

SEM performed a visual reconnaissance of adjacent properties and observed for similar obvious concerns referenced above. Additionally, the general surrounding area land usage was observed to the extent identified while accessing the Subject Property.

While an asbestos survey that includes sampling and analysis of suspect asbestos-containing materials is beyond the scope of this Phase I ESA, SEM conducted a limited visual assessment asbestos survey that was not intended to satisfy Asbestos Hazardous Emergency Response Act regulations.

Task 3: Interviews

SEM contacted current owners and readily available knowledgeable persons in an effort to obtain information indicating recognized environmental conditions in connection with past operations at the Subject Property.

2.0 SITE DESCRIPTION

Subject Property:

The Subject Property is made up of five parcels of land that have been improved with five commercial structures, one single family home and a parking lot. Figures 1, 2, 3 and 4 in Appendix A provide the general and relative location of the parcels. Each parcel is described separately below.

3630 West 73rd Avenue:- A single-story, 1,000 square foot slab-on-grade, cement block commercial building with a flat rubber membrane roof that was built on a 3,050 square foot lot in 1959. The building is owned by the Westminster Housing Authority and is being used for theater prop storage. Information obtained from the Adams County's Assessors Department indicated that the tax assessment parcel number is #0171931416014.

7287 Lowell Boulevard:- A single-story, 3,148 square foot slab-on-grade, cement block commercial building with a flat rubber membrane roof that was built on an 11,761 square foot lot in 1959 and later renovated in 1986. The building is owned by the Westminster Housing Authority and is being used for a theater. The tax assessment parcel number is # 0171931416013.

7277 Lowell Boulevard:- A single-story, two-unit commercial building that was constructed in two phases on a 7,841 square foot lot. The south unit, occupied by The Carpet Rep, is a 3,420 square foot slab-on-grade, cement block with a stone veneer commercial building and a sheet metal roof that was built in 1942. The north unit, occupied by Hector's Upholstery, is a 2,822 square foot slab-on-grade, cement block commercial building with a brick veneer that was added in 1947. The building is owned by the Albert and Gregory Minton. The tax assessment parcel number is # 0171931416012.

7253 Lowell Boulevard:- A two-story, slab-on-grade, cement block and brick veneer commercial building with a flat rubber membrane roof that was built on a 3,050 square foot lot in 1951. The main floor is an unoccupied 1,720 square foot commercial unit and the 1,720 square foot second floor unit has two residential apartments, one occupied and one vacant. The building is owned by the Fingermash Family Trust. The tax assessment parcel number is # 0171931416010.

7247 Lowell Boulevard:- The property consists of an 9,583 square foot lot improved with two separate structures; one commercial building fronting on Lowell Boulevard and a single family residential structure with an alleyway entrance. The residential building is a 976 square foot wood-frame building with a gabled roof and a crawl space that was built in 1945. The commercial building is a 2,000 square foot slab-on-grade, cement block and brick veneer commercial building with a flat rubber membrane roof that was built in 1951. The commercial building is occupied by a boxing club. The building is owned by Russell Sisler. The tax assessment parcel number is # 0171931416009.

7235 Lowell Boulevard: The property consists of a 12,197 square foot parking lot that is owned by the City of Westminster. The tax assessment parcel number is # 0171931416008.

The remainder of the Subject Property is made up of asphalt driveways and parking areas on the east and north sides. The legal description for each parcel is provided in Appendix A.

Adjoining and Surrounding Properties (to the extent identified):

North – The Subject Property is bounded to the north by West 73rd Avenue followed by an office building occupied by the Community Resource & Housing Development Corporation to the north east and the GOAL Academy to the north west. See ESA Photos #11 and #12.

South – A commercial property called Quik Pawn is located at 7225 Lowell Boulevard and borders the Subject Property to the south followed by a 7-Eleven store and gasoline station. No apparent RECs were observed to the south of the Subject Property. See ESA Photo #18.

East – The Subject Property is bounded to the east by Lowell Boulevard followed the Hidden Lakes High School property. See ESA Photo # 15

West – The Subject Property is bordered to the west by an alleyway followed by a US Post Office to the south and A&R Plumbing to the north. No apparent RECs were observed directly to the west of the Subject Property. See ESA Photos # 13 and #14.

3.0 PHYSICAL SETTING

General Topographic Setting:

The elevation of the subject property is approximately 5,312 feet above mean sea level (MSL). Based upon topographic map interpretation determined from the USGS 7.5' Topographical Map in the EDR report indicates that the Subject Property is relatively flat with the gradient in the general area appearing to slope from the north to south and east to west. Storm water flow is routed via sheet flow over the hardscapes across the property to the south and then south east into the street gutters on the west side of Lowell Boulevard.

Surface Water:

The nearest surface water in the vicinity of the Subject Property is Little Dry Creek located roughly a half mile to the south. No surface water is located on the Subject Property.

Soils:

Information for soil in this area was obtained from the US Department of Agriculture. The dominant soil type in the area is the Platner loam. This material consists of a well-drained silty clay/loam mixture with. The USGS indicated that the local geology is mapped as Quaternary (Pleistocene) loess deposits overlying Palocene to bedrock in the Upper Cretaceous Denver Formation. Based on an engineering report prepared in 1997 by Walsh / McGlothlin & Associates on the property to the north of the Subject Property, the depth to the water table was determined to range from 7 to 12 feet below ground surface.

Geology /Hydrology:

According to the USEPA Ground Water Handbook, Vol. 1 Ground Water and Contamination, September 1990, the water table typically conforms to surface topography. This means that the direction of flow for shallow ground water is generally from higher elevations to lower elevations. Localized flow direction, however, may vary as a result of tide, rainfall, development, geologic characteristics, nearby surface water bodies, underground utilities such as storm drains, septic systems and sewers, or other influences such as the presence of high volume wells.

In addition, EDR has developed a special system called the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites in the area of the Subject Property. This information indicates that the groundwater flow direction from a point 1/8 of a mile north west of the Subject Property is in a south south west direction. An additional well located 1/2 of a mile south east of the Subject Property also has the flow in a south south west direction. This information is confirmed in the engineering report prepared in 1997 by Walsh / McGlothlin & Associates on the property to the north of the Subject Property. A copy of this report is in Appendix E.

4.0 RECORD REVIEW

Environmental Records Review:

Environmental records from the State of Colorado and the United States Environmental Protection Agency (EPA) were obtained for SEM by Environmental Data Resources (EDR); the state and federal databases and minimum search radii requirements of American Society for Testing and Materials (ASTM) Practice E 1527-05 were satisfied. While the EDR report details are in Appendix B for a copy of the following standard environmental records sources were reviewed for the minimum search distance identified:

STANDARD ENVIRONMENTAL RECORD SOURCE	SEARCH DISTANCE	NO. OF SITES
Federal NPL site list	1.0 mile	0
Federal Delisted NPL site list	0.5 mile	0
Federal CERCLIS list	0.5 mile	0
Federal CERCLIS NFRAP site list	0.5 mile	0
Federal RCRA CORRACTS facility list	1.0 mile	0
Federal RCRA non-CORRACTS TSD facilities list	0.5 mile	0
Federal RCRA non-generators and generators list	Subject/adjoining	4
Federal institutional control/engineering control registries	Subject	0
Federal ERNS list	Subject	0
State and tribal NPL equivalent	1.0 mile	0
State and tribal CERCLIS equivalent	0.5 mile	0
State and tribal landfill and/or solid waste disposal site lists	0.5 mile	0
State and tribal leaking storage tank lists	0.5 mile	12
State and local registered storage tank lists	Subject/adjoining	2
State and tribal Historic Auto Stations and Dry Cleaners	Subject	0
State and tribal voluntary cleanup sites	0.5 mile	1
State and tribal Brownfield sites	0.5 mile	5

Subject Property:

The subject site was listed in the RCRA-NonGen and FINDS databases searched in this ESA investigation.

The RCRA-NonGen: Resource Conservation and Recovery Act (RCRA) - Non Generators list is EPA's comprehensive information system, providing access to a database that includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. The Subject Property was once operated as the City of Westminster Vehicle Service Center and was registered as a RCRA-non generator of hazardous materials and no violations were reported.

The FINDS database contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System). Being on this list does not constitute a REC for the Subject Property.

Surrounding Properties:

Regulatory database information for Federal and State facility listings, as well as reasonably ascertainable and useful local government information, was requested from Environmental Data Resources (EDR) for the Subject Property and facilities within the search radii suggested by the ASTM standard practice.

National Priority and CERCLIS List

The National Priorities List (NPL), also known as Superfund is a database that is a subset of the CERCLIS and identifies sites that are on a priority list for cleanup under the Superfund program. The Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) lists sites identified as being abandoned, inactive, or uncontrolled hazardous waste sites which may require comprehensive cleanup. The source of these lists is the USEPA. No NPL, Delisted NPL, CERCLIS or CERCLIS No Further Remedial Action Planned (NFRAP) sites were identified in the search radii.

Resource Conservation and Recovery Information System – Conditionally Exempt Small Quantity Generator

The Resource Conservation and Recovery Information System - Small Quantity Generator (RCRIS-SQG) lists sites that generate, transport, store, treat and/or dispose of hazardous waste as

defined by RCRA. Small Quantity Generators (SQG) generates less than 100 Kg or less than 1 Kg of acutely hazardous waste per month. A review of the RCRIS-SQG list provided by EDR dated November 10, 2011, indicates that there are three sites, one higher in elevation and two lower in elevation than the Subject Property, within 1/4 mile of the Subject Property.

Higher in Elevation:

1. The US West Communications site is shown on the EDR report map as being approximately 973 feet north of the Subject Property at 7431 Lowell Boulevard. However a review of the record indicates that this site has no record of violations. Therefore this is considered not to be a REC and not of concern at the present.

Lower in Elevation:

2. The EDR report indicates that the City of Westminster Development site located at 7233 Lowell Boulevard, approximately 340 feet south of the Subject Property is in the database. However a review of the site indicates that this site does not physically exist. Since it has no record of violations this is considered not to be a REC and not of concern at the present.
3. The Lowell Auto Body site located at 7111 Lowell Boulevard, approximately 1,039 feet south of the Subject Property. While the site has had some violations recorded, this property is located down gradient to the Subject Property. Therefore this is considered not to be a REC and not of concern at the present.

Resource Conservation and Recovery Information System - Non Generator

The RCRA-NonGen: Resource Conservation and Recovery Act (RCRA) - Non Generators list is EPA's comprehensive information system, providing access to a database that includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. As of November 10, 2011, there were five sites within 1/4 mile of the Subject Property.

A review of the information in the EDR report indicates all five sites are down gradient of the Subject Property and the closest one is over 500 feet away. As a result, these sites are considered not to be a REC and not of concern at the present.

Leaking Underground Storage Tanks

A review of the Leaking Underground Storage Tank Incident Reports (LUST) contains an inventory of reported leaking underground storage tank incidents. A review of the list provided by EDR dated January 31, 2012, indicates that there are 14 sites within 1/2 mile of the Subject Property. Since two sites are duplicates, there are only 12 sites to examine.

The closest site is the former Pik Quik site (now the Community Resource & Housing Development Corporation building) located at 7301 Lowell Boulevard, adjacent and just across West 73rd Avenue to the north of the Subject Property. A review of the State of Colorado files at the Division of Oil and Public Safety (OPS) offices indicated that there was a gas station that operated at the site from 1976 to 1992. It has not been operated as a gasoline station since that time. Two leaking underground storage tanks were removed in 1992. A report entitled “Initial Site Characterization Report” that summarizes the history and condition of the site as of March 27, 1997 was prepared by Walsh / McGlothlin & Associates is provided in Appendix E. The current status of the site is “State Lead”, which means that the State of Colorado is managing the site. Records indicate that 853 cubic yards of contaminated soil was removed and that a Corrective Action Plan for the site was approved in September 2007. Soil excavation and the installation of a soil vapor extraction system (SVE) was the accepted remedial strategy. A report entitled “Monitoring and Remediation Report” prepared by CGRS Environmental Services on November 23, 2011 indicated that the hydrocarbon plume extends across West 73rd Avenue and under the Subject Property. A copy of this report is provided in Appendix E. While the report shows that the concentrations of contaminants have declined over the years, concentrations of Benzene, Ethyl Benzene and Methyl Tert-Butyl Ether that exceed the State MCLs are in a hydrocarbon plume that has migrated under the Subject Property. As a result this site is a REC for the Subject Property.

The next closest up gradient site is the US West Communications & Westminster Lowell Central Office site. The EDR report map indicates that the site is approximately 973 feet north of the Subject Property at 7431 Lowell Boulevard. The Colorado Storage Tank Information System (COSTIS) indicated that this site has had reported releases in 1994 and 1999 and both have been cleaned up and the State has issued two No Further Action Letters and the site is “Closed”. While there is still a 3,000 gallon diesel tank operating at the site, there are no current violations and as a result is not considered to be a REC.

The third up gradient site is the Westminster Fire Department site located at 3948 West 73rd Avenue. COSTIS records indicate that the leaking tank had been removed and the site is “Closed”. As a result is not considered to be a REC.

The closest down gradient site is Herb's Texaco at 3791 West 72nd Avenue and it is 987 feet away and is down gradient. While this site is designated as an "Open" LUST case, it should not have an impact on the Subject Properties. The next closest site that is not closed is the Bradley Self Serve site and is 1,435 feet away and is “Implementing the Corrective Action Plan”. This site is located to the south of the Subject Property and it is down and cross gradient. The remaining seven sites are all “Closed” and as a result all these sites are not considered to be RECs.

Above Ground and Underground Storage Tanks

A review of the Underground Storage Tank (UST) and Above Ground Tank (AST) databases provided by EDR and dated January 3, 2012 contains an inventory of registered above and underground storage tanks. The closest site is the 7-Eleven Gas Station that is located on the

corner of West 72nd Avenue and Lowell. Since it is located down gradient to the Subject Property it would have no impact on the Subject Property in the event of a release.

A review of the list indicates that the remaining eight sites within 1/4 mile of the Subject Property are located down gradient or cross gradient of the Subject Property or have been discussed above and as a result are not considered to be RECs.

Unplottable Sites

EDR provided a list of “unplottable” or orphan sites which may or may not be located within the minimum search distances. SEM reviewed the list of unplottable sites. Based on locations, compliance status and/or the nature of the listing, none of these sites is believed to be an REC for the Subject Property.

5.0 HISTORICAL INFORMATION REVIEW

Historical information identifying the past site use was obtained from a variety of sources as detailed in Appendix D of this report and included: Aerial Photographs, Topographic Maps, Sanborn Fire Insurance Maps and City Directories. The following historical use information was reviewed:

Historical Aerial Photographs

SEM reviewed historical aerial maps of the Subject Property and surrounding properties from the years 1937, 1954, 1963, 1978, 1984, 1988, 1991, 1993, 1999 and 2006. A copy of each historical aerial map is provided in Appendix D. The results of the historic aerial photo review are as follows:

- 1937 – The Subject Property appears to be a vacant lot with several footpaths bisecting the site. West 73rd Avenue and Lowell Boulevard are visible and it appears that there is residential development to the north, south and west. The property to the east, across Lowell Boulevard, is undeveloped.
- 1954 – The Subject Property now has five structures. All appear to be small, perhaps residences. The property to the east has been developed with what appears to be a commercial operation.
- 1963 – The Subject Property now has been fully developed with buildings on all the lots. Property to the south has also been fully developed as well. The high school to the east has now been constructed.
- 1978 – The Subject Property appears to have been developed as it is today, except that the theater portion of the northern building has not been constructed and there is a building where the south parking lot is today.
- 1984 – A poor quality photo with not enough resolution to determine changes to the Subject Property.
- 1991 – There are no changes from the 1978 photograph except that there is a L-shaped building where the south parking lot is today and the theater has been constructed.
- 1993 – There are no changes from the 1991 photograph.
- 1999 – There are no changes from the 1993 photograph except that the L-shaped building is now gone and a parking lot remains.
- 2006 – The Subject Property appears to be as it is today. The only change from the 1999 photograph is that the building across from the parking lot on Lowell Boulevard is now gone.

Historical Topographic Map

SEM reviewed a historical topographic map of the Subject Property and surrounding properties for 1999. A copy of the topographic map is provided in Appendix D. The results of the historic topographic map review are relatively unremarkable as the level of detail does not show detailed development in and around the Subject Property.

Historical Sanborn Maps:

The EDR report certifies that the complete holdings of the Sanborn Library collection have been searched based on the target property information and fire insurance maps covering the target property were not found. Appendix D documents the attempt.

City Directories

City directories have been published for cities and towns across the U.S. since the 1700s. Originally a list of residents, the city directory developed into a sophisticated tool for locating individuals and businesses in a particular urban or suburban area. While city directory coverage is comprehensive for major cities, it may be spotty for rural areas and small towns.

SEM reviewed city directories for the Subject Property and adjoining properties at the Denver Public Library. SEM utilized the Bresser's City Directory from 1965 through 1975 and the Coles Directory from 1980 through to 2010. Copies of the directories are in Appendix D.

In 1965, the Subject Property was identified as:

3630 W. 73rd Avenue: Westminster Econo Wash
7287 Lowell Boulevard: Bromans Econo
7277 Lowell Boulevard: Complete Auto Parts, Doug & Nicks Pizza
7253 Lowell Boulevard: Sullivans Barber Shop and French Bakery
7247 Lowell Boulevard: Not Listed
7235 Lowell Boulevard: Westminster Sanitation

Adjacent properties were identified as:

North: 7301 Lowell Boulevard - Westminster Standard
North/South: (Penguin Bldg) - 7267 Lowell Boulevard – Library & Offices
East: 7300 Lowell Boulevard – Westminster High School
South: 7225 Lowell Boulevard – Bays Pharmacies
West: 7262 Meade Street - Westminster Post Office
West: 3660 W. 73rd Avenue – Residential

In 1970, the Subject Property was identified as:

3630 W. 73rd Avenue: Westminster Econo Wash
7287 Lowell Boulevard: Not Listed
7277 Lowell Boulevard: Genuine Auto Parts, Creative Hobbies
7253 Lowell Boulevard: Sullivans Barber Shop and French Bakery, TV Repair
7237 Lowell Boulevard: Barnettes Bty Salon
7235 Lowell Boulevard: Westminster Sanitation

Adjacent properties were identified as:

North: 7301 Lowell Boulevard – Adas Thrift Store
North/South: (Penguin Bldg) - 7267 Lowell Boulevard – Mildred White
East: 7300 Lowell Boulevard – Westminster High School
South: 7225 Lowell Boulevard – Westminster Pharmacy
West: 7262 Meade Street - Westminster Post Office
West: 3660 W. 73rd Avenue – Residential

In 1975, the Subject Property was identified as:

3630 W. 73rd Avenue: Westminster Chimes
7287 Lowell Boulevard: A G Motors
7277 Lowell Boulevard: Genuine Auto Parts
7253 Lowell Boulevard: Sullivans Barber Shop and French Bakery
7237 Lowell Boulevard: Barnettes Bty Salon
7235 Lowell Boulevard: Westminster Sanitation

Adjacent properties were identified as:

North: 7301 Lowell Boulevard – Adas Thrift Store
North/South: (Penguin Bldg) - 7265 Lowell Boulevard – Residential & 2nd Chance
East: 7300 Lowell Boulevard – Westminster Senior High School
South: 7225 Lowell Boulevard – Westminster Pharmacies
West: 7262 Meade Street - US Post Office
West: 3660 W. 73rd Avenue – Not Listed

In 1980, the Subject Property was identified as:

3630 W. 73rd Avenue: Westminster Chimes
7287 Lowell Boulevard: Ideal Auto Sales
7277 Lowell Boulevard: Genuine Auto Parts, Ellenwinds Ceramics
7253 Lowell Boulevard: Rug Doctor & Westminster Office Supply
7237 Lowell Boulevard: Style House Beauty
7235 Lowell Boulevard: Celebrity Dance

Adjacent properties were identified as:

North: 7301 Lowell Boulevard – Pik Quik
North/South: (Penguin Bldg) - 7267 Lowell Boulevard – Mary Anne’s Catering & Residential
East: 7300 Lowell Boulevard – Career Enrichment Park
South: 7225 Lowell Boulevard – Westminster Pharmacy
West: 7262 Meade Street - Westminster Post Office
West: 3660 W. 73rd Avenue – Not Listed

In 1985, the Subject Property was identified as:

3630 W. 73rd Avenue: Westminster Auto Wash
7287 Lowell Boulevard: Front Range Automotive
7277 Lowell Boulevard: Number 1 Auto Parts
7253 Lowell Boulevard: Rug Doctor & Westminster Office Supply, TV Repair
7237 Lowell Boulevard: Style House Beauty
7235 Lowell Boulevard: Celebrity Dance

Adjacent properties were identified as:

North: 7301 Lowell Boulevard – Pik Quik
North/South: (Penguin Bldg) - 7267 Lowell Boulevard – Mary Anne’s Catering & Residential
East: 7300 Lowell Boulevard – Career Enrichment Park
South: 7225 Lowell Boulevard – Westminster Pharmacies
West: 7262 Meade Street - Westminster Post Office
West: 3660 W. 73rd Avenue – Residential

In 1990, the Subject Property was identified as:

3630 W. 73rd Avenue: Not Listed
7287 Lowell Boulevard: Vehicle Service
7283 Lowell Boulevard: Hectors Upholstery
7249 Lowell Boulevard: Westminster Office Supply
7237 Lowell Boulevard: Style House Beauty
7235 Lowell Boulevard: A&C TV Repair Service

Adjacent properties were identified as:

North: 7301 Lowell Boulevard – Pik Quik
North/South: (Penguin Bldg) - 7267 Lowell Boulevard – Mary Ann’s Café & All Family Ceramic
East: 7300 Lowell Boulevard – Career Enrichment Park
South: 7225 Lowell Boulevard – Westminster Pawn Shop
West: 7262 Meade Street - Westminster Post Office
West: 3660 W. 73rd Avenue – Residential

In 1995, the Subject Property was identified as:

3630 W. 73rd Avenue: No Listing
7287 Lowell Boulevard: Vehicle Service & Denver Business Machines
7283 Lowell Boulevard: Hectors Upholstery
7253 Lowell Boulevard: A&R Windows & Hemp Heaven, Stuff & Things
7237 Lowell Boulevard: Style House Beauty
7235 Lowell Boulevard: A&C TV Repair Service & Bass Custom Golf

Adjacent properties were identified as:

North: 7301 Lowell Boulevard – Not Listed
North/South: (Penguin Bldg) - 7267 Lowell Boulevard – Mary Ann’s Café & All Family Ceramic
East: 7300 Lowell Boulevard – Career Enrichment Park
South: 7225 Lowell Boulevard – US Pawn Shop
West: 7262 Meade Street - Westminster Post Office
West: 3660 W. 73rd Avenue – Mile High Valet Service

In 2000, the Subject Property was identified as:

3630 W. 73rd Avenue: Thrifty Car Rental
7287 Lowell Boulevard: Roofers Inc. & Vehicle Service
7283 Lowell Boulevard: Hectors Upholstery & The Carpet Rep
7253 Lowell Boulevard: Residential
7237 Lowell Boulevard: No Listing
7235 Lowell Boulevard: Stuff & Things & Bass Custom Golf

Adjacent properties were identified as:

North: 7301 Lowell Boulevard – The New Club
North/South: (Penguin Bldg) - 7267 Lowell Boulevard – Residential
East: 7300 Lowell Boulevard – Career Enrichment Park – Adams Public Schools
South: 7225 Lowell Boulevard – US Pawn Shop
West: 7262 Meade Street – No Listing
West: 3660 W. 73rd Avenue – A&R Plumbing

In 2005, the Subject Property was identified as:

3630 W. 73rd Avenue: No Listing
7287 Lowell Boulevard: Roofers Inc. & Vehicle Service
7283 Lowell Boulevard: Hectors Upholstery & The Carpet Rep
7253 Lowell Boulevard: Residential
7237 Lowell Boulevard: No Listing
7235 Lowell Boulevard: Stuff & Things & Bass Custom Golf

Adjacent properties were identified as:

North: 7301 Lowell Boulevard – No Listing
North/South: (Penguin Bldg) - 7269 Lowell Boulevard – Kun Lun Pie
East: 7300 Lowell Boulevard – Career Enrichment Park
South: 7225 Lowell Boulevard – Pawn One
West: 7262 Meade Street – US Government Security Office
West: 3660 W. 73rd Avenue – A&R Plumbing

In 2010, the Subject Property was identified as:

3630 W. 73rd Avenue: No Listing
7287 Lowell Boulevard: Not Listed
7283 Lowell Boulevard: Hectors Upholstery & The Carpet Rep
7253 Lowell Boulevard: Linda's Closet
7237 Lowell Boulevard: No Listing
7251 Lowell Boulevard: Bass Custom Golf

Adjacent properties were identified as:

North: 7301 Lowell Boulevard – No Listing
North/South: (Penguin Bldg) - 7269 Lowell Boulevard – Kun Lun Pai Marshall Arts
East: 7300 Lowell Boulevard – Hidden Lake High School
South: 7225 Lowell Boulevard – US Pawn
West: 7262 Meade Street – US Post Office
West: 3660 W. 73rd Avenue – No Listing

Prior Use Summary

Prior to its current development, the Subject Property was vacant land. Since 1965 the Subject Properties were used as a car wash, automotive service and parts store, beauty and barber shop, bakery, Westminster Sanitation office, carpet and upholstery sales and service shop, TV repair golf shop, car rental store, boxing club, theater and residential. Adjacent properties include a post office, high school, gas station, pharmacy, offices, clothing store, plumbing shop and residential.

Colorado Department of Public Health and Environment – Division of Oil and Public Safety

A review of the records at the Colorado State Department of Labor and Employment - Division of Oil and Public Safety – Colorado Storage Tank Information System provided details regarding underground storage tanks and leaking underground storage tanks (LUSTS) near the site and surrounding areas. Records indicated that the Subject Property had no LUSTs however properties with LUSTs were determined to be close to the Subject Property. Details concerning the remediation and on-going site monitoring at these sites have been provided in Appendix E.

Adams County Property Reports

An online search of the Adams County Property Reports produced the records for each parcel that have been included in Appendix E. The records indicate that development began in 1945.

Fire Department Records

As indicated in the letter dated April 24, 2012 in Appendix E, SEM contacted Mr. Robert Martinez, the Fire Inspector responsible for conducting the search of department records at the Westminster Fire Department to determine if any hazardous materials, incidents or spills had occurred at the Subject Property. On April 24, 2012 the Fire Department reported that their records indicated that one hazmat incident was reported on July 30, 2004. A 55 gallon drum spill was reported behind 7267 Lowell Boulevard (in the alley), however the contents did not appear to be hazardous.

Environmental Liens

SEM inquired of the current owners and representatives if there were any encumbrances including environmental liens on the Subject Properties. All owners and owners representatives indicated that they had no knowledge of any liens, environmental or otherwise, on their properties.

FEMA - Flood Insurance Rate Map

FEMA's flood insurance maps were accessed and it was determined and shown in Appendix E that the Subject Property is not in 100 year or the 500 year flood plain.

Data Gaps

After reviewing the above sources of information regarding the historical uses of the Subject Property, SEM did not identify any significant data gaps, as defined by ASTM.

6.0 INTERVIEWS AND SPECIALIZED KNOWLEDGE

Subject Property Owner Interview

An interview with Tony Chacon, who is the Revitalization Projects Coordinator for the owner of a parking lot at 7235 Lowell and 7287 Lowell Boulevard & 3630 West 73rd Avenue, two adjacent buildings, was conducted on May 1, 2012. Mr. Chacon indicated that the City of Westminster purchased the parking lot from the estate of Inis Leichter in 1998. He thought that there was an environmental study completed by Goodbee & Associates at the time of purchase however a copy could not be produced. Mr. Chacon indicated that the building that was on the property at one time had been occupied by a golf equipment store, TV repair shop and a hair salon. He said that then the City acquired the two adjacent properties from Mr. Joe Bellm in 2004. Since that time they have been either vacant or un-used until the 73rd Avenue Theater group started using the building for theater operations and storage. Mr. Chacon indicated that there was a hydraulic lift that had been removed after the City acquired the property. See ESA Photo #21. During a call to Mr. Joe Bellm (720-422-5244) on May 14, 2012, Mr. Bellm indicated that he had owned both properties for 7 years before he sold them to the City. He used 7287 Lowell as an auto repair shop and 3630 W. 73rd Avenue as auto parts storage. He said that there were no floor drains or grease traps at the site during his time at the buildings. Both Mr. Chacon and Mr. Bellm were not aware of any environmental violations or liens on the properties and indicated that they had no knowledge of any storage, handling or dumping of hazardous materials on the Subject Property. However Mr. Chacon did note that he believed that there was some contamination on the properties that was a result of a release from the former Pik Quik gasoline station to the north.

A telephone interview with Greg Minton (303-664-5000), who is the owner of 7277 Lowell Boulevard, was conducted on May 1, 2012. Mr. Minton said that his father had acquired the property about 40 years ago and that he had recently passed away. He said that the properties have been leased to the current tenants, Hectors Upholstery and The Carpet Rep, for at least 10 years. He was not aware of any environmental violations or liens on the properties and indicated that he had no knowledge of any storage, handling or dumping of hazardous materials on the Subject Property.

An interview with Mr. Dick Meyer (303-475-3501), the property manager for the owner of 7253 Lowell Boulevard, was completed on May 1, 2012. Mr. Meyer said that the property had been in the estate of Mark Goldstein and that he had represented the property for the estate for more than 25 years. He said that the property had been passed down through the family over the years and the current owners haven't even seen the property. He said that the property had been used as a sales office and a retail store on the main floor and rental apartments upstairs for as long as he had been with the property. He was not aware of any environmental violations or liens on the properties and indicated that he had no knowledge of any storage, handling or dumping of hazardous materials on the Subject Property.

An interview with Mr. Ron Sisler, brother of Mr. Russell Sisler, who is the owner of 7247 Lowell Boulevard (334-303-6055), was completed on May 1, 2012. Mr. Sisler said that the property had been acquired by his brother in 1996. He said that the property had been used as a barber shop

and as retail store for as long as he could remember. The residential unit was occupied and he had conducted plumbing repairs on the unit about 6 years ago. He was not aware of any environmental violations or liens on the properties and indicated that he had no knowledge of any storage, handling or dumping of hazardous materials on the Subject Property.

Specialized Knowledge and Reason for Completing Phase I

Pursuant to ASTM E 1527-05, SEM requested from the property owners and property owner's representatives, regarding any specialized knowledge of environmental conditions associated with the Subject Property. At SEM's request, the property owners and property owner's representatives provided a completed environmental questionnaire that is included in Appendix E. No environmental issues were identified by the owner that could result in property value reduction.

The purpose of this ESA was to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E-1527-05) in connection with the Subject Property. This ESA was also performed to permit new owner to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "landowner liability protections," or "Lips"). ASTM Standard E-1527-05 constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35) (B). SEM understands that the findings of this study will be used to evaluate a pending financial transaction in connection with the Subject Property.

7.0 SITE RECONNAISSANCE

SEM conducted a site visit of the Subject Property and observed the condition of the property on May 1, 2012. A depiction of the Subject Property and surrounding area configuration is provided in the Figures 1 through 4 in Appendix A. Weather conditions at the time of the site reconnaissance were sunny and 81 degrees Fahrenheit. The visual reconnaissance consisted of observing the boundaries of the property and systematically traversing the site to provide an overlapping field of view, wherever possible. The periphery of the on-site structures was observed along with interior accessible common areas, storage and maintenance areas. Photographs of pertinent site features identified during the site reconnaissance are included in Appendix C.

During the property reconnaissance, SEM looked for the following visual indications of environmental concern at the Subject Property. Consistent with the ASTM guidelines, the efforts were made to identify the presence of the following items, which could indicate the potential presence of RECs on the Subject Property.

- **Hazardous Substances and Petroleum Products in Connection with Identified Uses**

No significant use or generation of hazardous substances is known to occur at the Subject Properties. No manufacturing, fabrication or assembly operations are conducted on the Properties. Limited amounts of cleaning supplies and paints are present, but are used in small quantities consistent with similar types of businesses. The storage of these materials appeared satisfactory.

- **Odors**

No strong, pungent or noxious odors were noted or reported that would indicate the potential for RECs at the Subject Properties were noted emanating from either the Subject Properties or an adjacent properties.

- **Pools of Liquids**

No pools of liquid were noted or reported.

- **Drums**

No drums were observed.

- **Hazardous Substance, Petroleum Products and Unidentified Substance Containers**

No containers containing hazardous substances, petroleum products or unidentified substances were noted or reported on or adjacent to the Subject Properties.

- **Heating and Cooling Source**

The buildings are heated by a mixture of roof-mounted HVAC units, separate furnace units, window mounted air conditioning units and gas-fired ceiling mounted heaters.

- **Interior Stains or Corrosion**

No evidence of stains or corrosion on the floors, walls or ceilings at the Subject Properties were noted or reported.

- **Drains and Sumps**

No drains or sumps were noted.

- **Pits, Ponds or Lagoons**

No ponds or lagoons associated with hazardous substance, petroleum products or industrial activities at the Subject Properties or adjacent properties were noted or reported.

- **Stained Soil & Pavement**

There were no significant stained soil or pavement was observed or reported at the Subject Properties.

- **Stressed Vegetation**

No areas of stressed vegetation were observed or reported on or adjacent to the Subject Properties.

- **Solid Waste**

SEM did not observe any areas that appeared to have been filled or graded that would suggest the presence of waste including, but not limited to, construction debris, demolition debris or other solid waste. No improperly stored solid waste was noted.

- **Wells**

A total of 13 groundwater monitoring wells were observed on the Subject Properties. Ten of the wells were located on the north east corner of West 73rd Avenue and Lowell Boulevard adjacent to 7287 Lowell Boulevard. See ESA Photo #1. The remaining three wells were located on the south (see ESA Photo #40), east and west (see ESA Photo #10) sides of the Subject Properties. No drinking water wells, dry wells, irrigation wells, injection wells, abandoned wells or other wells were observed or reported.

- **Septic Systems**

SEM did not observe any on-site septic systems or cesspools.

- **PCBs**

Three pole-mounted transformers were observed on the Subject Properties during the site inspection. See ESA Photo #42. The transformers, owned by Xcel Energy, were observed on the west side of the Subject Property in the alleyway. The transformers did not have blue stickers that indicated that the transformers did not contain PCBs. No spills, staining or leaks were observed on or around the transformers. Based on the good condition of the equipment, the transformers are not expected to represent a significant environmental concern.

8.0 OTHER ENVIRONMENTAL CONSIDERATIONS

Asbestos-Containing Materials

In conjunction with the site reconnaissance, a limited asbestos survey that included a visual review of readily accessible interior areas of the building was conducted. Although this visual survey was not intended to satisfy Asbestos Hazardous Emergency Response Act or other state or local regulations, obvious sources of asbestos containing materials (ACM) were identified throughout the Properties. Suspect asbestos containing materials in the buildings included floor tile, linoleum, popcorn ceiling texture, ceiling tile, dry wall and joint compound.

An asbestos survey that includes the testing of suspected ACM was beyond the scope of this Phase I ESA, however an asbestos survey was being completed separately from this report and will be completed at a later date.

Asbestos is regulated by the US EPA, the Occupational Safety and Health Administration (OSHA) and Colorado Department of Public Health and the Environment (CDPHE). The US EPA and CDPHE regulate asbestos use, removal and disposal, while OSHA regulates exposures to workers. US EPA standard 40 CFR Part 61.145, National Emission Standards for Hazardous Air Pollutants, requires that commercial and public buildings be thoroughly inspected for the presence of ACM prior to conducting renovation or demolition activities. The inspection must assess whether ACM is considered friable or non-friable. Friable ACM is defined as material containing more than 1% asbestos that when dry can be crumbled, pulverized or reduced to powder by hand pressure.

The subject buildings were constructed from 1945 to 1959 with an 1986 renovation, and as a result, have the potential to contain asbestos containing building materials (ACBM). NESHA regulations require sampling of potential ACM and ACBM prior to any renovation or demolition activities likely to disturb the material, regardless of the date of construction. If such activities are planned, an asbestos survey of the entire facility, or the portion slated for the renovation or demolition activities, prior to initiating these activities. That survey should be conducted by a state licensed firm and should include an assessment of all suspect ACM including those in areas which are not normally accessible. Any material found to be ACM should be handled in accordance with applicable regulations.

Lead-Based Paint

Many buildings constructed before 1978 have paint that contains lead. Lead from paint, chips and dust can pose health hazards, especially in young children. The painted surfaces inside the structure were in good condition. Due to the construction date of the original buildings from 1945 to 1959, it is possible that paint underneath the recently painted surfaces observed contains lead. While LBP may be present at the Properties based on the age of the Properties, the Subject Properties is not used residentially. The painted surfaces observed, for the most part, were in good condition and LBP is not considered a significant concern. No sampling of potential lead-based paint was performed as part of this Phase I ESA.

Radon

Radon gas is a product of the decay series that begins with uranium. Radon is produced directly from radium, which can be commonly found in bedrock that contains black shale and/or granite. Radon gas can migrate through the ground and enter buildings through porous concrete or fractures. Radon tends to accumulate in poorly ventilated basements. Long-term exposure to radon has been associated with lung cancer.

The US EPA has prepared a map to assist National, State, and local organizations to target their resources and to implement radon-resistant building codes. The map divides the country into three Radon Zones. Zone 1 being those areas with the average predicted indoor radon concentration in residential dwellings exceeding the EPA Action limit of 4.0 picoCuries per Liter (pCi/L). It is important to note that the EPA has found homes with elevated levels of radon in all three zones, and the EPA recommends site specific testing in order to determine radon levels at a specific location. However, the map does give a valuable indication of the propensity of radon gas accumulation in structures. Review of the EPA Map of Radon Zones places the Properties in Zone 1. While the Subject Property is located in an area prone to elevated radon levels, based on the presence of commercial grade mechanical equipment, radon is not considered to pose a significant concern at the Subject Property.

Wetlands

The nearest surface water in the vicinity of the Subject Properties is the Little Dry Creek, located approximately one half mile south. There are no settling ponds, lagoons, surface impoundments observed at the Subject Properties during this investigation.

Microbial Contamination – Mold

The site reconnaissance included a visual inspection for indications of water intrusions or the presence of active mold growth on readily accessible interior and exterior surfaces. Confirmation sampling is not included in the scope of work for the Phase I ESA. Readily accessible areas of the building were observed for visual or olfactory indications of mold, and for areas of water damage. SEM looked for evidence of the presence of conspicuous mold or observed water intrusion or accumulation during completion of site reconnaissance. SEM did observe the presence of mold on the back room ceiling of Hectors Upholstery located at 7277 Lowell Boulevard. See ESA Photo# 24. The mold appeared to be as a result of a water leak in the roof and it was dry at the time of the site visit and is considered to be de-minimus.

This activity was not designed to discover all areas, which may be affected by mold growth on the Subject Properties. Rather, it is intended to give the client an indication as to whether or not conspicuous (based on observed areas) mold growth is present at the Subject Properties. This evaluation did not include a review of pipe chases, HVAC systems or areas behind enclosed walls and ceilings.

9.0 RECOMMENDATIONS AND CONCLUSIONS

Recognized Environmental Conditions (“REC”)

SEM has performed an Environmental Site Assessment, in conformance with the Scope of Work developed in cooperation with the client and Recognized Environmental Conditions (RECs) are defined by the ASTM Standard Practice E1527- 05 as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the Subject Property. This assessment has revealed evidence of a REC in connection with the Subject Property.

Recognized Environmental Condition

The former Pik Quik site (now the Community Resource & Housing Development Corporation building) located at 7301 Lowell Boulevard, adjacent and just across West 73rd Avenue to the north of the Subject Property is the location of a former gasoline service station. A review of the State of Colorado files at the Division of Oil and Public Safety (OPS) offices indicated that there was a gas station that operated at the site from 1976 to 1992. It has not been operated as a gasoline station since that time. Two leaking underground storage tanks were removed in 1992. The current status of the site is “State Lead”, which means that the State of Colorado is managing the site. Records indicate that 853 cubic yards of contaminated soil was removed and that a Corrective Action Plan for the site was approved in September 2007. Soil excavation and the installation of a soil vapor extraction system (SVE) was the accepted remedial strategy. A November 2011 engineering report indicated that a hydrocarbon plume extends across West 73rd Avenue and under the Subject Property and within 10 feet of the existing structure at 7287 Lowell Boulevard. This is inside the 30 foot critical distance for potential exposure to the vapor intrusion into structures. While the report shows that the concentrations of contaminants have declined over the years, concentrations of Benzene, Ethyl Benzene and Methyl Tert-Butyl Ether that exceed the State MCLs are in a hydrocarbon plume that has migrated under the Subject Property. As a result, the potential for indoor air quality issues exists in the Subject Property building located at 7287 Lowell Boulevard and this is a REC for the Subject Property.

Recommendations

1. In order to confirm that the quality of the indoor air in 7287 Lowell Boulevard is acceptable, it is recommended that an indoor air test for Volatile Organic Compounds including benzene and MTBE be conducted.
2. Vapor intrusion could be a potential concern for any buildings that are going to be constructed in future development on the Site due to the hydrocarbon groundwater plume that has migrated under the Site. It is recommended that sub-slab venting systems be installed on any future Site buildings to mitigate the effects of potential vapor intrusion issues and ensure safe indoor air levels.

3. Since the source of the existing hydrocarbon plume has been removed and the site is under an active remediation program, it is recommended that the State be requested to provide copies of biannual Monitoring and Remediation Reports to the City of Westminster so that the progress and concentrations of the contaminants under the Subject Properties can be actively monitored.
4. As the buildings were constructed prior to 1989, there is a possibility that the building contains asbestos containing building materials (“ACM”). Moreover, suspect ACM were observed throughout the building. In the event that renovation or building demolition was to occur, an asbestos survey will be required to maintain compliance with State and Federal regulations. That survey should be conducted by a state licensed firm and should include an assessment of all suspect ACM including those in areas which are not normally accessible. Any material found to be ACM should be handled in accordance with applicable regulations.

10.0 LIMITATIONS

No environmental assessment or investigation is infallible. Some uncertainty will always exist concerning the presence or absence of potential Recognized Environmental Conditions at a particular property, irrespective of the rigor of the investigation. Accordingly, SEM does not warrant that Recognized Environmental Conditions, other than those identified in this report, do not exist at the subject Properties or may not exist there in the future.

The findings and opinions presented in this report are partially based on information obtained from a variety of sources which SEM has no control over, but believes are reliable. Nonetheless, SEM does not warrant the authenticity or reliability of the information from these sources.

SEM believes that it has performed the services summarized in this report in a manner consistent with the level of care and skill ordinarily exercised by members of the environmental risk assessment profession practicing at the same time and under similar conditions in the area of the project.

Conclusions regarding the condition of the site do not represent a warranty. If additional information becomes available concerning this site after the date of this report, SEM is under no obligation to revise the conclusions and recommendations of this report.

APPENDIX E

**Phase I ESA
3630 West 73rd Avenue**

Strategic Environmental

February 28, 2017



Phase I

Environmental Site Assessment Report

3630 WEST 73rd AVENUE & 7287 LOWELL BOULEVARD
WESTMINSTER, COLORADO 80030



Prepared for:

*Ms. Heather Ruddy
City of Westminster
Dept of Community Development
4800 West 92nd Avenue
Westminster, Colorado 80031*

February 28, 2017

**PHASE I
ENVIRONMENTAL SITE ASSESSMENT
COMMERCIAL PROPERTY
3630 WEST 73RD AVENUE & 7287 LOWELL BOULEVARD
WESTMINSTER, COLORADO 80030**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	4
2.0 SITE DESCRIPTION	8
3.0 PHYSICAL SETTING	9
4.0 RECORDS REVIEW	11
5.0 HISTORICAL INFORMATION REVIEW.....	16
6.0 INTERVIEWS	22
7.0 SITE RECONNAISSANCE	23
8.0 OTHER ENVIRONMENTAL CONSIDERATIONS.....	25
9.0 RECOMMENDATIONS AND CONCLUSIONS	28
10.0 LIMITATIONS.....	30

Appendices:

Appendix A:	Figures – Site and Surrounding Properties Map
Appendix B:	EDR Report
Appendix C:	Photographic Documentation
Appendix D:	Historical Topographical, Aerial, Sanborn Maps, City Directory
Appendix E:	Other Reports
Appendix F:	Resume & Certification
Appendix G:	Asbestos Surveys

EXECUTIVE SUMMARY

Strategic Environmental Management, LLC (SEM) has performed a Phase I Environmental Site Assessment (“ESA”) of the Commercial Property located at 3630 West 73rd Avenue & 7287 Lowell Boulevard, Adams County, Westminster, Colorado (the “Subject Property”). SEM was authorized to perform this work on February 16, 2017 by Ms. Heather Ruddy, Program Planner with the City of Westminster. The ESA was performed in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E 1527-13. This ESA has been performed by an environmental professional (see Declaration in Appendix F) as described in the ASTM standard and 40 C.F.R. Section 312.10.

The Subject Property is made up of two parcels of land that have been improved with two commercial structures. Figures 1 and 2 in Appendix A provide the general and relative location of the parcels. Each parcel is described separately below.

3630 West 73rd Avenue:– A single-story, 1,000 square foot slab-on-grade, cement block commercial building with a flat rubber membrane roof that was built on a 3,050 square foot lot in 1959. The structure is currently vacant but has been used for the storage of clothing and props for the adjacent theater.

7287 Lowell Boulevard:- A single-story, 3,148 square foot slab-on-grade, cement block commercial building with a flat rubber membrane roof that was built on an 11,761 square foot lot in 1959 and later renovated in 1986. The structure is a theater that is called the 73rd Avenue Playhouse & Germinal Stage and is currently closed.

The remainder of the Subject Property is made up of asphalt driveways and parking areas on the east and north sides. The legal description for each parcel is provided in Appendix A.

The legal description for the properties is provided in detail in Appendix A. The following is a summary of the findings of this ESA of the Subject Property:

SEM has performed an Environmental Site Assessment, in conformance with the Scope of Work developed in cooperation with the client and the provisions of ASTM Practice E 1527-13. This assessment has revealed no evidence of RECs in connection with the Subject Property.

SEM has performed an Environmental Site Assessment, in conformance with the Scope of Work developed in cooperation with the client and the provisions of ASTM Practice E 1527-13. This assessment has revealed no evidence of RECs in connection with the Subject Property except for the following:

- The former Pik Quik site (now the Gateway Plaza building) located at 7301 Lowell Boulevard, adjacent and just across West 73rd Avenue to the north of the Subject Property operated as a gasoline station from 1976 to 1992. Two leaking underground storage tanks were removed in August 1992. The current status of the site is “State Lead”, which means that the State of Colorado is managing the site. Records indicate that 853 cubic yards of contaminated soil was removed and that a Corrective Action

Plan for the site was approved in September 2007. Soil excavation and the installation of a soil vapor extraction system (SVE) was the accepted remedial strategy. A report entitled “Monitoring and Remediation Report” prepared by CGRS Environmental Services on October 18, 2016 indicated that the hydrocarbon plume extends across West 73rd Avenue and under the Subject Property. While the report shows that the concentrations of contaminants have declined over the years, concentrations of Benzene, Ethyl Benzene and Methyl Tert-Butyl Ether that exceed the State MCLs are in a hydrocarbon plume that has migrated under the Subject Property and beyond. As a result this site is a REC for the Subject Property.

A de minimis condition is a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. This assessment has revealed no evidence of de minimis conditions.

An historical recognized environmental condition (HREC) refers to an environmental condition which would have been considered a REC in the past, but which is no longer considered a REC based on subsequent assessment and/or remediation of any contaminants to below the most restrictive (generally residential) cleanup target concentrations or regulatory closure with no formal or implied restricted uses. The assessment has revealed no evidence of HRECs in connection with the Subject Property.

No significant data gaps were identified that would affect the ability of the environmental professional to identify RECs at the Property.

The ASTM Standard was designed solely to meet the requirements of the USEPA’s All Appropriate Inquiries (AAI) to permit the potential purchaser to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability. It is possible for there to be business environmental risks (BERs) related to ASTM scope considerations that do not meet the definition of a REC. This assessment has revealed evidence of the following BERs associated with the standard ASTM scope considerations:

- **7287 Lowell Boulevard** - asbestos bulk-sampling of surfacing materials indicate that the ceiling drywall in the dressing room of the structure tested positive for 3% chrysotile asbestos. In addition block filler ranging from 5% to 8% was identified on the exterior concrete block walls of the building and in the blue, white and black painted concrete block walls on the interior of the building.
- **3630 West 73rd Avenue** - asbestos bulk-sampling of surfacing materials indicate that the ceiling drywall on the main floor of the structure tested positive for 2% chrysotile asbestos. In addition the exterior concrete block walls have a coat of block filler that also tested positive for 2% chrysotile asbestos.

Recommendations

1. If the building at 7287 Lowell Boulevard is not going to be demolished it will be necessary to confirm that the quality of the indoor air is acceptable. Accordingly, it is recommended that an indoor air test for Volatile Organic Compounds including benzene and MTBE be conducted.
2. Vapor intrusion could be a potential concern for any buildings that are going to be constructed in future development on the Site due to the hydrocarbon groundwater plume that has migrated under the Site. It is recommended that sub-slab venting systems be installed on any future Site buildings to mitigate the effects of potential vapor intrusion issues and ensure safe indoor air levels.
3. Since the source of the existing hydrocarbon plume has been removed and the site is under an active remediation program, it is recommended that the State be requested to provide copies of biannual Monitoring and Remediation Reports to the City of Westminster so that the progress and concentrations of the contaminants under the Subject Properties can be actively monitored.
4. If the buildings are to be demolished, both buildings will require the abatement of the ACM identified in the asbestos surveys that were conducted.

1.0 INTRODUCTION

Purpose of the Assessment:

Strategic Environmental Management, LLC (SEM) has performed a Phase I Environmental Site Assessment (“ESA”) of the Commercial Property located at 3630 West 73rd Avenue & 7287 Lowell Boulevard, Adams County, Westminster, Colorado (the “Subject Property”). SEM was authorized to perform this work on February 16, 2017 by Ms. Heather Ruddy, Program Planner with the City of Westminster. The ESA was performed in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Practice E 1527-13. This ESA has been performed by an environmental professional (see Declaration in Appendix F) as described in the ASTM standard and 40 C.F.R. Section 312.10. Any exceptions to, or deletions from, this practice are described Section 1.0 of this report. The location of the Subject Property and surrounding properties is shown on Figures 1 and 2 in Appendix A.

The purpose of the ESA is to identify Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Conditions (CRECs) and Historical Recognized Environmental Conditions (HRECs) and de minimis conditions as defined by ASTM E1527-13.

The term REC is defined as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

The term CREC is defined as “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.”

The term HREC is defined as “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.”

The term de minimis condition is defined as “a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not RECs nor CRECs.”

The term Business Environmental Risk (BER) is used to describe environmental risks from ASTM scope considerations that do not rise to the level of a REC, but which SEM is of the opinion should be brought to the attention of Client, and environmental risks associated ASTM non-scope considerations addressed during this assessment.

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required.

Special Terms and Reliance:

It is SEM's understanding that this report is to be used and distributed exclusively for purposes connected with a financial transaction involving the Subject Property. This report of findings was prepared for the exclusive use of the City of Westminster and associates. The contents of this report may not be copied, provided or otherwise communicated to any party other than those associated with the City of Westminster without the express written consent of SEM.

Significant Assumptions:

The following assumptions are made by SEM in this report. SEM relied on information derived from secondary sources including governmental agencies, the Client (User), designated representatives of the Client (User), property contact, property owner, property owner representatives, computer databases, and personal interviews. Except as set forth in this report, SEM has made no independent investigation as to the accuracy and completeness of the information derived from secondary sources including government agencies, the Client, designated representatives of the Client, property contact, property owner, property owner representatives, computer databases, or personal interviews and has assumed that such information is accurate and complete. SEM assumes information provided by or obtained from governmental agencies including information obtained from government websites is accurate and complete. Groundwater flow and depth to groundwater, unless otherwise specified by on-property well data, are assumed based on contours depicted on the United States Geological Survey topographic maps. SEM assumes the property has been correctly and accurately identified by the Client (User), designated representative of the Client (User), property contact, property owner, and property owner's representatives. SEM assumes that the Client (User), Client representatives, Client Legal Counsel, designated representatives of the Client, Key Site Manager, property contact, property owner, property owner representatives, and property brokers, used good faith in answering questions and in obtaining information for the subject property as defined in 10.8 of the ASTM E 1527-13 practice. This would also include obtaining those helpful documents from previous owners, operators, tenants, brokers, financial institutions etc. SEM also assumes the Client will designate appropriate and knowledgeable people for performance of the Phase I Environmental Assessment including Key Site Managers.

Limiting Conditions and Exceptions to the ASTM Standard:

Review of historical research information was limited to available intervals. De minimus conditions are not listed in the Recommendations section of the report. The report format does not exactly follow the ASTM recommended format in that it provides a review of ASTM Non Scope Considerations including, asbestos, lead-based paint, radon, wetlands and mold.

Scope of Work:

The scope-of-work for this investigation was consistent with the American Society for Testing and Materials (ASTM) Practice E 1527-13 and was designed to meet the objective above by performing the following tasks:

- Environmental Records Review;
- Site Reconnaissance; and
- Interviews.

Each of these tasks is more specifically described in greater detail below.

Task 1: Records Review

SEM examined reasonably available records in an effort to evaluate current and historic activities that suggest the potential for recognized environmental conditions at the site. The specific items implemented under this task were as follows:

- Review databases of federal, state and/or local agencies to identify past and current activities at the site, to the extent possible, with respect to the generation, treatment, storage, disposal and/or release of hazardous substances and/or petroleum products;
- Review and summarize of at least one of the following readily available sources: historic topographic maps, aerial photographs, fire insurance maps, city directories and/or other historic data of the site to identify previous uses; and
- Review of available federal, state and/or local publications regarding hydrogeology.

Task 2: Site Reconnaissance

SEM conducted a site reconnaissance of the property in an effort to identify recognized environmental conditions as indicated by:

- Stressed vegetation;
- Stained or disturbed soils and/or pavement;
- Sheen or iridescence on surface water;
- Unusual odors;
- Unusual corrosion;
- Drums and containers;
- Storage tanks;
- Pits, ponds, lagoons, pools, drains and sumps;
- Landfilling;
- Spills or releases;
- Storage, treatment and/or disposal of hazardous substances and/or petroleum products;
- Wastes generated at the subject site and associated waste disposal practices;
- Oil, gas or water wells;

- Heating system(s) and cesspools;
- Hydraulic lifts;
- Parts washers; and
- PCB-containing devices.

SEM performed a visual reconnaissance of adjacent properties and observed for similar obvious concerns referenced above. Additionally, the general surrounding area land usage was observed to the extent identified while accessing the Subject Property.

While an asbestos and lead based paint survey that includes sampling and analysis of suspect asbestos-containing materials is beyond the scope of a standard Phase I ESA the owner had commissioned an asbestos survey so that the structures could be demolished. Copies of the survey reports are included in Appendix G.

Task 3: Interviews

SEM contacted current owners and readily available knowledgeable persons in an effort to obtain information indicating recognized environmental conditions in connection with past operations at the Subject Property.

Appendices

All of the Appendices to this report are incorporated herein and shall be considered a part of this report.

2.0 SITE DESCRIPTION

Subject Property:

The Subject Property is made up of two parcels of land that have been improved with two commercial structures. Figures 1 and 2 in Appendix A provide the general and relative location of the parcels. Each parcel is described separately below.

3630 West 73rd Avenue:– A single-story, 1,000 square foot slab-on-grade, cement block commercial building with a flat rubber membrane roof that was built on a 3,050 square foot lot in 1959. The structure is currently vacant but has been used for the storage of clothing and props for the adjacent theater.

7287 Lowell Boulevard:- A single-story, 3,148 square foot slab-on-grade, cement block commercial building with a flat rubber membrane roof that was built on an 11,761 square foot lot in 1959 and later renovated in 1986. The structure is a theater that is called the 73rd Avenue Playhouse & Germinal Stage and is currently closed.

The remainder of the Subject Property is made up of asphalt driveways and parking areas on the east and north sides.

Adjoining and Surrounding Properties (to the extent identified):

North – The Subject Property is bounded to the north by West 73rd Avenue followed by a commercial building occupied by the Gateway Plaza to the north east and an office building to the north west. See ESA Photos #17 and #18.

South – A vacant lot borders the Subject Property to the south followed by commercial building. No apparent RECs were observed to the south of the Subject Property. See ESA Photo #20.

East – The Subject Property is bounded to the east by Lowell Boulevard followed the Hidden Lakes High School property. See ESA Photo # 21.

West – The Subject Property is bordered to the west by an alleyway followed by a residential structure. No apparent RECs were observed directly to the west of the Subject Property. See ESA Photo # 19.

3.0 PHYSICAL SETTING

General Topographic Setting:

The elevation of the Subject Property is approximately 5,311 feet above mean sea level and the surface is relatively flat. The topography described in the EDR report indicates that, in general, the site is relatively flat with the gradient in the general area appearing to slope from the west to east and north to south. Storm water flow is routed via sheet flow over the hardscapes across the property to the south and then south east into the street gutters on the west side of Lowell Boulevard.

Surface Water:

The nearest surface water in the vicinity of the Subject Property is Little Dry Creek located roughly a half mile to the south. No surface water is located on the Subject Property.

Soils:

The overall geology for the Subject Property as defined by P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994). Based on this information the underlying geology consists of the following:

Era: Mesozoic

System: Cretaceous

Series: Navarro Group

Code: uK4 (decoded above as Era, System & Series)

Cenozoic Category: Stratified Sequence

Information for soil in this area was obtained from the US Department of Agriculture. The dominant soil type in the area is the Platner loam. This material consists of a well-drained silty clay/loam mixture with. The USGS indicated that the local geology is mapped as Quaternary (Pleistocene) loess deposits overlying Palocene to bedrock in the Upper Cretaceous Denver Formation. Based on an engineering report prepared on October 18, 2016 by CGRS Environmental Services on the property to the north of the Subject Property, the depth to the water table was determined to range from 7 to 12 feet below ground surface. A copy of the engineering report can be found in Appendix E.

Geology /Hydrology:

According to the USEPA Ground Water Handbook, Vol. 1 Ground Water and Contamination, September 1990, the water table typically conforms to surface topography. This means that the direction of flow for shallow ground water is generally from higher elevations to lower elevations. Localized flow direction, however, may vary as a result of tide, rainfall, development, geologic

characteristics, nearby surface water bodies, underground utilities such as storm drains, septic systems and sewers, or other influences such as the presence of high volume wells.

In addition, engineering report prepared on October 18, 2016 by CGRS Environmental Services on the property to the north of the Subject Property indicates that the groundwater flow direction is to the south.

4.0 RECORD REVIEW

Environmental Records Review:

Environmental records from the State of Colorado and the United States Environmental Protection Agency (EPA) were obtained for SEM by Environmental Data Resources (EDR); the state and federal databases and minimum search radii requirements of American Society for Testing and Materials (ASTM) Practice E 1527-13 were satisfied. While the EDR report details are in Appendix B for a copy of the following standard environmental records sources were reviewed for the minimum search distance identified:

STANDARD ENVIRONMENTAL RECORD SOURCE	SEARCH DISTANCE	NO. OF SITES
Federal NPL site list	1.0 mile	0
Federal Delisted NPL site list	0.5 mile	0
Federal CERCLIS - SEMS list	0.5 mile	0
Federal CERCLIS NFRAP site list	0.5 mile	0
Federal RCRA CORRACTS facility list	1.0 mile	0
Federal RCRA non-CORRACTS TSD facilities list	0.5 mile	0
Federal RCRA generators list	Subject/adjoining	1
Federal institutional control/engineering control registries	Subject	0
Federal ERNS list	Subject	0
State and tribal NPL equivalent	1.0 mile	0
State and tribal CERCLIS equivalent	0.5 mile	0
State and tribal landfill and/or solid waste disposal site lists	0.5 mile	0
State and tribal leaking storage tank lists	0.5 mile	15
State and local registered storage tank lists	Subject/adjoining	3
State and tribal Historic Auto Stations, MGPs and Dry Cleaners, Asbestos	Subject	0
State and tribal voluntary cleanup sites	0.5 mile	1
State and tribal Brownfield sites	0.5 mile	2

Subject Property:

The subject site located at 7287 Lowell Boulevard was listed in the RCRA-NonGen database searched in this ESA investigation.

The RCRA-NonGen: Resource Conservation and Recovery Act (RCRA) - Non Generators list is EPA's comprehensive information system, providing access to a database that includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. The Subject Property was once operated as the City of Westminster Vehicle Service Center and was registered as a RCRA-non generator of hazardous materials and no violations were reported. In addition, a review of the records at the Colorado Department of Public Health and Environment was conducted. The files indicated that the site was no longer generating hazardous waste and there was a record of a one-time disposal of hazardous waste in May 2007. A copy of the records is in Appendix E. As a result this is not considered to be a REC.

Surrounding Properties:

Regulatory database information for Federal and State facility listings, as well as reasonably ascertainable and useful local government information, was requested from Environmental Data Resources (EDR) for the Subject Property and facilities within the search radii suggested by the ASTM standard practice.

Colorado Asbestos Database

The property located adjacent and to the south of the Subject Property and identified as 7283 Lowell Boulevard was listed in the ASBESTOS database searched in the EDR report. The building on the site was demolished in 2015 American Demolition. Before demolition can be approved by the CDPHE, an asbestos survey must be conducted and all identified asbestos containing materials must be abated. The permit is recorded by the CDPHE.

Resource Conservation and Recovery Information System – Conditionally Exempt Small Quantity Generator

The Resource Conservation and Recovery Information System - Small Quantity Generator (RCRIS-SQG) lists sites that generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. Small Quantity Generators (SQG) generates less than 100 Kg or less than 1 Kg of acutely hazardous waste per month. A review of the RCRIS-SQG list provided by EDR dated September 12, 2016, indicates that there are three sites, one higher in elevation and two lower in elevation than the Subject Property, within 1/4 mile of the Subject Property.

Higher in Elevation:

1. The US West Communications site is shown on the EDR report map as being approximately 1,073 feet north of the Subject Property at 7431 Lowell Boulevard. However a review of the record indicates that this site has no record of violations and is over 1,000 feet away. Therefore this is considered not to be a REC and not of concern at the present.

Lower in Elevation:

2. The EDR report indicates that the City of Westminster Development site located at 7233 Lowell Boulevard, approximately 231 feet south of the Subject Property is in the database. However a review of the site indicates that this site does not physically exist. Since it has no record of violations this is considered not to be a REC and not of concern at the present.
3. The Lowell Auto Body site located at 7111 Lowell Boulevard, approximately 1,050 feet south of the Subject Property. While the site has had some violations recorded, this property is located down gradient to the Subject Property. Therefore this is considered not to be a REC and not of concern at the present time.

Leaking Underground Storage Tanks

While ASTM only requires reviewing the registered storage tank database for the Subject Property and adjoining properties, the database search provided by EDR looked at a 0.5 mile radius to cover mapping errors. The list of Leaking Underground Storage Tank Incident Reports (LUST) contains an inventory of reported leaking underground storage tank incidents. A review of the list provided by EDR dated September 22, 2016 indicates that there are 15 sites within 1/2 mile of the Subject Property.

The closest site is the former Pik Quik site (now the Gateway Plaza building) located at 7301 Lowell Boulevard, adjacent and just across West 73rd Avenue to the north of the Subject Property is a location of a former gasoline station. A review of the State of Colorado files at the Division of Oil and Public Safety (OPS) offices indicated that there was a gas station that operated at the site from 1976 to 1992. It has not been operated as a gasoline station since that time. Two leaking underground storage tanks were removed in August 1992. A report entitled “Initial Site Characterization Report” that summarizes the history and condition of the site as of March 27, 1997 was prepared by Walsh / McGlothlin & Associates is provided in Appendix E. The current status of the site is “State Lead”, which means that the State of Colorado is managing the site. Records indicate that 853 cubic yards of contaminated soil was removed and that a Corrective Action Plan for the site was approved in September 2007. Soil excavation and the installation of a soil vapor extraction system (SVE) was the accepted remedial strategy. A report entitled “Monitoring and Remediation Report” prepared by CGRS Environmental Services on October 18, 2016 indicated that the hydrocarbon plume extends across West 73rd Avenue and under the Subject Property. A copy of this report is provided in Appendix E. While the report shows that the

concentrations of contaminants have declined over the years, concentrations of Benzene, Ethyl Benzene and Methyl Tert-Butyl Ether that exceed the State MCLs are in a hydrocarbon plume that has migrated under the Subject Property and beyond. Monitoring continues. As a result this site is a REC for the Subject Property.

The next closest up gradient site is the Westminster Lowell C site. The EDR report map indicates that the site is approximately 1,073 feet north of the Subject Property at 7431 Lowell Boulevard. The Colorado Storage Tank Information System (COSTIS) indicated that this site has had reported releases in 1994 and 1999 and both have been cleaned up and the State has issued two No Further Action Letters and the site is “Closed”. While there is still a 3,000 gallon diesel tank operating at the site, there are no current violations and as a result is not considered to be a REC.

The closest down gradient site is the 7-Eleven site located 7201 Lowell Boulevard, 446 feet south of the Subject Property. Due to the close proximity, the records at OPS were reviewed and as shown in the report in Appendix E, the facility experienced a replacement of the dispenser spill buckets in February 2012. Once they were replaced, a NFA was issued in March 2012. As a result, this site is not a REC.

Of the remaining 12 LUST sites identified, all are either cross or down gradient and too far away to have an impact on the Subject Property. Accordingly, these sites are not considered RECs.

Above Ground and Underground Storage Tanks

A review of the Underground Storage Tank (UST) and Above Ground Tank (AST) databases provided by EDR and dated December 9, 2016 contains an inventory of 12 registered above and underground storage tanks. The closest site that has a tank that is use is the 7-Eleven Gas Station that is located on the corner of West 72nd Avenue and Lowell Boulevard. Since it is located down gradient to the Subject Property it would have no impact on the Subject Property in the event of a release. The two up gradient tanks have discussed above at Pik Kwik and Westminster Lowell C have been discussed above.

The remaining nine sites within 1/4 mile of the Subject Property are located down gradient or cross gradient of the Subject Property and as a result are not considered to be RECs.

Voluntary Cleanup & Brownfield Properties

The Voluntary Cleanup & Brownfield Properties records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Public Health and Environment’s Waste Sites & Facilities database. A review of the VCUP and Brownfields list, as provided by EDR, has revealed that there are three sites within approximately 0.5 miles of the target property. A review of the EDR report indicates that the sites are either down gradient, cross gradient or too far away to have an impact on the Subject Property.

Additional Environmental Databases

Nine Resource Conservation and Recovery Act non-generator (RCRA-NonGen) sites were identified in the Other Ascertainable Records reviewed. RCRA-NonGen sites are facilities that no longer generate hazardous wastes. SEM reviewed the identified RCRA-NonGen sites and determined the sites were not located adjacent to the Subject Property and are either down or cross gradient; therefore, the RCRA non-generator sites are not considered to be RECs in connection with the Subject Property.

Historical Dry Cleaners

A review of Historical Dry Cleaner database provided by EDR indicates that there is one site within 1/4 mile of the Subject Property. The site was adjacent to the Subject Property at 3621 West 73rd Avenue. A review of the EDR report indicates that it was a steam cleaning operation that was in business in 1999 and should not be an issue for the Subject Property due to the type of operation.

Unplottable Sites

EDR provided a list of “unplottable” or orphan sites which may or may not be located within the minimum search distances. SEM reviewed the list of unplottable sites. Based on locations, compliance status and/or the nature of the listing, none of these sites is believed to be an REC for the Subject Property.

5.0 HISTORICAL INFORMATION REVIEW

Historical information identifying the past site use was obtained from a variety of sources as detailed in Appendix D of this report and included: Aerial Photographs, Topographic Maps, Sanborn Fire Insurance Maps and City Directories. The following historical use information was reviewed:

Historical Aerial Photographs

SEM reviewed historical aerial maps of the Subject Property and surrounding properties from the years 1937, 1950, 1954, 1963, 1970, 1979, 1983, 1988, 1991, 1994, 1999, 2005, 2006, 2009 and 2011. A copy of each historical aerial map is provided in Appendix D. The results of the historic aerial photo review are as follows:

- 1937 - The Subject Property appears to be a vacant lot with several footpaths bisecting the site. West 73rd Avenue and Lowell Boulevard are visible and it appears that there is residential development to the north, south and west. The property to the east, across Lowell Boulevard, is undeveloped.
- 1950 – The Subject Property appears to have two structures, one on the north and one on the south side of the site. Several buildings have been constructed to the south and east. The property to the east, across Lowell Boulevard, has been developed with what appears to be a school building and a running track. The property to the west also appears to be developed with what appears to be a residential structure.
- 1954 – No significant changes to the Subject Property or adjacent properties from the 1950 photograph except that the property to the north has been developed.
- 2005 to 2006 – No changes to the Subject Property. The property to the north has been cleared and is vacant.
- 2009 – No changes to the Subject Property. The property to the north has been developed with the current structure.
- 2011 – The Subject Property and surrounding properties appear to be as they are today.

Historical Topographic Map

SEM reviewed a historical topographic map of the Subject Property and surrounding properties for 2013. Copies of the topographic maps are provided in Appendix D; however the results of the historic topographic map review are relatively unremarkable. No special hazards, such as sinkholes, oil and/or gas wells, gravel pits, landfills, pipelines, mineral production, open pits, stockpiled soils or railroad tracks and spurs, were indicated on the Subject Property or an adjoining property.

Historical Sanborn Maps

A historical EDR report certifies that the complete holdings of the Sanborn Library collection have been searched based on the target property information and fire insurance maps covering the target property were not found. Appendix D documents the attempt.

City Directories

City directories have been published for cities and towns across the U.S. since the 1700s. Originally a list of residents, the city directory developed into a sophisticated tool for locating individuals and businesses in a particular urban or suburban area. Twentieth century directories are generally divided into three sections: a business index, a list of resident names and addresses, and a street index. While city directory coverage is comprehensive for major cities, it may be spotty for rural areas and small towns.

SEM reviewed city directories for the Subject Property and adjoining properties at the Denver Public Library. SEM utilized the Bresser's City Directory from 1965 through 1975 and the Coles Directory from 1980 through to 2010. Copies of the directories are in Appendix D.

Date: 1965

Subject Property: 3630 W. 73rd Avenue: Westminster Econo Wash
7287 Lowell Boulevard: Bromans Econo

North: 7301 Lowell Boulevard - Westminster Standard

West: 3660 W. 73rd Avenue – Residential

East: 7300 Lowell Boulevard – Westminster High School

South: (Penguin Bldg) - 7267 Lowell Boulevard – Library & Offices

Date: 1970

North: 7301 Lowell Boulevard - Adas Thrift Store

West: 3660 W. 73rd Avenue – Residential

East: 7300 Lowell Boulevard – Westminster High School

South: (Penguin Bldg) - 7267 Lowell Boulevard – Library & Offices

Date: 1975

Subject Property: 3630 W. 73rd Avenue: Westminster Chimes
7287 Lowell Boulevard: A G Motors

North: 7301 Lowell Boulevard - Adas Thrift Store

West: 3660 W. 73rd Avenue – Not Listed

East: 7300 Lowell Boulevard – Westminster High School

South: (Penguin Bldg) - 7267 Lowell Boulevard – Library & Offices

Date: 1980

Subject Property: 3630 W. 73rd Avenue: Westminster Chimes
7287 Lowell Boulevard: Ideal Auto Sales

North: 7301 Lowell Boulevard - Pik Quik

West: 3660 W. 73rd Avenue – Not Listed

East: 7300 Lowell Boulevard – Career Enrichment Park

South: (Penguin Bldg) - 7267 Lowell Boulevard – Mary Anne’s Catering & Residential

Date: 1985

Subject Property: 3630 W. 73rd Avenue: Westminster Auto Wash
7287 Lowell Boulevard: Front Range Automotive

North: 7301 Lowell Boulevard - Pik Quik

West: 3660 W. 73rd Avenue – Residential

East: 7300 Lowell Boulevard – Career Enrichment Park

South: (Penguin Bldg) - 7267 Lowell Boulevard – Mary Anne’s Catering & Residential

Date: 1990

Subject Property: 3630 W. 73rd Avenue: Not Listed
7287 Lowell Boulevard: Vehicle Service

North: 7301 Lowell Boulevard - Pik Quik

West: 3660 W. 73rd Avenue – Residential

East: 7300 Lowell Boulevard – Career Enrichment Park

South: (Penguin Bldg) - 7267 Lowell Boulevard – Mary Anne’s Catering & Residential

Date: 1995

Subject Property: 3630 W. 73rd Avenue: Not Listed
7287 Lowell Boulevard: Vehicle Service & Denver Business Machines

North: 7301 Lowell Boulevard - Not Listed

West: 3660 W. 73rd Avenue – Mile High Valet Service

East: 7300 Lowell Boulevard – Career Enrichment Park

South: (Penguin Bldg) - 7267 Lowell Boulevard – Mary Anne’s Catering & & All Family Ceramic

Date: 2000

Subject Property: 3630 W. 73rd Avenue: Thrifty Car Rental
7287 Lowell Boulevard: Roofers Inc. & Vehicle Service

North: 7301 Lowell Boulevard - The New Club
West: 3660 W. 73rd Avenue – A&R Plumbing
East: 7300 Lowell Boulevard – Career Enrichment Park – Adams Public Schools
South: (Penguin Bldg) - 7267 Lowell Boulevard – Residential

Date: 2005

Subject Property: 3630 W. 73rd Avenue: No Listing
7287 Lowell Boulevard: Roofers Inc. & Vehicle Service

North: 7301 Lowell Boulevard - No Listing
West: 3660 W. 73rd Avenue – A&R Plumbing
East: 7300 Lowell Boulevard – Career Enrichment Park
South: (Penguin Bldg) - 7267 Lowell Boulevard – Residential

Date: 2010 to 2012

Subject Property: 3630 W. 73rd Avenue: No Listing
7287 Lowell Boulevard: No Listing

North: 7301 Lowell Boulevard - No Listing
West: 3660 W. 73rd Avenue – A&R Plumbing
East: 7300 Lowell Boulevard – Hidden Lake High School
South: (Penguin Bldg) - 7267 Lowell Boulevard – Kun Lun Pai Marshall Arts

Prior Use Summary

The Subject Property was first developed as an auto repair shop and car wash until the use changed to auto sales car rental and a storage warehouse and theater. Surrounding properties were used for retail stores, plumbing shop, thrift shop, catering, high school and gasoline station.

Colorado Department of Public Health and Environment

SEM contacted the Health Department regarding any and all records on the Subject Property and surrounding properties, including citizen complaints and any investigations on the use, handling, release or discharge of solid or liquid wastes, hazardous materials, or any other circumstance of environmental concern at the Property. According to Ms. Pearl Campos, CDPHE Records Administrator (303-692-3331) there were records regarding the Subject Property and the report can be found in Appendix E.

Colorado Department of Public Health and Environment – Division of Oil and Public Safety

A review of the records at the Colorado State Department of Labor and Employment - Division of Oil and Public Safety (OPS) – Colorado Storage Tank Information System provided details regarding underground storage tanks and leaking underground storage tanks (LUSTS) on and near the site and surrounding areas. Details concerning the remediation and on-going site monitoring at nearby sites have also been provided in Appendix E.

Adams County Property Reports

SEM accessed the website (<http://www.gis.co.adams.co.us>) for the Building Department records from the Adams County. As shown in Appendix E, records indicated that the property located at 3630 West 73rd Avenue consisted of a 1,000 square foot building that was built on a 3,050 square foot lot in 1959. The property located at 7287 Lowell Boulevard was a single-story, 3,148 square foot building that was built on an 11,761 square foot lot in 1959. Copies of the records can be found in Appendix E.

Fire Department Records

As indicated in the letter dated February 15, 2017 in Appendix E, SEM contacted Ms. Kelly Ehredt, the administrative person responsible for conducting the search of department records at the Westminster Fire Department to determine if any hazardous materials, incidents or spills had occurred at the Subject Property. On February 21, 2017 Ms. Ehredt sent a response that indicated that while three USTs had been removed there were no violations or outstanding permits since the last inspection that was conducted in July 2016.

Environmental Liens and Activity and Usage Limitations

This section is to describe tasks to be performed by the User that will help identify the possibility of recognized environmental conditions, environmental liens and AULs in connection with the Subject Property as required by the ASTM standard. These tasks do not require the technical expertise of an environmental professional. Any and all information that may be material to identifying recognized environmental conditions must be provided by the User if available. Per the ASTM standard, the environmental professional shall note in the report whether or not the User has reported to the environmental professional information pursuant to Section 6 of the ASTM standard. The User did not request SEM to coordinate with a title company or title professional to undertake a review of Recorded Land Title records and judicial records for environmental liens or AULs. Therefore, no information was provided for environmental liens and AULs which is the responsibility of the User. Per the ASTM standard this is considered a data gap.

Title and Judicial Records

Per ASTM E 1527-13 Section 6.2, the User is required to provide and/or report to the environmental professional any environmental liens or activity and use limitations (AULs) so identified for the Subject Property. The environmental professional per the ASTM practice is not responsible to undertake a review of recorded land title records and judicial records for environmental liens or activity and use limitations. The User did not request SEM to coordinate with a title company or title professional to undertake a review of Recorded Land Title records and judicial records. Therefore, no title records were searched and no information was provided for environmental liens and AULs which is the responsibility of the User. Per the ASTM standard this is considered a data gap.

FEMA - Flood Insurance Rate Map

FEMA's flood insurance maps were accessed and it was determined and shown in Appendix E that the Subject Property appears not to be in the 100 or 500 year flood plain.

Previous Environmental Reports

A previous environmental assessment of the Subject Property was conducted by Strategic Environmental Management, LLC on May 16, 2012. The report entitled “Phase I Environmental Assessment West 73rd Avenue & Lowell Boulevard, Westminster, Colorado 80030”. The report identified the former Pik Quik site as a REC. The site was a former gasoline service station located just north of the Subject Property from 1976 to 1992. Reports indicated that a hydrocarbon plume has migrated under the Subject Property. As a result, the potential for indoor air quality issues exists in the Subject Property building located at 7287 Lowell Boulevard. It was then recommended that in order to confirm that the quality of the indoor air in 7287 Lowell Boulevard is acceptable; it is recommended that an indoor air test for Volatile Organic Compounds including benzene and MTBE be conducted. In addition, if a renovation or building demolition was to occur, an asbestos survey will be required to maintain compliance with State and Federal regulations.

A copy of the Phase I ESA can be found in Appendix E.

Data Gaps

After reviewing the above sources of information regarding the historical information on the Subject Property, SEM determined that there were no data gaps that would affect the ability of the environmental professional involved on this project to identify RECs in connection with the Subject Property.

6.0 INTERVIEWS AND SPECIALIZED KNOWLEDGE

Subject Property Owner Interview

An interview with Ms. Boni Leuenberger, who is a representative for the City of Westminster, the owner of the Subject Property, was conducted on February 14, 2017. According to Ms. Leuenberger who has been associated with the property for over 7 years, the building, formerly a city service garage and then a theater for the South Westminster Arts Group (SWAG), a group that has been serving the community for the last seven years with a mission to create and grow arts opportunities. It was scheduled for demolition in 2015 when it was decided to delay for reasons unknown. She was not aware of any other environmental issues with the property and was not aware of any environmental violations or liens on the property and indicated that she had no knowledge of any storage, handling or dumping of hazardous materials on the Subject Property.

Specialized Knowledge and Reason for Completing Phase I

Pursuant to ASTM E 1527-13, SEM asked a representative of the user of the report, Ms. Heather Ruddy of the City of Westminster, the owner of the Subject Property, if she had any specialized knowledge of environmental conditions associated with the Subject Property. SEM requested that she provide a completed environmental questionnaire that is included in Appendix E.

The purpose of this ESA was to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E-1527-13) in connection with the Subject Property. This ESA was also performed to the permit new owner to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) liability (hereinafter, the "landowner liability protections," or "Lips"). ASTM Standard E-1527-13 constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35) (B). SEM understands that the findings of this study will be used to evaluate a pending financial transaction in connection with the Subject Property.

7.0 SITE RECONNAISSANCE

SEM conducted a site visit of the Subject Property and observed the condition of the property on February 14, 2017. A depiction of the Subject Property and surrounding area configuration is provided in the Figures 1 and 2 in Appendix A. Weather conditions at the time of the site reconnaissance were sunny and 52 degrees Fahrenheit. The visual reconnaissance consisted of observing the boundaries of the property and systematically traversing the site to provide an overlapping field of view, wherever possible. The periphery of the on-site structures was observed along with interior accessible common areas, storage and maintenance areas. Photographs of pertinent site features identified during the site reconnaissance are included in Appendix C.

During the property reconnaissance, SEM looked for the following items, which could indicate the potential presence of RECs on the Subject Property.

- **Hazardous Substances and Petroleum Products in Connection with Identified Uses**

No significant use or generation of hazardous substances is known to occur at the Subject Property. No manufacturing, fabrication or assembly operations are conducted on the property.

- **Odors**

No strong, pungent or noxious odors were noted or reported that would indicate the potential for RECs at the Subject Property were noted emanating from either the Subject Property or an adjacent property.

- **Pools of Liquids**

No pools containing liquids likely to be hazardous substances or petroleum products were observed or reported on or adjacent to the Subject Property.

- **Drums & Hazardous Substance, Petroleum Products and Unidentified Substance Containers**

No drums containing liquids likely to be hazardous substances or petroleum products were observed or reported on or adjacent to the Subject Property.

- **Heating and Cooling Source**

The office area is heated by ceiling-mounted gas-fired heaters.

- **Interior Stains or Corrosion**

No evidence of stains or corrosion on the floors, walls or ceilings at the Subject Property were noted or reported.

- **Drains and Sumps**

No evidence of sumps or drains were observed.

- **Pits, Ponds or Lagoons**

No ponds or lagoons associated with hazardous substance, petroleum products or industrial activities at the Subject Property.

- **Stained Soil & Pavement**

No significant stained soil or pavement was observed or reported at the Subject Property.

- **Stressed Vegetation**

No areas of stressed vegetation were observed or reported on or adjacent to the Subject Property.

- **Solid Waste**

SEM did not observe any areas that appeared to have been filled or graded that would suggest the presence of waste including, but not limited to, construction debris, demolition debris or other solid waste. No improperly stored solid waste was noted.

- **Waste Water**

No operations, likely to require a significant waste water discharge, were noted or reported. Waters that enter the sanitary system go to the city's treatment plant.

- **Wells**

A total of 6 groundwater monitoring wells were observed on the Subject Property. Another 8 monitoring wells were located on the south and west of the Subject Property. See ESA Photos #1 and 5. No drinking water wells, dry wells, irrigation wells, injection wells, abandoned wells or other wells were observed or reported.

- **Septic Systems**

SEM did not observe any on-site septic systems or cesspools.

8.0 OTHER ENVIRONMENTAL CONSIDERATIONS

Asbestos-Containing Materials

Asbestos is a mineral fiber that has been used commonly in a variety of building construction materials for insulation and as a fire-retardant. Because of its fiber strength and heat resistant properties, asbestos was used in roofing shingles, ceiling and floor tiles, insulation products, asbestos cement products, and a host of other building materials. ACM is often classified as either friable or non-friable. Friable ACM, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM can be crumbled, pulverized, or reduced to powder during machining, cutting, drilling, or other abrasive procedures. When asbestos-containing materials are damaged or disturbed by repair, remodeling or demolition activities, microscopic fibers become airborne and can be inhaled into the lungs, where they can cause significant health problems. Friable ACM is more likely to release fibers when disturbed or damaged than non-friable ACM.

Based on the scope of work requested by the City of Westminster, an asbestos survey was conducted at the Subject Property so that the buildings could be demolished. An Asbestos Survey Report was completed on February 28, 2017 and a summary of the findings is included in Appendix G.

7287 Lowell Boulevard

Mr. Lee performed asbestos bulk-sampling of surfacing materials in a total of thirty-six (36) locations in the building where demolition activities are planned. Material samples taken included drywall in a total of seventeen (17) locations, block filler a total of seventeen (17) locations, ceiling tile in one (1) location and floor tile in one (1) location. All thirty-six (36) bulk samples were analyzed by Reservoirs Environmental, Inc. (NVLAP #101896).

The laboratory results of the potential ACM sampled at the Subject Property indicate that one (1) sample of ceiling drywall in the dressing room of the structure tested positive for 3% chrysotile asbestos. In addition block filler ranging from 5% to 8% was identified on the exterior concrete block walls of the building and in the blue, white and black painted concrete block walls on the interior of the building.

3630 West 73rd Avenue

Mr. Lee performed asbestos bulk-sampling of surfacing materials in a total of seventeen (17) locations in the building where demolition activities are planned. Material samples taken included ceiling tile in a total of four (4) locations, ceiling wallboard/texture in three (3) location, wall board in three (3) locations, block filler in six (6) locations and ceiling insulation in one (1) location. All seventeen (17) bulk samples were analyzed by Reservoirs Environmental, Inc. (NVLAP #101896).

The laboratory results of the potential ACM sampled at the Subject Property indicate that one sample of ceiling drywall of the structure and the drywall in the back room tested positive for 2% chrysotile asbestos. In addition the exterior concrete block walls have a coat of block filler that also tested positive for 2% chrysotile asbestos.

As a result, asbestos is considered a BER for the Subject Property

Lead-Based Paint

Many buildings constructed before 1978 have paint that contains lead. Lead from paint, chips and dust can pose health hazards, especially in young children. The painted surfaces inside the restaurant's main floor were in good condition with some peeling and cracking observed on the second floor office and storage areas. Due to the construction date of the original building in 1970, it is likely that paint observed may contain lead. No sampling of potential lead-based paint was performed as part of this Phase I ESA.

In the event that renovation activities are planned and the final use will be residential, the areas to be renovated should be tested for the presence of lead-based paint. If lead-based paint is detected, EPA has issued a rule requiring the use of lead-safe practices and other actions aimed at preventing lead poisoning. Under the rule, beginning April 22, 2010, contractors performing renovation, repair and painting projects that disturb lead-based paint in residential homes, child care facilities, and schools built before 1978 must be certified by EPA and that they use certified renovators who are trained by EPA-approved training providers to follow lead-safe work practices to prevent lead contamination.

Radon

Radon is a naturally occurring colorless, odorless gas that is a by-product of the decay of radioactive materials potentially present in bedrock and soil. The USEPA guidance action level for annual residential exposure to radon is 4.0 picoCuries per liter of air (pCi/L). The guidance action level is not a regulatory requirement for private owners of commercial real estate, but is commonly used for comparison purposes to suggest whether further action at a building may be prudent.

A preliminary evaluation of the potential for concerns relating to radon was made using the USEPA Map of Radon Zones. The USEPA Map is based solely on averages in order to identify areas in the country with the potential for elevated indoor radon levels. Elevated levels of radon have been found in all radon zones. A finding that a property is located in a zone with predicted levels of radon below the USEPA action level does not mean a specific property does not have elevated levels of radon. The evaluation considered the location of the Subject Property, previous test results, if available, type of construction and usage of the Subject Property.

The Subject Property is located in Zone 1, counties which have a predicted average indoor radon screening level greater than the USEPA action level of 4 pCi/L. While the Subject Property is located in an area prone to elevated radon levels, based on the non-residential usage of the

property, slab-on-grade construction and the presence of commercial grade mechanical equipment, radon is not considered to pose a significant concern at the Subject Property.

Wetlands

Wetlands are those areas that are inundated with surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and ponds.

National Wetlands Inventory's digital wetlands mapper tool: <http://www.fws.gov/nwi/> was utilized to determine if site conditions or other documents indicate there may be a wetland. However, as indicated on the Wetland Map in Appendix E, no wetlands were located on the Subject Property.

Microbial Contamination – Mold

The site reconnaissance included a visual inspection for indications of water intrusions or the presence of active mold growth on readily accessible interior and exterior surfaces. Confirmation sampling is not included in the scope of work for the Phase I ESA. Readily accessible areas of the building were observed for visual or olfactory indications of mold, and for areas of water damage. SEM looked for evidence of the presence of conspicuous mold or observed water intrusion or accumulation during completion of site reconnaissance. SEM did not note conspicuous visual or olfactory indications of the presence of mold.

Vapor Intrusion

In evaluating the potential for a vapor encroachment condition (VEC), SEM attempted to determine if there was information indicating that chemicals of concern were located within the critical distance, defined as the lineal distance between the nearest edge of the contaminated plume and the nearest target property boundary. Based on ASTM E2600-10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, the critical distance is equal to 100 feet, with the exception of dissolved petroleum hydrocarbons, which have a critical distance of 30 feet. If non-aqueous phase petroleum hydrocarbons are present, the 100 feet distance is utilized. Based on the information reviewed in this report, there are issues that would create the potential for vapor intrusion on the Subject Property.

9.0 RECOMMENDATIONS AND CONCLUSIONS

SEM has performed an Environmental Site Assessment, in conformance with the Scope of Work developed in cooperation with the client and the provisions of ASTM Practice E 1527-13. This assessment has revealed no evidence of RECs in connection with the Subject Property except for the following:

- The former Pik Quik site (now the Gateway Plaza building) located at 7301 Lowell Boulevard, adjacent and just across West 73rd Avenue to the north of the Subject Property operated as a gasoline station from 1976 to 1992. Two leaking underground storage tanks were removed in August 1992. The current status of the site is “State Lead”, which means that the State of Colorado is managing the site. Records indicate that 853 cubic yards of contaminated soil was removed and that a Corrective Action Plan for the site was approved in September 2007. Soil excavation and the installation of a soil vapor extraction system (SVE) was the accepted remedial strategy. A report entitled “Monitoring and Remediation Report” prepared by CGRS Environmental Services on October 18, 2016 indicated that the hydrocarbon plume extends across West 73rd Avenue and under the Subject Property. While the report shows that the concentrations of contaminants have declined over the years, concentrations of Benzene, Ethyl Benzene and Methyl Tert-Butyl Ether that exceed the State MCLs are in a hydrocarbon plume that has migrated under the Subject Property and beyond. As a result this site is a REC for the Subject Property.

A de minimis condition is a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. This assessment has revealed no evidence of de minimis conditions.

An historical recognized environmental condition (HREC) refers to an environmental condition which would have been considered a REC in the past, but which is no longer considered a REC based on subsequent assessment and/or remediation of any contaminants to below the most restrictive (generally residential) cleanup target concentrations or regulatory closure with no formal or implied restricted uses. The assessment has revealed no evidence of HRECs in connection with the Subject Property.

No significant data gaps were identified that would affect the ability of the environmental professional to identify RECs at the Property.

The ASTM Standard was designed solely to meet the requirements of the USEPA’s All Appropriate Inquiries (AAI) to permit the potential purchaser to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability. It is possible for there to be business environmental risks (BERs) related to ASTM scope considerations that do not meet the definition of a REC. This assessment has revealed evidence of the following BERs associated with the standard ASTM scope considerations:

- **7287 Lowell Boulevard** - asbestos bulk-sampling of surfacing materials indicate that the ceiling drywall in the dressing room of the structure tested positive for 3% chrysotile asbestos. In addition block filler ranging from 5% to 8% was identified on the exterior concrete block walls of the building and in the blue, white and black painted concrete block walls on the interior of the building.
- **3630 West 73rd Avenue** - asbestos bulk-sampling of surfacing materials indicate that the ceiling drywall on the main floor of the structure tested positive for 2% chrysotile asbestos. In addition the exterior concrete block walls have a coat of block filler that also tested positive for 2% chrysotile asbestos.

Recommendations

1. If the building at 7287 Lowell Boulevard is not going to be demolished it will be necessary to confirm that the quality of the indoor air is acceptable. Accordingly, it is recommended that an indoor air test for Volatile Organic Compounds including benzene and MTBE be conducted.
2. Vapor intrusion could be a potential concern for any buildings that are going to be constructed in future development on the Site due to the hydrocarbon groundwater plume that has migrated under the Site. It is recommended that sub-slab venting systems be installed on any future Site buildings to mitigate the effects of potential vapor intrusion issues and ensure safe indoor air levels.
3. Since the source of the existing hydrocarbon plume has been removed and the site is under an active remediation program, it is recommended that the State be requested to provide copies of biannual Monitoring and Remediation Reports to the City of Westminster so that the progress and concentrations of the contaminants under the Subject Properties can be actively monitored.
4. If the buildings are to be demolished, both buildings will require the abatement of the ACM identified in the asbestos surveys that were conducted.

10.0 LIMITATIONS

No environmental assessment or investigation is infallible. Some uncertainty will always exist concerning the presence or absence of potential Recognized Environmental Conditions at a particular property, irrespective of the rigor of the investigation. Accordingly, SEM does not warrant that Recognized Environmental Conditions, other than those identified in this report, do not exist at the subject property or may not exist there in the future.

The findings and opinions presented in this report are partially based on information obtained from a variety of sources which SEM has no control over, but believes are reliable. Nonetheless, SEM does not warrant the authenticity or reliability of the information from these sources.

SEM believes that it has performed the services summarized in this report in a manner consistent with the level of care and skill ordinarily exercised by members of the environmental risk assessment profession practicing at the same time and under similar conditions in the area of the project.

Conclusions regarding the condition of the site do not represent a warranty. If additional information becomes available concerning this site after the date of this report, SEM is under no obligation to revise the conclusions and recommendations of this report.

APPENDIX F

Phase I ESA

3630 W. 73rd Ave & 7287 Lowell Blvd

AEI Consultants

December 28, 2018

**NOTE: File too large to be combined and
is on disc separately**

APPENDIX G

Limited Phase II ESA

Subsurface Investigation

March 15, 2019



AEI Consultants

March 15, 2019

LIMITED PHASE II SUBSURFACE INVESTIGATION

Property Identification:

3630 West 73rd Avenue and 7227, 7287 Lowell Boulevard
Westminster, Colorado 80030

AEI Project No. 401473

Prepared for:

City of Westminster
4800 West 92nd Avenue
Westminster, Colorado 80031

Prepared by:

AEI Consultants
2420 West 26th Avenue, Suite 400D
Denver, Colorado 80211
(720) 238-4582

Environmental &
Engineering Due
Diligence

Site Investigation &
Remediation

Energy Performance
& Benchmarking

Industrial Hygiene

Construction
Consulting

Construction,
Site Stabilization &
Stormwater Services

Zoning Analysis
Reports & ALTA
Surveys

National Presence

Regional Focus

Local Solutions

TABLE OF CONTENTS

1.0 SITE DESCRIPTION	1
2.0 BACKGROUND	2
3.0 INVESTIGATION EFFORTS	3
3.1 Health and Safety Plan	3
3.2 Permitting and Utility Clearance	3
3.3 Geophysical Survey	3
3.4 Drilling and Soil Sample Collection	4
3.5 Groundwater Sample Collection.....	5
3.6 Boring Abandonment	5
3.7 Laboratory Analyses.....	5
3.8 Investigation Derived Wastes.....	5
4.0 FINDINGS.....	5
4.1 Geology and Hydrogeology	6
4.2 Soil Sample Analytical Results	6
4.3 Groundwater Sample Analytical Results.....	6
5.0 SUMMARY AND CONCLUSIONS.....	7
6.0 RECCOMENDATIONS	7
7.0 REPORT LIMITATIONS AND RELIANCE.....	8

FIGURES

Figure 1	Site Location Map
Figure 2	Site Map

TABLES

Table 1	Soil Sample Data Summary
Table 2	Groundwater Sample Data Summary

APPENDICES

Appendix A	Geophysical Survey Report
Appendix B	Boring Logs
Appendix C	Laboratory Analytical Reports



March 15, 2019

Mr. Seth Plas
City of Westminster
4800 West 92nd Avenue
Westminster, Colorado 80031

Subject: Limited Phase II Subsurface Investigation
3630 West 73rd Avenue and 7277, 7287 Lowell Boulevard
Westminster, Colorado 80030
AEI Project No. 401473

AEI Consultants (AEI) prepared the following report to document the results of a Limited Phase II Subsurface Investigation (Phase II) performed at the above referenced property; hereafter referred to as the "Site" (See Figure 1). The investigation was completed in general accordance with the authorized scope of services outlined in AEI's proposal 62100, signed February 15, 2019.

1.0 SITE DESCRIPTION

The Site consists of three commercial and residential parcels totaling 0.52-acres. The northern portion of the Site is developed with two single-story commercial buildings. The southern portion of the site is vacant land. The areas to the north and east of the commercial buildings are paved with asphalt or concrete. There are several monitoring wells located on the eastern and southern portions of the Site associated with the adjacent leaking underground storage tank (LUST) site, located to the north. A soil vapor extraction (SVE) system, associated with the LUST site to the north, is located on the northeastern portion of the site. The Site is located on the southwest corner of 73rd Avenue and Lowell Boulevard in a mixed commercial and residential area of Westminster, Colorado (Figure 2).

The Site slopes to the south at an average elevation of about 5,315 feet above mean sea level. Based on the regional topographic gradient, the direction of groundwater flow beneath the Site is inferred to be to the south. Little Dry Creek is located approximately 1,411 feet to the southwest.

Based on a review of the Geologic Map of Colorado, the area surrounding the Site is underlain by, the Denver and Arapahoe Formations, sedimentary deposits of the Cretaceous Period. According to the United States Department of Agriculture (USDA) Soil Survey, soils at the Site are described as the Platner Series which are described as well drained sandy loam.

Refer to Section 4.1 below for additional information on the site geology and groundwater conditions.

2.0 BACKGROUND

According to the December 28, 2018 Phase I Environmental Site Assessment (ESA) performed by AEI, the Site was vacant land from 1937 through 1944. By 1950 three small commercial structures were located on the site between West 72nd and West 73rd Avenues on Lowell Boulevard with address of 7287, 7277 and 7281-7283 Lowell Boulevard. In 1959, the current building at 3630 West 73rd Avenue was located on the northwest corner of the Site and occupied by Econo Wash from 1963 through 1983 followed by auto service and repair businesses from 1986 through 2011. The buildings at 7277 and 7281-7283 Lowell Boulevard were occupied by commercial tenants until 2015 when the buildings were demolished. According to city directories and aerial photographs the address at 7287 Lowell Boulevard was occupied by a gasoline station from at least 1963 through 1967. By 1978, 7287 Lowell Boulevard is listed as an auto sales company. In 1986 the northern portion of the site (7287 Lowell Boulevard) was redeveloped with the current building and occupied by auto service businesses from 1988 through 2011 followed by a theater from 2011 through 2015.

During the Phase I ESA AEI identified the following potential environmental concerns:

- According to information obtained during the Phase I ESA by AEI, various auto sales and service repair tenants operated at the 7287 Lowell Boulevard from at least 1978 through 2011. The last service tenant, Vehicle Service Center, closed operations in 2011. Subsequently, the building was reportedly occupied by a playhouse theater for approximately five years prior to being vacated through the present day. Based on the nature of operations, it is presumed that hazardous substances and/or petroleum products were likely associated with the former auto repair operations.
- During the Site reconnaissance, two vent pipes, characteristic of underground storage tank (UST) systems, were observed on the south side of the building. No information regarding the installation, use, or removal of a UST was identified during the course of the ESA assessment. However, based on the nature of property use as the former Vehicle Service Center, a UST in this area could have presumably been utilized in conjunction with on-site auto repair activities. Based on the presence of the observed vent pipes and lack of available information to confirm whether a UST was removed, it is possible that the UST remains in place.
- In addition, the adjacent property to the north, having an address of 7305 Lowell Boulevard was occupied by a gas station from approximately 1959 – 1971. No information regarding the presence or removal of USTs from this adjacent Site were identified as part of the Phase I ESA for the Site. However, this adjacent property is the subject of an open Leaking UST (LUST) case with the Colorado Department of Labor and Employment Division of Oil and Public Safety (OPS). Based on the information obtained from OPS regarding the LUST case, a plume of hydrocarbon-impacted groundwater has migrated onto the Site, which is currently being remediated by the Responsible Party (RP) for the open LUST case under the oversight of OPS.

Based on the property having been used for automotive service operations for approximately 33 years, and the possible presence of an existing UST on the Site as evidenced by the presence of a vent pipe, AEI recommends completion of a Phase II investigation to assess potential environmental impacts to the property. Because it is currently being remediated by the RP under

OPS oversight, no additional investigation activities were recommended for potential impacts associated with the LUST case on the adjacent property to the north.

3.0 INVESTIGATION EFFORTS

AEI was retained to perform additional investigation for the collection of soil and groundwater samples to evaluate if the former auto repair and UST operations had adversely impacted the property. In addition, a geophysical survey was performed in an attempt to locate any potential USTs or former UST basins and determine what, if anything, the vent pipes observed on the south side of the building are connected to.

At the time of the private utility locate, a walk-through of the interior of the building was conducted. During the inspection, a concrete ring with a steel center, typical of an inground hydraulic lift was observed in the central portion of the building. A steel cover was observed near and partially obscured by a water heater in a closet located in the southcentral portion of the building. The steel cover was removed and a pit typical of a single stage sand trap was observed.

3.1 Health and Safety Plan

A site-specific health and safety plan was prepared, reviewed by onsite personnel, and kept onsite for the duration of the fieldwork.

3.2 Permitting and Utility Clearance

Drilling permits were not required for this investigation. The public underground utility locating service Colorado811 was notified to identify public utilities in the work area. Private utility locating was conducted by Ground Penetrating Radar Systems (GPRS) of Denver, Colorado to identify underground utilities on the subject property.

3.3 Geophysical Survey

On February 15, 2019, a geophysical survey was conducted by GPRS of Denver, Colorado (Appendix A). The purpose of the survey was to evaluate the potential presence of current or former USTs and/or the UST basin(s). The geophysical survey was conducted using ground penetrating radar (GPR). The geophysical survey identified an area of disturbed soils to the north of the building near the location of the former dispenser island. No other anomalies indicative of USTs or disturbed soils were identified. During the investigation GPRs connected a mild electric current to both vent pipes observed on the south side of the building and located the piping with an electromagnetic detector. The eastern vent pipe trace lead north under the building and appears to be connected to a sand trap located in a closet on the south side of the building. The western vent pipe trace lead west under the building and was observed to descend to a depth of six feet below ground surface (bgs) before the trace was unlocatable due to features located inside the building and the southern building wall.

The client should be aware of the inherent limitations of geophysical surveying methods and that above and underground utilities and other man-made or natural features (i.e. automobiles, debris piles, tree roots, reinforced concrete, certain soil conditions, etc), if in the area of the survey, may

decrease the effectiveness of the survey. The client should be aware that the lack of a detection of a feature from a geophysical survey does not mean that the feature does not exist only that it was not detected.

3.4 Drilling and Soil Sample Collection

On February 20, 2019, two soil borings (SB-1 and SB-2) were advanced by Site Services of Golden, Colorado using a track-mounted, direct-push drilling rig. The borings were advanced to depths between 19 and 25 feet below ground surface (bgs). The location and purpose of each boring are listed below:

- Boring SB-1 was advanced through the location of the former suspected UST basin, identified by the disturbed soils during the GPR survey, for the collection of soil and groundwater samples.
- Boring SB-2 was advanced to the south of the former repair area in the building for the collection of soil and groundwater samples.

The borings were advanced using three-inch outer diameter rods. Soil samples were collected by advancing the rods with acetate sample liners in approximately five-foot intervals. After each interval, the core was retrieved, the core barrel disassembled, and the sample liner transferred to the onsite geologist.

Soils from borings SB-1 and SB-2 were evaluated for the purposes of lithologic logging, headspace testing, and sample collection for laboratory analyses. Soil samples were obtained by removing the soil from the sample liner, placed in four-ounce glass jars, and capped. Upon collection, each sample was labeled with the project name, boring number, sample depth, and date/time of sampling. After labeling, each sample was entered onto chain-of-custody documentation and placed into an iced cooler for transportation to a State of Colorado-certified laboratory for analyses.

Soils were visually inspected for the potential presence of impacted soils. Recovered soils were described on detailed boring logs in general conformance with the United Soil Classification System (USCS). The boring logs for borings SB-1 and SB-2 are presented in Appendix B.

Headspace field measurements were collected using a Photo-Ionization Detector equipped with an electrodeless 10.6 eV ultraviolet lamp for detecting the potential presence of organic vapors in the soil samples. To initiate the headspace testing procedure, soil samples were removed from the liner, placed into labeled, plastic bags, and sealed for conducting the tests. Due to the weather conditions at the time of sampling the plastic bags were placed on the dashboard with the defrost running to assist with the volatilization of any contaminants in the sample. After a sufficient duration of time had elapsed for vapor build-up inside the bags, each bag was then punctured with the PID probe tip to measure the concentration of any gases in the headspace. Measurements of the headspace were obtained in the parts per million (ppm) range for total organic vapors. The results of the headspace tests (PID readings) for borings SB-1 and SB-2 were recorded on the boring logs, presented in Appendix B.

Down-hole equipment was decontaminated prior to drilling and between successive boring locations.

3.5 Groundwater Sample Collection

On February 20, 2019, grab groundwater was collected from borings SB-1 and SB-2 using temporary poly-vinyl chloride (PVC) casing inserted into the borehole and collected using a peristaltic pump or new PVC tubing and a foot valve. A grab groundwater sample was also collected from monitoring well MW-20 located to the south of the building. The well was not purged prior to sampling.

3.6 Boring Abandonment

Following completion of sample collection and removal of tooling, the borings were backfilled with soil cuttings and hydrated bentonite and completed at the surface with asphalt cold patch or sod to match the surrounding conditions.

3.7 Laboratory Analyses

The soil and groundwater samples were labeled and placed into an ice-filled cooler following sampling. The samples were transferred under appropriate chain-of-custody documentation to SGS Accutest of Wheat Ridge, Colorado. Laboratory analytical documentation is provided in Appendix C.

The two soil samples were analyzed for:

- Volatile Organic Compounds (VOCs) by EPA Method 8260
- Polynuclear Aromatic Hydrocarbons (PAHs) by EPA Method 8270

Three groundwater samples were analyzed for:

- VOCs by EPA Method 8260
- PAHs by EPA Method 8270

3.8 Investigation Derived Wastes

No investigation derived waste was created during this investigation.

4.0 FINDINGS

The Colorado Department of Public Health and Environment (CDPHE) Hazardous Materials and Waste Management Division has the responsibility for overseeing soil and groundwater cleanups in Colorado.

The soil analytical results were compared with the Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) for Residential sites and the EPA's RSLs for Worker Protection (Commercial sites) (both dated November of 2017), and the CDPHE Groundwater Protection Values Soil Cleanup Table (CGWPVSC) dated March of 2014.

The groundwater analytical results were compared to the Colorado Basic Standards for Groundwater (CBSGW), which were issued by the CDPHE's Water Quality Control Commission (WQCC) in January of 1987, with amended rules taking effect in December of 2016.

The OPS has established the Tier 1 Risk Based Screening Levels (Tier 1 RBSL) for UST-related volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs). The Tier 1 RBSLs were revised in October of 2005 and published in the Petroleum Storage Tank Owner/Operator Guidance Document to assist owners and/or operators in conducting release investigations, performing initial response actions, preparing site characterization reports, and preparing and implementing corrective action plans.

4.1 Geology and Hydrogeology

Unconsolidated sediments encountered in each of the borings generally consisted of silts and clays with intermittent sandy silt layers (Appendix B). Staining and odor was encountered in a silty clay layer between 16 to 18 feet bgs in boring SB-1. A saturated gravelly sand was encountered between 18 to 20 feet bgs in boring SB-1 and 14 to 17 feet bgs in boring SB-2. Weathered bedrock was encountered at depths of 20 to 23 feet bgs in boring SB-1 and between 17 to 18 feet bgs in boring SB-2.

Groundwater was encountered in boring SB-1 at a depth of 17.8 feet bgs, in SB-2 at 15.8 feet bgs and in MW-20 at 15.35 feet bgs.

4.2 Soil Sample Analytical Results

The following information is a summary of the soil sample analytical test results (Appendix C). This information has also been included in Table 1.

- VOCs and PAHs were not reported in samples from any of the borings above the laboratory detection limits.

4.3 Groundwater Sample Analytical Results

The following information is a summary of the groundwater sample analytical test results (Appendix C). This information has also been included in Table 2.

- Benzene was not reported above the Laboratory detection level in boring SB-1, however benzene was reported at concentrations of 31.6 and 157 micrograms per liter ($\mu\text{g/L}$) in boring SB-2 and monitoring well MW-20, respectively. The concentrations of benzene reported in boring SB-2 and MW-20 exceed the OPS Tier 1 RBSL, the OPS Groundwater to indoor air screening level and the CBSGW.
- Fifteen additional VOCs were reported in the groundwater samples, however the concentrations were below the OPS Tier 1 RBSL, the OPS Groundwater to indoor air screening level and the CBSGW.
- 1-Methylnaphthalene, 2-methylnaphthalene and naphthalene were reported in boring SB-2 and monitoring well MW-20 at concentrations below the OPS Tier 1 RBSL, the OPS Groundwater to indoor air screening level and the CBSGW.
- The remaining VOCs and PAHs were not reported in the samples from any of the borings or the monitoring well above the laboratory detection limits.

5.0 SUMMARY AND CONCLUSIONS

AEI has completed a Phase II at the Site. The Phase II included a geophysical survey to determine if any USTs remained on the Site or identify former UST basins, determine what the vent pipes observed on the south side of the building are connected too, and the collection of soil and groundwater samples, to evaluate if the former auto repair operations, operation of USTs had adversely impacted the property. A total of two borings (SB-1 and SB-2) were advanced at the Site for the collection of soil and groundwater samples and the collection of a water sample from the existing monitoring well MW-20.

A summary of the investigation findings includes:

- During the utility located additional features were noted inside that building that were not identified in prior reports. In the central portion of the building an inground hydraulic lift was observed and in the south-central portion of the building a sand trap was observed in a closet below the water heater.
- The geophysical survey did not identify any USTs at the Site, however an area of disturbed soils was found to the north of the building that is typical of a former UST basin. One boring was completed through the area of disturbed soils.
- Concentrations of VOCs and PAHs in the soil samples were below the laboratory method detection limits.
- Benzene was reported in the groundwater samples collected from boring SB-2 and monitoring well MW-20 at concentrations exceeding the OPS Tier 1 RBSL, the OPS groundwater to indoor air screening level and the CBSGW.
- Fifteen additional VOCs and the PAHs 1-methylnaphthalene, 2-methylnaphthalene and naphthalene were reported in groundwater samples at concentrations below the OPS Tier 1 RBSL, the OPS groundwater to indoor air screening level and the CBSGW.
- The remaining VOCs and PAHs in groundwater were below the laboratory method detection limits.

6.0 RECCOMENDATIONS

Based on the data collected during the investigation AEI recommends the following:

- During the demolition of the existing building the inground hydraulic lift be removed and confirmatory soil samples collected.
- During the demolition of the existing building the sand trap be removed and confirmatory soil samples collected.

- Based on the concentrations of benzene reported in the groundwater at the site, an engineered vapor barrier and/or active vapor extraction system should be incorporated into the design of any buildings constructed on the Site. Final determination will be based on opinions provided by the CDLE OPS.
- Due to the impacts to groundwater and the soils in the saturated zone, AEI recommends the development of a Material Management Plan (MMP) prior to redevelopment activities. The MMP will provide site workers with knowledge of potential exposure pathways at the site and establish protocols for the management of impacted soils and groundwater if redevelopment activities disturb groundwater or soils in the saturated zone.
- Continued cooperation and coordination with the OPS and selected environmental consultants on groundwater monitoring and remediation activities at the Site.

7.0 REPORT LIMITATIONS AND RELIANCE

This report presents a summary of work completed by AEI Consultants. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples are chosen to provide the requested information, subject to scope of work for which AEI was retained and limitations inherent in this type of work, but it cannot be assumed that they are representative of areas not sampled. This report should not be regarded as a guarantee that no further contamination beyond that which could have been detected within the scope of this investigation is present beneath the subject property. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation.

Any conclusions and/or recommendations are based on these analyses and observations, and the governing regulations. Conclusions beyond those stated and reported herein should not be inferred from this document. These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work. No other warranty, either expressed or implied, has been made.

This investigation was prepared for the sole use and benefit of the City of Westminster and the United States Department of Housing and Urban Development (HUD). All reports, both verbal and written, whether in draft or final, are for the benefit of the City of Westminster and HUD. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of AEI. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with AEI granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against AEI, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with AEI's Proposal and Standard Terms & Conditions executed by the City of Westminster. The limitation of liability defined in the Terms and Conditions is the aggregate limit of AEI's liability to the client and all relying parties.

Limited Phase II Subsurface Investigation
3630 West 72nd Avenue and 7277, 7287 Lowell Boulevard
Westminster, Colorado 80030

If there are any questions regarding our investigation, please do not hesitate to contact AEI at 720.238.4582.

Sincerely,
AEI Consultants

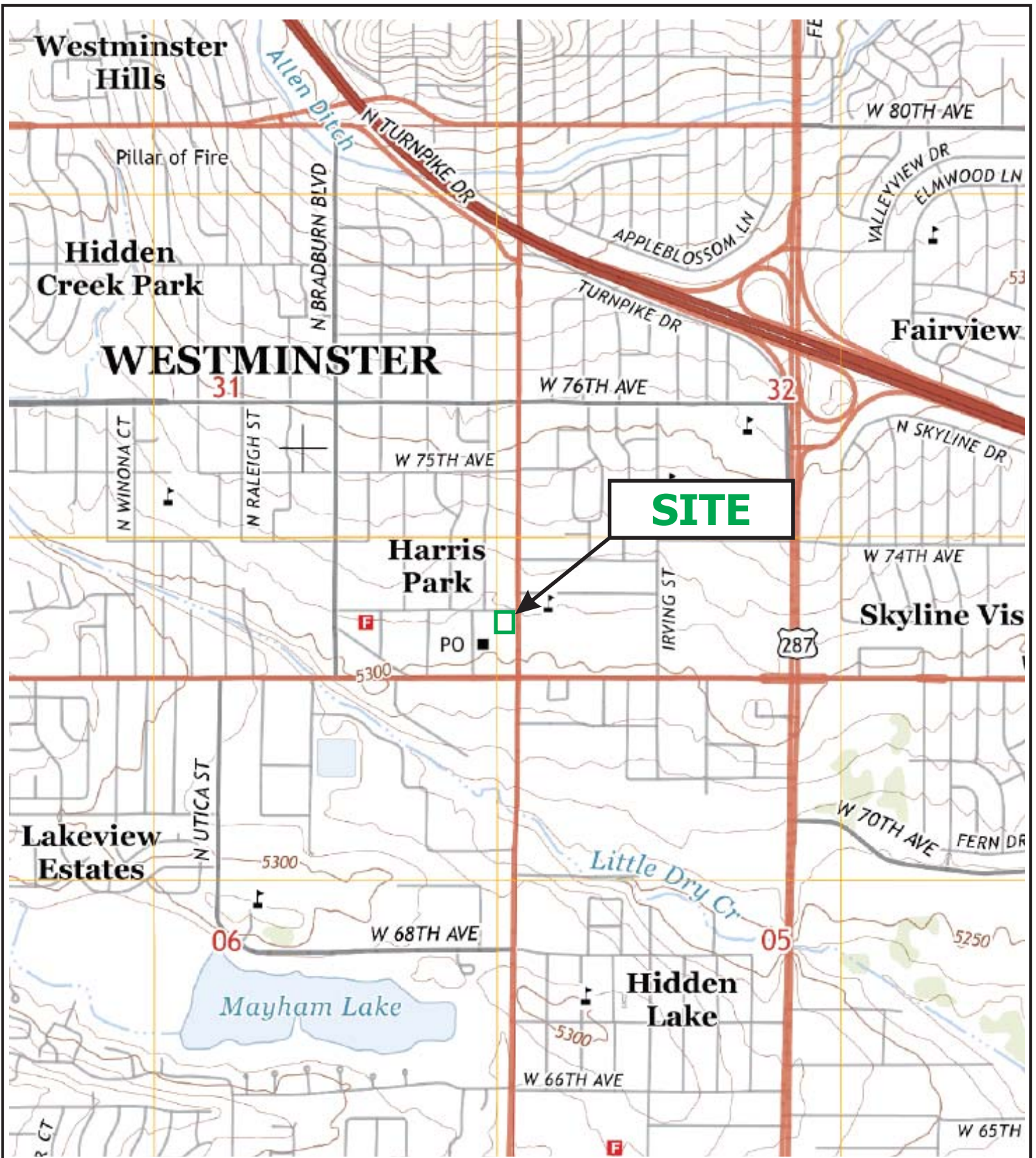
DRAFT

Jason Grubb, PG
Senior Geologist

DRAFT

Lon Michael Cooper, PE (IL), LPG
Director of Operations, SM Central

FIGURES



LEGEND

Map: ARVADA, COLORADO
 Date: 2013
 Source: USGS



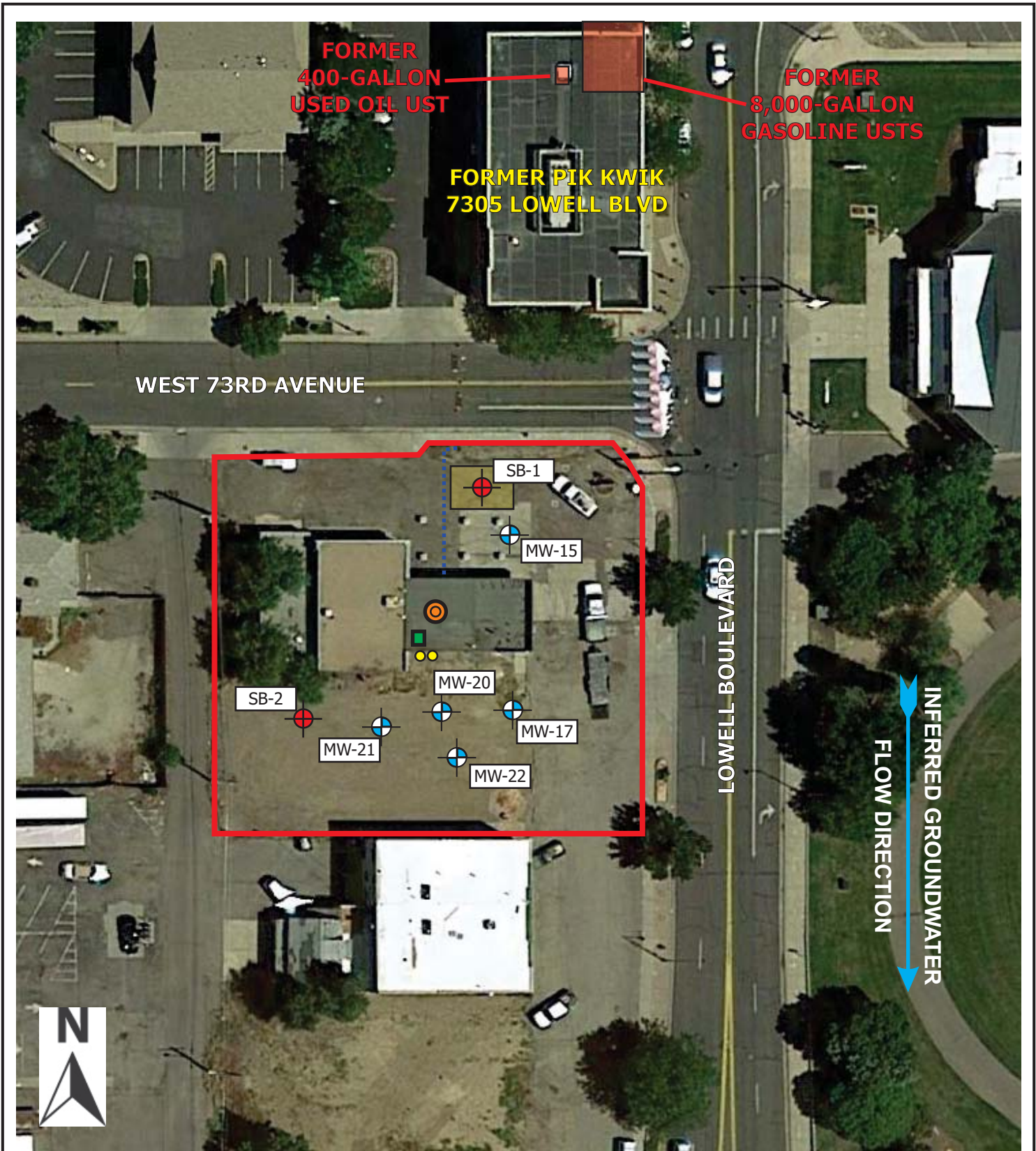
AEI Consultants

2420 West 26th Avenue, Suite 400D, Denver, Colorado

SITE LOCATION MAP

3630 WEST 73RD AVE AND
 7277 & 7287 LOWELL BLVD
 WESTMINSTER, COLORADO 80030

FIGURE 1
 Project No. 401473



LEGEND

- Approximate Site Boundary
 - Area of Disturbed Soils
 - Boring Location
 - Sand Trap
 - ⊕ Monitoring Well (CGRS)
 - ⊙ Hydraulic Lift
 - Vent Pipe
- 0 25 50

 SCALE: 1" = 50'

AEI Consultants

2420 West 26th Ave #400D, Denver, Colorado 80211

SITE MAP

3630 W 73RD AVE AND
7277 & 7287 LOWELL BLVD
WESTMINSTER, COLORADO 80030

FIGURE 2
Project No. 401473

TABLES

TABLE 1: SOIL SAMPLE DATA SUMMARY
3630 West 73rd Avenue, 7277 & 7287 Lowell Boulevard
Westminster, Colorado 80030

Analysis	Units	SB-1	SB-2	Comparison Values		
		2/20/2019 7 (feet bgs)	2/20/2019 14.5 (feet bgs)	EPA RSLs Residential	CDPHE GPVSC	OPS Tier 1 RBSL
VOCs	mg/kg	<MDL	<MDL	varies	varies	varies
PAHs	mg/kg	<MDL	<MDL	varies	varies	varies

Notes:

mg/kg	milligrams per kilogram
<MDL	less than the method detection limit
bgs	below ground surface
VOCs	volatile organic compounds
PAHs	polynuclear aromatic hydrocarbons
Bold	Result exceeds applicable Comparison Value

Comparison Values:

EPA RSLs: Environmental Protection Agency Regional Screening Levels

CDPHE: Colorado Department of Public Health and Environment

GPVSC: Groundwater Protection Values Soil Cleanup

OPS: Colorado Department of Labor and Employment Division of Oil and Public Safety

Tier 1 RBSL: Tier 1 Risk Based Screening Levels

TABLE 2: GROUNDWATER SAMPLE DATA SUMMARY
3630 West 73rd Avenue, 7277 & 7287 Lowell Boulevard
Westminster, Colorado 80030

Analysis	Units	SB-1	SB-2	MW-20	Comparison Value		
		2/20/2019	2/20/2019	2/20/2019	OPS Tier 1 RBSL	OPS GW to IA	CDPHE CBSGW
		17.8 (feet bgs)	15.8 (feet bgs)	15.35 (feet bgs)			
VOCs							
Benzene	µg/L	< 0.50	31.6	157	5	16	5
n-Butylbenzene	µg/L	< 0.51	88.7	1.8	N/A	N/A	N/A
sec-Butylbenzene	µg/L	< 0.52	61.8	7.8	N/A	N/A	N/A
tert-Butylbenzene	µg/L	< 0.53	< 0.50	0.73 J	N/A	N/A	N/A
Carbon disulfide	µg/L	< 0.54	0.85 J	< 0.70	N/A	N/A	N/A
Ethylbenzene	µg/L	< 0.55	338	102	700	26,000	700
Isopropylbenzene	µg/L	< 0.56	198	29.4	N/A	N/A	N/A
p-Isopropyltoluene	µg/L	< 0.57	25.6	0.84 J	N/A	N/A	N/A
4-Methyl-2-pentanone	µg/L	< 0.58	2.5 J	< 2.5	N/A	N/A	N/A
MTBE	µg/L	6	9.9	14.9	20	N/A	N/A
Naphthalene	µg/L	< 2.0	112	3.4 J	140	900	140
n-Propylbenzene	µg/L	< 1.0	586	30.8	N/A	N/A	N/A
Toluene	µg/L	< 1.0	1.9	5.2	100	10,000	560
1,2,4-TMB	µg/L	< 0.50	1,440	37.2	N/A	N/A	N/A
1,3,5-TMB	µg/L	< 0.50	92.4	< 1.0	N/A	N/A	N/A
Xylenes	µg/L	< 1.0	467	49.4	1,400	2,900	1,400
Remaining VOCs	µg/L	< MDL	<MDL	<MDL	varies	N/A	varies
PAHs							
1-Methylnaphthalene	µg/L	< 0.70	434	5.8	N/A	N/A	N/A
2-Methylnaphthalene	µg/L	< 0.70	104	< 0.70	N/A	N/A	N/A
Naphthalene	µg/L	< 0.80	137	2.3	140	900	140
Remaining PAHs	µg/L	< MDL	<MDL	<MDL	varies	N/A	varies

Notes:

µg/L	micrograms per liter
< MDL	less than the method detection limit
bgs	below ground surface
N/A	not applicable
VOCs	volatile organic compounds
PAHs	polynuclear aromatic hydrocarbons
MTBE	methyl tertiary butyl ether
TMB	trimethylbenzene
Bold	Result exceeds applicable Comparison Value
J	estimated value, analyte detected below the quantitation limit

Comparison Values:

OPS: Colorado Department of Labor and Employment Division of Oil and Public Safety

Tier 1 RBSL: Tier 1 Risk Based Screening Levels

GW to IA: Groundwater to Indoor Air Exposure Pathway

CDPHE CBSGW: Colorado Department of Public Health and Environment Colorado Basic Standards for Groundwater

APPENDIX A
GEOPHYSICAL SURVEY REPORT



**SUBSURFACE
SCANNING
SOLUTIONS**

Subsurface Investigation for Storage Tanks/Utilities

Prepared For: AEI Consultants

Prepared By:
Spencer Tibbs
Project Manager-CO/WY
2/15/2019



February,15,2019

AEI Consultants

Attn: Jason Grubb

Site: 3630 W 73rd Ave, Westminster, CO

We appreciate the opportunity to provide this report for our work completed on 2/15/19 at the above address in Westminster, CO

PURPOSE

The purpose of this project was to search for underground storage tanks (USTs), UST-related piping, and underground utilities prior to drilling two (2) soil borings. The interior of the building on site was accessed, but no further information was gathered from this.

EQUIPMENT

- **400 MHz GPR Antenna.** The antenna is mounted in a stroller frame which rolls over the surface. The surface needs to be reasonably smooth and unobstructed in order to obtain readable scans. Obstructions such as curbs, landscaping, and vegetation will limit the feasibility of GPR. The data is displayed on a screen and marked in the field in real time. GPR works by sending pulses of energy into a material and recording the strength and the time required for the return of the reflected signal. Reflections are produced when the energy pulses enter into a material with different electrical properties from the material it left. The strength of the reflection is determined by the contrast in signal speed between the two materials. The total depth achieved can be as much as 8' or more with this antenna but can vary widely depending on the conductivity of the materials. Depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit: [Link](#)
- **Electromagnetic Pipe Locator.** The EM locator can passively detect the electromagnetic fields from live AC power or radio signals travelling along some conductive utilities. It can also be used in conjunction with a transmitter to connect directly to accessible, metallic pipes, risers, or tracer wires. A current is sent through the pipe or tracer wire at a specific frequency and the resulting EM field can then be detected by the receiver. For more information, please visit: [Link](#)
- **GPS.** This handheld GPS unit offers accuracy down to 4 inches, however, the accuracy will depend on the satellite environment and obstructions and should not be considered to be survey-grade. Features can be collected as points, lines, or areas and then exported into Google Earth or overlaid on a CAD drawing. For more information, please visit: [Link](#)

PROCESS

The EM pipe locator was used to connect to accessible, traceable pipes that may be tank-related such as vent pipes or product lines. A current is induced onto the pipe which creates an electromagnetic field that can be traced using the receiver. We can then attempt to trace these pipes to their origin or end point and paint or flag their locations.

Initial GPR scans were collected in order to evaluate the data and calibrate the equipment. Based on these findings, a scanning strategy is formed, typically consisting of scanning the entire area in a grid with 3'-5' scan spacing in order to locate any potential UST's or former UST basins that may remain at the site. The GPR data is interpreted in real time and anomalies in the data are located and marked on the surface along with their depths using spray paint, pin flags, etc. Depths are dependent on the dielectric of the materials being scanned so depth accuracy can vary throughout a site. Relevant scan examples were saved and will be provided in this report.

LIMITATIONS

Please keep in mind that there are limitations to any subsurface investigation. The equipment may not achieve maximum effectiveness due to soil conditions, above ground obstructions, reinforced concrete, and a variety of other factors. No subsurface investigation or equipment can provide a complete image of what lies below. Our results should always be used in conjunction with as many methods as possible including consulting existing plans and drawings, exploratory excavation or potholing, visual inspection of above ground features, and utilization of services such as One Call/811.

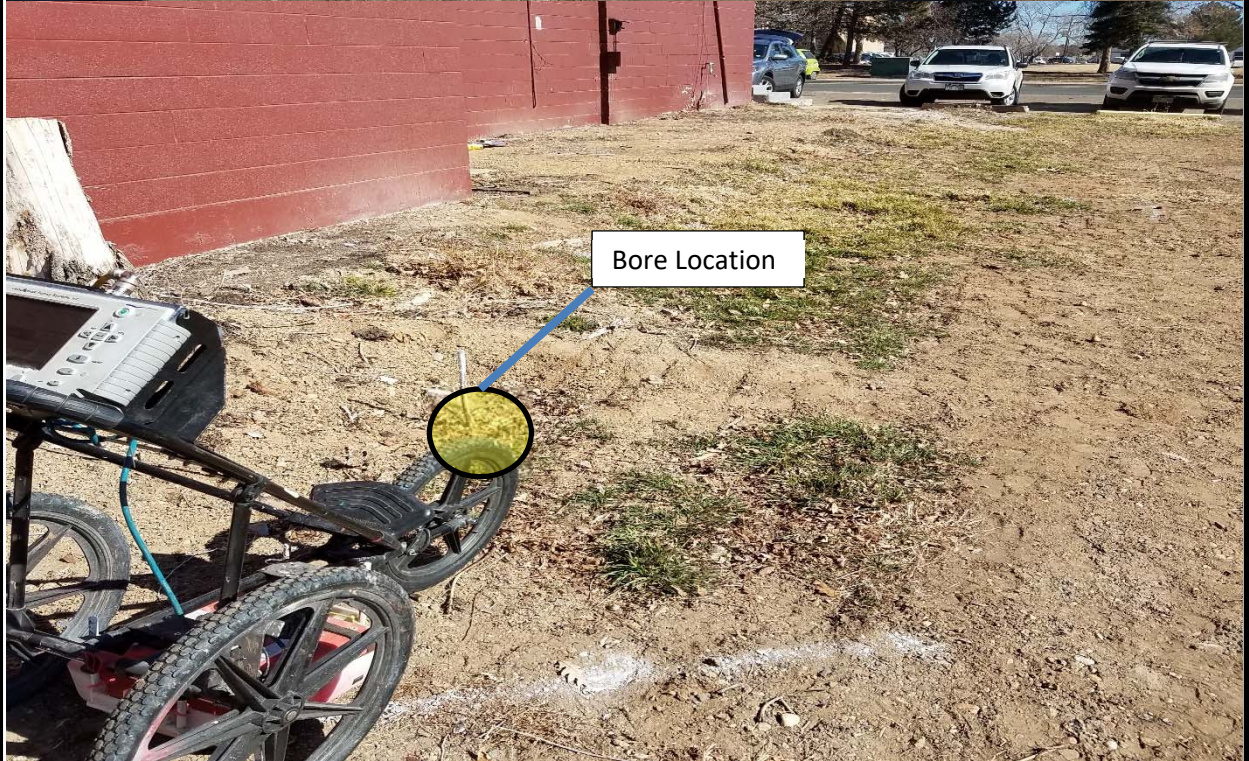
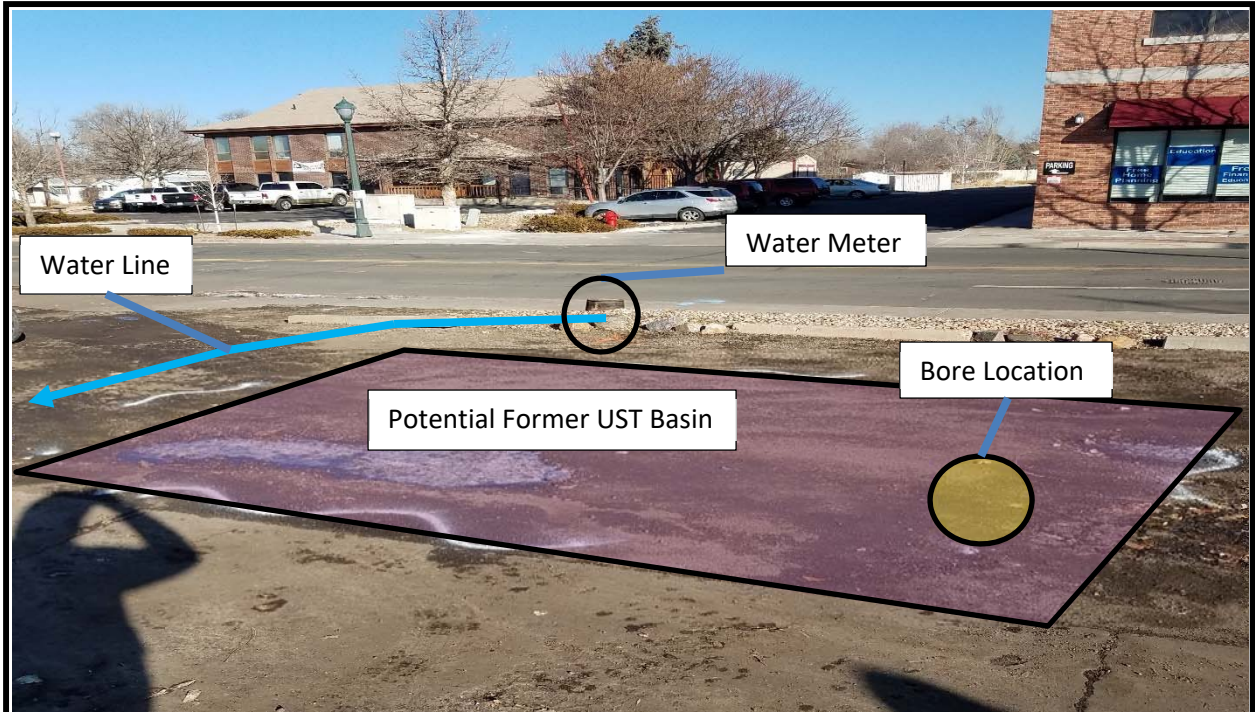
At this site, our scans were limited by poor scanning conditions due to wet grounds. This limited our maximum scan depth to roughly 1'-2'.

FINDINGS

We found that the soil allowed for maximum GPR depth penetration of 1'-2' in most areas. We walked the site, noting all possible utility access to and from the location. We located and marked a former gas line and a water line coming from the building. Communication and power were located and marked just outside the area of concern. We located a vent pipe on the building. The EM locator traced the pipe to roughly 5' before losing signal. Contact determined it to be a potential sewer vent pipe. We scanned the area using the 400 MHz antenna. We were able to locate one former UST basin due to the disturbed soil in the basin. There was no evidence of tanks in this area. This area was marked with white paint boarder. Gas, Power and Communication lines were abandoned and capped off.

The following pages will provide photos and further explanation of our findings.



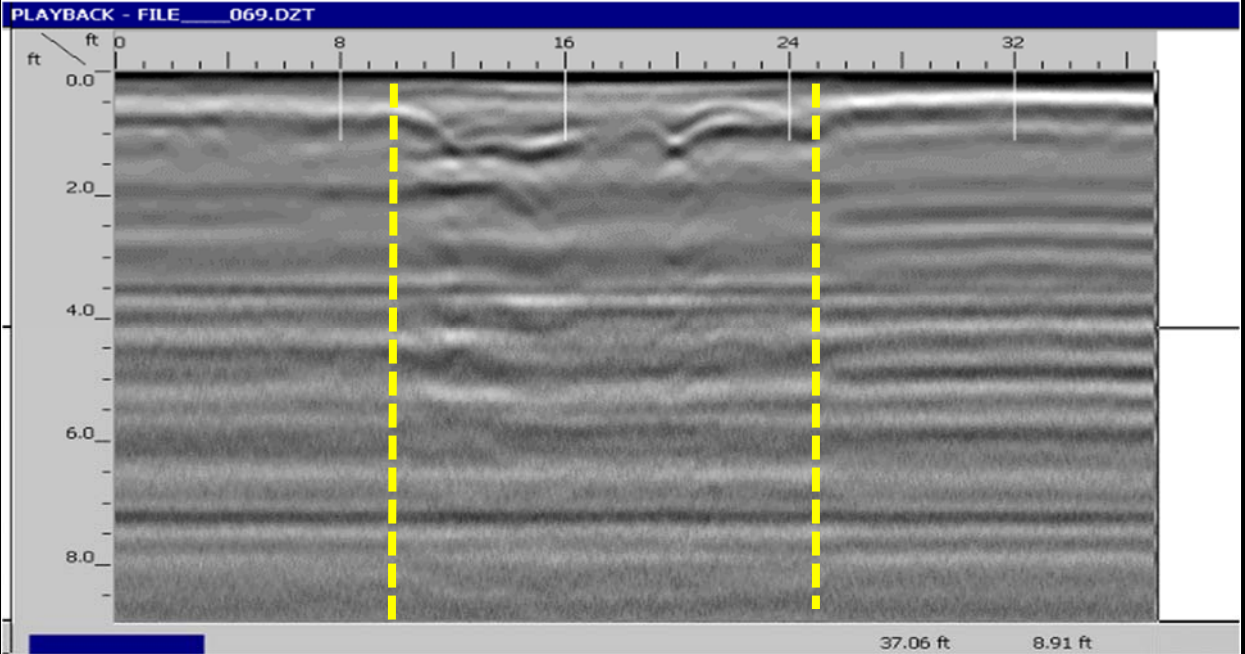
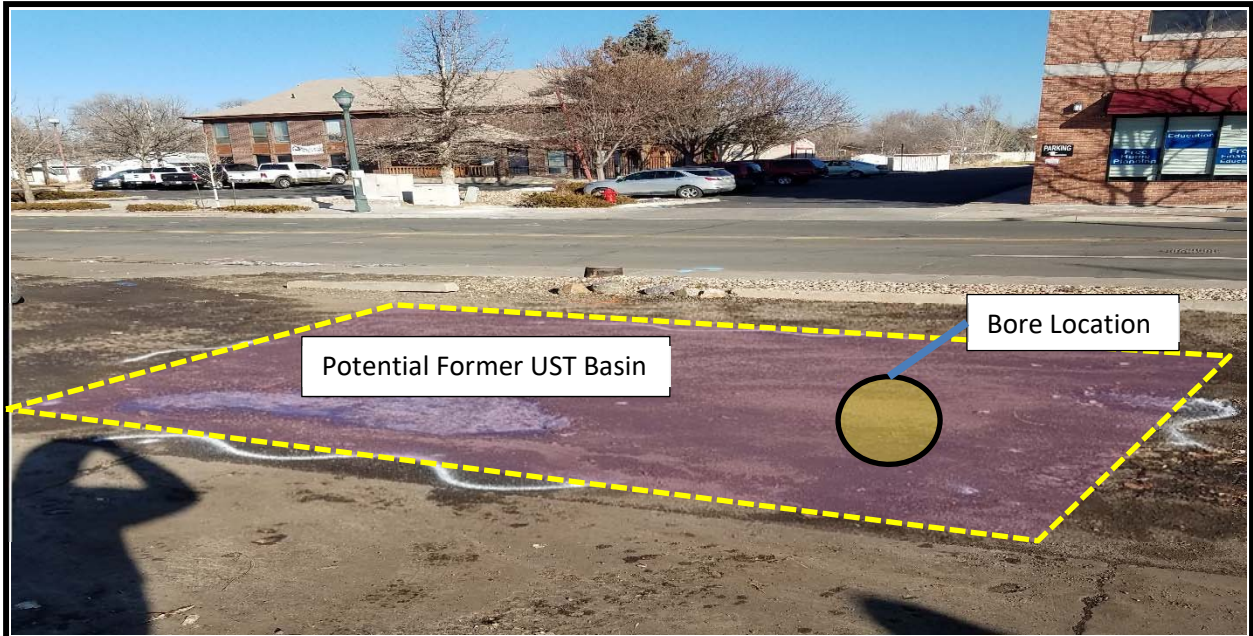


Site Map with Findings.



3630 W 73rd Ave,
Westminster, CO



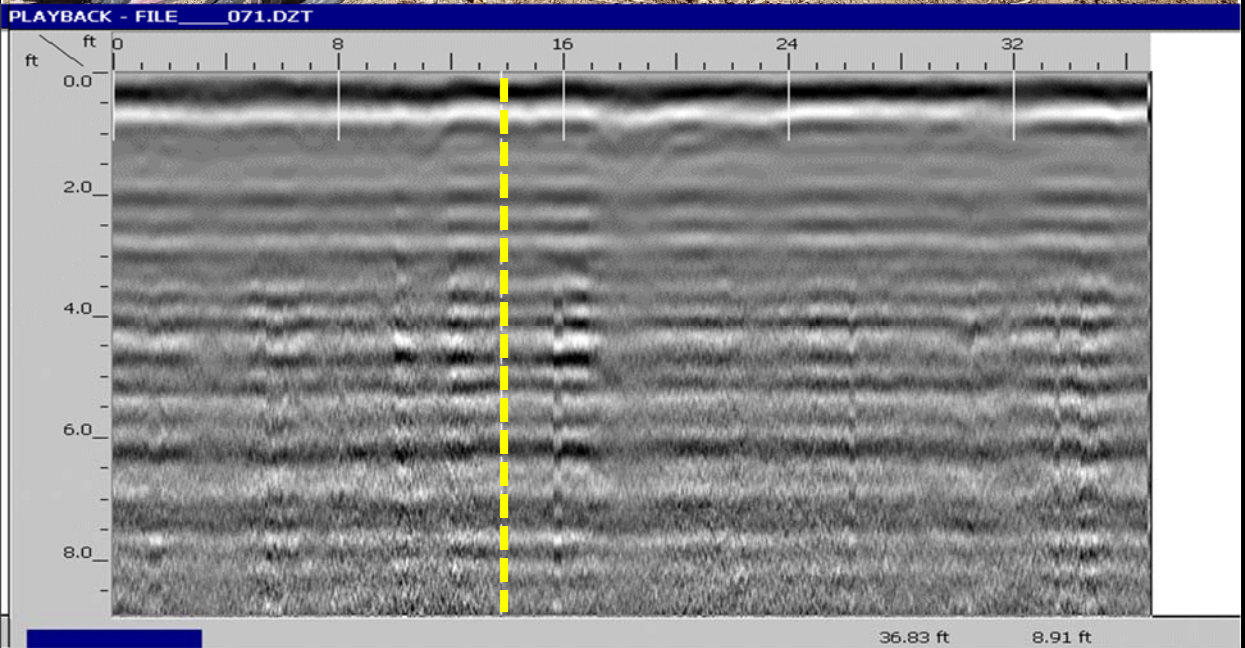
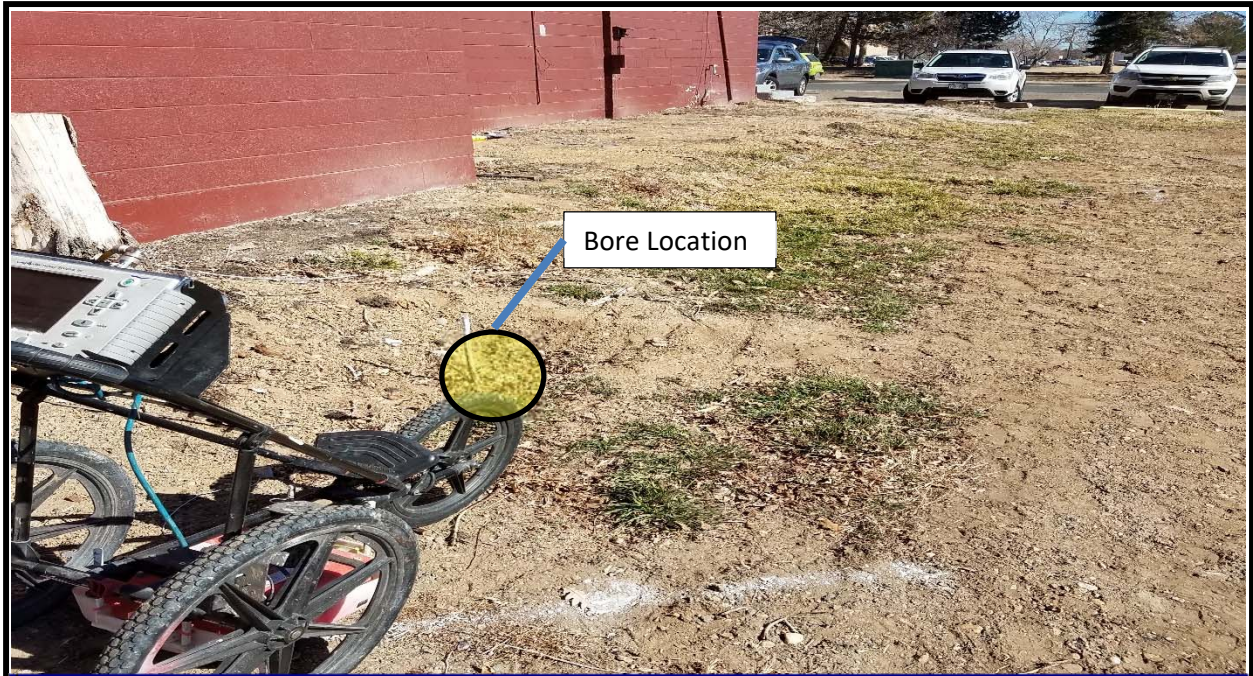


GPR data screenshot. The depth scale is on the left and the distance of the scan is across the top, forming a cross section view of the subsurface. Yellow hash marks indicate the start and finish of the disturbed soil indicating a potential former UST basin.

GPR Data Screenshot and Photo of Location

3630 W 73rd Ave,
Westminster, CO



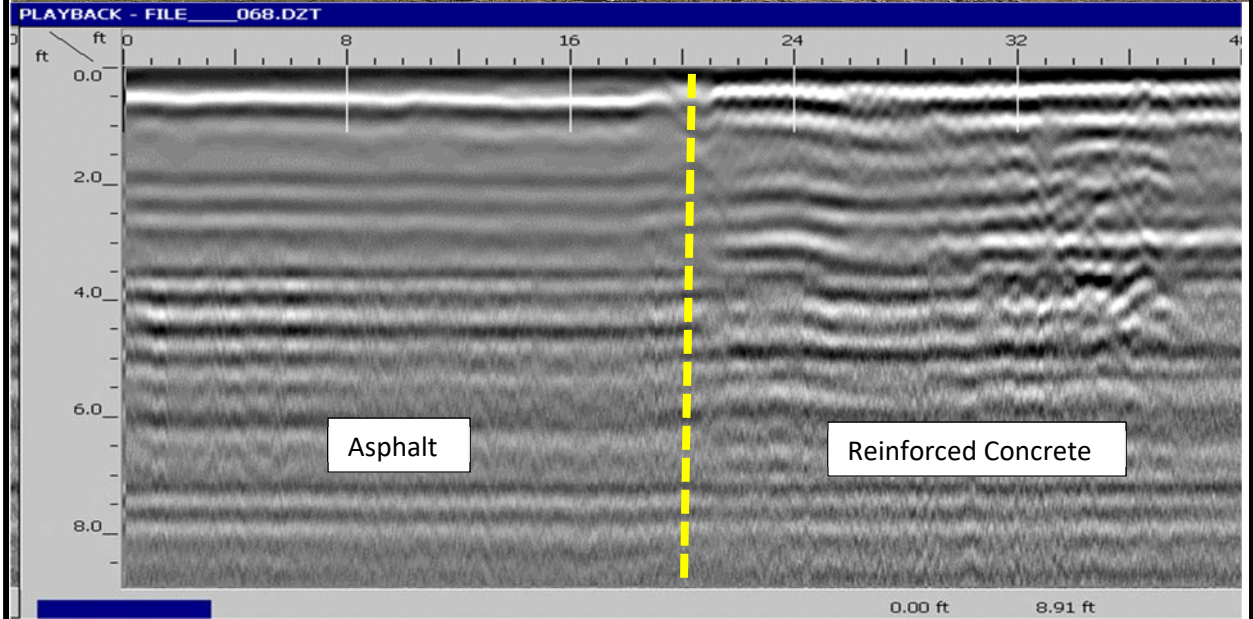
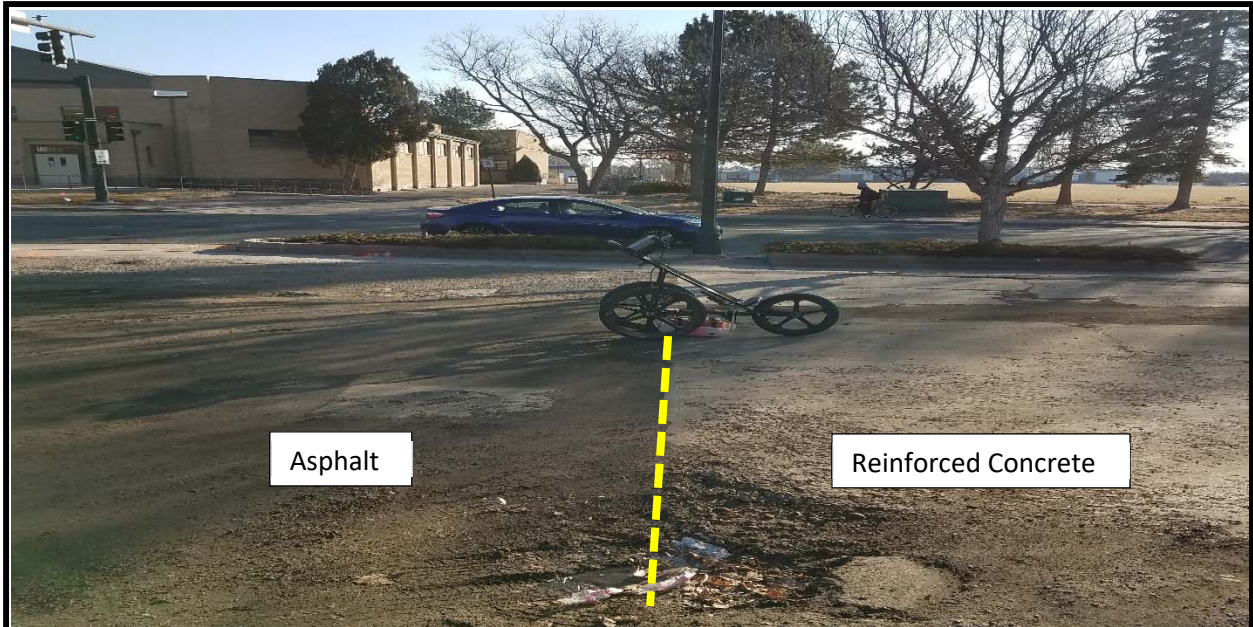


GPR data screenshot of boring location. The depth scale is on the left and the distance of the scan is across the top, forming a cross section view of the subsurface. Yellow hash mark indicates boring location.

GPR Data Screenshot and Photo of Location

3630 W 73rd Ave,
Westminster, CO





GPR data screenshot of boring Location. The depth scale is on the left and the distance of the scan is across the top, forming a cross section view of the subsurface. Yellow line indicates the line between asphalt and heavily reinforced concrete. Notice the max GPR depth is different between the two due to the heavy reinforcement. Most of these areas around the building varied between asphalt and concrete.

GPR Data Screenshot and Photo of Location

3630 W 73rd Ave,
Westminster, CO



CLOSING

GPRS, Inc. has been in business since 2001, specializing in underground storage tank location, concrete scanning, utility locating, and shallow void detection for projects throughout the United States. I encourage you to visit our website (www.gprsinc.com) and contact any of the numerous references listed.

GPR scanned all two (2) locations to verify that these areas are clear up to 1'-2'. GPR max depth was 1'-2' in most areas.

GPRS appreciates the opportunity to offer our services, and we look forward to continuing to work with you on future projects. Please feel free to contact us for additional information or with any questions you may have regarding this report.

Signed,



Spencer Tibbs
Project Manager-CO/WY



Direct: 720.765.9533

spencer.tibbs@gprsinc.com

www.gprsinc.com

APPENDIX B
BORING LOGS



AEI CONSULTANTS
 2420 West 26th Avenue, Suite 400D
 Denver, Colorado 80211
 Telephone: 720-238-4582

BORING NUMBER SB-1

CLIENT City of Westminster **PROJECT NAME** 3630 West 73rd Ave
PROJECT NUMBER 401473 **PROJECT LOCATION** 73rd Ave & Lowell Blvd, Westminster, CO
DATE STARTED 2/20/19 **COMPLETED** 2/20/19 **GROUND ELEVATION** _____ **HOLE SIZE** 3 inches
DRILLING CONTRACTOR Site Services Drilling, LLC **GROUND WATER LEVELS:**
DRILLING METHOD Direct Push **AT TIME OF DRILLING** 17.80 ft
LOGGED BY JG **CHECKED BY** LMC **AT END OF DRILLING** ---
NOTES _____ **AFTER DRILLING** ---

AEI BORING - GINT STD US LAB.GDT - 3/15/19 09:18 - C:\USERS\JGRUBB\DESKTOP\PROJECTS\401473 PHII WESTMINSTER, CO\APPENDIX\401473 BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
0.2					Asphalt	
3.0					(ML) Firm clay Moist	
5.0			.1		(SP-SM) Very fine to medium grained sandy silt Moist	
7.0	SB-1 17'		.2		(CL-ML) Hard silty clay Moist	
10.0			.1			
16.5	SB-1 17'		.2		(CL-ML) Silty clay with light grey staining Moist	
18.0						
20.0					(SW-SM) Very fine to coarse grained silty sand with sub rounded gravel less than 1/2 inch Saturated	
23.0			.9		Hard weathered siltstone Dry	
25.0					Very hard siltstone bedrock Dry	

Refusal at 25.0 feet.
 Bottom of borehole at 25.0 feet.



AEI CONSULTANTS
 2420 West 26th Avenue, Suite 400D
 Denver, Colorado 80211
 Telephone: 720-238-4582

BORING NUMBER SB-2

CLIENT City of Westminster PROJECT NAME 3630 West 73rd Ave
 PROJECT NUMBER 401473 PROJECT LOCATION 73rd Ave & Lowell Blvd, Westminster, CO
 DATE STARTED 2/20/19 COMPLETED 2/20/19 GROUND ELEVATION _____ HOLE SIZE 3 inches
 DRILLING CONTRACTOR Site Services Drilling, LLC GROUND WATER LEVELS:
 DRILLING METHOD Direct Push ∇ AT TIME OF DRILLING 15.90 ft
 LOGGED BY JG CHECKED BY LMC AT END OF DRILLING ---
 NOTES _____ AFTER DRILLING ---

AEI BORING - GINT STD US LAB.GDT - 3/15/19 09:18 - C:\USERS\JGRUBB\DESKTOP\PROJECTS\401473 PHII WESTMINSTER, CO\APPENDIX\401473 BORING LOGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS	PID DATA (ppm)	GRAPHIC LOG	MATERIAL DESCRIPTION	COMPLETION
0						
5			0.0		(ML) Soft very fine grained sandy silt Slightly moist	
7.0						
8.0					(CL-ML) Firm silty clay with light tan mottle Moist	
10			0.0		(CL-ML) Firm silty clay Moist	
12.5						
14.0					(SP) Very fine to medium grained sand Slightly moist	
15	SB-2 14.5'		0.0		(SW) Very fine to coarse grained sand with subrounded gravel Dark black staining and petroleum odor Wet	
17.0						
18.0					Hard weathered siltstone Light gray staining Slightly moist	
19.0	SB-2 19'		1.2		Very hard siltstone bedrock Dry	

Bottom of borehole at 19.0 feet.

APPENDIX C
LABORATORY ANALYTICAL REPORTS

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

AEI Consultants

73rd & Lowell

401473 PO# 185967

SGS Job Number: DA13685

Sampling Date: 02/20/19

Report to:

AEI Consultants
2420 W 26th Ave
Denver, CO
jgrubb@aeiconsultants.com

ATTN: Jason Grubb

Total number of pages in report: 69



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Scott Heideman'.

Scott Heideman
Laboratory Director

Client Service contact: Carissa Cumine 303-425-6021

Certifications: CO (CO00049), ID (CO00049), NE (NE-OS-06-04), ND (R-027), NJ (CO007), OK (D9942)
UT (NELAP CO00049), LA (LA150028), TX (T104704511), WY (8TMS-L)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	6
3.1: DA13685-2: SB-1 7'	7
3.2: DA13685-3: SB-2 14.5'	11
3.3: DA13685-5: SB-1 GW	15
3.4: DA13685-6: SB-2 GW	19
3.5: DA13685-7: MW-20 GW	23
Section 4: Misc. Forms	27
4.1: Chain of Custody	28
Section 5: MS Volatiles - QC Data Summaries	30
5.1: Method Blank Summary	31
5.2: Blank Spike Summary	43
5.3: Matrix Spike/Matrix Spike Duplicate Summary	53
Section 6: MS Semi-volatiles - QC Data Summaries	63
6.1: Method Blank Summary	64
6.2: Blank Spike Summary	66
6.3: Matrix Spike/Matrix Spike Duplicate Summary	68

1

2

3

4

5

6



Sample Summary

AEI Consultants

Job No: DA13685

73rd & Lowell

Project No: 401473 PO# 185967

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
DA13685-2	02/20/19	12:32 JG	02/20/19	SO	Soil	SB-1 7'
DA13685-3	02/20/19	13:20 JG	02/20/19	SO	Soil	SB-2 14.5'
DA13685-5	02/20/19	13:57 JG	02/20/19	AQ	Ground Water	SB-1 GW
DA13685-6	02/20/19	14:18 JG	02/20/19	AQ	Ground Water	SB-2 GW
DA13685-7	02/20/19	14:46 JG	02/20/19	AQ	Ground Water	MW-20 GW

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: DA13685
Account: AEI Consultants
Project: 73rd & Lowell
Collected: 02/20/19

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

DA13685-2 SB-1 7'

No hits reported in this sample.

DA13685-3 SB-2 14.5'

No hits reported in this sample.

DA13685-5 SB-1 GW

Methyl Tert Butyl Ether	6.0	1.0	0.50	ug/l	SW846 8260B
-------------------------	-----	-----	------	------	-------------

DA13685-6 SB-2 GW

Benzene	31.6	1.0	0.50	ug/l	SW846 8260B
n-Butylbenzene	88.7	1.0	0.50	ug/l	SW846 8260B
sec-Butylbenzene	61.8	1.0	0.50	ug/l	SW846 8260B
Carbon disulfide	0.85 J	2.0	0.70	ug/l	SW846 8260B
Ethylbenzene	338	10	5.0	ug/l	SW846 8260B
Isopropylbenzene	198	1.0	0.50	ug/l	SW846 8260B
p-Isopropyltoluene	25.6	1.0	0.50	ug/l	SW846 8260B
4-Methyl-2-pentanone	2.5 J	5.0	2.5	ug/l	SW846 8260B
Methyl Tert Butyl Ether	9.9	1.0	0.50	ug/l	SW846 8260B
Naphthalene	112	4.0	2.0	ug/l	SW846 8260B
n-Propylbenzene	586	10	5.0	ug/l	SW846 8260B
Toluene	1.9	1.0	0.50	ug/l	SW846 8260B
1,2,4-Trimethylbenzene	1440	10	5.0	ug/l	SW846 8260B
1,3,5-Trimethylbenzene	92.4	1.0	0.50	ug/l	SW846 8260B
Xylene (total)	467	10	10	ug/l	SW846 8260B
1-Methylnaphthalene	434	20	7.0	ug/l	SW846 8270C
2-Methylnaphthalene	104	20	7.0	ug/l	SW846 8270C
Naphthalene	137	20	8.0	ug/l	SW846 8270C

DA13685-7 MW-20 GW

Benzene	157	1.0	0.50	ug/l	SW846 8260B
n-Butylbenzene	1.8	1.0	0.50	ug/l	SW846 8260B
sec-Butylbenzene	7.8	1.0	0.50	ug/l	SW846 8260B
tert-Butylbenzene	0.73 J	1.0	0.50	ug/l	SW846 8260B
Ethylbenzene	102	1.0	0.50	ug/l	SW846 8260B
Isopropylbenzene	29.4	1.0	0.50	ug/l	SW846 8260B
p-Isopropyltoluene	0.84 J	1.0	0.50	ug/l	SW846 8260B
Methyl Tert Butyl Ether	14.9	1.0	0.50	ug/l	SW846 8260B
Naphthalene	3.4 J	4.0	2.0	ug/l	SW846 8260B
n-Propylbenzene	30.8	1.0	0.50	ug/l	SW846 8260B

Summary of Hits

Job Number: DA13685
Account: AEI Consultants
Project: 73rd & Lowell
Collected: 02/20/19

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
		5.2	1.0	0.50	ug/l	SW846 8260B
		37.2	1.0	0.50	ug/l	SW846 8260B
		49.4	1.0	1.0	ug/l	SW846 8260B
		5.8	2.0	0.70	ug/l	SW846 8270C
		2.3	2.0	0.80	ug/l	SW846 8270C

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: SB-1 7'		Date Sampled: 02/20/19
Lab Sample ID: DA13685-2		Date Received: 02/20/19
Matrix: SO - Soil		Percent Solids: 81.0
Method: SW846 8260B		
Project: 73rd & Lowell		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5V51382.D	1	02/21/19 12:44	MB	n/a	n/a	V5V2709
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.05 g	5.0 ml
Run #2		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	61	27	ug/kg	
107-02-8	Acrolein	ND	24	18	ug/kg	
107-13-1	Acrylonitrile	ND	12	9.8	ug/kg	
71-43-2	Benzene	ND	1.2	0.61	ug/kg	
108-86-1	Bromobenzene	ND	2.4	0.61	ug/kg	
74-97-5	Bromochloromethane	ND	2.4	0.73	ug/kg	
75-27-4	Bromodichloromethane	ND	2.4	0.61	ug/kg	
75-25-2	Bromoform	ND	2.4	1.2	ug/kg	
104-51-8	n-Butylbenzene	ND	2.4	0.61	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.4	0.61	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.4	0.61	ug/kg	
75-15-0	Carbon disulfide	ND	2.4	0.61	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.4	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	2.4	0.61	ug/kg	
75-00-3	Chloroethane	ND	2.4	0.98	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	4.9	1.6	ug/kg	
67-66-3	Chloroform	ND	2.4	0.61	ug/kg	
95-49-8	o-Chlorotoluene	ND	2.4	0.61	ug/kg	
106-43-4	p-Chlorotoluene	ND	2.4	0.61	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	12	8.6	ug/kg	
124-48-1	Dibromochloromethane	ND	2.4	0.73	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.4	0.61	ug/kg	
95-50-1	o-Dichlorobenzene	ND	2.4	0.61	ug/kg	
541-73-1	m-Dichlorobenzene	ND	2.4	0.61	ug/kg	
106-46-7	p-Dichlorobenzene	ND	2.4	0.61	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.4	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.4	0.61	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.4	0.61	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.4	0.61	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.4	0.61	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.4	0.61	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.4	0.61	ug/kg	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-1 7'	Date Sampled:	02/20/19
Lab Sample ID:	DA13685-2	Date Received:	02/20/19
Matrix:	SO - Soil	Percent Solids:	81.0
Method:	SW846 8260B		
Project:	73rd & Lowell		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.4	0.61	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.4	0.61	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.4	0.61	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	0.61	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.4	0.61	ug/kg	
100-41-4	Ethylbenzene	ND	2.4	0.61	ug/kg	
87-68-3	Hexachlorobutadiene	ND	2.4	0.67	ug/kg	
591-78-6	2-Hexanone	ND	12	6.1	ug/kg	
98-82-8	Isopropylbenzene	ND	2.4	0.61	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.4	0.61	ug/kg	
74-83-9	Methyl bromide	ND	2.4	0.61	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.4	0.61	ug/kg	
74-87-3	Methyl chloride	ND	2.4	1.1	ug/kg	
74-95-3	Methylene bromide	ND	2.4	0.73	ug/kg	
75-09-2	Methylene chloride	ND	4.9	3.7	ug/kg	
78-93-3	Methyl ethyl ketone	ND	12	6.1	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	12	6.1	ug/kg	
91-20-3	Naphthalene	ND	4.9	3.7	ug/kg	
103-65-1	n-Propylbenzene	ND	2.4	0.61	ug/kg	
100-42-5	Styrene	ND	2.4	0.61	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.4	0.61	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	0.61	ug/kg	
127-18-4	Tetrachloroethylene	ND	2.4	0.61	ug/kg	
108-88-3	Toluene	ND	2.4	1.2	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	2.4	1.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2.4	1.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.4	0.61	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.4	0.61	ug/kg	
79-01-6	Trichloroethylene	ND	2.4	0.61	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.4	1.2	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	2.4	0.61	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.4	0.61	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.4	0.61	ug/kg	
108-05-4	Vinyl Acetate	ND	12	6.1	ug/kg	
75-01-4	Vinyl chloride	ND	2.4	0.61	ug/kg	
1330-20-7	Xylene (total)	ND	2.4	1.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-131%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-1 7'		Date Sampled: 02/20/19
Lab Sample ID: DA13685-2		Date Received: 02/20/19
Matrix: SO - Soil		Percent Solids: 81.0
Method: SW846 8260B		
Project: 73rd & Lowell		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	101%		70-130%
17060-07-0	1,2-Dichloroethane-D4	99%		70-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-1 7'		
Lab Sample ID: DA13685-2		Date Sampled: 02/20/19
Matrix: SO - Soil		Date Received: 02/20/19
Method: SW846 8270C SW846 3546		Percent Solids: 81.0
Project: 73rd & Lowell		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G141326.D	1	02/21/19 20:39	DC	02/21/19	OP17493	E1G2405
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	82	21	ug/kg	
208-96-8	Acenaphthylene	ND	82	21	ug/kg	
120-12-7	Anthracene	ND	82	21	ug/kg	
56-55-3	Benzo(a)anthracene	ND	82	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	82	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	82	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	82	21	ug/kg	
50-32-8	Benzo(a)pyrene	ND	82	21	ug/kg	
218-01-9	Chrysene	ND	82	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	82	21	ug/kg	
206-44-0	Fluoranthene	ND	82	21	ug/kg	
86-73-7	Fluorene	ND	82	21	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	82	21	ug/kg	
90-12-0	1-Methylnaphthalene	ND	82	29	ug/kg	
91-57-6	2-Methylnaphthalene	ND	82	37	ug/kg	
91-20-3	Naphthalene	ND	82	29	ug/kg	
85-01-8	Phenanthrene	ND	82	21	ug/kg	
129-00-0	Pyrene	ND	82	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	36%		23-130%
4165-60-0	Nitrobenzene-d5	51%		12-131%
1718-51-0	Terphenyl-d14	71%		29-141%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 14.5'	Date Sampled:	02/20/19
Lab Sample ID:	DA13685-3	Date Received:	02/20/19
Matrix:	SO - Soil	Percent Solids:	93.6
Method:	SW846 8260B		
Project:	73rd & Lowell		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.1	0.53	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.1	0.53	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.1	0.53	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	0.53	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	0.53	ug/kg	
100-41-4	Ethylbenzene	ND	2.1	0.53	ug/kg	
87-68-3	Hexachlorobutadiene	ND	2.1	0.59	ug/kg	
591-78-6	2-Hexanone	ND	11	5.3	ug/kg	
98-82-8	Isopropylbenzene	ND	2.1	0.53	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.1	0.53	ug/kg	
74-83-9	Methyl bromide	ND	2.1	0.53	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.1	0.53	ug/kg	
74-87-3	Methyl chloride	ND	2.1	0.96	ug/kg	
74-95-3	Methylene bromide	ND	2.1	0.64	ug/kg	
75-09-2	Methylene chloride	ND	4.3	3.2	ug/kg	
78-93-3	Methyl ethyl ketone	ND	11	5.3	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	11	5.3	ug/kg	
91-20-3	Naphthalene	ND	4.3	3.2	ug/kg	
103-65-1	n-Propylbenzene	ND	2.1	0.53	ug/kg	
100-42-5	Styrene	ND	2.1	0.53	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.1	0.53	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	0.53	ug/kg	
127-18-4	Tetrachloroethylene	ND	2.1	0.53	ug/kg	
108-88-3	Toluene	ND	2.1	1.1	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	2.1	1.1	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.1	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.1	0.53	ug/kg	
79-01-6	Trichloroethylene	ND	2.1	0.53	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.1	1.1	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	2.1	0.53	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.1	0.53	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	0.53	ug/kg	
108-05-4	Vinyl Acetate	ND	11	5.3	ug/kg	
75-01-4	Vinyl chloride	ND	2.1	0.53	ug/kg	
1330-20-7	Xylene (total)	ND	2.1	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		70-131%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-2 14.5'		Date Sampled: 02/20/19
Lab Sample ID: DA13685-3		Date Received: 02/20/19
Matrix: SO - Soil		Percent Solids: 93.6
Method: SW846 8260B		
Project: 73rd & Lowell		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	98%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%
17060-07-0	1,2-Dichloroethane-D4	100%		70-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: SB-2 14.5'		
Lab Sample ID: DA13685-3		Date Sampled: 02/20/19
Matrix: SO - Soil		Date Received: 02/20/19
Method: SW846 8270C SW846 3546		Percent Solids: 93.6
Project: 73rd & Lowell		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G141327.D	1	02/21/19 21:07	DC	02/21/19	OP17493	E1G2405
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	71	18	ug/kg	
208-96-8	Acenaphthylene	ND	71	18	ug/kg	
120-12-7	Anthracene	ND	71	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	71	18	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	71	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	71	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	71	18	ug/kg	
50-32-8	Benzo(a)pyrene	ND	71	18	ug/kg	
218-01-9	Chrysene	ND	71	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	71	18	ug/kg	
206-44-0	Fluoranthene	ND	71	18	ug/kg	
86-73-7	Fluorene	ND	71	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	71	18	ug/kg	
90-12-0	1-Methylnaphthalene	ND	71	25	ug/kg	
91-57-6	2-Methylnaphthalene	ND	71	32	ug/kg	
91-20-3	Naphthalene	ND	71	25	ug/kg	
85-01-8	Phenanthrene	ND	71	18	ug/kg	
129-00-0	Pyrene	ND	71	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	76%		23-130%
4165-60-0	Nitrobenzene-d5	78%		12-131%
1718-51-0	Terphenyl-d14	90%		29-141%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-1 GW		Date Sampled: 02/20/19
Lab Sample ID: DA13685-5		Date Received: 02/20/19
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: 73rd & Lowell		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V7402.D	1	02/26/19 19:46	CH	n/a	n/a	V6V1936
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/l	
107-02-8	Acrolein	ND	10	7.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.50	ug/l	
74-97-5	Bromochloromethane	ND	2.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.50	ug/l	
75-25-2	Bromoform	ND	2.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.70	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.70	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	2.0	0.50	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	2.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.80	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-1 GW	
Lab Sample ID: DA13685-5	Date Sampled: 02/20/19
Matrix: AQ - Ground Water	Date Received: 02/20/19
Method: SW846 8260B	Percent Solids: n/a
Project: 73rd & Lowell	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		70-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-1 GW		
Lab Sample ID: DA13685-5		Date Sampled: 02/20/19
Matrix: AQ - Ground Water		Date Received: 02/20/19
Method: SW846 8270C SW846 3510C		Percent Solids: n/a
Project: 73rd & Lowell		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G141406.D	1	02/25/19 22:58	DC	02/21/19	OP17499	E1G2407
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	2.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.60	ug/l	
120-12-7	Anthracene	ND	2.0	0.70	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.70	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.90	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.90	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	1.0	ug/l	
218-01-9	Chrysene	ND	2.0	0.70	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	1.3	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.90	ug/l	
86-73-7	Fluorene	ND	2.0	0.60	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.4	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.70	ug/l	
91-20-3	Naphthalene	ND	2.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.60	ug/l	
129-00-0	Pyrene	ND	2.0	0.70	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		19-130%
321-60-8	2-Fluorobiphenyl	67%		20-130%
1718-51-0	Terphenyl-d14	52%		13-149%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB-2 GW	Date Sampled:	02/20/19
Lab Sample ID:	DA13685-6	Date Received:	02/20/19
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	73rd & Lowell		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
142-28-9	1,3-Dichloropropane	ND	2.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	1.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.60	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	338 ^a	10	5.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.0	2.0	ug/l	
591-78-6	2-Hexanone	ND	10	2.5	ug/l	
98-82-8	Isopropylbenzene	198	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	25.6	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	4.0	2.0	ug/l	
74-87-3	Methyl chloride	ND	2.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	2.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	2.5	5.0	2.5	ug/l	J
78-93-3	Methyl ethyl ketone	ND	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	9.9	1.0	0.50	ug/l	
91-20-3	Naphthalene	112	4.0	2.0	ug/l	
103-65-1	n-Propylbenzene	586 ^a	10	5.0	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.9	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	1.0	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	4.0	3.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1440 ^a	10	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	92.4	1.0	0.50	ug/l	
108-05-4	Vinyl Acetate	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.50	ug/l	
1330-20-7	Xylene (total)	467 ^a	10	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%	103%	70-130%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-2 GW	
Lab Sample ID: DA13685-6	Date Sampled: 02/20/19
Matrix: AQ - Ground Water	Date Received: 02/20/19
Method: SW846 8260B	Percent Solids: n/a
Project: 73rd & Lowell	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	95%	101%	70-130%
2037-26-5	Toluene-D8	97%	99%	70-130%
460-00-4	4-Bromofluorobenzene	93%	95%	70-130%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-2 GW		
Lab Sample ID: DA13685-6		Date Sampled: 02/20/19
Matrix: AQ - Ground Water		Date Received: 02/20/19
Method: SW846 8270C SW846 3510C		Percent Solids: n/a
Project: 73rd & Lowell		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G141357.D	1	02/22/19 19:10	DC	02/21/19	OP17499	E1G2406
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	20	7.0	ug/l	
208-96-8	Acenaphthylene	ND	20	6.0	ug/l	
120-12-7	Anthracene	ND	20	7.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	20	7.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	20	9.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	20	9.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	20	10	ug/l	
50-32-8	Benzo(a)pyrene	ND	20	10	ug/l	
218-01-9	Chrysene	ND	20	7.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	20	13	ug/l	
206-44-0	Fluoranthene	ND	20	9.0	ug/l	
86-73-7	Fluorene	ND	20	6.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	14	ug/l	
90-12-0	1-Methylnaphthalene	434	20	7.0	ug/l	
91-57-6	2-Methylnaphthalene	104	20	7.0	ug/l	
91-20-3	Naphthalene	137	20	8.0	ug/l	
85-01-8	Phenanthrene	ND	20	6.0	ug/l	
129-00-0	Pyrene	ND	20	7.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		19-130%
321-60-8	2-Fluorobiphenyl	73%		20-130%
1718-51-0	Terphenyl-d14	55%		13-149%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-20 GW		
Lab Sample ID: DA13685-7		Date Sampled: 02/20/19
Matrix: AQ - Ground Water		Date Received: 02/20/19
Method: SW846 8260B		Percent Solids: n/a
Project: 73rd & Lowell		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V7431.D	1	02/27/19 12:58	CH	n/a	n/a	V6V1938
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/l	
107-02-8	Acrolein	ND	10	7.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	4.0	ug/l	
71-43-2	Benzene	157	1.0	0.50	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.50	ug/l	
74-97-5	Bromochloromethane	ND	2.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.50	ug/l	
75-25-2	Bromoform	ND	2.0	0.50	ug/l	
104-51-8	n-Butylbenzene	1.8	1.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	7.8	1.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	0.73	1.0	0.50	ug/l	J
75-15-0	Carbon disulfide	ND	2.0	0.70	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.70	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	2.0	0.50	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	2.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.80	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-20 GW	
Lab Sample ID: DA13685-7	Date Sampled: 02/20/19
Matrix: AQ - Ground Water	Date Received: 02/20/19
Method: SW846 8260B	Percent Solids: n/a
Project: 73rd & Lowell	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		70-130%
2037-26-5	Toluene-D8	100%		70-130%
460-00-4	4-Bromofluorobenzene	97%		70-130%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-20 GW		
Lab Sample ID: DA13685-7		Date Sampled: 02/20/19
Matrix: AQ - Ground Water		Date Received: 02/20/19
Method: SW846 8270C SW846 3510C		Percent Solids: n/a
Project: 73rd & Lowell		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G141356.D	1	02/22/19 18:41	DC	02/21/19	OP17499	E1G2406
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	2.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.60	ug/l	
120-12-7	Anthracene	ND	2.0	0.70	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.70	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.90	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.90	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	1.0	ug/l	
218-01-9	Chrysene	ND	2.0	0.70	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	1.3	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.90	ug/l	
86-73-7	Fluorene	ND	2.0	0.60	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.4	ug/l	
90-12-0	1-Methylnaphthalene	5.8	2.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.70	ug/l	
91-20-3	Naphthalene	2.3	2.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.60	ug/l	
129-00-0	Pyrene	ND	2.0	0.70	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		19-130%
321-60-8	2-Fluorobiphenyl	59%		20-130%
1718-51-0	Terphenyl-d14	56%		13-149%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS Accutest Sample Receipt Summary

Job Number: DA13685

Client: AEI

Project: 73RD & LOWELL

Date / Time Received: 2/20/2019 4:10:00 PM

Delivery Method: _____

Airbill #'s: HD

Cooler Temps (Initial/Adjusted): #1: (3.5/3.5):

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | <u>Bar Therm;</u> | |
| 3. Cooler media: | <u>Ice (Bag)</u> | |
| 4. No. Coolers: | <u>1</u> | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | <u>Intact</u> | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

4.1
4

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-MB	5V51374.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2500	1100	ug/kg	
107-02-8	Acrolein	ND	1000	750	ug/kg	
107-13-1	Acrylonitrile	ND	500	400	ug/kg	
71-43-2	Benzene	ND	50	25	ug/kg	
108-86-1	Bromobenzene	ND	100	25	ug/kg	
74-97-5	Bromochloromethane	ND	100	30	ug/kg	
75-27-4	Bromodichloromethane	ND	100	25	ug/kg	
75-25-2	Bromoform	ND	100	50	ug/kg	
104-51-8	n-Butylbenzene	ND	100	25	ug/kg	
135-98-8	sec-Butylbenzene	ND	100	25	ug/kg	
98-06-6	tert-Butylbenzene	ND	100	25	ug/kg	
75-15-0	Carbon disulfide	ND	100	25	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	25	ug/kg	
108-90-7	Chlorobenzene	ND	100	25	ug/kg	
75-00-3	Chloroethane	ND	100	40	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	200	65	ug/kg	
67-66-3	Chloroform	ND	100	25	ug/kg	
95-49-8	o-Chlorotoluene	ND	100	25	ug/kg	
106-43-4	p-Chlorotoluene	ND	100	25	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	500	350	ug/kg	
124-48-1	Dibromochloromethane	ND	100	30	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	25	ug/kg	
95-50-1	o-Dichlorobenzene	ND	100	25	ug/kg	
541-73-1	m-Dichlorobenzene	ND	100	25	ug/kg	
106-46-7	p-Dichlorobenzene	ND	100	25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	25	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	25	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	100	25	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	100	25	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	100	25	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	25	ug/kg	
142-28-9	1,3-Dichloropropane	ND	100	25	ug/kg	
594-20-7	2,2-Dichloropropane	ND	100	25	ug/kg	
563-58-6	1,1-Dichloropropene	ND	100	25	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	25	ug/kg	

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-MB	5V51374.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	100	25	ug/kg	
100-41-4	Ethylbenzene	ND	100	25	ug/kg	
87-68-3	Hexachlorobutadiene	ND	100	28	ug/kg	
591-78-6	2-Hexanone	ND	500	250	ug/kg	
98-82-8	Isopropylbenzene	ND	100	25	ug/kg	
99-87-6	p-Isopropyltoluene	ND	100	25	ug/kg	
74-83-9	Methyl bromide	ND	100	25	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	25	ug/kg	
74-87-3	Methyl chloride	ND	100	45	ug/kg	
74-95-3	Methylene bromide	ND	100	30	ug/kg	
75-09-2	Methylene chloride	ND	200	150	ug/kg	
78-93-3	Methyl ethyl ketone	ND	500	250	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	500	250	ug/kg	
91-20-3	Naphthalene	ND	200	150	ug/kg	
103-65-1	n-Propylbenzene	ND	100	25	ug/kg	
100-42-5	Styrene	ND	100	25	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	25	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	25	ug/kg	
127-18-4	Tetrachloroethylene	ND	100	25	ug/kg	
108-88-3	Toluene	ND	100	50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	100	50	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	100	50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	25	ug/kg	
79-01-6	Trichloroethylene	ND	100	25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	100	25	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	100	25	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	100	25	ug/kg	
108-05-4	Vinyl Acetate	ND	500	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	25	ug/kg	
1330-20-7	Xylene (total)	ND	100	50	ug/kg	

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-MB	5V51374.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 70-131%
2037-26-5	Toluene-D8	100% 70-130%
460-00-4	4-Bromofluorobenzene	98% 70-130%
17060-07-0	1,2-Dichloroethane-D4	97% 70-130%

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-MB	5V51375.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	22	ug/kg	
107-02-8	Acrolein	ND	20	15	ug/kg	
107-13-1	Acrylonitrile	ND	10	8.0	ug/kg	
71-43-2	Benzene	ND	1.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	2.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	2.0	0.60	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	0.50	ug/kg	
75-25-2	Bromoform	ND	2.0	1.0	ug/kg	
104-51-8	n-Butylbenzene	ND	2.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	2.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	2.0	0.50	ug/kg	
75-15-0	Carbon disulfide	ND	2.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	2.0	0.80	ug/kg	
110-75-8	2-Chloroethyl vinyl ether	ND	4.0	1.3	ug/kg	
67-66-3	Chloroform	ND	2.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	2.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	2.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	7.0	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	0.60	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	2.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	2.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	2.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.50	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	2.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	2.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	2.0	0.50	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.50	ug/kg	

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-MB	5V51375.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	0.50	ug/kg	
87-68-3	Hexachlorobutadiene	ND	2.0	0.55	ug/kg	
591-78-6	2-Hexanone	ND	10	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	2.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	2.0	0.50	ug/kg	
74-83-9	Methyl bromide	ND	2.0	0.50	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	0.50	ug/kg	
74-87-3	Methyl chloride	ND	2.0	0.90	ug/kg	
74-95-3	Methylene bromide	ND	2.0	0.60	ug/kg	
75-09-2	Methylene chloride	ND	4.0	3.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	10	5.0	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	10	5.0	ug/kg	
91-20-3	Naphthalene	ND	4.0	3.0	ug/kg	
103-65-1	n-Propylbenzene	ND	2.0	0.50	ug/kg	
100-42-5	Styrene	ND	2.0	0.50	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.50	ug/kg	
127-18-4	Tetrachloroethylene	ND	2.0	0.50	ug/kg	
108-88-3	Toluene	ND	2.0	1.0	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	2.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	2.0	1.0	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	0.50	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	0.50	ug/kg	
108-05-4	Vinyl Acetate	ND	10	5.0	ug/kg	
75-01-4	Vinyl chloride	ND	2.0	0.50	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	1.0	ug/kg	

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-MB	5V51375.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 70-131%
2037-26-5	Toluene-D8	97% 70-130%
460-00-4	4-Bromofluorobenzene	99% 70-130%
17060-07-0	1,2-Dichloroethane-D4	109% 70-130%

5.1.2
5

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1936-MB	6V7394.D	1	02/26/19	CH	n/a	n/a	V6V1936

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-5, DA13685-6

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/l	
107-02-8	Acrolein	ND	10	7.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.50	ug/l	
74-97-5	Bromochloromethane	ND	2.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.50	ug/l	
75-25-2	Bromoform	ND	2.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.70	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.70	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	2.0	0.50	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	2.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.80	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	1.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.60	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.50	ug/l	

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1936-MB	6V7394.D	1	02/26/19	CH	n/a	n/a	V6V1936

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-5, DA13685-6

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.0	2.0	ug/l	
591-78-6	2-Hexanone	ND	10	2.5	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	4.0	2.0	ug/l	
74-87-3	Methyl chloride	ND	2.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	2.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	1.0	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	4.0	3.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.50	ug/l	
108-05-4	Vinyl Acetate	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	1.0	1.0	ug/l	

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1936-MB	6V7394.D	1	02/26/19	CH	n/a	n/a	V6V1936

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-5, DA13685-6

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	106% 70-130%
17060-07-0	1,2-Dichloroethane-D4	104% 70-130%
2037-26-5	Toluene-D8	103% 70-130%
460-00-4	4-Bromofluorobenzene	91% 70-130%

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1938-MB	6V7425.D	1	02/27/19	CH	n/a	n/a	V6V1938

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-6, DA13685-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	20	ug/l	
107-02-8	Acrolein	ND	10	7.0	ug/l	
107-13-1	Acrylonitrile	ND	5.0	4.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.50	ug/l	
74-97-5	Bromochloromethane	ND	2.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.50	ug/l	
75-25-2	Bromoform	ND	2.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.50	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.70	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.70	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	2.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	2.0	0.50	ug/l	
67-66-3	Chloroform	ND	2.0	0.50	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	4.0	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.50	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	2.0	0.50	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.80	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	1.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.60	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.50	ug/l	

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1938-MB	6V7425.D	1	02/27/19	CH	n/a	n/a	V6V1938

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-6, DA13685-7

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
87-68-3	Hexachlorobutadiene	ND	4.0	2.0	ug/l	
591-78-6	2-Hexanone	ND	10	2.5	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.50	ug/l	
74-83-9	Methyl bromide	ND	4.0	2.0	ug/l	
74-87-3	Methyl chloride	ND	2.0	1.0	ug/l	
74-95-3	Methylene bromide	ND	2.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	1.0	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	4.0	3.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.50	ug/l	
108-05-4	Vinyl Acetate	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	1.0	1.0	ug/l	

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1938-MB	6V7425.D	1	02/27/19	CH	n/a	n/a	V6V1938

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-6, DA13685-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 70-130%
17060-07-0	1,2-Dichloroethane-D4	100% 70-130%
2037-26-5	Toluene-D8	101% 70-130%
460-00-4	4-Bromofluorobenzene	93% 70-130%

5.1.4
5

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-BS	5V51371.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	247	99	30-198
107-02-8	Acrolein	250	186	74	66-137
107-13-1	Acrylonitrile	125	132	106	70-130
71-43-2	Benzene	50	44.5	89	68-130
108-86-1	Bromobenzene	50	43.2	86	70-130
74-97-5	Bromochloromethane	50	46.8	94	70-130
75-27-4	Bromodichloromethane	50	48.8	98	70-130
75-25-2	Bromoform	50	50.0	100	68-130
104-51-8	n-Butylbenzene	50	45.6	91	68-130
135-98-8	sec-Butylbenzene	50	43.7	87	69-130
98-06-6	tert-Butylbenzene	50	43.2	86	70-130
75-15-0	Carbon disulfide	50	47.8	96	67-130
56-23-5	Carbon tetrachloride	50	47.8	96	67-130
108-90-7	Chlorobenzene	50	43.2	86	70-130
75-00-3	Chloroethane	50	50.3	101	69-130
110-75-8	2-Chloroethyl vinyl ether	50	45.8	92	68-130
67-66-3	Chloroform	50	47.7	95	70-130
95-49-8	o-Chlorotoluene	50	43.0	86	67-130
106-43-4	p-Chlorotoluene	50	42.6	85	68-130
96-12-8	1,2-Dibromo-3-chloropropane	50	49.4	99	68-130
124-48-1	Dibromochloromethane	50	48.0	96	70-130
106-93-4	1,2-Dibromoethane	50	46.6	93	70-130
95-50-1	o-Dichlorobenzene	50	43.8	88	70-130
541-73-1	m-Dichlorobenzene	50	44.0	88	69-130
106-46-7	p-Dichlorobenzene	50	43.0	86	69-130
75-71-8	Dichlorodifluoromethane	50	59.5	119	33-173
75-34-3	1,1-Dichloroethane	50	47.4	95	70-130
107-06-2	1,2-Dichloroethane	50	46.8	94	70-130
75-35-4	1,1-Dichloroethylene	50	45.4	91	70-130
156-59-2	cis-1,2-Dichloroethylene	50	47.9	96	70-130
156-60-5	trans-1,2-Dichloroethylene	50	47.2	94	69-130
78-87-5	1,2-Dichloropropane	50	45.8	92	70-130
142-28-9	1,3-Dichloropropane	50	46.0	92	70-130
594-20-7	2,2-Dichloropropane	50	48.8	98	67-130
563-58-6	1,1-Dichloropropene	50	46.4	93	70-130
10061-01-5	cis-1,3-Dichloropropene	50	48.8	98	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-BS	5V51371.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	48.5	97	68-130
100-41-4	Ethylbenzene	50	44.1	88	69-130
87-68-3	Hexachlorobutadiene	50	44.9	90	67-130
591-78-6	2-Hexanone	250	250	100	58-130
98-82-8	Isopropylbenzene	50	44.6	89	70-130
99-87-6	p-Isopropyltoluene	50	44.6	89	70-130
74-83-9	Methyl bromide	50	52.0	104	57-130
1634-04-4	Methyl Tert Butyl Ether	50	48.0	96	70-130
74-87-3	Methyl chloride	50	49.8	100	51-137
74-95-3	Methylene bromide	50	49.0	98	70-130
75-09-2	Methylene chloride	50	45.7	91	69-130
78-93-3	Methyl ethyl ketone	250	285	114	61-136
108-10-1	4-Methyl-2-pentanone	250	247	99	69-130
91-20-3	Naphthalene	50	46.6	93	70-130
103-65-1	n-Propylbenzene	50	44.0	88	68-130
100-42-5	Styrene	50	45.5	91	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	46.0	92	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	45.9	92	68-130
127-18-4	Tetrachloroethylene	50	44.7	89	68-130
108-88-3	Toluene	50	42.9	86	65-130
87-61-6	1,2,3-Trichlorobenzene	50	45.6	91	70-130
120-82-1	1,2,4-Trichlorobenzene	50	47.9	96	70-130
71-55-6	1,1,1-Trichloroethane	50	47.0	94	68-130
79-00-5	1,1,2-Trichloroethane	50	45.4	91	70-130
79-01-6	Trichloroethylene	50	45.2	90	70-130
75-69-4	Trichlorofluoromethane	50	55.1	110	70-130
96-18-4	1,2,3-Trichloropropane	50	46.6	93	68-130
95-63-6	1,2,4-Trimethylbenzene	50	43.7	87	66-130
108-67-8	1,3,5-Trimethylbenzene	50	43.7	87	68-130
108-05-4	Vinyl Acetate	250	261	104	70-130
75-01-4	Vinyl chloride	50	51.1	102	65-130
1330-20-7	Xylene (total)	150	133	89	69-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-BS	5V51371.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	70-131%
2037-26-5	Toluene-D8	98%	70-130%
460-00-4	4-Bromofluorobenzene	99%	70-130%
17060-07-0	1,2-Dichloroethane-D4	105%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5V2709-BS	5V51372.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
---------	----------	----------------	--------------	----------	--------

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	70-131%
2037-26-5	Toluene-D8	97%	70-130%
460-00-4	4-Bromofluorobenzene	100%	70-130%
17060-07-0	1,2-Dichloroethane-D4	100%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1936-BS	6V7392.D	1	02/26/19	CH	n/a	n/a	V6V1936

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-5, DA13685-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	250	245	98	70-130
107-02-8	Acrolein	250	225	90	10-281
107-13-1	Acrylonitrile	125	135	108	58-136
71-43-2	Benzene	50	52.2	104	70-130
108-86-1	Bromobenzene	50	53.6	107	70-130
74-97-5	Bromochloromethane	50	52.4	105	70-130
75-27-4	Bromodichloromethane	50	55.0	110	70-130
75-25-2	Bromoform	50	59.1	118	61-130
104-51-8	n-Butylbenzene	50	57.1	114	69-130
135-98-8	sec-Butylbenzene	50	55.0	110	70-130
98-06-6	tert-Butylbenzene	50	55.9	112	70-130
75-15-0	Carbon disulfide	50	56.2	112	67-130
56-23-5	Carbon tetrachloride	50	57.9	116	70-130
108-90-7	Chlorobenzene	50	52.0	104	70-130
75-00-3	Chloroethane	50	50.3	101	64-138
110-75-8	2-Chloroethyl vinyl ether	50	50.1	100	68-130
67-66-3	Chloroform	50	54.7	109	70-130
95-49-8	o-Chlorotoluene	50	54.2	108	70-130
106-43-4	p-Chlorotoluene	50	52.0	104	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	55.7	111	65-130
124-48-1	Dibromochloromethane	50	53.8	108	65-130
106-93-4	1,2-Dibromoethane	50	51.1	102	70-130
95-50-1	o-Dichlorobenzene	50	53.1	106	63-130
541-73-1	m-Dichlorobenzene	50	53.5	107	65-130
106-46-7	p-Dichlorobenzene	50	52.9	106	68-130
75-71-8	Dichlorodifluoromethane	50	36.1	72	10-200
75-34-3	1,1-Dichloroethane	50	56.1	112	70-130
107-06-2	1,2-Dichloroethane	50	52.7	105	67-131
75-35-4	1,1-Dichloroethylene	50	55.5	111	70-130
156-59-2	cis-1,2-Dichloroethylene	50	53.1	106	70-130
156-60-5	trans-1,2-Dichloroethylene	50	55.3	111	70-130
78-87-5	1,2-Dichloropropane	50	52.4	105	70-130
142-28-9	1,3-Dichloropropane	50	48.4	97	70-130
594-20-7	2,2-Dichloropropane	50	57.3	115	32-148
563-58-6	1,1-Dichloropropene	50	53.6	107	70-130
10061-01-5	cis-1,3-Dichloropropene	50	55.3	111	68-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1936-BS	6V7392.D	1	02/26/19	CH	n/a	n/a	V6V1936

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-5, DA13685-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	49.8	100	64-130
100-41-4	Ethylbenzene	50	52.2	104	69-130
87-68-3	Hexachlorobutadiene	50	58.1	116	51-134
591-78-6	2-Hexanone	250	241	96	69-130
98-82-8	Isopropylbenzene	50	55.1	110	70-130
99-87-6	p-Isopropyltoluene	50	55.6	111	70-130
74-83-9	Methyl bromide	50	51.2	102	56-136
74-87-3	Methyl chloride	50	43.7	87	48-147
74-95-3	Methylene bromide	50	54.5	109	70-130
75-09-2	Methylene chloride	50	55.1	110	70-130
108-10-1	4-Methyl-2-pentanone	250	257	103	70-130
78-93-3	Methyl ethyl ketone	250	260	104	69-130
1634-04-4	Methyl Tert Butyl Ether	50	53.2	106	70-130
91-20-3	Naphthalene	50	55.5	111	61-130
103-65-1	n-Propylbenzene	50	53.8	108	70-130
100-42-5	Styrene	50	52.1	104	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	54.3	109	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	53.5	107	60-130
127-18-4	Tetrachloroethylene	50	52.8	106	70-130
108-88-3	Toluene	50	48.1	96	70-130
87-61-6	1,2,3-Trichlorobenzene	50	55.5	111	55-130
120-82-1	1,2,4-Trichlorobenzene	50	56.6	113	65-130
71-55-6	1,1,1-Trichloroethane	50	55.9	112	70-130
79-00-5	1,1,2-Trichloroethane	50	48.5	97	68-130
79-01-6	Trichloroethylene	50	56.6	113	70-130
75-69-4	Trichlorofluoromethane	50	52.9	106	68-146
96-18-4	1,2,3-Trichloropropane	50	54.0	108	70-130
95-63-6	1,2,4-Trimethylbenzene	50	54.3	109	70-130
108-67-8	1,3,5-Trimethylbenzene	50	54.9	110	70-130
108-05-4	Vinyl Acetate	250	273	109	49-131
75-01-4	Vinyl chloride	50	47.5	95	57-144
1330-20-7	Xylene (total)	150	158	105	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1936-BS	6V7392.D	1	02/26/19	CH	n/a	n/a	V6V1936

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-5, DA13685-6

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	70-130%
17060-07-0	1,2-Dichloroethane-D4	98%	70-130%
2037-26-5	Toluene-D8	92%	70-130%
460-00-4	4-Bromofluorobenzene	101%	70-130%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1938-BS	6V7423.D	1	02/27/19	CH	n/a	n/a	V6V1938

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-6, DA13685-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	250	235	94	70-130
107-02-8	Acrolein	250	175	70	10-281
107-13-1	Acrylonitrile	125	119	95	58-136
71-43-2	Benzene	50	44.8	90	70-130
108-86-1	Bromobenzene	50	47.5	95	70-130
74-97-5	Bromochloromethane	50	46.3	93	70-130
75-27-4	Bromodichloromethane	50	46.7	93	70-130
75-25-2	Bromoform	50	44.2	88	61-130
104-51-8	n-Butylbenzene	50	48.9	98	69-130
135-98-8	sec-Butylbenzene	50	47.5	95	70-130
98-06-6	tert-Butylbenzene	50	47.8	96	70-130
75-15-0	Carbon disulfide	50	46.1	92	67-130
56-23-5	Carbon tetrachloride	50	46.6	93	70-130
108-90-7	Chlorobenzene	50	45.8	92	70-130
75-00-3	Chloroethane	50	49.5	99	64-138
110-75-8	2-Chloroethyl vinyl ether	50	46.1	92	68-130
67-66-3	Chloroform	50	46.6	93	70-130
95-49-8	o-Chlorotoluene	50	46.6	93	70-130
106-43-4	p-Chlorotoluene	50	44.6	89	70-130
96-12-8	1,2-Dibromo-3-chloropropane	50	47.8	96	65-130
124-48-1	Dibromochloromethane	50	44.9	90	65-130
106-93-4	1,2-Dibromoethane	50	45.7	91	70-130
95-50-1	o-Dichlorobenzene	50	46.5	93	63-130
541-73-1	m-Dichlorobenzene	50	46.2	92	65-130
106-46-7	p-Dichlorobenzene	50	46.6	93	68-130
75-71-8	Dichlorodifluoromethane	50	57.0	114	10-200
75-34-3	1,1-Dichloroethane	50	47.6	95	70-130
107-06-2	1,2-Dichloroethane	50	45.3	91	67-131
75-35-4	1,1-Dichloroethylene	50	45.1	90	70-130
156-59-2	cis-1,2-Dichloroethylene	50	46.5	93	70-130
156-60-5	trans-1,2-Dichloroethylene	50	46.9	94	70-130
78-87-5	1,2-Dichloropropane	50	45.4	91	70-130
142-28-9	1,3-Dichloropropane	50	44.9	90	70-130
594-20-7	2,2-Dichloropropane	50	46.6	93	32-148
563-58-6	1,1-Dichloropropene	50	45.9	92	70-130
10061-01-5	cis-1,3-Dichloropropene	50	46.3	93	68-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1938-BS	6V7423.D	1	02/27/19	CH	n/a	n/a	V6V1938

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-6, DA13685-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-02-6	trans-1,3-Dichloropropene	50	44.5	89	64-130
100-41-4	Ethylbenzene	50	44.9	90	69-130
87-68-3	Hexachlorobutadiene	50	48.5	97	51-134
591-78-6	2-Hexanone	250	227	91	69-130
98-82-8	Isopropylbenzene	50	46.9	94	70-130
99-87-6	p-Isopropyltoluene	50	47.1	94	70-130
74-83-9	Methyl bromide	50	51.0	102	56-136
74-87-3	Methyl chloride	50	49.8	100	48-147
74-95-3	Methylene bromide	50	45.7	91	70-130
75-09-2	Methylene chloride	50	45.9	92	70-130
108-10-1	4-Methyl-2-pentanone	250	223	89	70-130
78-93-3	Methyl ethyl ketone	250	238	95	69-130
1634-04-4	Methyl Tert Butyl Ether	50	44.7	89	70-130
91-20-3	Naphthalene	50	48.4	97	61-130
103-65-1	n-Propylbenzene	50	46.2	92	70-130
100-42-5	Styrene	50	45.4	91	70-130
630-20-6	1,1,1,2-Tetrachloroethane	50	45.8	92	70-130
79-34-5	1,1,2,2-Tetrachloroethane	50	47.4	95	60-130
127-18-4	Tetrachloroethylene	50	47.0	94	70-130
108-88-3	Toluene	50	44.8	90	70-130
87-61-6	1,2,3-Trichlorobenzene	50	48.1	96	55-130
120-82-1	1,2,4-Trichlorobenzene	50	47.8	96	65-130
71-55-6	1,1,1-Trichloroethane	50	45.8	92	70-130
79-00-5	1,1,2-Trichloroethane	50	44.5	89	68-130
79-01-6	Trichloroethylene	50	47.0	94	70-130
75-69-4	Trichlorofluoromethane	50	52.3	105	68-146
96-18-4	1,2,3-Trichloropropane	50	39.5	79	70-130
95-63-6	1,2,4-Trimethylbenzene	50	46.8	94	70-130
108-67-8	1,3,5-Trimethylbenzene	50	47.2	94	70-130
108-05-4	Vinyl Acetate	250	235	94	49-131
75-01-4	Vinyl chloride	50	51.7	103	57-144
1330-20-7	Xylene (total)	150	136	91	70-130

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1938-BS	6V7423.D	1	02/27/19	CH	n/a	n/a	V6V1938

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-6, DA13685-7

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	70-130%
2037-26-5	Toluene-D8	97%	70-130%
460-00-4	4-Bromofluorobenzene	101%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA13658-2MS	5V51378.D	1	02/21/19	MB	n/a	n/a	V5V2709
DA13658-2MSD	5V51379.D	1	02/21/19	MB	n/a	n/a	V5V2709
DA13658-2	5V51377.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	DA13658-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	261	389	149	262	397	152	2	5-239/30
107-02-8	Acrolein	ND	261	189	72	262	179	68	5	5-183/30
107-13-1	Acrylonitrile	ND	130	140	107	131	137	105	2	37-162/30
71-43-2	Benzene	ND	52.2	51.2	98	52.3	49.2	94	4	48-130/30
108-86-1	Bromobenzene	ND	52.2	46.9	90	52.3	46.6	89	1	27-136/30
74-97-5	Bromochloromethane	ND	52.2	53.3	102	52.3	52.2	100	2	58-130/30
75-27-4	Bromodichloromethane	ND	52.2	52.5	101	52.3	51.7	99	2	47-130/30
75-25-2	Bromoform	ND	52.2	53.1	102	52.3	52.4	100	1	33-130/30
104-51-8	n-Butylbenzene	ND	52.2	48.8	93	52.3	46.9	90	4	5-168/30
135-98-8	sec-Butylbenzene	ND	52.2	48.4	93	52.3	46.6	89	4	12-149/30
98-06-6	tert-Butylbenzene	ND	52.2	48.4	93	52.3	47.3	90	2	20-147/30
75-15-0	Carbon disulfide	ND	52.2	55.7	107	52.3	51.5	98	8	37-143/30
56-23-5	Carbon tetrachloride	ND	52.2	55.4	106	52.3	52.2	100	6	37-136/30
108-90-7	Chlorobenzene	ND	52.2	48.5	93	52.3	46.9	90	3	26-130/30
75-00-3	Chloroethane	ND	52.2	55.2	106	52.3	49.6	95	11	43-148/30
110-75-8	2-Chloroethyl vinyl ether	ND	52.2	48.7	93	52.3	49.5	95	2	56-134/30
67-66-3	Chloroform	ND	52.2	55.1	106	52.3	52.3	100	5	56-130/30
95-49-8	o-Chlorotoluene	ND	52.2	47.0	90	52.3	46.8	89	0	5-202/30
106-43-4	p-Chlorotoluene	ND	52.2	47.5	91	52.3	46.6	89	2	5-227/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	52.2	50.4	97	52.3	49.6	95	2	7-187/30
124-48-1	Dibromochloromethane	ND	52.2	50.2	96	52.3	49.9	95	1	41-130/30
106-93-4	1,2-Dibromoethane	ND	52.2	49.2	94	52.3	49.6	95	1	51-132/30
95-50-1	o-Dichlorobenzene	ND	52.2	48.0	92	52.3	47.0	90	2	12-139/30
541-73-1	m-Dichlorobenzene	ND	52.2	48.3	93	52.3	46.6	89	4	13-139/30
106-46-7	p-Dichlorobenzene	ND	52.2	46.2	89	52.3	45.4	87	2	13-136/30
75-71-8	Dichlorodifluoromethane	ND	52.2	64.6	124	52.3	59.7	114	8	26-173/30
75-34-3	1,1-Dichloroethane	ND	52.2	54.7	105	52.3	51.3	98	6	58-130/30
107-06-2	1,2-Dichloroethane	ND	52.2	51.7	99	52.3	50.3	96	3	59-130/30
75-35-4	1,1-Dichloroethylene	ND	52.2	53.7	103	52.3	49.9	95	7	55-130/30
156-59-2	cis-1,2-Dichloroethylene	ND	52.2	54.5	104	52.3	51.3	98	6	55-130/30
156-60-5	trans-1,2-Dichloroethylene	ND	52.2	54.2	104	52.3	52.0	99	4	49-130/30
78-87-5	1,2-Dichloropropane	ND	52.2	50.9	98	52.3	49.4	94	3	59-130/30
142-28-9	1,3-Dichloropropane	ND	52.2	48.8	93	52.3	48.9	93	0	55-130/30
594-20-7	2,2-Dichloropropane	ND	52.2	56.3	108	52.3	48.9	93	14	43-136/30
563-58-6	1,1-Dichloropropene	ND	52.2	54.5	104	52.3	50.8	97	7	42-132/30
10061-01-5	cis-1,3-Dichloropropene	ND	52.2	52.5	101	52.3	51.3	98	2	40-133/30

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA13658-2MS	5V51378.D	1	02/21/19	MB	n/a	n/a	V5V2709
DA13658-2MSD	5V51379.D	1	02/21/19	MB	n/a	n/a	V5V2709
DA13658-2	5V51377.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	DA13658-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	ND	52.2	50.1	96	52.3	50.0	96	0	40-130/30
100-41-4	Ethylbenzene	ND	52.2	49.1	94	52.3	47.5	91	3	25-144/30
87-68-3	Hexachlorobutadiene	ND	52.2	44.6	85	52.3	42.5	81	5	5-153/30
591-78-6	2-Hexanone	ND	261	281	108	262	301	115	7	43-149/30
98-82-8	Isopropylbenzene	ND	52.2	49.8	95	52.3	48.0	92	4	21-143/30
99-87-6	p-Isopropyltoluene	ND	52.2	48.7	93	52.3	47.2	90	3	12-151/30
74-83-9	Methyl bromide	ND	52.2	62.9	121	52.3	53.1	102	17	5-167/30
1634-04-4	Methyl Tert Butyl Ether	ND	52.2	53.2	102	52.3	51.2	98	4	66-130/30
74-87-3	Methyl chloride	ND	52.2	53.9	103	52.3	52.5	100	3	34-162/30
74-95-3	Methylene bromide	ND	52.2	54.2	104	52.3	52.7	101	3	55-130/30
75-09-2	Methylene chloride	ND	52.2	53.5	102	52.3	50.1	96	7	58-130/30
78-93-3	Methyl ethyl ketone	ND	261	328	126	262	344	132	5	41-169/30
108-10-1	4-Methyl-2-pentanone	ND	261	264	101	262	266	102	1	54-147/30
91-20-3	Naphthalene	ND	52.2	48.2	92	52.3	49.3	94	2	5-164/30
103-65-1	n-Propylbenzene	ND	52.2	48.3	93	52.3	47.5	91	2	21-144/30
100-42-5	Styrene	ND	52.2	50.4	97	52.3	48.8	93	3	12-159/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	52.2	51.3	98	52.3	48.1	92	6	38-131/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	52.2	47.3	91	52.3	47.0	90	1	33-149/30
127-18-4	Tetrachloroethylene	ND	52.2	48.4	93	52.3	47.2	90	3	27-134/30
108-88-3	Toluene	ND	52.2	47.9	92	52.3	46.3	89	3	34-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	52.2	46.9	90	52.3	46.2	88	2	5-157/30
120-82-1	1,2,4-Trichlorobenzene	ND	52.2	49.0	94	52.3	47.6	91	3	5-164/30
71-55-6	1,1,1-Trichloroethane	ND	52.2	55.0	105	52.3	50.5	97	9	45-130/30
79-00-5	1,1,2-Trichloroethane	ND	52.2	49.6	95	52.3	49.6	95	0	30-152/30
79-01-6	Trichloroethylene	ND	52.2	53.7	103	52.3	51.1	98	5	31-147/30
75-69-4	Trichlorofluoromethane	ND	52.2	56.5	108	52.3	50.8	97	11	55-133/30
96-18-4	1,2,3-Trichloropropane	ND	52.2	48.1	92	52.3	48.6	93	1	51-134/30
95-63-6	1,2,4-Trimethylbenzene	ND	52.2	48.2	92	52.3	47.5	91	1	5-174/30
108-67-8	1,3,5-Trimethylbenzene	ND	52.2	48.4	93	52.3	46.4	89	4	26-138/30
108-05-4	Vinyl Acetate	ND	261	240	92	262	229	88	5	5-158/30
75-01-4	Vinyl chloride	ND	52.2	56.0	107	52.3	51.0	98	9	55-138/30
1330-20-7	Xylene (total)	ND	157	148	95	157	142	91	4	24-143/30

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA13658-2MS	5V51378.D	1	02/21/19	MB	n/a	n/a	V5V2709
DA13658-2MSD	5V51379.D	1	02/21/19	MB	n/a	n/a	V5V2709
DA13658-2	5V51377.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Surrogate Recoveries	MS	MSD	DA13658-2	Limits
1868-53-7	Dibromofluoromethane	109%	104%	102%	70-131%
2037-26-5	Toluene-D8	97%	98%	97%	70-130%
460-00-4	4-Bromofluorobenzene	99%	101%	99%	70-130%
17060-07-0	1,2-Dichloroethane-D4	102%	106%	102%	70-130%

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA13658-2MS	5V51380.D	1	02/21/19	MB	n/a	n/a	V5V2709
DA13658-2MSD	5V51381.D	1	02/21/19	MB	n/a	n/a	V5V2709
DA13658-2	5V51377.D	1	02/21/19	MB	n/a	n/a	V5V2709

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-2, DA13685-3

CAS No.	Compound	DA13658-2 ug/kg	Spike Q	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
---------	----------	--------------------	------------	-------------	---------	----------------	--------------	----------	-----	-------------------

CAS No.	Surrogate Recoveries	MS	MSD	DA13658-2	Limits
1868-53-7	Dibromofluoromethane	102%	103%	102%	70-131%
2037-26-5	Toluene-D8	97%	98%	97%	70-130%
460-00-4	4-Bromofluorobenzene	103%	100%	99%	70-130%
17060-07-0	1,2-Dichloroethane-D4	98%	102%	102%	70-130%

* = Outside of Control Limits.

5.3.2
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA12300-11MS	6V7397.D	1	02/26/19	CH	n/a	n/a	V6V1936
DA12300-11MSD	6V7398.D	1	02/26/19	CH	n/a	n/a	V6V1936
DA12300-11	6V7396A.D	1	02/26/19	CH	n/a	n/a	V6V1936

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-5, DA13685-6

CAS No.	Compound	DA12300-11 Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
67-64-1	Acetone	ND	250	223	89	250	235	94	5	60-133/30
107-02-8	Acrolein	ND	250	166	66	250	171	68	3	10-281/30
107-13-1	Acrylonitrile	ND	125	137	110	125	132	106	4	47-151/30
71-43-2	Benzene	ND	50	51.0	102	50	51.3	103	1	67-130/30
108-86-1	Bromobenzene	ND	50	53.1	106	50	52.5	105	1	70-130/30
74-97-5	Bromochloromethane	ND	50	51.1	102	50	52.5	105	3	70-130/30
75-27-4	Bromodichloromethane	ND	50	53.7	107	50	54.2	108	1	70-130/30
75-25-2	Bromoform	ND	50	55.7	111	50	54.7	109	2	60-130/30
104-51-8	n-Butylbenzene	ND	50	54.4	109	50	56.1	112	3	51-143/30
135-98-8	sec-Butylbenzene	ND	50	53.7	107	50	54.2	108	1	69-130/30
98-06-6	tert-Butylbenzene	ND	50	54.2	108	50	54.7	109	1	47-158/30
75-15-0	Carbon disulfide	ND	50	52.0	104	50	54.7	109	5	64-130/30
56-23-5	Carbon tetrachloride	ND	50	55.0	110	50	55.8	112	1	70-130/30
108-90-7	Chlorobenzene	ND	50	52.3	105	50	51.9	104	1	70-130/30
75-00-3	Chloroethane	ND	50	44.3	89	50	48.6	97	9	58-139/30
110-75-8	2-Chloroethyl vinyl ether	ND	50	52.9	106	50	51.9	104	2	10-174/30
67-66-3	Chloroform	ND	50	51.9	104	50	53.3	107	3	70-130/30
95-49-8	o-Chlorotoluene	ND	50	52.4	105	50	53.1	106	1	70-130/30
106-43-4	p-Chlorotoluene	ND	50	51.6	103	50	51.8	104	0	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	52.8	106	50	53.9	108	2	62-130/30
124-48-1	Dibromochloromethane	ND	50	53.7	107	50	53.8	108	0	65-130/30
106-93-4	1,2-Dibromoethane	ND	50	52.8	106	50	51.1	102	3	70-130/30
95-50-1	o-Dichlorobenzene	ND	50	51.4	103	50	51.8	104	1	63-130/30
541-73-1	m-Dichlorobenzene	ND	50	52.6	105	50	52.9	106	1	65-130/30
106-46-7	p-Dichlorobenzene	ND	50	52.2	104	50	52.2	104	0	66-130/30
75-71-8	Dichlorodifluoromethane	ND	50	30.7	61	50	35.2	70	14	10-200/30
75-34-3	1,1-Dichloroethane	ND	50	53.7	107	50	54.0	108	1	61-130/30
107-06-2	1,2-Dichloroethane	ND	50	52.3	105	50	52.9	106	1	63-135/30
75-35-4	1,1-Dichloroethylene	ND	50	49.6	99	50	53.8	108	8	67-130/30
156-59-2	cis-1,2-Dichloroethylene	ND	50	51.7	103	50	53.1	106	3	70-130/30
156-60-5	trans-1,2-Dichloroethylene	ND	50	53.6	107	50	54.9	110	2	70-130/30
78-87-5	1,2-Dichloropropane	ND	50	52.0	104	50	51.5	103	1	70-130/30
142-28-9	1,3-Dichloropropane	ND	50	51.5	103	50	49.8	100	3	70-130/30
594-20-7	2,2-Dichloropropane	ND	50	51.6	103	50	54.0	108	5	32-153/30
563-58-6	1,1-Dichloropropene	ND	50	52.2	104	50	52.8	106	1	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	50	54.8	110	50	54.9	110	0	68-130/30

* = Outside of Control Limits.

5.3.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA12300-11MS	6V7397.D	1	02/26/19	CH	n/a	n/a	V6V1936
DA12300-11MSD	6V7398.D	1	02/26/19	CH	n/a	n/a	V6V1936
DA12300-11	6V7396A.D	1	02/26/19	CH	n/a	n/a	V6V1936

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-5, DA13685-6

CAS No.	Compound	DA12300-11 Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
10061-02-6	trans-1,3-Dichloropropene	ND	50	52.7	105	50	50.9	102	3	64-130/30
100-41-4	Ethylbenzene	ND	50	51.7	103	50	51.2	102	1	69-130/30
87-68-3	Hexachlorobutadiene	ND	50	53.3	107	50	56.0	112	5	41-140/30
591-78-6	2-Hexanone	ND	250	262	105	250	250	100	5	69-130/30
98-82-8	Isopropylbenzene	ND	50	53.4	107	50	53.3	107	0	70-130/30
99-87-6	p-Isopropyltoluene	ND	50	53.2	106	50	54.3	109	2	70-130/30
74-83-9	Methyl bromide	ND	50	44.9	90	50	47.9	96	6	47-147/30
74-87-3	Methyl chloride	ND	50	37.7	75	50	41.0	82	8	48-147/30
74-95-3	Methylene bromide	ND	50	54.6	109	50	54.0	108	1	70-130/30
75-09-2	Methylene chloride	ND	50	52.0	104	50	52.8	106	2	70-130/30
108-10-1	4-Methyl-2-pentanone	ND	250	255	102	250	267	107	5	70-130/30
78-93-3	Methyl ethyl ketone	ND	250	259	104	250	246	98	5	69-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	50	51.3	103	50	51.5	103	0	69-130/30
91-20-3	Naphthalene	ND	50	53.0	106	50	54.4	109	3	55-130/30
103-65-1	n-Propylbenzene	ND	50	52.5	105	50	52.4	105	0	62-132/30
100-42-5	Styrene	ND	50	52.4	105	50	51.3	103	2	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	52.2	104	50	53.3	107	2	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	53.9	108	50	52.9	106	2	60-130/30
127-18-4	Tetrachloroethylene	ND	50	54.7	109	50	53.2	106	3	67-130/30
108-88-3	Toluene	ND	50	52.1	104	50	51.0	102	2	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	50	52.6	105	50	54.6	109	4	52-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	50	53.7	107	50	54.6	109	2	60-130/30
71-55-6	1,1,1-Trichloroethane	ND	50	51.9	104	50	52.7	105	2	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	50	52.0	104	50	51.1	102	2	68-130/30
79-01-6	Trichloroethylene	ND	50	53.8	108	50	54.4	109	1	70-130/30
75-69-4	Trichlorofluoromethane	ND	50	47.4	95	50	51.1	102	8	54-157/30
96-18-4	1,2,3-Trichloropropane	ND	50	52.7	105	50	51.4	103	2	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	50	52.4	105	50	52.7	105	1	65-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	50	53.5	107	50	53.4	107	0	44-155/30
108-05-4	Vinyl Acetate	ND	250	269	108	250	263	105	2	47-133/30
75-01-4	Vinyl chloride	ND	50	42.1	84	50	45.6	91	8	55-144/30
1330-20-7	Xylene (total)	ND	150	154	103	150	153	102	1	67-130/30

* = Outside of Control Limits.

5.3.3
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA12300-11MS	6V7397.D	1	02/26/19	CH	n/a	n/a	V6V1936
DA12300-11MSD	6V7398.D	1	02/26/19	CH	n/a	n/a	V6V1936
DA12300-11	6V7396A.D	1	02/26/19	CH	n/a	n/a	V6V1936

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-5, DA13685-6

CAS No.	Surrogate Recoveries	MS	MSD	DA12300-11 Limits	
1868-53-7	Dibromofluoromethane	98%	99%	103%	70-130%
17060-07-0	1,2-Dichloroethane-D4	97%	100%	105%	70-130%
2037-26-5	Toluene-D8	98%	97%	103%	70-130%
460-00-4	4-Bromofluorobenzene	101%	98%	95%	70-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA12202-10MS	6V7426.D	1	02/27/19	CH	n/a	n/a	V6V1938
DA12202-10MSD	6V7427.D	1	02/27/19	CH	n/a	n/a	V6V1938
DA12202-10	6V7428.D	1	02/27/19	CH	n/a	n/a	V6V1938

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-6, DA13685-7

CAS No.	Compound	DA12202-10 Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
67-64-1	Acetone	ND	250	357	143* a	250	373	149* a	4	60-133/30
107-02-8	Acrolein	ND	250	191	76	250	190	76	1	10-281/30
107-13-1	Acrylonitrile	ND	125	129	103	125	127	102	2	47-151/30
71-43-2	Benzene	ND	50	49.7	99	50	48.8	98	2	67-130/30
108-86-1	Bromobenzene	ND	50	50.4	101	50	51.3	103	2	70-130/30
74-97-5	Bromochloromethane	ND	50	49.4	99	50	48.8	98	1	70-130/30
75-27-4	Bromodichloromethane	6.3	50	57.0	101	50	57.2	102	0	70-130/30
75-25-2	Bromoform	ND	50	48.2	96	50	50.4	101	4	60-130/30
104-51-8	n-Butylbenzene	0.64	J 50	52.7	104	50	53.0	105	1	51-143/30
135-98-8	sec-Butylbenzene	ND	50	52.2	104	50	51.9	104	1	69-130/30
98-06-6	tert-Butylbenzene	ND	50	51.9	104	50	52.9	106	2	47-158/30
75-15-0	Carbon disulfide	0.94	J 50	50.4	99	50	52.0	102	3	64-130/30
56-23-5	Carbon tetrachloride	ND	50	54.4	109	50	53.3	107	2	70-130/30
108-90-7	Chlorobenzene	ND	50	50.4	101	50	50.0	100	1	70-130/30
75-00-3	Chloroethane	ND	50	52.7	105	50	53.2	106	1	58-139/30
110-75-8	2-Chloroethyl vinyl ether	ND	50	46.6	93	50	47.0	94	1	10-174/30
67-66-3	Chloroform	6.4	50	56.4	100	50	56.4	100	0	70-130/30
95-49-8	o-Chlorotoluene	ND	50	50.5	101	50	50.9	102	1	70-130/30
106-43-4	p-Chlorotoluene	ND	50	48.9	98	50	49.5	99	1	70-130/30
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	49.2	98	50	50.5	101	3	62-130/30
124-48-1	Dibromochloromethane	3.6	50	53.7	100	50	55.8	104	4	65-130/30
106-93-4	1,2-Dibromoethane	ND	50	48.7	97	50	50.9	102	4	70-130/30
95-50-1	o-Dichlorobenzene	ND	50	50.1	100	50	50.3	101	0	63-130/30
541-73-1	m-Dichlorobenzene	ND	50	49.9	100	50	49.6	99	1	65-130/30
106-46-7	p-Dichlorobenzene	ND	50	50.3	101	50	50.4	101	0	66-130/30
75-71-8	Dichlorodifluoromethane	ND	50	56.0	112	50	58.3	117	4	10-200/30
75-34-3	1,1-Dichloroethane	ND	50	52.2	104	50	52.2	104	0	61-130/30
107-06-2	1,2-Dichloroethane	ND	50	48.7	97	50	49.3	99	1	63-135/30
75-35-4	1,1-Dichloroethylene	ND	50	50.8	102	50	50.5	101	1	67-130/30
156-59-2	cis-1,2-Dichloroethylene	ND	50	50.7	101	50	50.8	102	0	70-130/30
156-60-5	trans-1,2-Dichloroethylene	ND	50	52.2	104	50	52.0	104	0	70-130/30
78-87-5	1,2-Dichloropropane	ND	50	49.6	99	50	48.7	97	2	70-130/30
142-28-9	1,3-Dichloropropane	ND	50	48.9	98	50	48.8	98	0	70-130/30
594-20-7	2,2-Dichloropropane	ND	50	51.9	104	50	51.5	103	1	32-153/30
563-58-6	1,1-Dichloropropene	ND	50	53.1	106	50	50.7	101	5	70-130/30
10061-01-5	cis-1,3-Dichloropropene	ND	50	51.2	102	50	51.2	102	0	68-130/30

* = Outside of Control Limits.

5.3.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA12202-10MS	6V7426.D	1	02/27/19	CH	n/a	n/a	V6V1938
DA12202-10MSD	6V7427.D	1	02/27/19	CH	n/a	n/a	V6V1938
DA12202-10	6V7428.D	1	02/27/19	CH	n/a	n/a	V6V1938

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-6, DA13685-7

CAS No.	Compound	DA12202-10 Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q							
10061-02-6	trans-1,3-Dichloropropene	ND	50	48.9	98	50	49.7	99	2	64-130/30
100-41-4	Ethylbenzene	ND	50	50.6	101	50	50.0	100	1	69-130/30
87-68-3	Hexachlorobutadiene	ND	50	51.1	102	50	54.2	108	6	41-140/30
591-78-6	2-Hexanone	ND	250	263	105	250	265	106	1	69-130/30
98-82-8	Isopropylbenzene	ND	50	51.3	103	50	51.8	104	1	70-130/30
99-87-6	p-Isopropyltoluene	ND	50	51.8	104	50	52.2	104	1	70-130/30
74-83-9	Methyl bromide	ND	50	53.4	107	50	54.2	108	1	47-147/30
74-87-3	Methyl chloride	ND	50	49.7	99	50	51.2	102	3	48-147/30
74-95-3	Methylene bromide	ND	50	51.2	102	50	50.1	100	2	70-130/30
75-09-2	Methylene chloride	ND	50	51.0	102	50	51.3	103	1	70-130/30
108-10-1	4-Methyl-2-pentanone	ND	250	241	96	250	240	96	0	70-130/30
78-93-3	Methyl ethyl ketone	ND	250	291	116	250	302	121	4	69-130/30
1634-04-4	Methyl Tert Butyl Ether	ND	50	48.8	98	50	47.9	96	2	69-130/30
91-20-3	Naphthalene	ND	50	51.2	102	50	51.8	104	1	55-130/30
103-65-1	n-Propylbenzene	ND	50	50.6	101	50	50.2	100	1	62-132/30
100-42-5	Styrene	ND	50	49.0	98	50	47.6	95	3	70-130/30
630-20-6	1,1,1,2-Tetrachloroethane	ND	50	51.0	102	50	50.5	101	1	70-130/30
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	50.2	100	50	49.6	99	1	60-130/30
127-18-4	Tetrachloroethylene	ND	50	52.5	105	50	53.2	106	1	67-130/30
108-88-3	Toluene	ND	50	50.4	101	50	49.2	98	2	70-130/30
87-61-6	1,2,3-Trichlorobenzene	ND	50	50.6	101	50	51.5	103	2	52-130/30
120-82-1	1,2,4-Trichlorobenzene	ND	50	51.9	104	50	52.2	104	1	60-130/30
71-55-6	1,1,1-Trichloroethane	ND	50	51.6	103	50	50.9	102	1	70-130/30
79-00-5	1,1,2-Trichloroethane	ND	50	48.2	96	50	49.5	99	3	68-130/30
79-01-6	Trichloroethylene	ND	50	53.6	107	50	52.9	106	1	70-130/30
75-69-4	Trichlorofluoromethane	ND	50	55.4	111	50	56.5	113	2	54-157/30
96-18-4	1,2,3-Trichloropropane	ND	50	42.9	86	50	44.2	88	3	70-130/30
95-63-6	1,2,4-Trimethylbenzene	ND	50	50.7	101	50	50.5	101	0	65-130/30
108-67-8	1,3,5-Trimethylbenzene	ND	50	51.6	103	50	51.4	103	0	44-155/30
108-05-4	Vinyl Acetate	ND	250	244	98	250	246	98	1	47-133/30
75-01-4	Vinyl chloride	ND	50	54.8	110	50	54.9	110	0	55-144/30
1330-20-7	Xylene (total)	ND	150	150	100	150	150	100	0	67-130/30

* = Outside of Control Limits.

5.3.4
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
DA12202-10MS	6V7426.D	1	02/27/19	CH	n/a	n/a	V6V1938
DA12202-10MSD	6V7427.D	1	02/27/19	CH	n/a	n/a	V6V1938
DA12202-10	6V7428.D	1	02/27/19	CH	n/a	n/a	V6V1938

The QC reported here applies to the following samples:

Method: SW846 8260B

DA13685-6, DA13685-7

CAS No.	Surrogate Recoveries	MS	MSD	DA12202-10	Limits
1868-53-7	Dibromofluoromethane	100%	100%	103%	70-130%
17060-07-0	1,2-Dichloroethane-D4	99%	94%	106%	70-130%
2037-26-5	Toluene-D8	98%	98%	102%	70-130%
460-00-4	4-Bromofluorobenzene	100%	100%	93%	70-130%

(a) Outside control limits due to possible matrix interference.

* = Outside of Control Limits.

5.3.4
5

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17499-MB	1G141343.D	1	02/22/19	DC	02/21/19	OP17499	E1G2406

The QC reported here applies to the following samples:

Method: SW846 8270C

DA13685-5, DA13685-6, DA13685-7

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	2.0	0.70	ug/l	
208-96-8	Acenaphthylene	ND	2.0	0.60	ug/l	
120-12-7	Anthracene	ND	2.0	0.70	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.0	0.70	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.0	0.90	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	0.90	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.0	1.0	ug/l	
218-01-9	Chrysene	ND	2.0	0.70	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	1.3	ug/l	
206-44-0	Fluoranthene	ND	2.0	0.90	ug/l	
86-73-7	Fluorene	ND	2.0	0.60	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	1.4	ug/l	
90-12-0	1-Methylnaphthalene	ND	2.0	0.70	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	0.70	ug/l	
91-20-3	Naphthalene	ND	2.0	0.80	ug/l	
85-01-8	Phenanthrene	ND	2.0	0.60	ug/l	
129-00-0	Pyrene	ND	2.0	0.70	ug/l	

CAS No.	Surrogate Recoveries	Limits	
4165-60-0	Nitrobenzene-d5	78%	19-130%
321-60-8	2-Fluorobiphenyl	73%	20-130%
1718-51-0	Terphenyl-d14	85%	13-149%

Method Blank Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17493-MB	1G141347.D	1	02/22/19	DC	02/21/19	OP17493	E1G2406

The QC reported here applies to the following samples:

Method: SW846 8270C

DA13685-2, DA13685-3

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	67	17	ug/kg	
208-96-8	Acenaphthylene	ND	67	17	ug/kg	
120-12-7	Anthracene	ND	67	17	ug/kg	
56-55-3	Benzo(a)anthracene	ND	67	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	67	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	67	17	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	67	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	67	17	ug/kg	
218-01-9	Chrysene	ND	67	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	67	17	ug/kg	
206-44-0	Fluoranthene	ND	67	17	ug/kg	
86-73-7	Fluorene	ND	67	17	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	67	17	ug/kg	
90-12-0	1-Methylnaphthalene	ND	67	23	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	30	ug/kg	
91-20-3	Naphthalene	ND	67	23	ug/kg	
85-01-8	Phenanthrene	ND	67	17	ug/kg	
129-00-0	Pyrene	ND	67	17	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
321-60-8	2-Fluorobiphenyl	89%	23-130%
367-12-4	2-Fluorophenol	85%	10-130%
4165-60-0	Nitrobenzene-d5	85%	12-131%
4165-62-2	Phenol-d5	96%	17-130%
1718-51-0	Terphenyl-d14	97%	29-141%
118-79-6	2,4,6-Tribromophenol	90%	25-130%

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17499-BS	1G141344.D	1	02/22/19	DC	02/21/19	OP17499	E1G2406

The QC reported here applies to the following samples:

Method: SW846 8270C

DA13685-5, DA13685-6, DA13685-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	50	42.1	84	48-130
208-96-8	Acenaphthylene	50	48.3	97	48-130
120-12-7	Anthracene	50	49.6	99	64-130
56-55-3	Benzo(a)anthracene	50	52.8	106	68-130
205-99-2	Benzo(b)fluoranthene	50	52.1	104	68-130
207-08-9	Benzo(k)fluoranthene	50	54.2	108	67-130
191-24-2	Benzo(g,h,i)perylene	50	53.0	106	66-130
50-32-8	Benzo(a)pyrene	50	53.4	107	66-130
218-01-9	Chrysene	50	52.4	105	65-130
53-70-3	Dibenzo(a,h)anthracene	50	54.1	108	64-130
206-44-0	Fluoranthene	50	50.4	101	63-130
86-73-7	Fluorene	50	48.5	97	57-130
193-39-5	Indeno(1,2,3-cd)pyrene	50	52.6	105	64-130
90-12-0	1-Methylnaphthalene	50	42.9	86	36-130
91-57-6	2-Methylnaphthalene	50	43.0	86	32-130
91-20-3	Naphthalene	50	42.5	85	29-130
85-01-8	Phenanthrene	50	49.9	100	64-130
129-00-0	Pyrene	50	51.4	103	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	88%	19-130%
321-60-8	2-Fluorobiphenyl	85%	20-130%
1718-51-0	Terphenyl-d14	89%	13-149%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17493-BS	1G141348.D	1	02/22/19	DC	02/21/19	OP17493	E1G2406

The QC reported here applies to the following samples:

Method: SW846 8270C

DA13685-2, DA13685-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1570	94	55-130
208-96-8	Acenaphthylene	1670	1630	98	55-130
120-12-7	Anthracene	1670	1660	100	70-130
56-55-3	Benzo(a)anthracene	1670	1740	104	70-130
205-99-2	Benzo(b)fluoranthene	1670	1740	104	70-130
207-08-9	Benzo(k)fluoranthene	1670	1740	104	70-130
191-24-2	Benzo(g,h,i)perylene	1670	1730	104	70-130
50-32-8	Benzo(a)pyrene	1670	1770	106	70-130
218-01-9	Chrysene	1670	1700	102	70-130
53-70-3	Dibenzo(a,h)anthracene	1670	1760	106	70-130
206-44-0	Fluoranthene	1670	1720	103	70-130
86-73-7	Fluorene	1670	1630	98	62-130
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1750	105	70-130
90-12-0	1-Methylnaphthalene	1670	1520	91	47-130
91-57-6	2-Methylnaphthalene	1670	1530	92	46-130
91-20-3	Naphthalene	1670	1480	89	45-130
85-01-8	Phenanthrene	1670	1650	99	70-130
129-00-0	Pyrene	1670	1700	102	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
321-60-8	2-Fluorobiphenyl	89%	23-130%
367-12-4	2-Fluorophenol	96%	10-130%
4165-60-0	Nitrobenzene-d5	89%	12-131%
4165-62-2	Phenol-d5	96%	17-130%
1718-51-0	Terphenyl-d14	101%	29-141%
118-79-6	2,4,6-Tribromophenol	100%	25-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17499-MS	1G141354.D	1	02/22/19	DC	02/21/19	OP17499	E1G2406
OP17499-MSD	1G141355.D	1	02/22/19	DC	02/21/19	OP17499	E1G2406
DA12300-27	1G141353.D	1	02/22/19	DC	02/21/19	OP17499	E1G2406

The QC reported here applies to the following samples:

Method: SW846 8270C

DA13685-5, DA13685-6, DA13685-7

CAS No.	Compound	DA12300-27 Spike		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
		ug/l	Q ug/l							
83-32-9	Acenaphthene	ND	50	42.3	85	50	38.9	78	8	31-130/30
208-96-8	Acenaphthylene	ND	50	51.2	102	50	44.5	89	14	31-130/30
120-12-7	Anthracene	ND	50	49.5	99	50	45.7	91	8	38-140/30
56-55-3	Benzo(a)anthracene	ND	50	50.9	102	50	51.3	103	1	44-149/30
205-99-2	Benzo(b)fluoranthene	ND	50	50.3	101	50	51.3	103	2	44-153/30
207-08-9	Benzo(k)fluoranthene	ND	50	50.0	100	50	51.1	102	2	44-151/30
191-24-2	Benzo(g,h,i)perylene	ND	50	49.3	99	50	50.1	100	2	45-149/30
50-32-8	Benzo(a)pyrene	ND	50	51.3	103	50	52.0	104	1	40-148/30
218-01-9	Chrysene	ND	50	50.9	102	50	50.6	101	1	40-153/30
53-70-3	Dibenzo(a,h)anthracene	ND	50	52.0	104	50	52.1	104	0	43-153/30
206-44-0	Fluoranthene	ND	50	51.4	103	50	48.9	98	5	42-148/30
86-73-7	Fluorene	ND	50	50.8	102	50	49.2	98	3	34-134/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND	50	50.8	102	50	51.0	102	0	42-153/30
90-12-0	1-Methylnaphthalene	ND	50	44.1	88	50	41.4	83	6	25-130/30
91-57-6	2-Methylnaphthalene	ND	50	43.1	86	50	41.8	84	3	23-130/30
91-20-3	Naphthalene	ND	50	42.7	85	50	41.2	82	4	21-130/30
85-01-8	Phenanthrene	ND	50	49.6	99	50	45.7	91	8	42-140/30
129-00-0	Pyrene	ND	50	50.1	100	50	49.6	99	1	46-148/30

CAS No.	Surrogate Recoveries	MS	MSD	DA12300-27	Limits
4165-60-0	Nitrobenzene-d5	90%	84%	90%	19-130%
321-60-8	2-Fluorobiphenyl	91%	79%	88%	20-130%
1718-51-0	Terphenyl-d14	83%	88%	85%	13-149%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: DA13685
Account: AEICCOD AEI Consultants
Project: 73rd & Lowell

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP17493-MS	1G141359.D	1	02/22/19	DC	02/21/19	OP17493	E1G2406
OP17493-MSD	1G141360.D	1	02/22/19	DC	02/21/19	OP17493	E1G2406
DA13565-1A	1G141358.D	1	02/22/19	DC	02/21/19	OP17493	E1G2406

The QC reported here applies to the following samples:

Method: SW846 8270C

DA13685-2, DA13685-3

CAS No.	Compound	DA13565-1A Spike		MS	MS	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD	
		ug/kg	Q	ug/kg	%						
83-32-9	Acenaphthene	ND		1700	1440	85	1700	1410	83	2	10-167/30
208-96-8	Acenaphthylene	ND		1700	1550	91	1700	1690	99	9	10-167/30
120-12-7	Anthracene	ND		1700	1600	94	1700	1550	91	3	22-143/30
56-55-3	Benzo(a)anthracene	ND		1700	1730	102	1700	1600	94	8	15-152/30
205-99-2	Benzo(b)fluoranthene	ND		1700	1790	105	1700	1580	93	12	17-155/30
207-08-9	Benzo(k)fluoranthene	ND		1700	1780	105	1700	1580	93	12	10-172/30
191-24-2	Benzo(g,h,i)perylene	ND		1700	1690	99	1700	1560	92	8	10-153/30
50-32-8	Benzo(a)pyrene	ND		1700	1740	102	1700	1660	98	5	19-151/30
218-01-9	Chrysene	ND		1700	1700	100	1700	1580	93	7	21-147/30
53-70-3	Dibenzo(a,h)anthracene	ND		1700	1750	103	1700	1640	97	6	16-152/30
206-44-0	Fluoranthene	ND		1700	1710	101	1700	1600	94	7	14-151/30
86-73-7	Fluorene	ND		1700	1550	91	1700	1640	97	6	10-196/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		1700	1750	103	1700	1670	98	5	15-153/30
90-12-0	1-Methylnaphthalene	ND		1700	1510	89	1700	1480	87	2	10-199/30
91-57-6	2-Methylnaphthalene	ND		1700	1440	85	1700	1590	94	10	10-188/30
91-20-3	Naphthalene	ND		1700	1440	85	1700	1430	84	1	10-194/30
85-01-8	Phenanthrene	ND		1700	1620	95	1700	1560	92	4	22-144/30
129-00-0	Pyrene	ND		1700	1800	106	1700	1690	99	6	16-152/30

CAS No.	Surrogate Recoveries	MS	MSD	DA13565-1A Limits	
321-60-8	2-Fluorobiphenyl	84%	84%	75%	23-130%
367-12-4	2-Fluorophenol	78%	82%	70%	10-130%
4165-60-0	Nitrobenzene-d5	79%	82%	72%	12-131%
4165-62-2	Phenol-d5	83%	89%	79%	17-130%
1718-51-0	Terphenyl-d14	97%	88%	89%	29-141%
118-79-6	2,4,6-Tribromophenol	95%	93%	84%	25-130%

* = Outside of Control Limits.

APPENDIX H

3rd Q Monitoring & Remediation Report

**Pik Kwik – October 10, 2019
7301 Lowell Boulevard**

CGRS

October 10, 2019



October 10, 2019

Ms. Hannah Phillips
Colorado Department of Labor and Employment
Division of Oil and Public Safety - Remediation Section
633 17th Street, Suite 500
Denver, Colorado 80202-3610

Subject: Monitoring and Remediation Report; Third Quarter 2019
Former Pik Kwik (now known as Harris Park Site IV)
7301 Lowell Boulevard (now known as 7305 Lowell Boulevard)
Westminster, Colorado 80030
OPS Event ID No. 1989
CGRS Project No. 1-996-9541ae

Dear Ms. Phillips:

The attached MRR documents third quarter 2019 groundwater and soil vapor monitoring activities performed by CGRS at the above-referenced site. Work documented in this report was performed according to OPS Task Order Number 123H dated January 3, 2019 and OPS Task Order Number 123H, Amendment 1, dated August 8, 2019, with performance end dates of October 31, 2019. The purpose of this narrative is to present the CSM and to evaluate the current monitoring data relative to the CSM.



Introduction/Site Background

The following is a summary of major events associated with the release that occurred at the site as well as assessment activities and other background information:

- The original facility operated as a retail gas station from circa 1976 to 1992.
- On August 28, 1992, two 8,000-gallon, steel USTs, product piping, and dispensers were removed. The USTs had no cathodic protection and had extensive corrosion with one to two-inch diameter holes on the ends and bottoms of the tanks. Therefore, the source of the release is the former USTs and the product released was gasoline.
- A confirmed release was reported on September 15, 1992, based upon soil analytical data. It appears that the excavated soil was placed back in the tank basin and covered with imported backfill.
- At some point between 1992 and 1997, the former gas station building was expanded and operated as a bowling alley.
- In July 2002, CGRS became the State Lead contractor for this project.
- In February and March 2014, CGRS spoke with Tony Chacon with the City of Westminster. Mr. Chacon stated that the structures located on the properties south of the former Vehicle Service Center property (the

Vehicle Service Center is located directly south of the subject site, across West 73rd Avenue) would be demolished in the next few months. However, the demolition work was not anticipated to impact the existing monitoring wells. The former Vehicle Service Center building remains intact at this time and the redevelopment of the property is proceeding.



- On June 9, 2015, CGRS was informed by Dave Downing, City Engineer for the City of Westminster, that the buildings south of the former Vehicle Service Center (except for 7265, 7267, and 7269 Lowell Boulevard) would be demolished at the end of July 2015. In November 2015, CGRS confirmed the buildings were demolished.
- In November 2015, CGRS researched the following resources to determine if a gas station was formerly located at 7287 Lowell Boulevard:
 - Colorado Aerial: An aerial photograph dated April 29, 1965, shows what appears to be four dispensers in the northeast section of the property.
 - EDR Certified Sanborn® Map Report: EDR did not have any Sanborn® maps for 7287 Lowell Boulevard.
 - The EDR-City Directory Image Report: The oldest directory that EDR could locate was from 1972 and did not list 7287 Lowell Boulevard.

Summary of Contaminants

Soil Contamination Characteristics

When the UST systems were removed, soil samples were collected from the excavation at six locations immediately beneath the USTs. Since then, numerous soil borings were installed across the site and the soil samples were analyzed for BTEX and TVPH. The following table summarizes the petroleum hydrocarbon impacts in soil that exceeded the Tier 1 RBSLs and/or TPH-TLV:

Sample Location	Date	Sample Depth	Vertical Interval	Benzene (mg/kg)	TVPH (mg/kg)
MW-02	02/25/97	14.0	saturated	0.40	21.0
MW-03	02/25/97	15.0	saturated	0.37	32.0
MW-04	02/25/97	16.0	saturated	3.10	97.0
SB-06	07/17/15	20.0	saturated	0.201	1864
SB-09	07/17/15	18.5	saturated	2.33	1772
SB-10	07/17/15	18.0	saturated	0.276	45.5
Tank 1 M	09/01/92	~10	smear	4.80	2800
Tank 1 S	09/01/92	~10	smear	3.30	2000
Tank 2 S	09/01/92	~10	smear	<0.002	790

Bolded values exceed the Tier 1 RBSLs and TPH-TLV.

These soil borings are located onsite and offsite at 7287 Lowell Boulevard. According to the laboratory results in the above table, the petroleum hydrocarbon impacts in soil are in the smear and saturated zones.

The vadose zone soils generally consist of silty clay to clay. It does not appear that there are petroleum hydrocarbon impacts to soil in the vadose zone.

The smear zone soils generally consist of clay to sandy clay. Smear zone impacts occur on-site and extend into the property located at 7287 Lowell Boulevard (south of W. 73rd Avenue). Based on TVPH concentrations obtained from smear zone soil samples collected from the site, it is estimated that approximately 5,918 pounds of petroleum hydrocarbons were retained in the soil within the petroleum hydrocarbon plume prior to initiation of remediation. It is estimated that there are approximately 465 pounds of petroleum hydrocarbons sorbed to the smear zone soils [5,918 - 1,557 - 3,896 = 465], which equates to approximately 75 gallons. It appears that the smear zone soils facilitate mass storage and transport. The contaminant mass calculations are included as supporting documents in the MRR.

In the upper saturated zone to approximately 25 feet, the soil general consists of clay to sand to gravelly sand. Bedrock was encountered at depths ranging between 16 and 22 feet on off-site properties. Based on TVPH concentrations obtained from saturated soil samples collected from the site, it is estimated that approximately 124 pounds, which equates to approximately 20 gallons, of petroleum hydrocarbons were retained in the soil within the petroleum hydrocarbon plume subsequent to mechanical remediation. It appears that the saturated zone soils facilitate mass storage and transport. The contaminant mass calculations are included as supporting documents in the MRR.

Saturated zone petroleum hydrocarbon impacts extend beyond the release area in a southerly direction, crossing the south property boundary of the subject site and impacting the City of Westminster's property located at 7287 Lowell Boulevard (south of W. 73rd Avenue). The vertical separation between the buried utilities and the dissolved petroleum hydrocarbon plume and soil impacts ranges from approximately three to eight feet. Therefore, it does not appear that subsurface utilities have been impacted by the petroleum hydrocarbon release. In addition, it does not appear that structures, groundwater wells, surface water, or sensitive environments have been impacted by the release.

Groundwater Contamination Characteristics

Currently, there are benzene and ethylbenzene concentrations in groundwater that exceed the respective Tier 1 RBSLs on- and off-site. The benzene plume extends from approximately 25 feet northeast of well SVE-04 (on-site) to approximately five feet south of well MW-22 (off-site). The geologic cross section A-A' suggests a permeable zone of gravelly sand to clayey sand occurring in the saturated zone and extending from approximately the north property boundary of 7287 Lowell Boulevard south (downgradient) to beyond well MW-12. The transverse geologic cross section B-B' created from soil borings extending from well MW-20 to MW-18 suggests that well-sorted and poorly-sorted sands extend in an easterly direction from MW-20 to beyond MW-18. It appears that this zone of sand serves as a preferential pathway for the apparent cross-gradient migration of petroleum hydrocarbons to wells MW-18 and MW-20.

In August 2003, three slug tests were performed and the hydraulic conductivity of the aquifer underlying the site was measured, as a geometric mean, at approximately 0.12 ft/day (4.27×10^{-5} cm/sec). The historic average depth to groundwater on-site is 8.8 feet and off-site is 15.6 feet below top of well casing (TOC). The seasonal fluctuations in groundwater range from 1.41 to 6.67 feet. The historic inferred direction of groundwater flow is to the south. The

average hydraulic gradient was calculated at approximately 0.0340 ft/ft. The average groundwater flow velocity is estimated to be 0.02 ft/day.

Based on current and historic data, the smear zone, as calculated as the geometric mean, is a thickness of 2.96 feet across the site. The current benzene plume diminished slightly when compared to the June 2019 analytical data. The current plume dispersion on-site and off-site appears to confirm the hydraulic model.

Based on TVPH concentrations obtained from the groundwater data from February 1997, it is estimated that approximately 17 pounds of petroleum hydrocarbons were retained in the groundwater within the petroleum hydrocarbon plume prior to initiation of remediation. Based on TVPH concentrations obtained from the groundwater data on August 14, 2019, it is estimated that approximately 1.93 pounds of petroleum hydrocarbons were retained in the groundwater within the TVPH plume.

Based on benzene concentrations obtained from the groundwater data on August 14, 2019, it is estimated that approximately 0.08 pounds of benzene were retained in the groundwater within the benzene plume. The contaminant mass calculations are included as supporting documents in the MRR.

It does not appear that structures, groundwater wells, surface water, or sensitive environments have been impacted by the release.

Surficial Soil - Ingestion/Dermal Contact/Inhalation Exposure Pathway (Closed)

Rationale: Investigation has revealed no petroleum hydrocarbon impacts to surficial soils. In addition, hard surfacing (asphalt and concrete pavement) overlying the release isolates the petroleum hydrocarbon impacts and prevents exposure through ingestion, dermal contact, or inhalation of petroleum vapors.

Subsurface Soil – Leachate to Groundwater Ingestion Pathway (Open)

Rationale: There are benzene concentrations that exceed the Tier 1 RBSL and TVPH concentrations that exceed the TPH-TLV in the subsurface soil on-site and off-site at 7287 Lowell Boulevard.

Soil Vapor – Indoor Air Inhalation Exposure Pathway (Closed)

Rationale: On August 31, 2015, soil vapor well VP-01 was completed on the north side of the on-site building adjacent to the former UST basin. The soil vapor well has two vapor probes installed at four feet and seven feet bgs. Benzene concentrations in the soil vapor samples collected from those vapor points have been below the Tier 1 RBSL for four consecutive quarters.

On May 3, 2017, soil vapor well VP-03 was completed on the east side of the building located at 7287 Lowell Boulevard. The benzene concentrations in the soil vapor samples for well VP-03 at ten feet remain below the Tier 1 RBSL. On July 13, 2017, soil vapor well VP-02 was completed south of the on-site building. The benzene concentrations in the soil vapor samples for well VP-02 at six feet remain below the Tier 1 RBSL. Additionally, the vertical separation from the bottom of the building foundations and the groundwater is greater than five feet. Accordingly, it appears that this pathway is closed. However, to ensure there are no health risks to the tenants of the on-site and off-site buildings, soil vapor wells VP-02 and VP-03 are sampled on a quarterly basis.

Groundwater – Indoor Air Inhalation/Enclosed Space Vapors Exposure Pathway (Closed)

Rationale: The benzene concentrations in groundwater samples exceed the Tier 1 RBSL on- and off-site. However, benzene concentrations in soil vapor samples are below the Tier 1 RBSL and the soil vapor pathway is technically closed.

Groundwater – Ingestion Exposure Pathway (Open)

Rationale: Currently, the benzene and ethylbenzene concentrations in groundwater samples exceed the respective Tier 1 RBSLs on- and off-site. On December 13, 2016, OPS eliminated the MTBE exposure pathway based on the RISC5 analytical fate and transport models to predict MTBE SSTLs.

Points of Exposure

Property Boundary

The Property Boundary POE has been impacted. The inferred areas of impacted subsurface soil and groundwater cross the south property boundary of the site and extend downgradient in a southerly direction across the off-site property boundary. The impacted off-site property is listed in the Pathways and Receptors Table of the MRR and depicted on the POE Location, Soil Sample, Groundwater Sample, and Inferred Benzene Isoconcentration Figures included in the MRR.

Surficial Soils

As described above, observations made during subsurface explorations (e.g. PID readings) indicated the absence of petroleum hydrocarbons within the upper one meter of the subsurface.

Subsurface Utilities

The dissolved petroleum hydrocarbon plume does not appear to intersect buried utilities in the area. The average depth to water on-site is approximately 8.8 feet and off-site is approximately 15.6 feet. The buried utilities crossing the plume are above the average depth to water on-site and off-site.

Structures

The north portion of the dissolved benzene plume underlies the south portion of the on-site building. The on-site building is on public drinking water and the benzene concentrations in the soil vapor samples from well VP-02 are below the laboratory RL. A portion of the dissolved benzene plume underlies the southeast portion of the building located at 7287 Lowell Boulevard. This building is unoccupied. There does not appear to be petroleum hydrocarbon impacts to these structures resulting from the release.

Groundwater Wells, Surface Water, and Sensitive Environments

Little Dry Creek is located approximately 580 meters downgradient from well MW-12. CGRS contacted Kelly Klein with the City of Westminster – Water Quality Division, who stated that Little Dry Creek is not a drinking water source for humans. Little Dry Creek serves as a storm water receptor. Little Dry Creek is not impacted by the subject release. BTEX concentrations in groundwater samples collected from downgradient point of compliance well MW-12 located between the release area and Little Dry Creek has historically been below the respective Tier 1 RBSLs since August 25, 2015.

There are nine domestic and municipal water wells located within 2,500 feet of the release. However, all of these wells are located crossgradient from the release and range in distance from 800 to 2,450 feet from the site. These wells are not impacted by the release.

Little Dry Creek is the only apparent sensitive environment located downgradient from the release. As described above, there are no apparent impacts to Little Dry Creek or other sensitive environments.

Site Specific Target Levels (SSTLs)

On February 5 and April 18, 2019, CGRS performed fate and transport modeling using RISC5 to evaluate SSTLs for dissolved phase benzene concentrations in groundwater protective to the nearest downgradient POE (the south property boundaries near wells MW-12 and MW-02A) and point of compliance groundwater monitoring well MW-01A. The SSTLs were calculated for source well SVE-04 for which benzene concentrations in groundwater have historically exceeded the Tier 1 RBSL. The following table summarizes the calculated SSTLs. The model input data and calculations are included in the *Model Input and Results* tab of the MRR.

Well ID -- to POC or POE	Distance From POC or POE (feet)	Distance From POC or POE (meters)	Benzene SSTL – Standard Degradation (mg/L)	Benzene SSTL - Zero Degradation (mg/L)
SVE-04 – well MW-01A (downgradient)	~305	~93	67	1.5
SVE-04 – South Property Boundary near well MW-12 (downgradient)	~200	~61	10	0.58
SVE-04 – South Property Boundary near well MW-02A (downgradient)	~426	~130	N/A	3.8

It should be noted that the benzene concentrations in groundwater for wells MW-01A, MW-02A, and MW-12 have not exceeded the Tier 1 RBSL since November 4, 2002, or August 25, 2015 (MW-12). Therefore, it appears that benzene degradation is occurring in the subsurface.

Previous Remedial Actions and Current Corrective Action Plan

In August 2003, CGRS performed two SVE pilot tests on monitoring wells MW-02 and MW-04 to determine the feasibility of SVE as a remediation method, obtain performance data required to design the remediation system, and to determine equipment specifications. Using the vacuum influence detected at the outlying monitoring wells, a calculated estimated effective radius of influence was determined to be approximately 25 feet.

Between March and April 2004, CGRS installed a temporary SVE system at the site. The SVE system was connected to wells MW-01B, MW-02, and MW-04. Approximately 287 yd³ of petroleum hydrocarbon impacted soil was removed from the trenches and disposed at the Denver Regional Landfill. The temporary SVE system operated from April 20, 2004, to May 24, 2005, and removed approximately 1,557 pounds of hydrocarbons as vapor.

In April 2005, CGRS installed an AS pilot test well (AS-1) and performed an AS pilot test. The AS pilot test did not appear to have an impact on wells that were located between 21 and 29 feet from well AS-1. Additionally, an oxygen diffusion system was installed and connected to wells MW-01B, MW-02, and MW-04.

On May 20, 2005, CGRS was notified by OPS that the City of Westminster was ready to develop the subject site. CGRS contacted CET Services, Inc./Community Builders, Inc. (CET), property owner, who stated that CGRS had to remove the SVE/oxygen diffusion systems and remediation shed. Between May and June 2005, CGRS removed the remediation systems and shed from the site. On June 22, 2005, CET notified CGRS that the City of Westminster

would be installing a new storm sewer on-site and monitoring well CHMW-3 had to be abandoned. On June 24, 2005, CGRS abandoned monitoring well CHMW-3 in accordance with the Colorado Division of Water Resources, Department of Natural Resources, regulations.

On September 27, 2007, OPS approved the CAP for SVE and oxygen diffusion on-site and off-site at the former Vehicle Service Center. The system installation occurred between November 2006 and November 2007 in conjunction with the construction of a new commercial building on the subject site. Between November 2006 and April 2007, groundwater monitoring wells MW-01, MW-01B, MW-02, and MW-04 were destroyed and approximately 853 yd³ of contaminated soil was excavated on site in preparation for the foundation for the new commercial building. The excavation was approximately 40 feet wide x 110 feet long x 5 feet deep. During the excavation, one 400-gallon, orphan, waste oil UST was removed.

The SVE system is connected to wells SVE-01 through SVE-10 and a horizontal SVE line was installed beneath the floor slab of the new commercial building on-site. The SVE system is designed to operate in twelve-hour intervals alternating between the on-site SVE wells and the off-site SVE wells. The SVE off-gas vapors were initially treated with a 3,000-pound carbon vessel. The SVE system was activated on November 29, 2007, and required a carbon change-out on March 10, 2008. By October 1, 2010, it was determined that carbon vapor treatment was no longer required and on November 18, 2010, the carbon vessel was removed from the site. The oxygen diffusion system is connected to wells SVE-02 through SVE-10 and O-01 through O-13. Operation of the oxygen diffusion system commenced on July 1, 2008.



Between June 10 and 12, 2013, CGRS subcontracted Remington Technologies, LLC (Remington), to perform a chemically oxygenated granular activated carbon (COGAC™) pilot test injection event via direct push in the vicinity of wells SVE-04 and SVE-06 through SVE-10. Thirty-two injection points (IP-1 through IP-6 located on-site and IP-1 through IP-26 located on the former Vehicle Service Center property) were proposed; however, injection point IP-1 on-site was adjacent to a fiber optic line and was not completed. The injectate was comprised of 2,400 gallons of a 12% solution of COGAC™. Injection points IP-2 through IP-6 received approximately 450 gallons of solution and injection points IP-1 through IP-26 received approximately 1,950 gallons of solution for a total of approximately 2,400 gallons. The injection was performed at an average pressure of approximately 26 psi with an average flow rate of approximately 4 gpm. The injection interval ranged between 9 and 17 feet bgs.

On March 26, 2013, the SVE system was found to be inoperable on the former Vehicle Service Center property. Due to the COGAC™ injections and the asymptotic performance of the SVE system, that part of the SVE system has not been investigated or repaired.

On April 29, 2014, the DO concentrations in the groundwater have increased from less than 1 mg/L up to a maximum of 5.61 mg/L in and around the wells that contain the oxygen diffusers. A recent decline in DO levels was believed to be the result of water trapped in the oxygen lines. CGRS replaced the oxygen tubing from the remediation shed to well O-03 on May 30, 2014. DO levels have not increased at this well following replacement of the tubing and troubleshooting has revealed that the oxygen generator is not working properly. The oxygen generator has not been repaired or replaced and remains off.

Between July 13 and 17, 2015, CGRS performed high resolution site characterization (HRSC) activities at the site via Laser Induced Fluorescence (LIF) and membrane interface probe and hydraulic profiling tool (MiHPT). The LIF system detects petroleum-based NAPLs. The MiHPT system is a combined VOC profiling and hydraulic conductivity profiling tool.



CGRS oversaw the installation of 28 LIF and MiHPT direct push borings (WPK-1 through WPK-28) to depths between approximately 14 and 30 feet bgs. Points WPK-1 through WPK-28 are shown on the LIF-MiHPT Location Figure which is included in the MRR.

Based on the results of the LIF investigation, NAPL was identified in the south portion of Lowell Boulevard near WPK-17 and WPK-18; the east portion of 7287 Lowell Boulevard near WPK-3 through WPK-8, WPK-15, WPK-16, WPK-21, WPK-22, and WPK-23; and the north portion of 7283 Lowell Boulevard near WPK-10. NAPL was detected between 17 and 21 feet across the site and fluoresced similar to gasoline. It appears that the NAPL is located in the saturated zone. Based on benzene concentrations in groundwater for well SVE-04, it appears that there is residual NAPL in the vicinity of well SVE-04.

The 12 MiHPT borings, designated as WPK-9, WPK-10, WPK-11, WPK-16, WPK-19, WPK-20, WPK-21, WPK-23, and WPK-25 through WPK-28, were installed to depths between approximately 20.5 and 24 feet bgs.

The HPT data indicate that fine-grained soils are generally present throughout the site to an average depth of 22.5 feet. However, in some areas the soil is a little more coarse-grained at depths between 17.5 and 21 feet which correlates with the location of the NAPL. The PID data show that petroleum (as VOCs) impacts are generally observed between 17.5 and 23 feet bgs which correlates with the location of the NAPL. The FID measures methane which is a byproduct of biodegradation of petroleum hydrocarbons. The FID data indicate the possible presence of methane above the groundwater surface. The XSD data indicates the possible presence of chlorinated solvent impacts in the vicinity of WPK-9 and WPK-28 at depths of approximately six to ten feet.

On August 25, 2015, the on-site SVE system was turned off due to the asymptotic performance of the SVE system.

On June 20 and July 18, 2016, CGRS subcontracted Vista GeoScience (Vista) to pothole and backfill 20 injection points for a PersulfOx[®] injection pilot test. Ten injection points (IP-32 through IP-41) were located in a circle in the

vicinity of soil boring SB-6 and ten injection points (IP-27 through IP-31 and IP-42 through IP-46) were located in a circle in the vicinity of soil boring SB-9 located on the former Vehicle Service Center property.

On June 24 and July 22, 2016, CGRS subcontracted Vista to perform the PersulfOx injection pilot test via direct push in the locations that were potholed and backfilled as mentioned above. The injectate was comprised of an average of 1,685 gallons of a 10% solution of PersulfOx for each event. Injection points IP-27 through IP-36 received approximately 1,451 gallons of solution and injection points IP-37 through IP-46 received approximately 1,918 gallons of solution for a total of approximately 3,369 gallons and 3,417 pounds of PersulfOx. The injection was performed at an average pressure of 81.5 psi with an average flow rate of 17.5 gpm. The injection interval ranged between 17 and 21 feet bgs.



While the injections were being performed, CGRS obtained depth to groundwater and MNA measurements from monitoring wells CHMW-01, MW-11, MW-16, O-9, O-10, O-11, O-12, O-13, SVE-07, SVE-08, SVE-09, and SVE-10 that are located in the vicinity of the injection points. The change in groundwater elevations ranged between 0.75 to 15.57 feet. The dissolved oxygen increased up to one order of magnitude in a few wells. The specific conductance increased up to one order of magnitude and the ORP increased up to five orders of magnitude in a few wells. A copy of Vista's Final Report, CGRS' Injection Pilot Test Data Sheets, and photographs of the injection activities are attached as supporting documents to the MRR.

On August 24, 2016, LNAPL was observed in well MW-16 at a thickness of 0.02 feet. LNAPL abatement was performed via hand-bailing. A PIG sock was installed in well MW-16. On October 5, 2016, measurable LNAPL was not observed in well MW-16. The PIG sock was not spent and re-inserted in the well. Between July 3 and 10, 2017, CGRS subcontracted DrillPro Services Inc. (DrillPro) to pothole and backfill 74 injection points for the PersulfOx, RegenOx, and ORC-A injections. Eight injection points (IP-113 through IP-120 in Area 1) were located in the right-of-way on the north side of W. 73rd Avenue (adjacent to 7305 Lowell Boulevard). Seventeen injection points (IP-73 through IP-76 and IP-100 through IP-112) were located in Area 2, 22 injection points (IP-78 through IP-99) were located in Area 3, 20 injection points (IP-54 through IP-72 and IP-77) were located in Area 4, and seven injection points (IP-



47 through IP-53) were located in Area 5. Areas 2 through 5 were located at 7287 Lowell Boulevard (south of the site).

Between July 11 and 21, 2017, CGRS subcontracted Regenesis Remediation Services (RRS) to perform PersulfOx, RegenOx, and ORC-A injections on- and off-site (7287 Lowell Boulevard) via direct push in the locations that were potholed and backfilled as mentioned above. The following table provides a summary of the injections in each of the five areas:

Area ID	PersulfOx (gallons) (15% solution)	RegenOx (gallons) (6% solution)	ORC-A (gallons) (30% slurry)	Injection Interval Range (feet)	Points Not Injected
Area 1	N/A	739	124	8-16	N/A
Area 2	N/A	1,450	99	15-25	IP-73, IP-75, IP-76, IP-104, IP-108
Area 3	5,503	N/A	198	15-25	N/A
Area 4	N/A	1,526	330	15-25	IP-61, IP-65, IP-67, IP-70, IP-71
Area 5	1,733	N/A	231	15-25	N/A

N/A = Not Applicable

A detailed description of the injections is provided in Regenesis' Application Summary Report for Remedial Services at the Former Pik Kwik site which is included as a supporting document in the MRR.

While the injections were being performed, CGRS obtained total depth, depth to groundwater, and MNA measurements from wells CHMW-01A, MW-11, MW-14, MW-16, MW-17, MW-18, MW-19, O-06, O-07, O-08, SVE-04, and SVE-06 that are located in the vicinity of the injection points. The change in groundwater elevations ranged between 0.0 and 16.53 feet. The dissolved oxygen concentrations increased up to three orders of magnitude in a few wells. The specific conductance measurements increased up to one order of magnitude and the ORP measurements increased up to six orders of magnitude in a few wells. A copy of CGRS' Injection Data Sheets and photographs of the injection activities are included as supporting documents to the MRR.

On July 6, 10, and 11, 2017, DrillPro transported a total of approximately 1,650 gallons (equivalent to 30 drums) of pothole slurry to Raritan CWT located in Englewood, Colorado, for disposal. Copies of the Non-Hazardous Waste Manifests are attached as supporting documents to the MRR.

Between October 31 and November 2, 2017, CGRS used approximately 850 gallons of water to flush the injectates and/or sediment out of wells CHMW-01A, MW-11, MW-13 through MW-19, SVE-05, SVE-06, SVE-07, and SVE-08. On January 10, 2018, CGRS used approximately 70 gallons of water to flush injectates out of wells MW-16, MW-17, and SVE-07.

BTEX/TVPH Concentrations vs. PersulfOx, RegenOx, and ORC-A Injections

The benzene and TVPH concentrations for May 16, August 28, and November 20, 2017, and March 19, June 14, September 12 and 13, and December 5, 2018, are shown in the following tables:

Sample ID	05/16/17* Benzene (mg/L)	08/28/17 Benzene (mg/L)	11/20/17 Benzene (mg/L)	03/19/18 Benzene (mg/L)	06/14/18 Benzene (mg/L)	09/12- 13/18 Benzene (mg/L)	12/05/18 Benzene (mg/L)	Injectates
CHMW-01A	0.044	0.001	<0.001	0.003	<0.001	0.003	0.006	PersulfOx & ORC-A
MW-11	1.96	0.430	0.067	0.107	<0.001	<0.001	0.029	RegenOx & ORC-A
MW-14	2.45	0.178	2.63	3.01	0.748	1.23	0.958	RegenOx & ORC-A
MW-16	0.531	0.279	0.169	0.324	0.396	0.545	0.351	PersulfOx & RegenOx
MW-17	0.160	NS	0.001	<0.001	<0.001	<0.001	<0.001	RegenOx & ORC-A
MW-19	2.47	NS	<0.001	0.323	0.502	0.773	0.275	RegenOx
SVE-04	2.48	25.9	21.0	13.2	11.8	26.6	19.1	RegenOx & ORC-A

*Pre-injection Bolded values exceed the Tier 1 RBSL

NS = Not Sampled-impacted with injectate

Sample ID	05/16/17* TVPH (mg/L)	08/28/17 TVPH (mg/L)	11/20/17 TVPH (mg/L)	03/19/18 TVPH (mg/L)	06/14/18 TVPH (mg/L)	09/12- 13/18 TVPH (mg/L)	12/05/18 TVPH (mg/L)	Injectates
CHMW-01A	28.8	1.81	<0.50	2.00	<0.50	1.18	1.95	PersulfOx & ORC-A
MW-11	12.5	5.01	0.88	1.17	0.62	<0.50	<0.50	RegenOx & ORC-A
MW-14	90.3	9.00	27.6	31.2	4.98	8.44	12.1	RegenOx & ORC-A
MW-16	36.0	34.1	16.0	30.8	7.13	20.3	14.7	PersulfOx & RegenOx
MW-17	1.26	NS	<0.50	<0.50	<0.50	<0.50	<0.50	RegenOx & ORC-A
MW-19	45.1	NS	<0.50	1.67	1.46	2.70	0.82	RegenOx
SVE-04	32.7	83.8	41.7	36.8	43.8	67.6	58.1	RegenOx & ORC-A

*Pre-injection NS = Not Sampled-impacted with injectate

It appears that the PersulfOx, RegenOx, and ORC-A injections were significantly beneficial in the vicinity of wells CHMW-01A, MW-11, MW-17, and MW-19 when comparing the September and December 2018 BTEX/TVPH concentrations with the May 2017 BTEX/TVPH concentrations (pre-injection). However, the benzene concentrations in the groundwater samples from wells CHMW-01A, MW-11, and MW-19 are rebounding but remaining an order of magnitude less than pre-injection concentrations. The TVPH concentration in the groundwater sample from well CHMW-01A is rebounding but remaining an order of magnitude less than the pre-injection concentration. It should be noted that the groundwater elevations decreased an average of 0.90 feet across the site except increased an average of 0.11 feet in wells CHMW-01A, CHMW-04, MW-01A, MW-02A, MW-03A, MW-12, MW-13, MW-15, and SVE-06 when comparing the December 2018 data to the May 2017 data.

The BTEX/TVPH concentrations in well MW-14 did not appear to show significant beneficial results from the injections. Injections were performed to the west and southwest of well MW-14 but were not performed to the southeast due to the subsurface being saturated with injectates and to the east and north due to an aboveground traffic control box and a raised landscaped area. However, the RegenOx injectate may have desorbed some of the petroleum hydrocarbons in the subsurface making it available for biodegradation.

The BTEX concentrations in well MW-16 decreased slightly when comparing the November 2017 data to the May 2017 data, possibly due to the injections. However, since November 2017, the BTEX concentrations appear to be rebounding. Injections of PersulfOx and RegenOx were performed in the vicinity of well MW-16. However, ORC-A was not injected in the vicinity of well MW-16 due to the subsurface being saturated with the PersulfOx and RegenOx.

The BTEX/TVPH concentrations in well SVE-04 did not appear to show significant beneficial results from the injections. Injections were performed to the southeast, south, and southwest of this well. Injections were not performed to the east, west, and north of this well due to subsurface remediation system piping and the vicinity of the on-site building. However, the RegenOx injectate may have desorbed some of the petroleum hydrocarbons in the subsurface making it available for biodegradation.

Overall, the benzene concentrations in the groundwater samples from wells CHMW-01A, MW-11, and MW-17 are trending downward, relatively stable in wells MW-14 and MW-19, and trending slightly upward in wells MW-16 and SVE-04. Benzene trend graphs for wells CHMW-01A, MW-11, MW-14, MW-16, MW-17, MW-19, and SVE-04 are included as supporting documents to the MRR.

On February 1, 2019, OPS informed CGRS that the City of Westminster is planning on developing its property located at 7287 Lowell Boulevard. CGRS met with OPS and the City of Westminster on several occasions at the property or at the City’s offices and had numerous telephone discussions and emails to discuss the development of the property.

Current Monitoring and Assessment Activities

Quarterly Groundwater Monitoring – Third Quarter

The third quarter monitoring event was performed on August 14, 2019, including measuring depth to groundwater, obtaining groundwater samples for laboratory analyses on select program monitoring wells, and recording MNA parameters.

The following wells had benzene and/or ethylbenzene concentrations that were at or exceeded the respective Tier 1 RBSLs in groundwater:

Sample ID	Date	Benzene (mg/L)	Ethylbenzene (mg/L)
CHWM-01A	8/14/19	0.006	0.631
MW-11	8/14/19	0.073	0.010
MW-14	8/14/19	3.97	2.60

Sample ID	Date	Benzene (mg/L)	Ethylbenzene (mg/L)
MW-16	8/14/19	1.51	2.79
MW-19	8/14/19	1.84	0.683
MW-20	8/14/19	0.182	0.061
MW-22	8/14/19	0.005	<0.001
SVE-04	8/14/19	21.2	1.45
SVE-05	8/14/19	0.003	1.64
SVE-08	8/14/19	0.018	0.006

Bolded values exceed the Tier 1 RBSLs.

- During the August sampling event, depth to groundwater ranged from 9.04 feet (SVE-02) to 18.02 feet (CHMW-02) below TOC.
- Compared to the June 2019 data, the groundwater elevation decreased an average of 0.75 feet across the site except the groundwater elevation increased an average of 0.31 feet in wells MW-01A, MW-02A, MW-03A, MW-04A, MW-12, and MW-25.
- Consistent with historic data, the inferred groundwater flow direction was to the south with a hydraulic gradient of 0.0321 ft/ft.
- Using the August 14th data, the groundwater flow velocity was estimated at 0.02 ft/day, which is consistent with historic data
- The inferred benzene plume in groundwater diminished slightly when compared to the June 2019 plume due to the groundwater table is in the smear zone.

DO Concentrations

In August 2019, the DO concentrations ranged between 0.16 and 7.26 mg/L, which is indicative of anaerobic to aerobic subsurface conditions. The inverse relationship between DO and BTEX concentrations is evident this quarter except for in-plume wells MW-20 and MW-22 which had DO concentrations that ranged between 1.91 and 6.13 mg/L. Overall, the DO concentrations indicate that biodegradation may be occurring.

ORP Measurements

ORP measurements recorded during the August 2019 monitoring event ranged between -250.6 and 111.3 mV. In-plume wells CHMW-01A, MW-11, MW-13 through MW-16, MW-19, MW-20, MW-22, MW-25, and SVE-04 through SVE-08 had reductive ORP measurements that ranged between -250.6 and -3.7 mV. Out-of-plume wells should have ORP measurements that are oxidative but out-of-plume wells MW-18, MW-23, and MW-24 had an average ORP measurement of -40 mV. It appears that the subsurface conditions are reductive to oxidative.

Aerobic Bacteria

The aerobic bacteria counts for May 16, August 28, November 20, 2017; March 19, June 14, September 12 and 13, and December 5, 2018; and March 27, June 12, and August 14, 2019, are shown in the following table:

Sample ID	05/16/17* Aerobic Bacteria (cfu/mL)	08/28/17 Aerobic Bacteria (cfu/mL)	11/20/17 Aerobic Bacteria (cfu/mL)	03/19/18 Aerobic Bacteria (cfu/mL)	06/14/18 Aerobic Bacteria (cfu/mL)	09/12/18 Aerobic Bacteria (cfu/mL)	12/05/18 Aerobic Bacteria (cfu/mL)	03/27/19 Aerobic Bacteria (cfu/mL)	06/12/19 Aerobic Bacteria (cfu/mL)	08/14/19 Aerobic Bacteria (cfu/mL)	Injectates
CHMW-01A	550	70	8,900	600	540	60	2,700	975,000	100	40	PersulfOx & ORC-A
MW-11	610	152,000	5,800	11,200	20,900	18,000	6,600	14,100	1,400	700	RegenOx & ORC-A
MW-12	640	N/A	3,700	2,900	1,300	90	3,400	1,200	2,860	11,400	None
MW-13	4,000	700	10,000	2,000	1,765,000	11,600	6,600	2,700	10,900	3,400	None
MW-14	1,350	3,600	54,000	29,000	107,000	30,000	18,500	10,500	6,700	3,500	RegenOx & ORC-A
MW-16	1,450	500,000	30,000	4,000	11,100	2,600	2,050	2,200	31,000	14,200	PersulfOx & RegenOx
MW-23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	130,000	65,000	None
SVE-04	2,400	880	34,000	4,000	700	2,520	3,100	3,100	1,000	600	RegenOx & ORC-A
SVE-05	1,555	1,720	500	1,200	1,200	210	1,160	2,050	190	320	None

*Pre-injection N/A = Not Analyzed

It appears that the injections had a beneficial result on the aerobic bacteria in wells that were within the influence of the injections. The aerobic bacteria counts in August 2019 increased when compared to the May 2017 counts for wells MW-11, MW-14, and MW-16. Wells MW-12, MW-13, MW-23, and SVE-05 are presumably outside the influence of the injections. The aerobic bacteria count in well MW-12 has increased up to two orders of magnitude when compared to the May 2017 counts. The aerobic bacteria counts in well SVE-05 decreased an order of magnitude.

Anaerobic Bacteria

The anaerobic bacteria counts for May 16, August 28, and November 20, 2017; March 19, June 14, September 12 and 13, and December 5, 2018; and March 27, June 12, and August 14, 2019 are shown in the following table:

Sample ID	05/16/17* Anaerobic Bacteria (cfu/mL)	08/28/17 Anaerobic Bacteria (cfu/mL)	11/20/17 Anaerobic Bacteria (cfu/mL)	03/19/18 Anaerobic Bacteria (cfu/mL)	06/14/18 Anaerobic Bacteria (cfu/mL)	09/12/18 Anaerobic Bacteria (cfu/mL)	12/05/18 Anaerobic Bacteria (cfu/mL)	03/27/19 Anaerobic Bacteria (cfu/mL)	06/12/19 Anaerobic Bacteria (cfu/mL)	08/14/19 Anaerobic Bacteria (cfu/mL)	Injectates
CHMW-01A	40	<30	250	30	<30	<30	190	7,500	<30	30	PersulfOx & ORC-A
MW-11	70	<30	190	190	30	<30	120	<30	<30	34	RegenOx & ORC-A
MW-12	<30	N/A	30	<30	<30	<30	<30	<30	<30	90	None

Sample ID	05/16/17* Anaerobic Bacteria (cfu/mL)	08/28/17 Anaerobic Bacteria (cfu/mL)	11/20/17 Anaerobic Bacteria (cfu/mL)	03/19/18 Anaerobic Bacteria (cfu/mL)	06/14/18 Anaerobic Bacteria (cfu/mL)	09/12/18 Anaerobic Bacteria (cfu/mL)	12/05/18 Anaerobic Bacteria (cfu/mL)	03/27/19 Anaerobic Bacteria (cfu/mL)	06/12/19 Anaerobic Bacteria (cfu/mL)	08/14/19 Anaerobic Bacteria (cfu/mL)	Injectates
MW-13	<30	<30	<30	<30	1,575,000	220	<30	<30	<30	<30	None
MW-14	30	230	760	840	460	160	400	250	280	320	RegenOx & ORC-A
MW-16	100	7,200	300	250	<30	<30	30	60	<30	50	PersulfOx & RegenOx
MW-23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	150	120	None
SVE-04	<30	180	2,000	100	<30	30	190	<30	30	120	RegenOx & ORC-A
SVE-05	220	190	410	360	250	80	260	300	120	140	None

*Pre-Injection N/A = Not Analyzed

It appears that the injections increased the anaerobic bacteria count an order of magnitude in wells MW-14 and SVE-04 when the August 2019 data is compared to the May 2017 data. The anaerobic bacteria counts decreased an order of magnitude in well MW-16 when compared to the May 2017 data. Anaerobic counts have remained relatively stable in wells MW-12, MW-13, and SVE-05 when comparing the August 2019 data to the May 2017 data. These wells are located presumably outside the influence of the injections.

Aerobic Bacteria vs. Anaerobic Bacteria

There are considerably more aerobic bacteria than anaerobic bacteria in the subsurface. This may be due to the ORC-A creating a more aerobic environment in the subsurface and the subsurface being naturally more aerobic and oxidative outside of the petroleum hydrocarbon plume.

Current Corrective Action Activities

Between August 19 and 28, 2019, CGRS subcontracted DrillPro to pothole and backfill 111 injection points for PetroFix™ injections on-site and off-site. Between September 4 and 20, 2019, CGRS subcontracted RRS to perform PetroFix™ injections on- and off-site (7287 Lowell Boulevard) via direct push in the 111 locations that were potholed and backfilled. This event will be described in further detail in the next quarterly monitoring report.

Remediation Goals

- Tier III and Tier IV in soil and groundwater

Currently, the groundwater samples from monitoring wells CHMW-01A, MW-11, MW-14, MW-16, MW-19, MW-20, MW-22, SVE-04, and SVE-08 located on-site and off-site at 7287 Lowell Boulevard have benzene and ethylbenzene concentrations that exceed the respective Tier 1 RBSLs.

To date, soil confirmation sampling has not been performed. The Tier III and Tier IV closure criteria allows contaminants of concern to remain in the soil. Therefore, soil confirmation sampling will not be performed.

Conclusion

The SVE system has been asymptotic for several years; however, it was kept in operation as a vapor mitigation system for the on-site commercial building. Since the BTEX concentrations from the on-site soil vapor well are below the laboratory RLs, the SVE system will remain off.

Carbon was observed in monitoring wells CHMW-01, SVE-09, and SVE-10 and these wells have been replaced with wells CHMW-01A, MW-11, and MW-12 on January 19, 2015. In January 2015, the benzene and ethylbenzene concentrations in groundwater from wells CHMW-01A and MW-11 exceeded the respective Tier 1 RBSLs. It appears that the COGAC™ injections were not successful in reducing the contaminant plume in groundwater.

Groundwater and remediation system monitoring data indicate that overall the SVE remediation system performed as designed in abating petroleum hydrocarbon concentrations in the subsurface. The PersulfOx injection pilot test on the off-site property appears to have been beneficial in the vicinity of wells CHMW-01A, MW-16, MW-17, SVE-06, SVE-07, and SVE-08. The PersulfOx, RegenOx, and ORC-A injections performed on- and off-site appear to have been beneficial in the vicinity of wells CHMW-01A, MW-11, MW-14, MW-16, MW-17, MW-19, and SVE-04 based on evaluation of the BTEX, TVPH, nitrate, sulfate, dissolved iron, dissolved manganese, alkalinity, TOC, BOD, and/or DO concentrations. The aerobic bacteria counts increased up to two orders of magnitude in the wells that are within the influence of the injections and within one year of the injection event. The aerobic bacteria are more abundant than the anaerobic bacteria in the subsurface.

Currently, the benzene plume in groundwater is located on-site and off-site at 7287 Lowell Boulevard and is consistent with the current CSM. The current CSM remains valid. The anticipated closure date is March 31, 2021.

Planned Recommended Future Activities

CGRS submitted to OPS a work plan and cost estimate to remove the electrical service at the remediation shed; flush PetroFix™ from impacted groundwater monitoring wells; perform quarterly groundwater monitoring; decommission the groundwater, soil vapor, and remediation system wells at 7287 Lowell Boulevard prior to the City of Westminster developing the property; and prepare and submit semi-annual MRRs. The work plan and cost estimate have been approved by OPS. Once CGRS receives the Notice to Proceed from OPS, CGRS will perform the above-mentioned tasks and continue with the evaluation of the PetroFix injections. .

If you have any questions or require any additional information regarding this report, please contact Monica Young at (800) 288-2657.

Sincerely,
CGRS, Inc.



Raina Osmundson
Environmental Staff Scientist



Reviewed By:

Monica G.L. Young

Monica G.L. Young
Project Manager/Environmental Scientist
Recognized Environmental Professional 27

Attachment: Third Quarter 2019 MRR

ec: Ms. Carly Johansson, Colorado Rural Housing Development Corporation, carly@crhdc.org
Ms. Jenni Grafton, City of Westminster, jgrafton@cityofwestminster.us
Ms. Stephanie Troller, City of Westminster, stroller@cityofwestminster.us
Mr. Chase Evans, City of Westminster, ccevans@cityofwestminster.us
Ms. Molly Tayer, City of Westminster, mtayer@cityofwestminster.us
Mr. Seth Plas, City of Westminster, splas@cityofwestminster.us

cc: Mary Lou Nielsen Revocable Living Trust, 4541 W. 36th Avenue, Denver, CO 80212



Department of Labor and Employment

Division of Oil and Public Safety

Remediation Section

633 17th Street, Suite 500

Denver, CO 80202-3660

303-318-8547 (technical assistance)

Website: www.colorado.gov/ops/remediation

Select a report title from the list:

Monitoring and Remediation Report

Facility ID: 456

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Submittal Date: October 10, 2019

SCR submitted: March 6, 2003

Date last CAP approved: December 8, 2003

Date CAP scope ends:

March 5, 2019

Version 2.0.3

Site Information

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

SITE INFORMATION					
Site Name:	Former Pik Kwik (now Harris Park Site IV)		Business on Site:	Commercial business	
Site Address:	7301 Lowell Boulevard (now 7305 Lowell Boulevard)				
City:	Westminster	County:	Adams	Zip Code:	80030
Latitude:	39° 49' 45"		Longitude:	105° 02' 04"	
PROPERTY OWNER INFORMATION					
Name:	Gateway Plaza LLC				
Address:	7305 Lowell Boulevard				
City:	Westminster	State:	Colorado	Zip Code:	80030
Phone Number:	303-428-1448		Fax Number:	303-428-1989	
Contact Person:	Ms. Carly Johansson		Email:	carly@crhdc.org	
RESPONSIBLE PARTY INFORMATION					
Name:	Paul O. Dalpes				
Address:	11210 W. 60th Avenue				
City:	Arvada	State:	Colorado	Zip Code:	80004
Phone Number:	Unknown		Fax Number:	Unknown	
Contact Person:	Unknown		Email:	Unknown	
ENVIRONMENTAL CONSULTANT INFORMATION					
Name:	CGRS, Inc.				
Address:	1301 Academy Court				
City:	Fort Collins	State:	Colorado	Zip Code:	80524
Phone Number:	970-493-7780		Fax Number:	970-493-7986	
Project Mgr:	Ms. Monica Young		Email:	monica@cgrs.com	
REP:	Ms. Monica Young		Email:	monica@cgrs.com	
RELEASE INFORMATION					
Date Release was Suspected	8/28/1992		Date OPS was notified of suspected release	9/15/1992	
Date Release was Confirmed	9/15/1992		Date OPS was notified of confirmed release	9/15/1992	
Product Released:	RUL		How was Release Discovered:	Tank Closure - Removal	
Source of Release:	Tank		Quantity in Gallons:	Unknown	
Cause of Release:	Corrosion				
Provide Brief Description of System Repair:	Tanks were removed on 8/28/1992				
PREVIOUS RELEASE INFORMATION					
Date of Prior Release	Event ID	Product	Quantity (Gallons)	Source of Release	Date NFA Letter Issued
N/A					
TANK INFORMATION				RESPONSE	
Is the facility open and actively dispensing fuel?				No	
If the facility no longer dispenses fuel what is the current use of the property?				Commercial businesses	
Number of tanks in use (locate tanks, piping, and dispensers on site map)				0	
Number of tanks in temporary closure (locate tanks, piping, and dispensers on site map)				0	
Number of tanks removed (locate tanks, piping, and dispensers on site map)				3	
Tanks closed in place (locate tanks, piping, and dispensers on site map)				0	
Date(s) of tank closure				8/28/1992	
SITE LITHOLOGY AND AQUIFER PARAMETERS				RESPONSE	
Predominant lithology in the unsaturated zone				Silty Clay	
Predominant lithology in the saturated zone				Silty Clay	
Date of hydraulic conductivity test. Include and label test data in 'Model Input' tab.				8/19/2003	
Hydraulic conductivity of the impacted aquifer in cm/sec				4.27E-05	
Estimated effective porosity in the saturated zone (%)				25%	
Hydraulic gradient (specify wells used to calculate gradient in narrative)				0.0321	
Estimated groundwater flow velocity in ft/day (1 cm/sec = approximately 2,835 ft/day)				0.02	
General flow direction during this reporting period				S	
Historically predominant flow direction				S	
If LNAPL present, highest transmissivity value (Tn) calculated (ft ² /day). Include and label test data in 'Model Input' tab.					
OTHER POTENTIAL SOURCES				RESPONSE	
Are there offsite sources that may account for the contamination found? If yes, detail in the narrative.				No	

Exposure Pathways and Receptors

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

POINTS OF EXPOSURE			THREATENED	IMPACTED	DISTANCE FROM SOURCE (ft)
Property Boundary			yes	yes	~20
Surficial Soils			no	no	N/A
Subsurface Utilities			no	no	~10
Structures			yes	no	0
Groundwater Wells			no	no	N/A
Surface Water			no	no	~2,000
Sensitive Environments			no	no	~2,000
UTILITY	DEPTH TO WATER	DEPTH TO UTILITY	THREATENED	IMPACTED	IDENTIFIED ON POE MAP?
Gas Line	9' to 15'	~2'	no	no	yes
Water Line	9' to 15'	4' to 6'	no	no	yes
Sanitary Sewer Line	9' to 15'	4' to 6'	no	no	yes
Storm Sewer Line	9' to 15'	4' to 6'	no	no	yes
Communication Line	9' to 15'	~2' to 3'	no	no	yes
Other	9' to 15'	~2' to 6'	no	no	yes
Impacted and Potentially Impacted Offsite Properties (If >3, note details for them in narrative)					
Property Address	Property Use	Exposure Pathway	Status	Report Sent to Property Owner?	
7287 Lowell Boulevard	Commercial	groundwater ingestion	impacted	yes	
Owner Name	Mailing Address	Phone	Email		
City of Westminster	4800 W. 92nd Avenue, Westminster, CO 80031	303-658-2108	jgrafton@cityofwestminster.us		
Property Address	Property Use	Exposure Pathway	Status	Report Sent to Property Owner?	
7267 Lowell Boulevard	commercial	groundwater ingestion	potentially impacted	yes	
Owner Name	Mailing Address	Phone	Email		
Mary Lou Nielsen Revocable Living Trust	4541 W. 36th Avenue, Denver, CO 80212				
Property Address	Property Use	Exposure Pathway	Status	Report Sent to Property Owner?	
W. 73rd Avenue	road	groundwater ingestion	impacted	yes	
Owner Name	Mailing Address	Phone	Email		
City of Westminster	4800 W. 92nd Avenue, Westminster, CO 80031	303-658-2108	jgrafton@cityofwestminster.us		
EXPOSURE PATHWAYS			ELIMINATED?	REASON	
Groundwater (Ingestion)			no		
Groundwater (Enclosed Space Vapors)			yes	Benzene concentrations in soil vapor samples are <RBSL.	
Surficial Soil (Ingestion, Ambient Vapors, Particulates, Dermal Contact)			yes	Surficial soils are not impacted.	
Subsurface Soil (Enclosed Space Vapors)			yes	Benzene concentrations in soil vapor samples are <RBSL.	
Subsurface Soil (Leaching to Groundwater)			no		
All exposure pathways must be eliminated to request an NFA determination					

Water Well and Surface Water Data Table

Click on a cell in the section in which you wish the additional row. Then click "New Row"

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Permit Number or Surface Water Designation*	Geographic Location (Lat/Long or T/R/S)	Approx. Direction From Site	Approx. Distance From Site (ft)	Listed Uses	Well Depth	Water Level	Top of Screen	Pumping Rate	Potential Point of Exposure?	Rationale for Elimination
23220	T2S, R68W, Sec 32	E	800	8	50	12		3	No	Crossgradient
117626	T3S, R68W, Sec 5	SE	1200	8					No	Crossgradient
941	T2S, R68W, Sec 31	W	1400	2	606	170	346	90	No	Crossgradient
940	T2S, R68W, Sec 32	NE	1600	2	1570	50	1197	50	No	Crossgradient
942	T2S, R68W, Sec 31	W	1700	2	800	210		150	No	Crossgradient
947	T3S, R68W, Sec 6	SW	1700	2	540	300		120	No	Crossgradient
Little Dry Creek	T3S, R68W, Sec 6	S	1900						No	Downgradient & Distance
23256	T2S, R68W, Sec 31	NW	2250	8					No	Crossgradient & Distance
14669	T2S, R68W, Sec 31	NW	2250	8	540	380		8	No	Crossgradient & Distance
15049	T3S, R68W, Sec 6	SW	2450	8					No	Crossgradient & Distance

*Information from the Colorado Division of Water Resources. AT A MINIMUM, input an identifier and the distance from the site.

Colorado Division of Water Resources Listed Uses	
0 STORAGE	A AUGMENTATION
1 IRRIGATION	B EXPORT FROM BASIN
2 MUNICIPAL	C CUMULATIVE ACCRETION TO RIVER
3 COMMERCIAL	D CUMULATIVE DEPLETION FROM RIVER
4 INDUSTRIAL	E EVAPORATIVE
5 RECREATION	F FEDERAL RESERVED
6 FISHERY	G GEOTHERMAL
7 FIRE	H HOUSEHOLD USE ONLY
8 DOMESTIC	K SNOW MAKING
9 STOCK	M MINIMUM STREAMFLOW
	N NET EFFECT ON RIVER
	P POWER GENERATION
	Q OTHER
	R RECHARGE
	S EXPORT FROM STATE
	T TRANSMOUNTAIN EXPORT
	W WILDLIFE
	X ALL BENEFICIAL USES

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
MW-01	02/17/01	0.0005	0.0005	0.0005	0.0005			0.50	101.58	92.58	82.58	2.0	95.98	5.60		0	YES	13.40	
MW-02	02/17/01	13.1900	11.9400	3.2500	9.0200			108.00	99.99	94.99	84.99	2.0	90.09	9.90		0	no	5.10	
MW-04	02/17/01	1.0500	0.9550	3.7050	8.9250			48.80	98.43	92.93	82.93	2.0	87.53	10.90		0	no	4.60	
CHMW-01	11/12/01	6.6050	0.7450	3.3700	2.7950			72.80	97.89	89.89	74.89	2.0	81.08	16.81		0	no	6.19	
CHMW-02	11/12/01	0.0005	0.0005	0.0005	0.0005			0.50	97.68	89.68	74.68	2.0	79.44	18.24		0	no	4.76	
CHMW-03	11/12/01	0.0005	0.0005	0.0005	0.0005			0.50	98.26	91.26	76.26	2.0	86.47	11.79		0	no	10.21	
CHMW-04	11/12/01	0.0021	0.0005	0.0005	0.0005			0.32	91.80	84.80	69.80	2.0	78.44	13.36		0	no	8.64	
MW-01	11/12/01	0.0005	0.0005	0.0005	0.0005			0.50	101.58	92.58	82.58	2.0	94.47	7.11		0	YES	11.89	
MW-04	11/12/01	4.6500	3.2700	2.9300	8.2300			54.60	98.43	92.93	82.93	2.0	87.03	11.40		0	no	4.10	
CHMW-01	11/04/02	2.3160	0.5200	4.1540	2.4960	0.4180			97.89	89.89	74.89	2.0	79.99	17.90		0	no	5.10	
CHMW-02	11/04/02	0.0005	0.0005	0.0005	0.0005	0.0005			97.68	89.68	74.68	2.0	79.68	18.00		0	no	5.00	
CHMW-03	11/04/02	0.0005	0.0005	0.0005	0.0005	0.0086			98.26	91.26	76.26	2.0	84.96	13.30		0	no	8.70	
CHMW-04	11/04/02	0.0005	0.0005	0.0005	0.0005	0.0259			91.80	84.80	69.80	2.0	77.45	14.35		0	no	7.65	
Field Blank	11/04/02	0.0005	0.0005	0.0005	0.0005	0.0005										0	na	0.00	
MW-01	11/04/02	0.0005	0.0005	0.0005	0.0005	0.0005			101.58	92.58	82.58	2.0	92.46	9.12		0	no	9.88	
MW-01A	11/04/02	0.0005	0.0005	0.0005	0.0005	0.0005			92.50	82.50	67.50	2.0	75.20	17.30		0	no	7.70	
MW-01B	11/04/02	4.5170	0.0363	2.3550	0.0773	0.1660			98.60	93.60	83.60	2.0	87.30	11.30		0	no	3.70	
MW-02A	11/04/02	0.0005	0.0005	0.0005	0.0005	0.0129			89.82	79.82	69.82	2.0	74.49	15.33		0	no	4.67	
MW-03A	11/04/02	0.0005	0.0005	0.0005	0.0005	0.0005			89.60	79.60	69.60	2.0	75.55	14.05		0	no	5.95	
MW-04	11/04/02	12.1230	8.7920	3.9740	14.6960	1.8360			98.43	92.93	82.93	2.0	85.83	12.60		0	no	2.90	
MW-04A	11/04/02	0.0005	0.0005	0.0005	0.0005	0.0005			101.19	91.19	81.19	2.0	86.24	14.95		0	no	5.05	
CHMW-01	07/29/03	2.0090	0.6000	3.1690	2.5410	0.0005	24.20		97.89	89.89	74.89	2.0	82.01	15.88		0	no	7.12	
CHMW-02	07/29/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	81.32	16.36		0	no	6.64	
CHMW-03	07/29/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		98.26	91.26	76.26	2.0	88.37	9.89		0	no	12.11	
CHMW-04	07/29/03	0.0005	0.0005	0.0005	0.0005	0.0838	0.50		91.80	84.80	69.80	2.0	79.01	12.79		0	no	9.21	
MW-01	07/29/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	94.39	7.19		0	YES	11.81	
MW-01A	07/29/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	76.96	15.54		0	no	9.46	
MW-01B	07/29/03	7.0160	0.1840	2.8390	1.0580	0.4780	23.20		98.60	93.60	83.60	2.0	89.88	8.72		0	no	6.28	
MW-02	07/29/03								99.99	94.99	84.99	2.0	90.44	9.57	9.55	0.02	no	5.44	FP
MW-02A	07/29/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	77.23	12.59		0	no	7.41	
MW-03A	07/29/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	78.23	11.37		0	no	8.63	
MW-04	07/29/03	3.7220	2.0140	4.1920	6.2770	0.1930	40.10		98.43	92.93	82.93	2.0	88.42	10.01		0	no	5.49	
MW-04A	07/29/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	88.62	12.57		0	no	7.43	
CHMW-01	10/20/03	1.5500	0.5370	3.5660	2.7850	0.6570	35.40		97.89	89.89	74.89	2.0	81.71	16.18		0	no	6.82	
CHMW-02	10/20/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	81.08	16.60		0	no	6.40	
CHMW-03	10/20/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		98.26	91.26	76.26	2.0	85.94	12.32		0	no	9.68	
CHMW-04	10/20/03	0.0005	0.0005	0.0005	0.0005	0.0045	0.50		91.80	84.80	69.80	2.0	79.45	12.35		0	no	9.65	
MW-01	10/20/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	91.96	9.62		0	no	9.38	
MW-01A	10/20/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	77.65	14.85		0	no	10.15	
MW-01B	10/20/03	6.9760	0.1040	4.2520	0.6460	0.1210	28.00		98.60	93.60	83.60	2.0	88.45	10.15		0	no	4.85	
MW-02	10/20/03								99.99	94.99	84.99	2.0	88.66	11.38	11.31	0.07	no	3.67	FP
MW-02A	10/20/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	77.70	12.12		0	no	7.88	
MW-03A	10/20/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	78.39	11.21		0	no	8.79	
MW-04	10/20/03	6.9920	8.1600	3.8310	15.5650	0.2720	80.30		98.43	92.93	82.93	2.0	86.71	11.72		0	no	3.78	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
MW-04A	10/20/03	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.87	13.32		0	no	6.68	
CHMW-01	01/19/04	1.3060	0.6210	3.4630	2.6460	0.3040	39.60		97.89	89.89	74.89	2.0	80.18	17.71		0	no	5.29	
CHMW-02	01/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.74	17.94		0	no	5.06	
CHMW-03	01/19/04	0.0005	0.0005	0.0005	0.0005	0.0131	0.50		98.26	91.26	76.26	2.0	84.89	13.37		0	no	8.63	
CHMW-04	01/19/04	0.0005	0.0005	0.0005	0.0005	0.0129	0.50		91.80	84.80	69.80	2.0	77.84	13.96		0	no	8.04	
MW-01	01/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	91.74	9.84		0	no	9.16	
MW-01A	01/19/04	0.0005	0.0005	0.0005	0.0005	0.0024	0.50		92.50	82.50	67.50	2.0	75.93	16.57		0	no	8.43	
MW-01B	01/19/04	8.6930	0.0359	4.3390	0.2190	0.1200	25.50		98.60	93.60	83.60	2.0	86.84	11.76		0	no	3.24	
MW-02	01/19/04								99.99	94.99	84.99	2.0	87.98	12.23	11.94	0.29	no	2.99	FP
MW-02A	01/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	75.74	14.08		0	no	5.92	
MW-03A	01/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	76.33	13.27		0	no	6.73	
MW-04	01/19/04	9.8500	8.4800	3.6620	13.3000	4.7030	83.40		98.43	92.93	82.93	2.0	85.46	12.97		0	no	2.53	
MW-04A	01/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	85.76	15.43		0	no	4.57	
CHMW-01	04/19/04	1.2200	0.6100	4.2690	3.2180	0.2770	48.20		97.89	89.89	74.89	2.0	79.94	17.95		0	no	5.05	
CHMW-02	04/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.17	18.51		0	no	4.49	
CHMW-03	04/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		98.26	91.26	76.26	2.0	86.87	11.39		0	no	10.61	
CHMW-04	04/19/04	0.0005	0.0005	0.0005	0.0005	0.0574	0.50		91.80	84.80	69.80	2.0	77.55	14.25		0	no	7.75	
MW-01	04/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	93.68	7.90		0	YES	11.10	
MW-01A	04/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	75.39	17.11		0	no	7.89	
MW-01B	04/19/04	11.7690	0.2180	4.9790	1.8850	0.6390	46.20		98.60	93.60	83.60	2.0	88.93	9.67		0	no	5.33	
MW-02	04/19/04								99.99	94.99	84.99	2.0	89.31	10.83	10.63	0.20	no	4.32	FP
MW-02A	04/19/04	0.0005	0.0005	0.0005	0.0005	0.0087	0.50		89.82	79.82	69.82	2.0	74.72	15.10		0	no	4.90	
MW-03A	04/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	75.62	13.98		0	no	6.02	
MW-04	04/19/04	0.3520	0.8060	0.8770	4.2550	0.1580	27.20		98.43	92.93	82.93	2.0	87.14	11.29		0	no	4.21	
MW-04A	04/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	86.68	14.51		0	no	5.49	
MW-20 (MW-4)	04/19/04	0.3400	0.6690	0.8360	3.8360	0.1640	25.50									0	na	0.00	
Trip Blank	04/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50									0	na	0.00	
CHMW-01	07/19/04	1.1640	0.5400	3.5650	2.8530	0.9310	63.20		97.89	89.89	74.89	2.0	81.73	16.16		0	no	6.84	
CHMW-02	07/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	81.07	16.61		0	no	6.39	
CHMW-03	07/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		98.26	91.26	76.26	2.0	86.99	11.27		0	no	10.73	
CHMW-04	07/19/04	0.0005	0.0005	0.0005	0.0005	0.0139	0.50		91.80	84.80	69.80	2.0	78.40	13.40		0	no	8.60	
MW-01	07/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	93.94	7.64		0	YES	11.36	
MW-01A	07/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	76.26	16.24		0	no	8.76	
MW-01B	07/19/04	4.5420	0.1700	5.5830	3.1890	0.1190	76.80		98.60	93.60	83.60	2.0	90.39	8.21		0	no	6.79	
MW-02	07/19/04	13.7160	19.7870	4.5570	19.0940	1.8260	185.00		99.99	94.99	84.99	2.0	90.38	9.61		0	no	5.39	
MW-02A	07/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	76.07	13.75		0	no	6.25	
MW-03A	07/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	76.85	12.75		0	no	7.25	
MW-04	07/19/04	0.4460	0.0167	1.2090	0.6200	0.0005	14.60		98.43	92.93	82.93	2.0	88.22	10.21		0	no	5.29	
MW-04A	07/19/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	88.14	13.05		0	no	6.95	
MW-20 (MW-4)	07/19/04	0.4620	0.0143	1.2320	0.6580	0.0005	15.20									0	na	0.00	
Trip Blank	07/19/04	0.0005	0.0005	0.0005	0.0005											0	na	0.00	
CHMW-01	10/21/04	3.2620	0.8100	5.3020	4.5230	3.2810	59.90		97.89	89.89	74.89	2.0	81.42	16.47		0	no	6.53	
CHMW-02	10/21/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	81.10	16.58		0	no	6.42	
CHMW-03	10/21/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		98.26	91.26	76.26	2.0	86.95	11.31		0	no	10.69	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

		Click on a cell in the section in which you wish the additional row. Then click "New Row"																		
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)	
CHMW-04	10/21/04	0.0005	0.0005	0.0005	0.0005	0.0219	0.50		91.80	84.80	69.80	2.0	78.85	12.95		0	no	9.05		
MW-01	10/21/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	92.98	8.60		0	YES	10.40		
MW-01A	10/21/04	0.0005	0.0005	0.0005	0.0005	0.0013	0.50		92.50	82.50	67.50	2.0	77.11	15.39		0	no	9.61		
MW-01B	10/21/04	2.8960	0.0005	3.0700	2.6080	0.5870	45.00		98.60	93.60	83.60	2.0	90.42	8.18		0	no	6.82		
MW-02	10/21/04	12.6130	13.9210	5.0950	19.2840	2.9540	147.00		99.99	94.99	84.99	2.0	90.61	9.38		0	no	5.62		
MW-02A	10/21/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	76.98	12.84		0	no	7.16		
MW-03A	10/21/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	77.52	12.08		0	no	7.92		
MW-04	10/21/04	1.3880	0.1410	1.1240	1.3220	0.1880	18.50		98.43	92.93	82.93	2.0	88.40	10.03		0	no	5.47		
MW-04A	10/21/04	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	88.00	13.19		0	no	6.81		
MW-20 (MW-4)	10/21/04	1.3630	0.1410	1.1110	1.2960	0.1950	18.80										0	na	0.00	
Trip Blank	10/21/04	0.0005	0.0005	0.0005	0.0005												0	na	0.00	
CHMW-01	01/21/05	3.8330	1.0040	3.4430	4.3460	1.1420	33.80		97.89	89.89	74.89	2.0	80.34	17.55		0	no	5.45		
CHMW-02	01/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.84	17.84		0	no	5.16		
CHMW-03	01/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		98.26	91.26	76.26	2.0	86.06	12.20		0	no	9.80		
CHMW-04	01/21/05	0.0005	0.0005	0.0005	0.0005	0.0265	0.50		91.80	84.80	69.80	2.0	77.82	13.98		0	no	8.02		
MW-01	01/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	93.76	7.82		0	YES	11.18		
MW-01A	01/21/05	0.0005	0.0005	0.0005	0.0005	0.0040	0.50		92.50	82.50	67.50	2.0	75.79	16.71		0	no	8.29		
MW-01B	01/21/05	4.2290	0.6730	0.9420	4.4600	2.5450	20.30		98.60	93.60	83.60	2.0	89.47	9.13		0	no	5.87		
MW-02	01/21/05	9.5280	6.8110	3.5120	12.4970	2.4090	94.10		99.99	94.99	84.99	2.0	90.25	9.74		0	no	5.26		
MW-02A	01/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	75.45	14.37		0	no	5.63		
MW-03A	01/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	76.14	13.46		0	no	6.54		
MW-04	01/21/05	2.3370	0.3050	2.4370	1.7680	0.3770	30.50		98.43	92.93	82.93	2.0	87.42	11.01		0	no	4.49		
MW-04A	01/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	86.69	14.50		0	no	5.50		
MW-20 (MW-4)	01/21/05	2.4200	0.3140	2.5780	1.8520	0.3980	33.30										0	na	0.00	
Trip Blank	01/21/05	0.0005	0.0005	0.0005	0.0005												0	na	0.00	
CHMW-01	04/20/05	3.7270	0.7040	4.3630	3.0440	0.5000	40.90		97.89	89.89	74.89	2.0	80.17	17.72		0	no	5.28		
CHMW-02	04/20/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.95	17.73		0	no	5.27		
CHMW-03	04/20/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		98.26	91.26	76.26	2.0	87.37	10.89		0	no	11.11		
CHMW-04	04/20/05	0.0005	0.0005	0.0005	0.0005	0.0392	0.50		91.80	84.80	69.80	2.0	77.60	14.20		0	no	7.80		
MW-01	04/20/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	95.02	6.56		0	YES	12.44		
MW-01A	04/20/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	75.29	17.21		0	no	7.79		
MW-01B	04/20/05	1.2220	0.0468	0.5010	0.1740	0.6480	6.94		98.60	93.60	83.60	2.0	91.15	7.45		0	no	7.55		
MW-02	04/20/05	5.1820	3.9650	1.2280	9.3680	0.9840	51.40		99.99	94.99	84.99	2.0	92.65	7.34		0	no	7.66		
MW-02A	04/20/05	0.0005	0.0005	0.0005	0.0005	0.0066	0.50		89.82	79.82	69.82	2.0	74.64	15.18		0	no	4.82		
MW-03A	04/20/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	75.66	13.94		0	no	6.06		
MW-04	04/20/05	1.5930	0.3710	1.4500	2.5980	0.2840	19.30		98.43	92.93	82.93	2.0	90.63	7.80		0	no	7.70		
MW-04A	04/20/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	86.97	14.22		0	no	5.78		
MW-20 (MW-4)	04/20/05	1.5930	0.3670	1.5580	2.6550	0.2790	20.80										0	na	0.00	
Trip Blank	04/20/05	0.0005	0.0005	0.0005	0.0005												0	na	0.00	
CHMW-02	07/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	80.51	17.17		0	no	5.83		
CHMW-03	07/21/05																0	na	0.00	DES
CHMW-04	07/21/05	0.0005	0.0005	0.0005	0.0005	0.0410	0.50		91.80	84.80	69.80	2.0	78.32	13.48		0	no	8.52		
MW-01	07/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	94.73	6.85		0	YES	12.15		
MW-01A	07/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	76.04	16.46		0	no	8.54		

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
MW-01B	07/21/05	1.3060	0.0005	2.7440	1.4590	0.0424	22.70		98.60	93.60	83.60	2.0	89.76	8.84		0	no	6.16	
MW-02	07/21/05	5.6240	2.2800	4.0840	15.5910	1.9470	119.00		99.99	94.99	84.99	2.0	90.58	9.41		0	no	5.59	
MW-02A	07/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	75.72	14.10		0	no	5.90	
MW-03A	07/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	76.62	12.98		0	no	7.02	
MW-04	07/21/05	1.1010	0.3020	1.5200	1.0510	0.0529	16.60		98.43	92.93	82.93	2.0	87.72	10.71		0	no	4.79	
MW-04A	07/21/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.69	13.50		0	no	6.50	
MW-20 (MW-4)	07/21/05	1.1300	0.3140	1.4880	1.0460	0.0559	16.70									0	na	0.00	
Trip Blank	07/21/05	0.0005	0.0005	0.0005	0.0005											0	na	0.00	
CHMW-01	10/27/05	3.0040	0.6990	4.3410	2.7340	1.3490	54.30		97.89	89.89	74.89	2.0	80.91	16.98		0	no	6.02	
CHMW-02	10/27/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	80.19	17.49		0	no	5.51	
CHMW-04	10/27/05	0.0005	0.0005	0.0005	0.0005	0.0270	0.50		91.80	84.80	69.80	2.0	78.44	13.36		0	no	8.64	
MW-01	10/27/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	94.28	7.30		0	YES	11.70	
MW-01A	10/27/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	76.36	16.14		0	no	8.86	
MW-01B	10/27/05	1.4140	0.0350	1.8030	0.9500	0.1080	36.10		98.60	93.60	83.60	2.0	89.89	8.71		0	no	6.29	
MW-02	10/27/05	9.3500	2.8640	3.2250	10.9540	1.1330	101.00		99.99	94.99	84.99	2.0	90.45	9.54		0	no	5.46	
MW-02A	10/27/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	76.30	13.52		0	no	6.48	
MW-03A	10/27/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	77.02	12.58		0	no	7.42	
MW-04	10/27/05	0.1290	0.0230	0.6110	0.2470	0.0147	4.86		98.43	92.93	82.93	2.0	87.81	10.62		0	no	4.88	
MW-04A	10/27/05	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.53	13.66		0	no	6.34	
MW-20 (MW-4)	10/27/05	0.1230	0.0208	0.6350	0.2370	0.0189	4.73									0	na	0.00	
Trip Blank	10/27/05	0.0005	0.0014	0.0005	0.0022											0	na	0.00	
CHMW-01	01/19/06	3.6600	0.9010	5.4690	4.1370	0.5590	54.70		97.89	89.89	74.89	2.0	80.27	17.62		0	no	5.38	
CHMW-02	01/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.60	18.08		0	no	4.92	
CHMW-04	01/19/06	0.0005	0.0005	0.0005	0.0005	0.0343	0.50		91.80	84.80	69.80	2.0	77.73	14.07		0	no	7.93	
MW-01	01/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	93.51	8.07		0	YES	10.93	
MW-01A	01/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	75.77	16.73		0	no	8.27	
MW-01B	01/19/06	4.3200	0.0814	5.4670	0.2400	0.0005	36.20		98.60	93.60	83.60	2.0	88.40	10.20		0	no	4.80	
MW-02	01/19/06	9.8840	2.8940	4.1300	12.8990	1.8420	88.40		99.99	94.99	84.99	2.0	89.29	10.70		0	no	4.30	
MW-02A	01/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	75.39	14.43		0	no	5.57	
MW-03A	01/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	76.10	13.50		0	no	6.50	
MW-04	01/19/06	9.9280	3.4140	1.7750	4.4830	0.5700	30.20		98.43	92.93	82.93	2.0	86.80	11.63		0	no	3.87	
MW-04A	01/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	86.48	14.71		0	no	5.29	
Trip Blank	01/19/06	0.0005	0.0005	0.0005	0.0005											0	na	0.00	
CHMW-01	04/18/06	2.2920	0.7810	5.0330	3.6780	0.3150	56.90		97.89	89.89	74.89	2.0	79.88	18.01		0	no	4.99	
CHMW-02	04/18/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.06	18.62		0	no	4.38	
CHMW-04	04/18/06	0.0005	0.0005	0.0005	0.0005	0.0611	0.50		91.80	84.80	69.80	2.0	77.32	14.48		0	no	7.52	
MW-01	04/18/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	93.37	8.21		0	YES	10.79	
MW-01A	04/18/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	75.10	17.40		0	no	7.60	
MW-01B	04/18/06	2.2830	0.1130	6.1950	0.9460	0.0005	48.30		98.60	93.60	83.60	2.0	88.47	10.13		0	no	4.87	
MW-02	04/18/06	6.5280	1.9370	4.7970	16.0990	2.2860	124.00		99.99	94.99	84.99	2.0	89.17	10.82		0	no	4.18	
MW-02A	04/18/06	0.0005	0.0005	0.0005	0.0005	0.0088	0.50		89.82	79.82	69.82	2.0	74.48	15.34		0	no	4.66	
MW-03A	04/18/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	75.60	14.00		0	no	6.00	
MW-04	04/18/06	5.5860	2.2460	0.8030	2.7050	3.3340	25.80		98.43	92.93	82.93	2.0	86.52	11.91		0	no	3.59	
MW-04A	04/18/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	86.45	14.74		0	no	5.26	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)	
																				Click on a cell in the section in which you wish the additional row. Then click "New Row"
MW-20 (MW-4)	04/18/06	5.4990	2.2770	0.8380	2.6490	3.2330	28.10										0	na	0.00	
Trip Blank	04/18/06	0.0005	0.0005	0.0005	0.0005												0	na	0.00	
CHMW-01	07/19/06	1.8390	0.9300	5.1130	4.2900	0.1490	74.20		97.89	89.89	74.89	2.0	80.51	17.38			0	no	5.62	
CHMW-02	07/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.53	18.15			0	no	4.85	
CHMW-04	07/19/06	0.0005	0.0005	0.0005	0.0005	0.0181	0.50		91.80	84.80	69.80	2.0	78.03	13.77			0	no	8.23	
Field Blank	07/19/06	0.0005	0.0005	0.0005	0.0005	0.0005											0	na	0.00	
MW-01	07/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	94.58	7.00			0	YES	12.00	
MW-01A	07/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	75.62	16.88			0	no	8.12	
MW-01B	07/19/06	1.8520	0.0942	5.9170	0.9900	0.0005	55.10		98.60	93.60	83.60	2.0	89.43	9.17			0	no	5.83	
MW-02	07/19/06	8.9300	2.2070	2.8880	15.8630	1.1380	132.00		99.99	94.99	84.99	2.0	90.36	9.63			0	no	5.37	
MW-02A	07/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	75.26	14.56			0	no	5.44	
MW-03A	07/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	76.49	13.11			0	no	6.89	
MW-04	07/19/06	7.5090	3.1960	1.1460	4.2430	1.4660	50.40		98.43	92.93	82.93	2.0	87.67	10.76			0	no	4.74	
MW-04A	07/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.60	13.59			0	no	6.41	
MW-20 (MW-4)	07/19/06	7.5930	3.2390	1.3480	4.5310	1.4550	51.20										0	na	0.00	
CHMW-01	10/19/06	1.4440	0.8330	4.6730	3.9220	0.1450	70.30		97.89	89.89	74.89	2.0	80.71	17.18			0	no	5.82	
CHMW-02	10/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.52	18.16			0	no	4.84	
CHMW-04	10/19/06	0.0005	0.0005	0.0005	0.0005	0.0162	0.50		91.80	84.80	69.80	2.0	78.06	13.74			0	no	8.26	
Field Blank	10/19/06	0.0005	0.0005	0.0005	0.0005	0.0005											0	na	0.00	
MW-01	10/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.58	92.58	82.58	2.0	95.14	6.44			0	YES	12.56	
MW-01A	10/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	75.93	16.57			0	no	8.43	
MW-01B	10/19/06	0.9860	0.0569	6.2700	1.0780	0.0005	50.50		98.60	93.60	83.60	2.0	89.50	9.10			0	no	5.90	
MW-02	10/19/06	11.1900	4.0600	4.0940	14.6060	1.3360	115.00		99.99	94.99	84.99	2.0	90.33	9.66			0	no	5.34	
MW-02A	10/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	75.71	14.11			0	no	5.89	
MW-03A	10/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	76.56	13.04			0	no	6.96	
MW-04	10/19/06	10.5280	2.2820	3.6370	5.5400	2.4360	54.80		98.43	92.93	82.93	2.0	87.46	10.97			0	no	4.53	
MW-04A	10/19/06	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.31	13.88			0	no	6.12	
MW-20 (MW-4)	10/19/06	11.5240	2.6980	3.7570	5.7630	2.7260	58.40										0	na	0.00	
MW-01	11/28/06								101.58	92.58	82.58	2.0					0	na	0.00	DES
MW-01B	11/28/06								98.60	93.60	83.60	2.0					0	na	0.00	DES
MW-02	11/28/06								99.99	94.99	84.99	2.0					0	na	0.00	DES
MW-04	11/28/06								98.43	92.93	82.93	2.0					0	na	0.00	DES
CHMW-01	03/28/07	0.8130	0.4370	2.3890	1.9350	0.0701	62.00		97.89	89.89	74.89	2.0	80.86	17.03			0	no	5.97	
CHMW-02	03/28/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	80.02	17.66			0	no	5.34	
Field Blank	03/28/07	0.0005	0.0005	0.0005	0.0005	0.0005											0	na	0.00	
MW-01A	03/28/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	75.64	16.86			0	no	8.14	
MW-03A	03/28/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	76.21	13.39			0	no	6.61	
MW-04A	03/28/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.58	13.61			0	no	6.39	
MW-30 (CHMW-01)	03/28/07	0.8440	0.4440	2.3680	1.9570	0.0769	62.10										0	na	0.00	
CHMW-04	03/29/07	0.0005	0.0005	0.0005	0.0005	0.0261	0.50		91.80	84.80	69.80	2.0	78.09	13.71			0	no	8.29	
MW-02A	03/29/07	0.0005	0.0005	0.0005	0.0005	0.0007	0.50		89.82	79.82	69.82	2.0	75.05	14.77			0	no	5.23	
CHMW-01	06/26/07	0.6270	0.3470	2.6650	2.0650	0.0419	34.20		97.89	89.89	74.89	2.0	81.71	16.18			0	no	6.82	
CHMW-02	06/26/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	80.51	17.17			0	no	5.83	
CHMW-04	06/26/07	0.0005	0.0005	0.0005	0.0005	0.0097	0.50		91.80	84.80	69.80	2.0	78.91	12.89			0	no	9.11	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																				
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)	
Field Blank	06/26/07	0.0005	0.0005	0.0005	0.0005	0.0005											0	na	0.00	
MW-01A	06/26/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	76.39	16.11			0	no	8.89	
MW-02A	06/26/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	76.41	13.41			0	no	6.59	
MW-03A	06/26/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	77.32	12.28			0	no	7.72	
MW-04A	06/26/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.96	13.23			0	no	6.77	
MW-30 (CHMW-	06/26/07	0.6480	0.3750	2.7300	2.1320	0.0437	34.70										0	na	0.00	
CHMW-01	09/25/07	1.3640	0.5970	4.5020	3.5870	0.2250	58.40		97.89	89.89	74.89	2.0	81.28	16.61			0	no	6.39	
CHMW-02	09/25/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	80.08	17.60			0	no	5.40	
CHMW-04	09/25/07	0.0005	0.0005	0.0005	0.0005	0.0227	0.50		91.80	84.80	69.80	2.0	78.57	13.23			0	no	8.77	
Field Blank	09/25/07	0.0005	0.0005	0.0005	0.0005	0.0005											0	na	0.00	
MW-01A	09/25/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	76.61	15.89			0	no	9.11	
MW-02A	09/25/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	76.51	13.31			0	no	6.69	
MW-03A	09/25/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	77.11	12.49			0	no	7.51	
MW-04A	09/25/07	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.64	13.55			0	no	6.45	
MW-30 (CHMW-	09/25/07	1.3510	0.6020	4.2300	3.3940	0.2640	57.10										0	na	0.00	
SVE-01	09/25/07								100.90	95.90	80.90	2.0					0	na	0.00	INA
SVE-02	09/25/07	0.0079	0.0021	0.0193	0.0302	1.7840	7.25		100.14	95.14	80.14	2.0	91.27	8.87			0	no	11.13	
SVE-03	09/25/07	0.0052	0.0007	0.0005	0.0043	0.0872	0.50		97.86	92.86	77.86	2.0	88.67	9.19			0	no	10.81	
SVE-04	09/25/07	31.1450	0.2750	3.0670	4.4590	3.2020	110.00		98.24	93.24	78.24	2.0	87.77	10.47			0	no	9.53	
SVE-05	09/25/07	0.9020	0.1220	5.3610	3.9200	0.0215	42.90		98.69	93.69	78.69	2.0	89.71	8.98			0	no	11.02	
SVE-06	09/25/07								97.74	92.74	72.74	2.0	81.34	16.40			0	no	8.60	NOP
SVE-07	09/25/07								97.82	92.82	72.82	2.0	81.18	16.64			0	no	8.36	NOP
SVE-08	09/25/07								97.39	92.39	72.39	2.0	81.19	16.22	16.20	0.02	no	8.80	FP	
SVE-09	09/25/07	2.3230	0.0743	0.6480	1.0710	1.3640	20.30		96.95	91.95	71.95	2.0	81.16	15.79			0	no	9.21	
SVE-10	09/25/07	19.3690	1.2020	6.5820	16.6460	0.0489	133.00		96.69	91.69	71.69	2.0	81.15	15.54			0	no	9.46	
CHMW-01	01/10/08	0.9290	0.7670	4.6270	3.7810	0.1160	73.30		97.89	89.89	74.89	2.0	80.46	17.43			0	no	5.57	
CHMW-02	01/10/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.46	18.22			0	no	4.78	
CHMW-04	01/10/08	0.0005	0.0005	0.0005	0.0005	0.0337	0.50		91.80	84.80	69.80	2.0	77.77	14.03			0	no	7.97	
Field Blank	01/10/08	0.0005	0.0005	0.0005	0.0005	0.0005											0	na	0.00	
MW-01A	01/10/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	75.60	16.90			0	no	8.10	
MW-02A	01/10/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	75.16	14.66			0	no	5.34	
MW-03A	01/10/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	75.99	13.61			0	no	6.39	
MW-04A	01/10/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.00	14.19			0	no	5.81	
MW-30 (CHMW-	01/10/08	1.0000	0.8680	5.1700	4.0850	0.1320	81.60										0	na	0.00	
SVE-01	01/10/08	0.0005	0.0005	0.0005	0.0005	0.0043	0.50		100.90	95.90	80.90	2.0	91.64	9.26			0	no	10.74	
SVE-02	01/10/08	0.0043	0.0014	0.1310	0.0443	0.3680	4.27		100.14	95.14	80.14	2.0	91.54	8.60			0	no	11.40	
SVE-03	01/10/08	0.0005	0.0005	0.0005	0.0005	0.0203	1.12		97.86	92.86	77.86	2.0	90.45	7.41			0	no	12.59	
SVE-04	01/10/08	14.6970	0.1930	7.8480	3.5360	0.6640	104.00		98.24	93.24	78.24	2.0	88.27	9.97			0	no	10.03	
SVE-05	01/10/08	0.6990	0.1800	5.6090	6.1230	0.0093	62.20		98.69	93.69	78.69	2.0	89.70	8.99			0	no	11.01	
SVE-06	01/10/08								97.74	92.74	72.74	2.0	80.47	17.27			0	no	7.73	NOP
SVE-07	01/10/08								97.82	92.82	72.82	2.0	80.44	17.38			0	no	7.62	NOP
SVE-08	01/10/08	3.6630	0.6450	4.6130	4.7740	0.4620	88.30		97.39	92.39	72.39	2.0	80.44	16.95			0	no	8.05	
SVE-09	01/10/08	3.5300	0.0781	1.9380	0.5970	0.4210	35.60		96.95	91.95	71.95	2.0	80.36	16.59			0	no	8.41	
SVE-10	01/10/08	18.7190	0.5730	7.9570	11.3270	0.0622	162.00		96.69	91.69	71.69	2.0	80.39	16.30			0	no	8.70	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
CHMW-01	04/14/08	0.4890	0.3900	2.2880	1.8130	0.0363	42.60		97.89	89.89	74.89	2.0	80.89	17.00		0	no	6.00	
CHMW-02	04/14/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.57	18.11		0	no	4.89	
CHMW-04	04/14/08	0.0005	0.0005	0.0005	0.0005	0.0359	0.50		91.80	84.80	69.80	2.0	77.98	13.82		0	no	8.18	
Field Blank	04/14/08	0.0005	0.0005	0.0005	0.0005	0.0005										0	na	0.00	
MW-01A	04/14/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	75.42	17.08		0	no	7.92	
MW-02A	04/14/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	74.84	14.98		0	no	5.02	
MW-03A	04/14/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	75.85	13.75		0	no	6.25	
MW-04A	04/14/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.10	14.09		0	no	5.91	
MW-30 (CHMW-1 dup.)	04/14/08	0.4970	0.3900	2.2200	1.7640	0.0386	40.10									0	na	0.00	
O-01	04/14/08												-9.13	9.13		0	no	-9.13	NOP
O-02	04/14/08												-9.29	9.29		0	no	-9.29	NOP
O-03	04/14/08												-7.84	7.84		0	no	-7.84	NOP
O-04	04/14/08												-7.84	7.84		0	no	-7.84	NOP
O-05	04/14/08												-8.88	8.88		0	no	-8.88	NOP
O-06	04/14/08												-9.74	9.74		0	no	-9.74	NOP
O-07	04/14/08												-9.70	9.70		0	no	-9.70	NOP
O-08	04/14/08												-9.81	9.81		0	no	-9.81	NOP
O-09	04/14/08												-16.70	16.70		0	no	-16.70	NOP
O-10	04/14/08												-16.50	16.51	16.49	0.02	no	-16.50	FP
O-11	04/14/08												-16.27	16.27		0	no	-16.27	NOP
O-12	04/14/08												-16.13	16.14	16.12	0.02	no	-16.13	FP
O-13	04/14/08												-15.42	15.42		0	no	-15.42	NOP
SVE-01	04/14/08	0.0005	0.0005	0.0005	0.0005	0.0061	0.50		100.90	95.90	80.90	2.0	92.19	8.71		0	no	11.29	
SVE-02	04/14/08	0.0005	0.0005	0.0005	0.0005	0.7940	0.79		100.14	95.14	80.14	2.0	94.47	5.67		0	no	14.33	
SVE-03	04/14/08	0.0005	0.0005	0.0005	0.0005	0.0222	0.50		97.86	92.86	77.86	2.0	90.51	7.35		0	no	12.65	
SVE-04	04/14/08	13.7700	0.1000	3.2010	1.5660	0.5680	57.10		98.24	93.24	78.24	2.0	88.38	9.86		0	no	10.14	
SVE-05	04/14/08	0.6290	0.1130	4.2860	4.4330	0.0005	48.00		98.69	93.69	78.69	2.0	90.07	8.62		0	no	11.38	
SVE-06	04/14/08								97.74	92.74	72.74	2.0	80.98	16.76		0	no	8.24	NOP
SVE-07	04/14/08								97.82	92.82	72.82	2.0	80.85	16.97		0	no	8.03	NOP
SVE-08	04/14/08	2.8490	0.2800	1.4440	1.3590	0.1590	33.50		97.39	92.39	72.39	2.0	80.81	16.58		0	no	8.42	
SVE-09	04/14/08	0.6420	0.0394	0.3300	0.5700	0.3390	8.66		96.95	91.95	71.95	2.0	80.83	16.12		0	no	8.88	
SVE-10	04/14/08								96.69	91.69	71.69	2.0				0	na	0.00	DRY
CHMW-01	07/22/08	0.4170	0.4690	3.4320	2.7230	0.0067	41.90		97.89	89.89	74.89	2.0	81.37	16.52		0	no	6.48	
CHMW-02	07/22/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		97.68	89.68	74.68	2.0	79.84	17.84		0	no	5.16	
CHMW-04	07/22/08	0.0005	0.0005	0.0005	0.0005	0.0103	0.50		91.80	84.80	69.80	2.0	78.39	13.41		0	no	8.59	
Field Blank	07/22/08	0.0005	0.0005	0.0005	0.0005	0.0005										0	na	0.00	
MW-01A	07/22/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		92.50	82.50	67.50	2.0	76.08	16.42		0	no	8.58	
MW-02A	07/22/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.82	79.82	69.82	2.0	75.78	14.04		0	no	5.96	
MW-03A	07/22/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		89.60	79.60	69.60	2.0	76.67	12.93		0	no	7.07	
MW-04A	07/22/08	0.0005	0.0005	0.0005	0.0005	0.0005	0.50		101.19	91.19	81.19	2.0	87.80	13.39		0	no	6.61	
MW-30 (CHMW-1 dup.)	07/22/08	0.3990	0.4610	3.0390	2.4610	0.0072	39.60									0	na	0.00	
O-10	07/22/08												-16.09	16.09		0	no	-16.09	NOP

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																				
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)	
O-12	07/22/08												-15.73	15.73			0	no	-15.73	NOP
SVE-01	07/22/08	0.0005	0.0005	0.0005	0.0005	0.0021	0.50		100.90	95.90	80.90	2.0	92.11	8.79			0	no	11.21	
SVE-02	07/22/08	0.0032	0.0005	0.0127	0.0105	0.3480	0.50		100.14	95.14	80.14	2.0	91.71	8.43			0	no	11.57	
SVE-03	07/22/08	0.0005	0.0005	0.0005	0.0005	0.0075	0.50		97.86	92.86	77.86	2.0	89.13	8.73			0	no	11.27	
SVE-04	07/22/08	0.0007	0.0005	0.0005	0.0005	0.0334	0.50		98.24	93.24	78.24	2.0	88.42	9.82			0	no	10.18	
SVE-05	07/22/08	0.0007	0.0005	0.0005	0.0010	0.0005	0.50		98.69	93.69	78.69	2.0	89.96	8.73			0	no	11.27	
SVE-06	07/22/08								97.74	92.74	72.74	2.0	81.45	16.29			0	no	8.71	NOP
SVE-07	07/22/08								97.82	92.82	72.82	2.0	81.33	16.49			0	no	8.51	NOP
SVE-08	07/22/08	0.5000	0.0093	0.0501	0.0377	0.6480	2.21		97.39	92.39	72.39	2.0	81.33	16.06			0	no	8.94	
SVE-09	07/22/08	0.0893	0.0020	0.0102	0.0300	0.0984	3.54		96.95	91.95	71.95	2.0	81.43	15.52			0	no	9.48	
SVE-10	07/22/08	0.8810	0.0270	0.2660	0.5470	0.0281	11.00		96.69	91.69	71.69	2.0	81.30	15.39			0	no	9.61	
CHMW-01	11/05/08	0.3350	0.4270	2.7300	2.2700	0.0080	36.60		97.89	89.89	74.89	2.0	81.02	16.87			0	no	6.13	
CHMW-02	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	80.17	17.51			0	no	5.49	
CHMW-04	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0160	0.50		91.80	84.80	69.80	2.0	78.17	13.63			0	no	8.37	
Field Blank	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0010											0	na	0.00	
MW-01A	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	76.19	16.31			0	no	8.69	
MW-02A	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		89.82	79.82	69.82	2.0	76.02	13.80			0	no	6.20	
MW-03A	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		89.60	79.60	69.60	2.0	76.73	12.87			0	no	7.13	
MW-04A	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.38	13.81			0	no	6.19	
MW-30 (CHMW-1 dup.)	11/05/08	0.3670	0.4690	2.9500	2.4600	0.0110	38.70										0	na	0.00	
O-10	11/05/08												-16.56	16.56			0	no	-16.56	NOP
O-12	11/05/08												-16.07	16.07			0	no	-16.07	NOP
SVE-01	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		100.90	95.90	80.90	2.0	92.01	8.89			0	no	11.11	
SVE-02	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0030	0.50		100.14	95.14	80.14	2.0	91.43	8.71			0	no	11.29	
SVE-03	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0270	0.50		97.86	92.86	77.86	2.0	89.10	8.76			0	no	11.24	
SVE-04	11/05/08	0.0070	0.0010	0.0010	0.0010	0.0830	0.50		98.24	93.24	78.24	2.0	88.06	10.18			0	no	9.82	
SVE-05	11/05/08	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		98.69	93.69	78.69	2.0	89.71	8.98			0	no	11.02	
SVE-06	11/05/08								97.74	92.74	72.74	2.0	81.11	16.63			0	no	8.37	NOP
SVE-07	11/05/08								97.82	92.82	72.82	2.0	80.98	16.84			0	no	8.16	NOP
SVE-08	11/05/08	1.0900	0.0450	0.2580	0.1210	1.3900	4.71		97.39	92.39	72.39	2.0	81.00	16.39			0	no	8.61	
SVE-09	11/05/08	0.2140	0.0030	0.0660	0.0340	1.8100	3.97		96.95	91.95	71.95	2.0	81.01	15.94			0	no	9.06	
SVE-10	11/05/08	0.0620	0.0010	0.0060	0.0450	0.1910	4.14		96.69	91.69	71.69	2.0	81.03	15.66			0	no	9.34	
CHMW-01	03/05/09	0.2950	0.3010	2.1500	1.7300	0.2280	20.40		97.89	89.89	74.89	2.0	81.83	16.06			0	no	6.94	
CHMW-02	03/05/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	80.53	17.15			0	no	5.85	
CHMW-04	03/05/09	0.0010	0.0010	0.0010	0.0010	0.0190	0.50		91.80	84.80	69.80	2.0	77.88	13.92			0	no	8.08	
MW-01A	03/05/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	75.59	16.91			0	no	8.09	
MW-02A	03/05/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		89.82	79.82	69.82	2.0	74.72	15.10			0	no	4.90	
MW-03A	03/05/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		89.60	79.60	69.60	2.0	75.71	13.89			0	no	6.11	
MW-04A	03/05/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.24	13.95			0	no	6.05	
O-10	03/05/09												-15.62	15.62			0	no	-15.62	NOP
O-12	03/05/09												-15.36	15.36			0	no	-15.36	NOP
SVE-01	03/05/09	0.0010	0.0010	0.0010	0.0010	0.0030	0.50		100.90	95.90	80.90	2.0	91.16	9.74			0	no	10.26	
SVE-02	03/05/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		100.14	95.14	80.14	2.0	90.38	9.76			0	no	10.24	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-03	03/05/09	0.0010	0.0010	0.0010	0.0010	0.0360	0.50		97.86	92.86	77.86	2.0	88.40	9.46		0	no	10.54	
SVE-04	03/05/09	1.2800	0.0200	0.8610	0.4010	0.0160	5.73		98.24	93.24	78.24	2.0	88.69	9.55		0	no	10.45	
SVE-05	03/05/09	0.0620	0.0250	0.4370	1.0600	0.0010	6.00		98.69	93.69	78.69	2.0	89.64	9.05		0	no	10.95	
SVE-06	03/05/09								97.74	92.74	72.74	2.0	81.96	15.78		0	no	9.22	NOP
SVE-07	03/05/09								97.82	92.82	72.82	2.0	81.76	16.06		0	no	8.94	NOP
SVE-08	03/05/09	0.1000	0.0050	0.0450	0.0110	0.0360	1.05		97.39	92.39	72.39	2.0	81.74	15.65		0	no	9.35	
SVE-09	03/05/09	0.0690	0.0030	0.0200	0.0170	0.0110	0.60		96.95	91.95	71.95	2.0	81.55	15.40		0	no	9.60	
SVE-10	03/05/09	0.0140	0.0010	0.0090	0.0100	0.0040	0.50		96.69	91.69	71.69	2.0	81.97	14.72		0	no	10.28	
CHMW-01	06/08/09	1.6300	0.3020	2.6100	2.1100	0.1160	26.00		97.89	89.89	74.89	2.0	85.35	12.54		0	no	10.46	
CHMW-02	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	83.85	13.83		0	no	9.17	
CHMW-04	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		91.80	84.80	69.80	2.0	80.05	11.75		0	no	10.25	
MW-01A	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	76.96	15.54		0	no	9.46	
MW-02A	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		89.82	79.82	69.82	2.0	76.78	13.04		0	no	6.96	
MW-03A	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		89.60	79.60	69.60	2.0	77.47	12.13		0	no	7.87	
MW-04A	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	89.41	11.78		0	no	8.22	
O-10	06/08/09												-12.69	12.69		0	no	-12.69	NOP
O-12	06/08/09												-12.13	12.13		0	no	-12.13	NOP
SVE-01	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		100.90	95.90	80.90	2.0	93.72	7.18		0	no	12.82	
SVE-02	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		100.14	95.14	80.14	2.0	91.91	8.23		0	no	11.77	
SVE-03	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.86	92.86	77.86	2.0	91.94	5.92		0	no	14.08	
SVE-04	06/08/09	0.0010	0.0010	0.0010	0.0020	0.0010	0.50		98.24	93.24	78.24	2.0	91.59	6.65		0	no	13.35	
SVE-05	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		98.69	93.69	78.69	2.0	91.70	6.99		0	no	13.01	
SVE-06	06/08/09								97.74	92.74	72.74	2.0	85.75	11.99		0	no	13.01	NOP
SVE-07	06/08/09								97.82	92.82	72.82	2.0	85.17	12.65		0	no	12.35	NOP
SVE-08	06/08/09	0.0270	0.0370	0.3240	0.6930	0.0010	5.75		97.39	92.39	72.39	2.0	85.39	12.00		0	no	13.00	
SVE-09	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0040	0.50		96.95	91.95	71.95	2.0	84.85	12.10		0	no	12.90	
SVE-10	06/08/09	0.0010	0.0010	0.0010	0.0010	0.0090	0.50		96.69	91.69	71.69	2.0	85.40	11.29		0	no	13.71	
CHMW-01	09/08/09	1.4800	0.2920	2.8300	2.3200	0.0960	38.10		97.89	89.89	74.89	2.0	82.02	15.87		0	no	7.13	
CHMW-02	09/08/09	0.0010	0.0010	0.0010	0.0010	0.0070	0.50		97.68	89.68	74.68	2.0	81.63	16.05		0	no	6.95	
CHMW-04	09/08/09	0.0010	0.0010	0.0010	0.0010	0.0070	0.50		91.80	84.80	69.80	2.0	79.00	12.80		0	no	9.20	
MW-01A	09/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	77.41	15.09		0	no	9.91	
MW-02A	09/08/09								89.82	79.82	69.82	2.0	77.18	12.64		0	no	7.36	NOP
MW-03A	09/08/09								89.60	79.60	69.60	2.0	77.65	11.95		0	no	8.05	NOP
MW-04A	09/08/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.86	13.33		0	no	6.67	
SVE-01	09/08/09	0.0010	0.0010	0.0010	0.0010	0.0120	0.50		100.90	95.90	80.90	2.0	92.15	8.75		0	no	11.25	
SVE-02	09/08/09	0.0010	0.0010	0.0010	0.0010	0.4860	0.50		100.14	95.14	80.14	2.0	91.44	8.70		0	no	11.30	
SVE-03	09/08/09	0.0010	0.0010	0.0010	0.0010	0.0720	0.50		97.86	92.86	77.86	2.0	88.89	8.97		0	no	11.03	
SVE-04	09/08/09	16.9000	0.1140	4.6100	1.8500	1.0700	31.10		98.24	93.24	78.24	2.0	87.97	10.27		0	no	9.73	
SVE-05	09/08/09	0.6980	0.1050	5.9200	3.7000	0.0010	46.40		98.69	93.69	78.69	2.0	89.80	8.89		0	no	11.11	
SVE-06	09/08/09								97.74	92.74	72.74	2.0	82.13	15.61		0	no	9.39	NOP
SVE-07	09/08/09								97.82	92.82	72.82	2.0	81.98	15.84		0	no	9.16	NOP
SVE-08	09/08/09	0.0240	0.0540	2.8900	0.4450	0.0010	20.40		97.39	92.39	72.39	2.0	81.99	15.40		0	no	9.60	
SVE-09	09/08/09	2.8100	0.0280	0.7100	0.3260	0.0820	8.95		96.95	91.95	71.95	2.0	81.81	15.14		0	no	9.86	
SVE-10	09/08/09	3.6000	0.0780	1.5100	0.8480	0.1090	16.70		96.69	91.69	71.69	2.0	81.88	14.81		0	no	10.19	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
CHMW-02	12/09/09	0.0010	0.0010	0.0010	0.0010	0.0010			97.68	89.68	74.68	2.0	80.63	17.05		0	no	5.95	
CHMW-04	12/09/09	0.0010	0.0010	0.0010	0.0010	0.0130	0.50		91.80	84.80	69.80	2.0	78.31	13.49		0	no	8.51	
MW-01A	12/09/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	76.32	16.18		0	no	8.82	
MW-02A	12/09/09								89.82	79.82	69.82	2.0	76.23	13.59		0	no	6.41	NOP
MW-03A	12/09/09								89.60	79.60	69.60	2.0	76.76	12.84		0	no	7.16	NOP
CHMW-01	12/10/09	0.9330	0.3600	2.8700	3.0400	0.0790	30.90		97.89	89.89	74.89	2.0	81.28	16.61		0	no	6.39	
MW-04A	12/10/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.45	13.74		0	no	6.26	
SVE-01	12/10/09	0.0010	0.0010	0.0010	0.0010	0.0090	0.50		100.90	95.90	80.90	2.0	92.31	8.59		0	no	11.41	
SVE-02	12/10/09	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		100.14	95.14	80.14	2.0	91.42	8.72		0	no	11.28	
SVE-03	12/10/09	0.0010	0.0010	0.0010	0.0010	0.0100	0.50		97.86	92.86	77.86	2.0	89.39	8.47		0	no	11.53	
SVE-04	12/10/09	7.3900	0.0330	0.3280	0.4590	0.7980	9.25		98.24	93.24	78.24	2.0	88.04	10.20		0	no	9.80	
SVE-05	12/10/09	0.2160	0.0840	3.4100	2.4000	0.0010	18.70		98.69	93.69	78.69	2.0	89.75	8.94		0	no	11.06	
SVE-06	12/10/09								97.74	92.74	72.74	2.0	81.40	16.34		0	no	8.66	NOP
SVE-07	12/10/09								97.82	92.82	72.82	2.0	81.23	16.59		0	no	8.41	NOP
SVE-08	12/10/09	0.0320	0.0470	1.0200	0.4730	0.0600	7.55		97.39	92.39	72.39	2.0	81.25	16.14		0	no	8.86	
SVE-09	12/10/09	0.0460	0.0010	0.0300	0.0100	0.0180	0.50		96.95	91.95	71.95	2.0	81.16	15.79		0	no	9.21	
SVE-10	12/10/09	0.0010	0.0010	0.0010	0.0010	0.0070	0.50		96.69	91.69	71.69	2.0	81.24	15.45		0	no	9.55	
CHMW-01	03/31/10	0.5950	0.3000	2.6200	2.8600	0.0010	38.20		97.89	89.89	74.89	2.0	81.16	16.73		0	no	6.27	
CHMW-02	03/31/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	80.03	17.65		0	no	5.35	
CHMW-04	03/31/10	0.0010	0.0010	0.0010	0.0010	0.0090	0.50		91.80	84.80	69.80	2.0	78.24	13.56		0	no	8.44	
MW-01A	03/31/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	75.79	16.71		0	no	8.29	
MW-02A	03/31/10								89.82	79.82	69.82	2.0	75.35	14.47		0	no	5.53	NOP
MW-03A	03/31/10								89.60	79.60	69.60	2.0	76.21	13.39		0	no	6.61	NOP
MW-04A	03/31/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.68	13.51		0	no	6.49	
SVE-01	03/31/10	0.0010	0.0010	0.0010	0.0010	0.0030	0.50		100.90	95.90	80.90	2.0	93.39	7.51		0	no	12.49	
SVE-02	03/31/10	0.0010	0.0010	0.0010	0.0010	0.1620	0.50		100.14	95.14	80.14	2.0	92.24	7.90		0	no	12.10	
SVE-03	03/31/10	0.0010	0.0010	0.0010	0.0010	0.0040	0.50		97.86	92.86	77.86	2.0	91.25	6.61		0	no	13.39	
SVE-04	03/31/10	0.0450	0.0020	0.0260	0.0190	0.0020	0.50		98.24	93.24	78.24	2.0	89.55	8.69		0	no	11.31	
SVE-05	03/31/10	0.0150	0.0090	0.0140	0.4640	0.0010	2.69		98.69	93.69	78.69	2.0	90.84	7.85		0	no	12.15	
SVE-06	03/31/10								97.74	92.74	72.74	2.0	81.21	16.53		0	no	8.47	NOP
SVE-07	03/31/10								97.82	92.82	72.82	2.0	81.07	16.75		0	no	8.25	NOP
SVE-08	03/31/10	0.2640	0.0400	0.2020	0.0720	0.7860	4.94		97.39	92.39	72.39	2.0	81.14	16.25		0	no	8.75	
SVE-09	03/31/10	0.0010	0.0010	0.0010	0.0010	0.0630	0.50		96.95	91.95	71.95	2.0	81.00	15.95		0	no	9.05	
SVE-10	03/31/10	0.0010	0.0010	0.0010	0.0010	0.0260	0.50		96.69	91.69	71.69	2.0	81.13	15.56		0	no	9.44	
CHMW-01	06/24/10	0.5470	0.3220	2.9100	2.6800	0.0010	31.80		97.89	89.89	74.89	2.0	82.70	15.19		0	no	7.81	
CHMW-02	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	81.71	15.97		0	no	7.03	
CHMW-04	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0080	0.50		91.80	84.80	69.80	2.0	79.17	12.63		0	no	9.37	
MW-01A	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	76.77	15.73		0	no	9.27	
MW-02A	06/24/10								89.82	79.82	69.82	2.0	76.74	13.08		0	no	6.92	NOP
MW-03A	06/24/10								89.60	79.60	69.60	2.0	77.43	12.17		0	no	7.83	NOP
MW-04A	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	88.58	12.61		0	no	7.39	
SVE-01	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		100.90	95.90	80.90	2.0	93.33	7.57		0	no	12.43	
SVE-02	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0600	0.50		100.14	95.14	80.14	2.0	92.29	7.85		0	no	12.15	
SVE-03	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.86	92.86	77.86	2.0	90.54	7.32		0	no	12.68	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-04	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0080	0.50		98.24	93.24	78.24	2.0	89.26	8.98		0	no	11.02	
SVE-05	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		98.69	93.69	78.69	2.0	90.78	7.91		0	no	12.09	
SVE-06	06/24/10								97.74	92.74	72.74	2.0	82.77	14.97		0	no	10.03	NOP
SVE-07	06/24/10								97.82	92.82	72.82	2.0	82.64	15.18		0	no	9.82	NOP
SVE-08	06/24/10	0.0010	0.0010	0.0010	0.0010	1.5800	1.61		97.39	92.39	72.39	2.0	82.66	14.73		0	no	10.27	
SVE-09	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0100	0.50		96.95	91.95	71.95	2.0	82.49	14.46		0	no	10.54	
SVE-10	06/24/10	0.0010	0.0010	0.0010	0.0010	0.0800	0.50		96.69	91.69	71.69	2.0	83.20	13.49		0	no	11.51	
CHMW-01	09/20/10	0.7310	0.2520	2.0600	2.4900	0.0820	30.50		97.89	89.89	74.89	2.0	81.32	16.57		0	no	6.43	
CHMW-02	09/20/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	80.39	17.29		0	no	5.71	
CHMW-04	09/20/10	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		91.80	84.80	69.80	2.0	78.41	13.39		0	no	8.61	
MW-01A	09/20/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	76.71	15.79		0	no	9.21	
MW-02A	09/20/10								89.82	79.82	69.82	2.0	76.55	13.27		0	no	6.73	NOP
MW-03A	09/20/10								89.60	79.60	69.60	2.0	77.02	12.58		0	no	7.42	NOP
MW-04A	09/20/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.70	13.49		0	no	6.51	
SVE-01	09/20/10	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		100.90	95.90	80.90	2.0	91.79	9.11		0	no	10.89	
SVE-02	09/20/10	0.0010	0.0010	0.0010	0.0010	0.5500	0.62		100.14	95.14	80.14	2.0	91.60	8.54		0	no	11.46	
SVE-03	09/20/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.86	92.86	77.86	2.0	88.65	9.21		0	no	10.79	
SVE-04	09/20/10	17.4000	0.0430	1.9500	0.6460	1.2200	42.10		98.24	93.24	78.24	2.0	87.52	10.72		0	no	9.28	
SVE-05	09/20/10	0.1070	0.0670	4.4500	3.3500	0.0010	30.20		98.69	93.69	78.69	2.0	89.55	9.14		0	no	10.86	
SVE-06	09/20/10								97.74	92.74	72.74	2.0	81.38	16.36		0	no	8.64	NOP
SVE-07	09/20/10								97.82	92.82	72.82	2.0	81.28	16.54		0	no	8.46	NOP
SVE-08	09/20/10	0.0010	0.0010	0.0010	0.0010	0.0540	0.50		97.39	92.39	72.39	2.0	81.31	16.08		0	no	8.92	
SVE-09	09/20/10	0.5900	0.0060	0.1620	0.0600	0.2370	5.11		96.95	91.95	71.95	2.0	81.14	15.81		0	no	9.19	
SVE-10	09/20/10	0.0070	0.0010	0.0070	0.0030	0.0470	0.50		96.69	91.69	71.69	2.0	81.32	15.37		0	no	9.63	
CHMW-01	12/16/10	1.1000	0.4250	2.3100	3.0100	0.4360	38.70		97.89	89.89	74.89	2.0	80.35	17.54		0	no	5.46	
CHMW-02	12/16/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	79.47	18.21		0	no	4.79	
CHMW-04	12/16/10	0.0010	0.0010	0.0010	0.0010	0.0410	0.50		91.80	84.80	69.80	2.0	77.56	14.24		0	no	7.76	
MW-01A	12/16/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	75.56	16.94		0	no	8.06	
MW-02A	12/16/10								89.82	79.82	69.82	2.0	75.03	14.79		0	no	5.21	NOP
MW-03A	12/16/10								89.60	79.60	69.60	2.0	75.82	13.78		0	no	6.22	NOP
MW-04A	12/16/10	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	86.66	14.53		0	no	5.47	
SVE-01	12/16/10	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		100.90	95.90	80.90	2.0	90.60	10.30		0	no	9.70	
SVE-02	12/16/10	0.0010	0.0010	0.0040	0.0010	0.4970	0.85		100.14	95.14	80.14	2.0	90.31	9.83		0	no	10.17	
SVE-03	12/16/10	0.0010	0.0010	0.0010	0.0010	0.0130	0.50		97.86	92.86	77.86	2.0	88.25	9.61		0	no	10.39	
SVE-04	12/16/10	25.9000	0.0700	4.0300	1.1800	0.5070	43.60		98.24	93.24	78.24	2.0	86.74	11.50		0	no	8.50	
SVE-05	12/16/10	0.1800	0.0370	5.3700	1.5000	0.0010	37.00		98.69	93.69	78.69	2.0	88.64	10.05		0	no	9.95	
SVE-06	12/16/10								97.74	92.74	72.74	2.0	80.38	17.36		0	no	7.64	NOP
SVE-07	12/16/10								97.82	92.82	72.82	2.0	80.33	17.49		0	no	7.51	NOP
SVE-08	12/16/10	0.0050	0.0010	0.0010	0.0010	0.0480	0.72		97.39	92.39	72.39	2.0	79.90	17.49		0	no	7.51	
SVE-09	12/16/10	0.0290	0.0010	0.0020	0.0120	0.1110	0.50		96.95	91.95	71.95	2.0	80.30	16.65		0	no	8.35	
SVE-10	12/16/10	0.1850	0.0020	0.0010	0.0720	0.0430	1.71		96.69	91.69	71.69	2.0	80.47	16.22		0	no	8.78	
CHMW-01	03/25/11	0.5790	0.2920	1.9800	2.5100	0.0650	40.00		97.89	89.89	74.89	2.0	80.49	17.40		0	no	5.60	
CHMW-02	03/25/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	79.54	18.14		0	no	4.86	
CHMW-04	03/25/11	0.0010	0.0010	0.0010	0.0010	0.0250	0.50		91.80	84.80	69.80	2.0	77.61	14.19		0	no	7.81	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
MW-01A	03/25/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	75.30	17.20		0	no	7.80	
MW-02A	03/25/11								89.82	79.82	69.82	2.0	74.56	15.26		0	no	4.74	NOP
MW-03A	03/25/11								89.60	79.60	69.60	2.0	75.65	13.95		0	no	6.05	NOP
MW-04A	03/25/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	86.82	14.37		0	no	5.63	
SVE-01	03/25/11	0.0010	0.0010	0.0010	0.0010	0.0030	0.50		100.90	95.90	80.90	2.0	91.53	9.37		0	no	10.63	
SVE-02	03/25/11	0.0010	0.0010	0.0010	0.0010	0.2220	0.50		100.14	95.14	80.14	2.0	90.81	9.33		0	no	10.67	
SVE-03	03/25/11	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		97.86	92.86	77.86	2.0	88.56	9.30		0	no	10.70	
SVE-04	03/25/11	22.4000	0.0660	0.7040	1.2500	0.6690	51.50		98.24	93.24	78.24	2.0	87.37	10.87		0	no	9.13	
SVE-05	03/25/11	0.1330	0.0840	5.3800	2.5200	0.0010	42.50		98.69	93.69	78.69	2.0	89.11	9.58		0	no	10.42	
SVE-06	03/25/11								97.74	92.74	72.74	2.0	80.49	17.25		0	no	7.75	NOP
SVE-07	03/25/11								97.82	92.82	72.82	2.0	80.43	17.39		0	no	7.61	NOP
SVE-08	03/25/11	0.0040	0.0010	0.0010	0.0020	0.0800	0.75		97.39	92.39	72.39	2.0	80.40	16.99		0	no	8.01	
SVE-09	03/25/11	0.0010	0.0010	0.0010	0.0010	0.3020	0.87		96.95	91.95	71.95	2.0	80.34	16.61		0	no	8.39	
SVE-10	03/25/11	0.1060	0.0020	0.0230	0.0140	0.0120	6.05		96.69	91.69	71.69	2.0	80.35	16.34		0	no	8.66	
CHMW-01	05/25/11	0.3830	0.2730	2.5800	3.3500	0.0010	45.80		97.89	89.89	74.89	2.0	81.06	16.83		0	no	6.17	
CHMW-02	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	80.31	17.37		0	no	5.63	
CHMW-04	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		91.80	84.80	69.80	2.0	78.30	13.50		0	no	8.50	
MW-01A	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	75.86	16.64		0	no	8.36	
MW-02A	05/25/11								89.82	79.82	69.82	2.0	75.12	14.70		0	no	5.30	NOP
MW-03A	05/25/11								89.60	79.60	69.60	2.0	76.28	13.32		0	no	6.68	NOP
MW-04A	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.93	13.26		0	no	6.74	
SVE-01	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0030	0.50		100.90	95.90	80.90	2.0	93.50	7.40		0	no	12.60	
SVE-02	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0810	0.50		100.14	95.14	80.14	2.0	92.52	7.62		0	no	12.38	
SVE-03	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.86	92.86	77.86	2.0	92.22	5.64		0	no	14.36	
SVE-04	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0110	0.50		98.24	93.24	78.24	2.0	89.72	8.52		0	no	11.48	
SVE-05	05/25/11	0.0330	0.0620	6.1200	5.2600	0.0010	43.90		98.69	93.69	78.69	2.0	91.14	7.55		0	no	12.45	
SVE-06	05/25/11								97.74	92.74	72.74	2.0	81.14	16.60		0	no	8.40	NOP
SVE-07	05/25/11								97.82	92.82	72.82	2.0	80.99	16.83		0	no	8.17	NOP
SVE-08	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0960	0.50		97.39	92.39	72.39	2.0	81.04	16.35		0	no	8.65	
SVE-09	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0240	0.50		96.95	91.95	71.95	2.0	80.94	16.01		0	no	8.99	
SVE-10	05/25/11	0.0010	0.0010	0.0010	0.0010	0.0050	0.50		96.69	91.69	71.69	2.0	80.99	15.70		0	no	9.30	
CHMW-01	08/29/11	0.4500	0.3490	2.8000	3.9000	0.0010	47.10		97.89	89.89	74.89	2.0	81.23	16.66		0	no	6.34	
CHMW-02	08/29/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	79.95	17.73		0	no	5.27	
CHMW-04	08/29/11	0.0010	0.0010	0.0010	0.0010	0.0050	0.50		91.80	84.80	69.80	2.0	78.90	12.90		0	no	9.10	
MW-01A	08/29/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	76.45	16.05		0	no	8.95	
MW-02A	08/29/11								89.82	79.82	69.82	2.0	76.28	13.54		0	no	6.46	NOP
MW-03A	08/29/11								89.60	79.60	69.60	2.0	76.90	12.70		0	no	7.30	NOP
MW-04A	08/29/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.84	13.35		0	no	6.65	
SVE-01	08/29/11	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		100.90	95.90	80.90	2.0	91.90	9.00		0	no	11.00	
SVE-02	08/29/11	0.0030	0.0010	0.0010	0.0010	0.2760	0.50		100.14	95.14	80.14	2.0	91.30	8.84		0	no	11.16	
SVE-03	08/29/11	0.0010	0.0010	0.0010	0.0010	0.0130	0.50		97.86	92.86	77.86	2.0	88.45	9.41		0	no	10.59	
SVE-04	08/29/11	30.8000	0.1260	2.3300	1.4300	1.9600	72.80		98.24	93.24	78.24	2.0	87.09	11.15		0	no	8.85	
SVE-05	08/29/11	0.0370	0.0370	3.4700	1.6300	0.0010	21.70		98.69	93.69	78.69	2.0	89.39	9.30		0	no	10.70	
SVE-06	08/29/11								97.74	92.74	72.74	2.0	81.25	16.49		0	no	8.51	NOP

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-07	08/29/11								97.82	92.82	72.82	2.0	81.18	16.64		0	no	8.36	NOP
SVE-08	08/29/11	0.1970	0.0010	0.0010	0.0530	2.1400	3.77		97.39	92.39	72.39	2.0	81.20	16.19		0	no	8.81	
SVE-09	08/29/11	0.0060	0.0010	0.0020	0.0010	0.2660	0.50		96.95	91.95	71.95	2.0	81.15	15.80		0	no	9.20	
SVE-10	08/29/11	0.0010	0.0010	0.0010	0.0010	0.0090	0.50		96.69	91.69	71.69	2.0	81.18	15.51		0	no	9.49	
CHMW-01	11/23/11	0.3390	0.3580	2.1000	3.7300	0.0220	46.60		97.89	89.89	74.89	2.0	80.54	17.35		0	no	5.65	
CHMW-02	11/23/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	79.50	18.18		0	no	4.82	
CHMW-04	11/23/11	0.0010	0.0010	0.0010	0.0010	0.0110	0.50		91.80	84.80	69.80	2.0	77.51	14.29		0	no	7.71	
MW-01A	11/23/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	75.78	16.72		0	no	8.28	
MW-02A	11/23/11								89.82	79.82	69.82	2.0	75.45	14.37		0	no	5.63	NOP
MW-03A	11/23/11								89.60	79.60	69.60	2.0	76.18	13.42		0	no	6.58	NOP
MW-04A	11/23/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.04	14.15		0	no	5.85	
SVE-01	11/23/11	0.0010	0.0010	0.0010	0.0010	0.0030	0.50		100.90	95.90	80.90	2.0	92.07	8.83		0	no	11.17	
SVE-02	11/23/11	0.0010	0.0010	0.0010	0.0010	0.2290	0.50		100.14	95.14	80.14	2.0	92.00	8.14		0	no	11.86	
SVE-03	11/23/11	0.0010	0.0010	0.0010	0.0010	0.0010	0.78		97.86	92.86	77.86	2.0	89.86	8.00		0	no	12.00	
SVE-04	11/23/11	18.4000	0.0940	4.3600	1.8200	0.6590	69.30		98.24	93.24	78.24	2.0	87.99	10.25		0	no	9.75	
SVE-05	11/23/11	0.1390	0.0940	6.0900	3.5000	0.0010	42.80		98.69	93.69	78.69	2.0	90.52	8.17		0	no	11.83	
SVE-06	11/23/11								97.74	92.74	72.74	2.0	80.56	17.18		0	no	7.82	NOP
SVE-07	11/23/11								97.82	92.82	72.82	2.0	80.59	17.23		0	no	7.77	NOP
SVE-08	11/23/11	0.0460	0.0070	0.0490	0.0310	0.5310	2.86		97.39	92.39	72.39	2.0	80.08	17.31		0	no	7.69	
SVE-09	11/23/11	0.0510	0.0010	0.0020	0.0080	0.4000	0.55		96.95	91.95	71.95	2.0	80.40	16.55		0	no	8.45	
SVE-10	11/23/11	0.2150	0.0030	0.0180	0.0190	0.0260	1.62		96.69	91.69	71.69	2.0	80.44	16.25		0	no	8.75	
CHMW-01	02/21/12	0.1280	0.1670	2.3000	3.1300	0.0010	35.20		97.89	89.89	74.89	2.0	81.54	16.35		0	no	6.65	
CHMW-02	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	79.97	17.71		0	no	5.29	
CHMW-04	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		91.80	84.80	69.80	2.0	78.21	13.59		0	no	8.41	
MW-01A	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	75.71	16.79		0	no	8.21	
MW-02A	02/21/12								89.82	79.82	69.82	2.0	75.16	14.66		0	no	5.34	NOP
MW-03A	02/21/12								89.60	79.60	69.60	2.0	76.14	13.46		0	no	6.54	NOP
MW-04A	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.44	13.75		0	no	6.25	
SVE-01	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		100.90	95.90	80.90	2.0	92.97	7.93		0	no	12.07	
SVE-02	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0450	0.50		100.14	95.14	80.14	2.0	91.95	8.19		0	no	11.81	
SVE-03	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.86	92.86	77.86	2.0	91.32	6.54		0	no	13.46	
SVE-04	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0320	0.50		98.24	93.24	78.24	2.0	89.03	9.21		0	no	10.79	
SVE-05	02/21/12	0.0070	0.0060	0.2300	1.0200	0.0010	5.84		98.69	93.69	78.69	2.0	90.57	8.12		0	no	11.88	
SVE-06	02/21/12								97.74	92.74	72.74	2.0	81.50	16.24		0	no	8.76	NOP
SVE-07	02/21/12								97.82	92.82	72.82	2.0	81.35	16.47		0	no	8.53	NOP
SVE-08	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0070	0.50		97.39	92.39	72.39	2.0	81.35	16.04		0	no	8.96	
SVE-09	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0090	0.50		96.95	91.95	71.95	2.0	81.27	15.68		0	no	9.32	
SVE-10	02/21/12	0.0010	0.0010	0.0010	0.0010	0.0100	0.50		96.69	91.69	71.69	2.0	81.71	14.98		0	no	10.02	
CHMW-01	05/22/12	0.1430	0.1890	1.8900	2.9100	0.0010	29.60		97.89	89.89	74.89	2.0	81.06	16.83		0	no	6.17	
CHMW-02	05/22/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	79.71	17.97		0	no	5.03	
CHMW-04	05/22/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		91.80	84.80	69.80	2.0	78.22	13.58		0	no	8.42	
MW-01A	05/22/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	75.90	16.60		0	no	8.40	
MW-02A	05/22/12								89.82	79.82	69.82	2.0	75.52	14.30		0	no	5.70	NOP
MW-03A	05/22/12								89.60	79.60	69.60	2.0	76.35	13.25		0	no	6.75	NOP

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
MW-04A	05/22/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.49	13.70		0	no	6.30	
SVE-01	05/22/12	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		100.90	95.90	80.90	2.0	92.87	8.03		0	no	11.97	
SVE-02	05/22/12	0.0010	0.0010	0.0010	0.0010	0.0430	0.50		100.14	95.14	80.14	2.0	91.84	8.30		0	no	11.70	
SVE-03	05/22/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.86	92.86	77.86	2.0	89.95	7.91		0	no	12.09	
SVE-04	05/22/12	2.6900	0.0010	0.0010	0.3280	0.2060	5.89		98.24	93.24	78.24	2.0	87.93	10.31		0	no	9.69	
SVE-05	05/22/12	0.0480	0.0630	5.5600	3.0300	0.0010	31.30		98.69	93.69	78.69	2.0	89.90	8.79		0	no	11.21	
SVE-06	05/22/12								97.74	92.74	72.74	2.0	81.04	16.70		0	no	8.30	NOP
SVE-07	05/22/12								97.82	92.82	72.82	2.0	80.96	16.86		0	no	8.14	NOP
SVE-08	05/22/12	0.1660	0.0030	0.0280	0.0070	0.3130	1.00		97.39	92.39	72.39	2.0	80.96	16.43		0	no	8.57	
SVE-09	05/22/12	0.0010	0.0010	0.0010	0.0010	0.0100	0.50		96.95	91.95	71.95	2.0	80.90	16.05		0	no	8.95	
SVE-10	05/22/12	0.0010	0.0010	0.0010	0.0010	0.0080	0.50		96.69	91.69	71.69	2.0	82.09	14.60		0	no	10.40	
CHMW-01	08/27/12	0.1460	0.3000	2.1500	3.0600	0.0080	32.40		97.89	89.89	74.89	2.0	80.58	17.31		0	no	5.69	
CHMW-02	08/27/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	78.78	18.90		0	no	4.10	
CHMW-04	08/27/12	0.0010	0.0010	0.0010	0.0010	0.0170	0.50		91.80	84.80	69.80	2.0	77.80	14.00		0	no	8.00	
MW-01A	08/27/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	76.04	16.46		0	no	8.54	
MW-02A	08/27/12								89.82	79.82	69.82	2.0	75.68	14.14		0	no	5.86	NOP
MW-03A	08/27/12								89.60	79.60	69.60	2.0	75.19	14.41		0	no	5.59	NOP
MW-04A	08/27/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.29	13.90		0	no	6.10	
SVE-01	08/27/12	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		100.90	95.90	80.90	2.0	90.96	9.94		0	no	10.06	
SVE-02	08/27/12	0.0010	0.0010	0.0020	0.0010	0.1030	0.50		100.14	95.14	80.14	2.0	91.08	9.06		0	no	10.94	
SVE-03	08/27/12	0.0010	0.0010	0.0010	0.0010	0.0150	0.50		97.86	92.86	77.86	2.0	87.20	10.66		0	no	9.34	
SVE-04	08/27/12	32.7000	0.1870	2.9900	0.7150	1.0700	50.20		98.24	93.24	78.24	2.0	86.24	12.00		0	no	8.00	
SVE-05	08/27/12	0.0010	0.0010	4.9500	1.6300	0.0010	27.80		98.69	93.69	78.69	2.0	88.99	9.70		0	no	10.30	
SVE-06	08/27/12								97.74	92.74	72.74	2.0	80.59	17.15		0	no	7.85	NOP
SVE-07	08/27/12								97.82	92.82	72.82	2.0	80.52	17.30		0	no	7.70	NOP
SVE-08	08/27/12	0.0580	0.0010	0.0230	0.0060	0.6430	1.53		97.39	92.39	72.39	2.0	80.52	16.87		0	no	8.13	
SVE-09	08/27/12	0.0150	0.0010	0.0010	0.0020	0.2080	0.50		96.95	91.95	71.95	2.0	80.42	16.53		0	no	8.47	
SVE-10	08/27/12	0.2900	0.0060	0.0140	0.0010	0.0670	1.30		96.69	91.69	71.69	2.0	80.60	16.09		0	no	8.91	
CHMW-01	11/29/12	0.1390	0.3470	2.2400	3.6200	0.0010	31.60		97.89	89.89	74.89	2.0	80.07	17.82		0	no	5.18	
CHMW-02	11/29/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	79.03	18.65		0	no	4.35	
CHMW-04	11/29/12	0.0010	0.0010	0.0010	0.0010	0.0510	0.50		91.80	84.80	69.80	2.0	77.40	14.40		0	no	7.60	
MW-01A	11/29/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		92.50	82.50	67.50	2.0	75.32	17.18		0	no	7.82	
MW-02A	11/29/12								89.82	79.82	69.82	2.0	74.74	15.08		0	no	4.92	NOP
MW-03A	11/29/12								89.60	79.60	69.60	2.0	75.70	13.90		0	no	6.10	NOP
MW-04A	11/29/12	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	86.67	14.52		0	no	5.48	
SVE-01	11/29/12	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		100.90	95.90	80.90	2.0	90.86	10.04		0	no	9.96	
SVE-02	11/29/12	0.0010	0.0010	0.0010	0.0010	0.0710	0.50		100.14	95.14	80.14	2.0	90.76	9.38		0	no	10.62	
SVE-03	11/29/12	0.0010	0.0010	0.0010	0.0010	0.0030	0.79		97.86	92.86	77.86	2.0	88.56	9.30		0	no	10.70	
SVE-04	11/29/12	33.1000	0.4540	4.5800	2.0100	1.4200	68.10		98.24	93.24	78.24	2.0	86.76	11.48		0	no	8.52	
SVE-05	11/29/12	0.0010	0.0010	5.4100	2.7500	0.0010	27.90		98.69	93.69	78.69	2.0	88.85	9.84		0	no	10.16	
SVE-06	11/29/12								97.74	92.74	72.74	2.0	80.10	17.64		0	no	7.36	NOP
SVE-07	11/29/12								97.82	92.82	72.82	2.0	80.03	17.79		0	no	7.21	NOP
SVE-08	11/29/12	0.0650	0.0130	0.0400	0.1480	0.1290	1.85		97.39	92.39	72.39	2.0	80.05	17.34		0	no	7.66	
SVE-09	11/29/12	0.0260	0.0010	0.0080	0.0030	0.3150	0.52		96.95	91.95	71.95	2.0	80.00	16.95		0	no	8.05	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-10	11/29/12	0.0050	0.0010	0.0020	0.0030	0.0990	0.50		96.69	91.69	71.69	2.0	80.15	16.54		0	no	8.46	
CHMW-01	02/26/13	0.1930	0.4720	3.0700	4.7500	0.0010	52.40		97.89	89.89	74.89	2.0	79.57	18.32		0	no	4.68	
CHMW-02	02/26/13	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	78.68	19.00		0	no	4.00	
CHMW-04	02/26/13	0.0010	0.0010	0.0010	0.0010	0.0360	0.50		91.80	84.80	69.80	2.0	77.49	14.31		0	no	7.69	
MW-01A	02/26/13								92.50	82.50	67.50	2.0	76.98	15.52		0	no	9.48	NOP
MW-02A	02/26/13								89.82	79.82	69.82	2.0	74.54	15.28		0	no	4.72	NOP
MW-03A	02/26/13								89.60	79.60	69.60	2.0	75.53	14.07		0	no	5.93	NOP
MW-04A	02/26/13	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	85.91	15.28		0	no	4.72	
SVE-01	02/26/13	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		100.90	95.90	80.90	2.0	90.08	10.82		0	no	9.18	
SVE-02	02/26/13	0.0010	0.0010	0.0010	0.0010	0.1910	0.50		100.14	95.14	80.14	2.0	90.31	9.83		0	no	10.17	
SVE-03	02/26/13	0.0010	0.0010	0.0010	0.0010	0.0040	0.50		97.86	92.86	77.86	2.0	88.62	9.24		0	no	10.76	
SVE-04	02/26/13	20.5000	0.1500	3.7300	0.3170	0.3900	66.80		98.24	93.24	78.24	2.0	86.81	11.43		0	no	8.57	
SVE-05	02/26/13	0.0010	0.0010	5.7500	2.7700	0.0010	50.20		98.69	93.69	78.69	2.0	88.70	9.99		0	no	10.01	
SVE-06	02/26/13								97.74	92.74	72.74	2.0	79.72	18.02		0	no	6.98	NOP
SVE-07	02/26/13								97.82	92.82	72.82	2.0	79.68	18.14		0	no	6.86	NOP
SVE-08	02/26/13	1.3400	0.5460	3.5500	9.3300	0.4480	72.20		97.39	92.39	72.39	2.0	79.92	17.47		0	no	7.53	
SVE-09	02/26/13	0.6720	0.1060	0.0580	1.2400	0.3500	8.72		96.95	91.95	71.95	2.0	79.63	17.32		0	no	7.68	
SVE-10	02/26/13	2.1300	0.0580	0.2190	0.2590	0.1260	5.14		96.69	91.69	71.69	2.0	79.87	16.82		0	no	8.18	
SB-01	03/26/13	0.0010	0.0010	0.0080	0.0040	0.0200	7.55						-18.30	18.30		0	no	-18.30	
SB-02	03/26/13	0.0010	0.0010	0.0010	0.0010	0.0110	12.40						-23.00	23.00		0	no	-23.00	
SB-03	03/26/13	0.0010	0.0050	0.0010	0.0010	0.0010	0.50						-18.00	18.00		0	no	-18.00	
SB-04	03/26/13	0.0010	0.0050	0.0010	0.0010	0.0010	0.50						-17.00	17.00		0	no	-17.00	
SB-05	03/26/13	0.0010	0.0010	0.0010	0.0010	0.0010	0.50						-17.00	17.00		0	no	-17.00	
CHMW-01	05/16/13	0.1080	0.2350	2.5800	2.6600	0.0290	40.40		97.89	89.89	74.89	2.0	80.90	16.99		0	no	6.01	
CHMW-02	05/16/13	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.68	89.68	74.68	2.0	79.67	18.01		0	no	4.99	
CHMW-04	05/16/13	0.0010	0.0010	0.0010	0.0010	0.0250	0.50		91.80	84.80	69.80	2.0	78.11	13.69		0	no	8.31	
MW-01A	05/16/13								92.50	82.50	67.50	2.0				0	na	0.00	INA
MW-02A	05/16/13								89.82	79.82	69.82	2.0	75.00	14.82		0	no	5.18	NOP
MW-03A	05/16/13								89.60	79.60	69.60	2.0	76.07	13.53		0	no	6.47	NOP
MW-04A	05/16/13	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		101.19	91.19	81.19	2.0	87.51	13.68		0	no	6.32	
SVE-01	05/16/13	0.0010	0.0010	0.0010	0.0010	0.0020	0.50		100.90	95.90	80.90	2.0	93.33	7.57		0	no	12.43	
SVE-02	05/16/13	0.0010	0.0010	0.0010	0.0010	0.0360	0.50		100.14	95.14	80.14	2.0	93.58	6.56		0	no	13.44	
SVE-03	05/16/13	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		97.86	92.86	77.86	2.0	92.83	5.03		0	no	14.97	
SVE-04	05/16/13	0.0010	0.0010	0.0010	0.0010	0.0010	0.50		98.24	93.24	78.24	2.0	91.36	6.88		0	no	13.12	
SVE-05	05/16/13	0.0010	0.0440	4.2600	2.5300	0.0010	23.30		98.69	93.69	78.69	2.0	92.41	6.28		0	no	13.72	
SVE-06	05/16/13								97.74	92.74	72.74	2.0	80.95	16.79		0	no	8.21	NOP
SVE-07	05/16/13								97.82	92.82	72.82	2.0	80.88	16.94		0	no	8.06	NOP
SVE-08	05/16/13	0.2110	0.0170	0.0840	1.0900	0.1410	34.40		97.39	92.39	72.39	2.0	80.87	16.52		0	no	8.48	
SVE-09	05/16/13	0.1070	0.0010	0.0010	0.0010	0.0250	0.68		96.95	91.95	71.95	2.0	80.79	16.16		0	no	8.84	
SVE-10	05/16/13	0.6800	0.0140	0.0070	0.0590	0.1060	1.70		96.69	91.69	71.69	2.0	80.75	15.94		0	no	9.06	
CHMW-01	08/20/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.89	89.89	74.89	2.0	80.91	16.98		0	no	6.02	
CHMW-02	08/20/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.68	89.68	74.68	2.0	79.38	18.30		0	no	4.70	
CHMW-04	08/20/13	<0.001	<0.001	<0.001	0.0010	0.0240	<0.5		91.80	84.80	69.80	2.0	78.19	13.61		0	no	8.39	
MW-01A	08/20/13								92.50	82.50	67.50	2.0	75.97	16.53		0	no	8.47	NOP

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
MW-02A	08/20/13								89.82	79.82	69.82	2.0	75.64	14.18		0	no	5.82	NOP
MW-03A	08/20/13								89.60	79.60	69.60	2.0	75.59	14.01		0	no	5.99	NOP
MW-04A	08/20/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		101.19	91.19	81.19	2.0	87.35	13.84		0	no	6.16	
SVE-01	08/20/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		100.90	95.90	80.90	2.0	92.31	8.59		0	no	11.41	
SVE-02	08/20/13	<0.001	<0.001	<0.001	0.0010	0.0350	<0.5		100.14	95.14	80.14	2.0	92.55	7.59		0	no	12.41	
SVE-03	08/20/13	<0.001	<0.001	<0.001	0.0010	0.0110	<0.5		97.86	92.86	77.86	2.0	90.06	7.80		0	no	12.20	
SVE-04	08/20/13	17.1000	0.2950	1.7800	1.0600	0.3410	26.50		98.24	93.24	78.24	2.0	88.06	10.18		0	no	9.82	
SVE-05	08/20/13	0.0870	<0.001	3.9900	1.5800	<0.001	14.10		98.69	93.69	78.69	2.0	90.34	8.35		0	no	11.65	
SVE-06	08/20/13								97.74	92.74	72.74	2.0	80.94	16.80		0	no	8.20	NOP
SVE-07	08/20/13								97.82	92.82	72.82	2.0	80.87	16.95		0	no	8.05	NOP
SVE-08	08/20/13	0.5670	0.0170	0.1220	0.0730	0.3290	2.50		97.39	92.39	72.39	2.0	80.87	16.52		0	no	8.48	
SVE-09	08/20/13								96.95	91.95	79.95	2.0	80.76	16.19		0	no	0.81	DRY
SVE-10	08/20/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		96.69	91.69	71.69	2.0	80.75	15.94		0	no	9.06	
CHMW-01	11/18/13	<0.001	<0.001	<0.001	0.0010	0.0010	<0.5		97.89	89.89	74.89	2.0	81.27	16.62		0	no	6.38	
CHMW-02	11/18/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.68	89.68	74.68	2.0	80.48	17.20		0	no	5.80	
CHMW-04	11/18/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		91.80	84.80	69.80	2.0	78.47	13.33		0	no	8.67	
MW-01A	11/18/13								92.50	82.50	67.50	2.0	76.41	16.09		0	no	8.91	NOP
MW-02A	11/18/13								89.82	79.82	69.82	2.0	76.30	13.52		0	no	6.48	NOP
MW-03A	11/18/13								89.60	79.60	69.60	2.0	76.88	12.72		0	no	7.28	NOP
MW-04A	11/18/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		101.19	91.19	81.19	2.0	87.16	14.03		0	no	5.97	
SVE-01	11/18/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		100.90	95.90	80.90	2.0	92.14	8.76		0	no	11.24	
SVE-02	11/18/13	<0.001	<0.001	<0.001	0.0010	0.0290	<0.5		100.14	95.14	80.14	2.0	91.70	8.44		0	no	11.56	
SVE-03	11/18/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.86	92.86	77.86	2.0	89.88	7.98		0	no	12.02	
SVE-04	11/18/13	3.0900	0.0640	0.1970	0.2850	0.0520	4.98		98.24	93.24	78.24	2.0	88.24	10.00		0	no	10.00	
SVE-05	11/18/13	0.0240	0.0100	2.6500	2.3900	<0.001	20.90		98.69	93.69	78.69	2.0	89.67	9.02		0	no	10.98	
SVE-06	11/18/13								97.74	92.74	72.74	2.0	81.38	16.36		0	no	8.64	NOP
SVE-07	11/18/13								97.82	92.82	72.82	2.0	81.18	16.64		0	no	8.36	NOP
SVE-08	11/18/13	0.2320	0.0070	0.0610	0.0970	0.4740	1.97		97.39	92.39	72.39	2.0	81.24	16.15		0	no	8.85	
SVE-09	11/18/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		96.95	91.95	79.95	2.0	81.14	15.81		0	no	1.19	
SVE-10	11/18/13	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		96.69	91.69	71.69	2.0	81.11	15.58		0	no	9.42	
CHMW-01	02/25/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.89	89.89	74.89	2.0	80.38	17.51		0	no	5.49	
CHMW-02	02/25/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.68	89.68	74.68	2.0	79.58	18.10		0	no	4.90	
CHMW-04	02/25/14	<0.001	<0.001	<0.001	0.0010	0.0140	<0.5		91.80	84.80	69.80	2.0	77.87	13.93		0	no	8.07	
MW-01A	02/25/14								92.50	82.50	67.50	2.0	75.60	16.90		0	no	8.10	NOP
MW-02A	02/25/14								89.82	79.82	69.82	2.0	75.12	14.70		0	no	5.30	NOP
MW-03A	02/25/14								89.60	79.60	69.60	2.0	76.02	13.58		0	no	6.42	NOP
MW-04A	02/25/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		101.19	91.19	81.19	2.0	86.85	14.34		0	no	5.66	
SVE-01	02/25/14	<0.001	<0.001	<0.001	0.0010	0.0010	<0.5		100.90	95.90	80.90	2.0	92.07	8.83		0	no	11.17	
SVE-02	02/25/14	<0.001	<0.001	<0.001	0.0010	0.0380	<0.5		100.14	95.14	80.14	2.0	91.75	8.39		0	no	11.61	
SVE-03	02/25/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.86	92.86	77.86	2.0	90.01	7.85		0	no	12.15	
SVE-04	02/25/14	5.6100	0.1280	3.2100	1.5200	<0.001	19.60		98.24	93.24	78.24	2.0	88.34	9.90		0	no	10.10	
SVE-05	02/25/14	0.0200	0.0300	5.4000	3.1700	<0.001	33.20		98.69	93.69	78.69	2.0	90.01	8.68		0	no	11.32	
SVE-06	02/25/14								97.74	92.74	72.74	2.0	80.39	17.35		0	no	7.65	NOP
SVE-07	02/25/14								97.82	92.82	72.82	2.0	80.40	17.42		0	no	7.58	NOP

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-08	02/25/14	0.2290	0.0420	0.2010	0.1390	0.5890	1.98		97.39	92.39	72.39	2.0	80.32	17.07		0	no	7.93	
SVE-09	02/25/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		96.95	91.95	79.95	2.0	80.30	16.65		0	no	0.35	
SVE-10	02/25/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		96.69	91.69	71.69	2.0	80.27	16.42		0	no	8.58	
CHMW-01	04/29/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.89	89.89	74.89	2.0	80.79	17.10		0	no	5.90	
CHMW-02	04/29/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.68	89.68	74.68	2.0	79.78	17.90		0	no	5.10	
CHMW-04	04/29/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		91.80	84.80	69.80	2.0	78.08	13.72		0	no	8.28	
MW-01A	04/29/14								92.50	82.50	67.50	2.0	75.50	17.00		0	no	8.00	NOP
MW-02A	04/29/14								89.82	79.82	69.82	2.0	75.01	14.81		0	no	5.19	NOP
MW-03A	04/29/14								89.60	79.60	69.60	2.0	76.07	13.53		0	no	6.47	NOP
MW-04A	04/29/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		101.19	91.19	81.19	2.0	86.98	14.21		0	no	5.79	
SVE-01	04/29/14	<0.001	<0.001	<0.001	0.0010	0.0020	<0.5		100.90	95.90	80.90	2.0	92.50	8.40		0	no	11.60	
SVE-02	04/29/14	<0.001	<0.001	<0.001	0.0010	0.0370	<0.5		100.14	95.14	80.14	2.0	91.45	8.69		0	no	11.31	
SVE-03	04/29/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		97.86	92.86	77.86	2.0	90.16	7.70		0	no	12.30	
SVE-04	04/29/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		98.24	93.24	78.24	2.0	88.19	10.05		0	no	9.95	
SVE-05	04/29/14	0.0080	0.0120	2.8000	1.6100	<0.001	20.90		98.69	93.69	78.69	2.0	89.83	8.86		0	no	11.14	
SVE-06	04/29/14								97.74	92.74	72.74	2.0	80.74	17.00		0	no	8.00	NOP
SVE-07	04/29/14								97.82	92.82	72.82	2.0	80.67	17.15		0	no	7.85	NOP
SVE-08	04/29/14	0.2100	0.0120	0.0770	0.0950	1.4800	4.59		97.39	92.39	72.39	2.0	80.72	16.67		0	no	8.33	
SVE-09	04/29/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		96.95	91.95	79.95	2.0	80.65	16.30		0	no	0.70	
SVE-10	04/29/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.5		96.69	91.69	71.69	2.0	80.19	16.50		0	no	8.50	
CHMW-01	07/24/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		97.89	89.89	74.89	2.0	81.36	16.53		0	no	6.47	
CHMW-02	07/24/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		97.68	89.68	74.68	2.0	80.16	17.52		0	no	5.48	
CHMW-04	07/24/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		91.80	84.80	69.80	2.0	78.48	13.32		0	no	8.68	
MW-01A	07/24/14								92.50	82.50	67.50	2.0	76.06	16.44		0	no	8.56	NOP
MW-02A	07/24/14								89.82	79.82	69.82	2.0	75.87	13.95		0	no	6.05	NOP
MW-03A	07/24/14								89.60	79.60	69.60	2.0	76.73	12.87		0	no	7.13	NOP
MW-04A	07/24/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		101.19	91.19	81.19	2.0	87.59	13.60		0	no	6.40	
SVE-01	07/24/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		100.90	95.90	80.90	2.0	92.29	8.61		0	no	11.39	
SVE-02	07/24/14	<0.001	<0.001	<0.001	0.0010	0.0130	<0.50		100.14	95.14	80.14	2.0	92.71	7.43		0	no	12.57	
SVE-03	07/24/14	<0.001	<0.001	<0.001	0.0010	0.0440	<0.50		97.86	92.86	77.86	2.0	89.87	7.99		0	no	12.01	
SVE-04	07/24/14	4.9400	0.0800	0.6020	0.3580	0.1640	20.20		98.24	93.24	78.24	2.0	88.23	10.01		0	no	9.99	
SVE-05	07/24/14	0.0110	0.0120	3.4100	1.6300	<0.001	26.10		98.69	93.69	78.69	2.0	90.57	8.12		0	no	11.88	
SVE-06	07/24/14								97.74	92.74	72.74	2.0	81.40	16.34		0	no	8.66	NOP
SVE-07	07/24/14								97.82	92.82	72.82	2.0	81.28	16.54		0	no	8.46	NOP
SVE-08	07/24/14	0.1750	0.0010	0.0090	0.0040	0.0820	1.37		97.39	92.39	72.39	2.0	81.33	16.06		0	no	8.94	
SVE-09	07/24/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		96.95	91.95	79.95	2.0	81.23	15.72		0	no	1.28	
SVE-10	07/24/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		96.69	91.69	71.69	2.0	81.24	15.45		0	no	9.55	
CHMW-01	10/16/14	0.0030	<0.001	<0.001	0.0010	<0.001	<0.50		97.89	89.89	74.89	2.0	81.05	16.84		0	no	6.16	
CHMW-02	10/16/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		97.68	89.68	74.68	2.0	80.23	17.45		0	no	5.55	
CHMW-04	10/16/14	<0.001	<0.001	<0.001	0.0010	0.0150	<0.50		91.80	84.80	69.80	2.0	78.24	13.56		0	no	8.44	
MW-01A	10/16/14								92.50	82.50	67.50	2.0	75.97	16.53		0	no	8.47	NOP
MW-02A	10/16/14								89.82	79.82	69.82	2.0	75.71	14.11		0	no	5.89	NOP
MW-03A	10/16/14								89.60	79.60	69.60	2.0	76.48	13.12		0	no	6.88	NOP
MW-04A	10/16/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		101.19	91.19	81.19	2.0	87.38	13.81		0	no	6.19	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-01	10/16/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		100.90	95.90	80.90	2.0	92.59	8.31		0	no	11.69	
SVE-02	10/16/14	<0.001	<0.001	<0.001	0.0010	0.0430	<0.50		100.14	95.14	80.14	2.0	91.84	8.30		0	no	11.70	
SVE-03	10/16/14	<0.001	<0.001	<0.001	0.0010	<0.001	0.54		97.86	92.86	77.86	2.0	90.10	7.76		0	no	12.24	
SVE-04	10/16/14	22.1000	0.4530	1.8000	0.7160	0.6700	68.10		98.24	93.24	78.24	2.0	87.75	10.49		0	no	9.51	
SVE-05	10/16/14	0.0330	0.0380	9.1900	4.6600	<0.001	67.50		98.69	93.69	78.69	2.0	89.62	9.07		0	no	10.93	
SVE-06	10/16/14								97.74	92.74	72.74	2.0	81.06	16.68		0	no	8.32	NOP
SVE-07	10/16/14								97.82	92.82	72.82	2.0	80.99	16.83		0	no	8.17	NOP
SVE-08	10/16/14	1.1800	0.0200	0.3040	0.0750	0.3290	5.96		97.39	92.39	72.39	2.0	81.01	16.38		0	no	8.62	
SVE-09	10/16/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		96.95	91.95	79.95	2.0	80.95	16.00		0	no	1.00	
SVE-10	10/16/14	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		96.69	91.69	71.69	2.0	80.95	15.74		0	no	9.26	
CHMW-01A	01/19/15	0.1490	0.2570	3.1600	3.4000	0.0200	36.10		97.83	93.45	73.45	2.0	80.33	17.50		0	no	6.88	
MW-11	01/19/15	2.0600	0.6320	1.0000	4.0600	0.1470	31.10		96.19	91.70	71.70	2.0	80.25	15.94		0	no	8.55	
MW-12	01/20/15	<0.001	<0.001	<0.001	0.0010	2.4100	2.41		94.62	90.30	70.30	2.0	77.44	17.18		0	no	7.14	
CHMW-01	03/24/15								97.89	89.89	74.89	2.0				0	na	0.00	NOP
CHMW-01A	03/24/15	2.1400	0.3700	4.1600	4.4300	0.0100	42.90		97.83	93.45	73.45	2.0	81.20	16.63		0	no	7.75	
CHMW-02	03/24/15								97.68	89.68	74.68	2.0	80.18	17.50		0	no	5.50	NOP
CHMW-04	03/24/15								91.80	84.80	69.80	2.0	78.27	13.53		0	no	8.47	NOP
MW-01A	03/24/15								92.50	82.50	67.50	2.0	75.68	16.82		0	no	8.18	NOP
MW-02A	03/24/15								89.82	79.82	69.82	2.0	75.21	14.61		0	no	5.39	NOP
MW-03A	03/24/15								89.60	79.60	69.60	2.0	76.25	13.35		0	no	6.65	NOP
MW-04A	03/24/15								101.19	91.19	81.19	2.0	87.48	13.71		0	no	6.29	NOP
MW-11	03/24/15	1.5300	0.1140	0.5920	2.1400	0.2160	17.60		96.19	91.70	71.70	2.0	80.28	15.91		0	no	8.58	
MW-12	03/24/15	0.0030	0.0080	0.0030	0.0120	2.7400	2.86		94.62	90.30	70.30	2.0	77.68	16.94		0	no	7.38	
SVE-01	03/24/15								100.90	95.90	80.90	2.0	93.20	7.70		0	no	12.30	NOP
SVE-02	03/24/15	<0.001	<0.001	<0.001	0.0010	0.0210	<0.50		100.14	95.14	80.14	2.0	92.12	8.02		0	no	11.98	
SVE-03	03/24/15	<0.001	<0.001	<0.001	0.0010	0.0040	<0.50		97.86	92.86	77.86	2.0	90.46	7.40		0	no	12.60	
SVE-04	03/24/15	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		98.24	93.24	78.24	2.0	89.28	8.96		0	no	11.04	
SVE-05	03/24/15	0.0080	0.0190	3.1100	2.2800	<0.001	15.40		98.69	93.69	78.69	2.0	90.59	8.10		0	no	11.90	
SVE-06	03/24/15								97.74	92.74	72.74	2.0	81.20	16.54		0	no	8.46	NOP
SVE-07	03/24/15								97.82	92.82	72.82	2.0	81.65	16.17		0	no	8.83	NOP
SVE-08	03/24/15	0.0920	0.0090	0.0250	0.0090	0.0250	2.43		97.39	92.39	72.39	2.0	81.13	16.26		0	no	8.74	
SVE-09	03/24/15								96.95	91.95	79.95	2.0				0	na	0.00	NOP
SVE-10	03/24/15								96.69	91.69	71.69	2.0				0	na	0.00	NOP
CHMW-01A	06/22/15	0.1800	0.1870	2.4000	2.5400	<0.001	36.00		97.83	93.45	73.45	2.0	84.56	13.27		0	no	11.11	
CHMW-02	06/22/15								97.68	89.68	74.68	2.0	83.63	14.05		0	no	8.95	NOP
CHMW-04	06/22/15								91.80	84.80	69.80	2.0	80.55	11.25		0	no	10.75	NOP
MW-01A	06/22/15								92.50	82.50	67.50	2.0	77.97	14.53		0	no	10.47	NOP
MW-02A	06/22/15								89.82	79.82	69.82	2.0	77.82	12.00		0	no	8.00	NOP
MW-03A	06/22/15								89.60	79.60	69.60	2.0	78.67	10.93		0	no	9.07	NOP
MW-04A	06/22/15								101.19	91.19	81.19	2.0	88.47	12.72		0	no	7.28	NOP
MW-11	06/22/15	1.5600	0.0150	0.2310	0.6880	0.1160	14.50		96.19	91.70	71.70	2.0	84.34	11.85		0	no	12.64	
MW-12	06/22/15	0.0090	<0.001	<0.001	0.0010	3.9000	4.41		94.62	90.30	70.30	2.0	79.93	14.69		0	no	9.63	
SVE-01	06/22/15								100.90	95.90	80.90	2.0	93.76	7.14		0	no	12.86	NOP
SVE-02	06/22/15	<0.001	<0.001	<0.001	0.0010	0.0290	<0.50		100.14	95.14	80.14	2.0	92.76	7.38		0	no	12.62	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-03	06/22/15	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		97.86	92.86	77.86	2.0	91.44	6.42		0	no	13.58	
SVE-04	06/22/15	1.0700	0.0340	0.0870	0.1910	<0.001	5.98		98.24	93.24	78.24	2.0	90.24	8.00		0	no	12.00	
SVE-05	06/22/15	0.0140	0.0150	2.8200	1.5500	<0.001	35.40		98.69	93.69	78.69	2.0	91.38	7.31		0	no	12.69	
SVE-06	06/22/15								97.74	92.74	72.74	2.0	84.66	13.08		0	no	11.92	NOP
SVE-07	06/22/15								97.82	92.82	72.82	2.0	84.42	13.40		0	no	11.60	NOP
SVE-08	06/22/15	2.0100	0.0400	0.3470	0.3320	0.0240	13.40		97.39	92.39	72.39	2.0	84.45	12.94		0	no	12.06	
CHMW-01	07/16/15								97.89	89.89	74.89	2.0	83.35	14.54		0	no	8.46	NOP
CHMW-01A	07/16/15								97.83	93.45	73.45	2.0	83.38	14.45		0	no	9.93	NOP
MW-11	07/16/15								96.19	91.70	71.70	2.0	83.21	12.98		0	no	11.51	NOP
MW-12	07/16/15								94.62	90.30	70.30	2.0	79.60	15.02		0	no	9.30	NOP
SVE-03	07/16/15								97.86	92.86	77.86	2.0	90.05	7.81		0	no	12.19	NOP
SVE-04	07/16/15								98.24	93.24	78.24	2.0	88.75	9.49		0	no	10.51	NOP
SVE-06	07/16/15								97.74	92.74	72.74	2.0	83.41	14.33		0	no	10.67	NOP
SVE-07	07/16/15								97.82	92.82	72.82	2.0	83.27	14.55		0	no	10.45	NOP
SVE-08	07/16/15								97.39	92.39	72.39	2.0	83.29	14.10		0	no	10.90	NOP
SVE-09	07/16/15								96.95	91.95	79.95	2.0	83.50	13.45		0	no	3.55	NOP
SVE-10	07/16/15								96.69	91.69	71.69	2.0	83.44	13.25		0	no	11.75	NOP
SB-06	07/17/15	0.2040	0.2050	3.9200	5.9000	<0.001	124.00									0	na	0.00	
SB-07	07/17/15	0.0060	0.0890	4.5200	3.8000	<0.001	109.00									0	na	0.00	
SB-08	07/17/15	0.0070	0.0120	0.6430	0.5570	0.0050	20.20									0	na	0.00	
SB-09	07/17/15	19.7000	2.6300	4.1400	13.3000	0.1030	184.00									0	na	0.00	
SB-10	07/17/15	23.0000	11.4000	4.8700	20.7000	0.1120	238.00									0	na	0.00	
SB-11	07/17/15	0.1870	0.1180	0.2590	0.6530	0.0840	9.21									0	na	0.00	
CHMW-01A	08/25/15	0.1320	0.1750	3.1500	3.1200	0.0040	41.00		97.83	93.45	73.45	2.0	82.43	15.40		0	no	8.98	
CHMW-02	08/25/15	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		97.68	89.68	74.68	2.0	82.14	15.54		0	no	7.46	
CHMW-04	08/25/15	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		91.80	84.80	69.80	2.0	79.55	12.25		0	no	9.75	
MW-01A	08/25/15								92.50	82.50	67.50	2.0	77.45	15.05		0	no	9.95	NOP
MW-02A	08/25/15								89.82	79.82	69.82	2.0	77.42	12.40		0	no	7.60	NOP
MW-03A	08/25/15								89.60	79.60	69.60	2.0	78.18	11.42		0	no	8.58	NOP
MW-04A	08/25/15	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		101.19	91.19	81.19	2.0	88.51	12.68		0	no	7.32	
MW-11	08/25/15	0.9220	0.0210	0.3170	0.3000	0.1330	9.43		96.19	91.70	71.70	2.0	82.28	13.91		0	no	10.58	
MW-12	08/25/15	<0.001	<0.001	<0.001	0.0010	2.4600	2.53		94.62	90.30	70.30	2.0	79.06	15.56		0	no	8.76	
SVE-01	08/25/15	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		100.90	95.90	80.90	2.0	91.99	8.91		0	no	11.09	
SVE-02	08/25/15	<0.001	<0.001	<0.001	0.0010	0.0780	<0.50		100.14	95.14	80.14	2.0	91.53	8.61		0	no	11.39	
SVE-03	08/25/15	<0.001	<0.001	<0.001	0.0010	0.0320	<0.50		97.86	92.86	77.86	2.0	88.75	9.11		0	no	10.89	
SVE-04	08/25/15	15.7000	0.1650	0.7100	0.4340	0.2420	61.40		98.24	93.24	78.24	2.0	87.52	10.72		0	no	9.28	
SVE-05	08/25/15	0.0090	0.0140	3.2200	2.1200	<0.001	32.00		98.69	93.69	78.69	2.0	89.59	9.10		0	no	10.90	
SVE-06	08/25/15								97.74	92.74	72.74	2.0	82.42	15.32		0	no	9.68	NOP
SVE-07	08/25/15								97.82	92.82	72.82	2.0	82.74	15.08		0	no	9.92	NOP
SVE-08	08/25/15	0.6150	0.0050	0.3070	0.2090	0.2220	6.59		97.39	92.39	72.39	2.0	82.30	15.09		0	no	9.91	
CHMW-01A	11/25/15	0.1430	0.1720	3.8800	3.7000	0.0040	48.30		97.83	93.45	73.45	2.0	81.15	16.68		0	no	7.70	
CHMW-02	11/25/15								97.68	89.68	74.68	2.0	83.37	14.31		0	no	8.69	NOP
CHMW-04	11/25/15								91.80	84.80	69.80	2.0	78.35	13.45		0	no	8.55	NOP
MW-01A	11/25/15								92.50	82.50	67.50	2.0				0	na	0.00	INA

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
MW-02A	11/25/15								89.82	79.82	69.82	2.0	76.30	13.52		0	no	6.48	NOP
MW-03A	11/25/15								89.60	79.60	69.60	2.0	76.97	12.63		0	no	7.37	NOP
MW-04A	11/25/15								101.19	91.19	81.19	2.0	87.50	13.69		0	no	6.31	NOP
MW-11	11/25/15	1.0600	0.0420	0.6340	0.7670	0.0790	14.10		96.19	91.70	71.70	2.0	81.02	15.17		0	no	9.32	
MW-12	11/25/15	0.0010	0.0050	0.0040	0.0050	3.0900	3.23		94.62	90.30	70.30	2.0	78.02	16.60		0	no	7.72	
SVE-01	11/25/15								100.90	95.90	80.90	2.0	92.67	8.23		0	no	11.77	NOP
SVE-02	11/25/15	<0.001	<0.001	<0.001	0.0020	0.0590	<0.50		100.14	95.14	80.14	2.0	91.65	8.49		0	no	11.51	
SVE-03	11/25/15	<0.001	<0.001	<0.001	0.0010	<0.001	1.90		97.86	92.86	77.86	2.0	90.31	7.55		0	no	12.45	
SVE-04	11/25/15	17.6000	0.3640	1.8900	1.1700	0.2130	80.00		98.24	93.24	78.24	2.0	88.01	10.23		0	no	9.77	
SVE-05	11/25/15	0.0080	0.0260	4.0400	2.3900	<0.001	36.70		98.69	93.69	78.69	2.0	89.84	8.85		0	no	11.15	
SVE-06	11/25/15								97.74	92.74	72.74	2.0	81.21	16.53		0	no	8.47	NOP
SVE-07	11/25/15								97.82	92.82	72.82	2.0	81.07	16.75		0	no	8.25	NOP
SVE-08	11/25/15	0.5540	0.0070	0.0500	0.0380	0.0250	4.94		97.39	92.39	72.39	2.0	81.11	16.28		0	no	8.72	
CHMW-01A	03/28/16	0.1470	0.0820	3.4800	1.7300	<0.001	27.70		97.83	93.45	73.45	2.0	81.23	16.60		0	no	7.78	
CHMW-02	03/28/16								97.68	89.68	74.68	2.0	80.48	17.20		0	no	5.80	NOP
CHMW-04	03/28/16								91.80	84.80	69.80	2.0	78.16	13.64		0	no	8.36	NOP
MW-01A	03/28/16								92.50	82.50	67.50	2.0	75.77	16.73		0	no	8.27	NOP
MW-02A	03/28/16								89.82	79.82	69.82	2.0	75.51	14.31		0	no	5.69	NOP
MW-03A	03/28/16								89.60	79.60	69.60	2.0	76.35	13.25		0	no	6.75	NOP
MW-04A	03/28/16								101.19	91.19	81.19	2.0	87.88	13.31		0	no	6.69	NOP
MW-11	03/28/16	0.3420	0.0180	0.2260	0.2950	0.0420	4.71		96.19	91.70	71.70	2.0	81.12	15.07		0	no	9.42	
MW-12	03/28/16	<0.001	<0.001	<0.001	0.0010	2.2700	2.35		94.62	90.30	70.30	2.0	77.78	16.84		0	no	7.48	
SVE-01	03/28/16								100.90	95.90	80.90	2.0	93.58	7.32		0	no	12.68	NOP
SVE-02	03/28/16	<0.001	<0.001	<0.001	0.0010	0.0640	<0.50		100.14	95.14	80.14	2.0	92.34	7.80		0	no	12.20	
SVE-03	03/28/16								97.86	92.86	77.86	2.0	92.26	5.60		0	no	14.40	NOP
SVE-04	03/28/16	0.4860	0.0240	0.5000	0.5010	<0.001	7.64		98.24	93.24	78.24	2.0	91.26	6.98		0	no	13.02	
SVE-05	03/28/16	0.0080	0.0160	3.6500	2.8400	0.0170	31.90		98.69	93.69	78.69	2.0	91.47	7.22		0	no	12.78	
SVE-06	03/28/16	0.0080	0.0020	0.5520	0.7280	0.0030	8.73		97.74	92.74	72.74	2.0	81.26	16.48		0	no	8.52	
SVE-07	03/28/16	0.0010	<0.001	<0.001	0.0010	0.0050	<0.50		97.82	92.82	72.82	2.0	81.15	16.67		0	no	8.33	
SVE-08	03/28/16	0.9490	0.0110	0.1240	0.1060	0.1840	5.69		97.39	92.39	72.39	2.0	81.17	16.22		0	no	8.78	
MW-13	05/25/16	<0.001	<0.001	<0.001	0.0020	0.008	3.42		97.47	92.72	72.72	2.0	82.96	14.51		0	no	10.24	
MW-14	05/25/16	2.6200	4.8300	116.0000	291.0000	<0.10	3415.00		97.57	93.01	73.01	2.0	82.63	14.94		0	no	9.62	
MW-15	05/25/16	<0.001	0.0170	2.3900	1.1300	<0.001	22.20		97.96	94.97	74.97	2.0	82.76	15.20		0	no	7.79	
MW-16	05/25/16	0.6310	0.3280	4.2400	7.7700	0.0650	68.50		97.29	92.96	72.96	2.0	82.70	14.59		0	no	9.74	
MW-17	05/25/16	0.0260	<0.001	0.0160	0.0130	0.0200	0.76		95.16	90.86	70.86	2.0	82.43	12.73		0	no	11.57	
MW-18	05/25/16	0.0360	<0.001	0.0090	0.0020	0.0560	1.24		95.42	90.79	70.79	2.0	78.91	16.51		0	no	8.12	
CHMW-01A	06/15/16	0.1320	0.1700	3.1400	2.7200	<0.001	39.40		97.83	93.45	73.45	2.0	82.30	15.53		0	no	8.85	
CHMW-02	06/15/16								97.68	89.68	74.68	2.0	81.68	16.00		0	no	7.00	NOP
CHMW-04	06/15/16								91.80	84.80	69.80	2.0	79.20	12.60		0	no	9.40	NOP
MW-01A	06/15/16	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		92.50	82.50	67.50	2.0	76.74	15.76		0	no	9.24	
MW-02A	06/15/16								89.82	79.82	69.82	2.0	76.80	13.02		0	no	6.98	NOP
MW-03A	06/15/16								89.60	79.60	69.60	2.0	77.59	12.01		0	no	7.99	NOP
MW-04A	06/15/16								101.19	91.19	81.19	2.0	88.32	12.87		0	no	7.13	NOP
MW-11	06/15/16	1.4500	0.0320	1.0000	0.2790	0.1720	11.90		96.19	91.70	71.70	2.0	82.15	14.04		0	no	10.45	

Click on a cell in the section in which you wish the additional row. Then click "New Row"

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
MW-12	06/15/16	<0.001	<0.001	<0.001	0.0010	3.0500	3.06		94.62	90.30	70.30	2.0	78.72	15.90		0	no	8.42	
MW-13	06/15/16	<0.001	<0.001	<0.001	0.0010	0.0240	1.75		97.47	92.72	72.72	2.0	82.39	15.08		0	no	9.67	
MW-14	06/15/16	0.8860	0.3160	4.8700	11.6000	<0.001	84.60		97.57	93.01	73.01	2.0	82.09	15.48		0	no	9.08	
MW-15	06/15/16	<0.001	0.0100	1.2000	0.6830	<0.001	15.20		97.96	94.97	74.97	2.0	82.22	15.74		0	no	7.25	
MW-16	06/15/16	0.5620	0.2650	2.7400	6.7000	<0.001	57.80		97.29	92.96	72.96	2.0	82.18	15.11		0	no	9.22	
MW-17	06/15/16	<0.001	<0.001	<0.001	0.0010	0.0840	0.57		95.16	90.86	70.86	2.0	81.92	13.24		0	no	11.06	
MW-18	06/15/16	<0.001	<0.001	<0.001	0.0010	0.2300	<0.50		95.42	90.79	70.79	2.0	78.72	16.70		0	no	7.93	
SVE-01	06/15/16								100.90	95.90	80.90	2.0	93.02	7.88		0	no	12.12	NOP
SVE-02	06/15/16	<0.001	<0.001	<0.001	0.0010	0.0720	<0.50		100.14	95.14	80.14	2.0	91.88	8.26		0	no	11.74	
SVE-03	06/15/16								97.86	92.86	77.86	2.0	90.11	7.75		0	no	12.25	NOP
SVE-04	06/15/16	6.7100	0.2210	1.2300	1.6600	0.0360	36.40		98.24	93.24	78.24	2.0	88.12	10.12		0	no	9.88	
SVE-05	06/15/16	<0.001	0.0440	3.3400	2.9400	<0.001	31.70		98.69	93.69	78.69	2.0	90.05	8.64		0	no	11.36	
SVE-06	06/15/16	0.0090	0.0050	0.7550	0.9500	<0.001	22.80		97.74	92.74	72.74	2.0	82.32	15.42		0	no	9.58	
SVE-07	06/15/16	<0.001	<0.001	0.0080	0.0010	0.0020	2.44		97.82	92.82	72.82	2.0	82.18	15.64		0	no	9.36	
SVE-08	06/15/16	1.0500	0.0190	0.5910	0.4410	0.1450	11.20		97.39	92.39	72.39	2.0	82.23	15.16		0	no	9.84	
CHMW-01A	07/15/16	0.0300	0.0540	1.4500	0.6160	0.0030	17.30		97.83	93.45	73.45	2.0	81.80	16.03		0	no	8.35	
MW-11	07/15/16	1.0300	0.0600	0.8310	0.7190	0.1060	14.50		96.19	91.70	71.70	2.0	81.70	14.49		0	no	10.00	
MW-14	07/15/16	0.6790	0.2650	4.2700	8.1700	0.0160	96.80		97.57	93.01	73.01	2.0	81.66	15.91		0	no	8.65	
MW-15	07/15/16	<0.001	0.0030	1.2400	0.7210	<0.001	17.30		97.96	94.97	74.97	2.0	81.78	16.18		0	no	6.81	
MW-17	07/15/16	0.3930	0.0120	0.0890	0.1010	0.1490	4.61		95.16	90.86	70.86	2.0	81.47	13.69		0	no	10.61	
MW-18	07/15/16	<0.001	<0.001	<0.001	0.0010	0.0610	0.63		95.42	90.79	70.79	2.0	78.48	16.94		0	no	7.69	
CHMW-01A	08/24/16	0.0060	0.0020	0.1660	0.0720	<0.001	5.39		97.83	93.45	73.45	2.0	80.89	16.94		0	no	7.44	
CHMW-02	08/24/16								97.68	89.68	74.68	2.0	83.98	13.70		0	no	9.30	NOP
CHMW-04	08/24/16								91.80	84.80	69.80	2.0	78.31	13.49		0	no	8.51	NOP
MW-01A	08/24/16	<0.001	<0.001	<0.001	0.0010	<0.001	<0.50		92.50	82.50	67.50	2.0	76.18	16.32		0	no	8.68	
MW-02A	08/24/16								89.82	79.82	69.82	2.0	76.12	13.70		0	no	6.30	NOP
MW-03A	08/24/16								89.60	79.60	69.60	2.0	76.82	12.78		0	no	7.22	NOP
MW-04A	08/24/16								101.19	91.19	81.19	2.0	83.81	17.38		0	no	2.62	NOP
MW-11	08/24/16	2.4800	0.2000	1.0000	1.8500	0.0860	28.60		96.19	91.70	71.70	2.0	80.79	15.40		0	no	9.09	
MW-12	08/24/16	<0.001	<0.001	<0.001	0.0010	2.0200	3.04		94.62	90.30	70.30	2.0	77.99	16.63		0	no	7.69	
MW-13	08/24/16	<0.001	<0.001	<0.001	0.0010	0.0270	0.73		97.47	92.72	72.72	2.0	80.96	16.51		0	no	8.24	
MW-14	08/24/16	0.6760	0.2140	3.7700	6.1000	0.0360	62.40		97.57	93.01	73.01	2.0	80.72	16.85		0	no	7.71	
MW-15	08/24/16	<0.001	<0.001	0.6190	0.2530	0.0120	13.30		97.96	94.97	74.97	2.0	80.85	17.11		0	no	5.88	
MW-16	08/24/16	0.4190	0.2020	2.3800	3.6000	0.0060	48.00		97.29	92.96	72.96	2.0	80.82	16.49	16.47	0.02	no	7.86	FP
MW-17	08/24/16	0.0920	<0.001	0.0040	0.0020	0.1300	2.28		95.16	90.86	70.86	2.0	80.65	14.51		0	no	9.79	
MW-18	08/24/16	<0.001	<0.001	<0.001	0.0010	0.4910	0.61		95.42	90.79	70.79	2.0	78.01	17.41		0	no	7.22	
SVE-02	08/24/16	<0.001	<0.001	<0.001	0.0010	0.0640	<0.50		100.14	95.14	80.14	2.0	90.64	9.50		0	no	10.50	
SVE-03	08/24/16								97.86	92.86	77.86	2.0	87.48	10.38		0	no	9.62	NOP
SVE-04	08/24/16	19.5000	0.0670	0.3940	0.1020	0.3420	56.60		98.24	93.24	78.24	2.0	86.24	12.00		0	no	8.00	
SVE-05	08/24/16	0.0020	0.0090	0.5980	1.7900	<0.001	19.10		98.69	93.69	78.69	2.0	88.51	10.18		0	no	9.82	
SVE-06	08/24/16	0.0020	<0.001	0.0080	0.0020	0.0290	2.31		97.74	92.74	72.74	2.0	80.82	16.92		0	no	8.08	
SVE-07	08/24/16	0.0330	0.0010	0.0070	0.0020	0.0250	0.89		97.82	92.82	72.82	2.0	80.83	16.99		0	no	8.01	
SVE-08	08/24/16	0.4280	0.0020	0.0310	0.0080	0.0430	2.91		97.39	92.39	72.39	2.0	80.89	16.50		0	no	8.50	
CHMW-01A	05/16/17	0.0440	0.0300	2.7400	1.4900		28.80		97.83	93.45	73.45	2.0	80.31	17.52		0	no	6.86	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
CHMW-02	05/16/17	<0.001	<0.001	<0.001	0.0010		<0.50		97.68	89.68	74.68	2.0	80.14	17.54		0	no	5.46	
CHMW-04	05/16/17	<0.001	<0.001	<0.001	0.0010		<0.50		91.80	84.80	69.80	2.0	77.74	14.06		0	no	7.94	
MW-01A	05/16/17								92.50	82.50	67.50	2.0	75.11	17.39		0	no	7.61	NOP
MW-02A	05/16/17								89.82	79.82	69.82	2.0	74.72	15.10		0	no	4.90	NOP
MW-03A	05/16/17								89.60	79.60	69.60	2.0	75.85	13.75		0	no	6.25	NOP
MW-04A	05/16/17	<0.001	<0.001	<0.001	0.0010		<0.50		101.19	91.19	81.19	2.0	87.27	13.92		0	no	6.08	
MW-11	05/16/17	1.9600	0.0110	0.9470	0.3320		12.50		96.19	91.70	71.70	2.0	80.26	15.93		0	no	8.56	
MW-12	05/16/17	<0.001	<0.001	<0.001	0.0010		5.65		94.62	90.30	70.30	2.0	77.50	17.12		0	no	7.20	
MW-13	05/16/17	<0.001	<0.001	<0.001	0.0010		<0.50		97.47	92.72	72.72	2.0	80.44	17.03		0	no	7.72	
MW-14	05/16/17	2.4500	0.0880	1.7900	2.4000		90.30		97.57	93.01	73.01	2.0	80.12	17.45		0	no	7.11	
MW-15	05/16/17	<0.001	<0.001	0.0990	0.0130		19.50		97.96	94.97	74.97	2.0	80.29	17.67		0	no	5.32	
MW-16	05/16/17	0.5310	0.1760	2.1100	1.8800		36.00		97.29	92.96	72.96	2.0	80.29	17.00		0	no	7.33	
MW-17	05/16/17	0.1600	0.0040	0.0100	0.0180		1.26		95.16	90.86	70.86	2.0	80.06	15.10		0	no	9.20	
MW-18	05/16/17	<0.001	<0.001	<0.001	0.0010		0.79		95.42	90.79	70.79	2.0	77.96	17.46		0	no	7.17	
SVE-02	05/16/17								100.14	95.14	80.14	2.0	91.73	8.41		0	no	11.59	NOP
SVE-03	05/16/17								97.86	92.86	77.86	2.0	90.84	7.02		0	no	12.98	NOP
SVE-04	05/16/17	2.4800	0.0870	2.6500	1.4800		32.70		98.24	93.24	78.24	2.0	88.60	9.64		0	no	10.36	
SVE-05	05/16/17	0.0080	0.0320	4.9900	4.3900		49.00		98.69	93.69	78.69	2.0	90.16	8.53		0	no	11.47	
SVE-06	05/16/17	<0.001	<0.001	<0.001	0.0010		1.33		97.74	92.74	72.74	2.0	80.31	17.43		0	no	7.57	
SVE-07	05/16/17	0.0070	<0.001	0.0050	0.0010		<0.50		97.82	92.82	72.82	2.0	80.32	17.50		0	no	7.50	
SVE-08	05/16/17	0.0790	0.0100	0.0160	0.0070		2.85		97.39	92.39	72.39	2.0	80.30	17.09		0	no	7.91	
MW-19	05/26/17	2.4700	0.2020	1.6600	4.0100		45.10		96.51	92.12	72.12	2.0	82.09	14.42		0	no	9.97	
MW-20	05/31/17	0.1360	0.0040	<0.001	0.1020		1.63		94.80	90.35	70.35	2.0	80.88	13.92		0	no	10.53	
CHMW-01A	08/28/17	0.0010	<0.001	<0.001	<0.001		1.81		97.83	93.45	76.51	2.0	81.11	16.72		0	no	4.60	
CHMW-02	08/28/17								97.68	89.68	74.68	2.0	80.67	17.01		0	no	5.99	NOP
CHMW-04	08/28/17								91.80	84.80	69.80	2.0	78.31	13.49		0	no	8.51	NOP
MW-01A	08/28/17								92.50	82.50	67.50	2.0	76.00	16.50		0	no	8.50	NOP
MW-02A	08/28/17								89.82	79.82	69.82	2.0	75.79	14.03		0	no	5.97	NOP
MW-03A	08/28/17								89.60	79.60	69.60	2.0	76.57	13.03		0	no	6.97	NOP
MW-04A	08/28/17								101.19	91.19	81.19	2.0				0	na	0.00	INA
MW-11	08/28/17	0.4300	0.0260	0.2180	0.5620		5.01		96.19	91.70	71.59	2.0	80.94	15.25		0	no	9.35	
MW-12	08/28/17								94.62	90.30	70.40	2.0	78.04	16.58		0	no	7.64	NOP
MW-13	08/28/17	<0.001	<0.001	<0.001	<0.001		<0.50		97.47	92.72	72.86	2.0	81.21	16.26		0	no	8.35	
MW-14	08/28/17	0.1780	0.0260	0.6130	0.9770		9.00		97.57	93.01	73.00	2.0	80.95	16.62		0	no	7.95	
MW-15	08/28/17	<0.001	<0.001	0.2110	0.0170		7.57		97.96	94.97	73.16	2.0	81.05	16.91		0	no	7.89	
MW-16	08/28/17	0.2790	0.1700	1.3600	1.6500		34.10		97.29	92.96	72.99	2.0	81.04	16.25		0	no	8.05	
MW-17	08/28/17								95.16	90.86	78.66	2.0	80.75	14.41		0	no	2.09	NOP
MW-18	08/28/17	0.0030	<0.001	<0.001	<0.001		1.16		95.42	90.79	70.82	2.0	78.11	17.31		0	no	7.29	
MW-19	08/28/17								96.51	92.12	72.31	2.0	81.20	15.31		0	no	8.89	NOP
MW-20	08/28/17	0.1170	<0.001	0.0490	0.0020		1.57		94.80	90.35	70.27	2.0	80.80	14.00		0	no	10.53	
SVE-02	08/28/17								100.14	95.14	80.14	2.0	91.18	8.96		0	no	11.04	NOP
SVE-03	08/28/17								97.86	92.86	77.86	2.0	88.69	9.17		0	no	10.83	NOP
SVE-04	08/28/17	25.9000	0.2280	1.7900	0.6090		83.80		98.24	93.24	78.24	2.0	87.14	11.10		0	no	8.90	
SVE-05	08/28/17	0.0020	0.0120	1.1100	2.5900		20.10		98.69	93.69	79.61	2.0	89.37	9.32		0	no	9.76	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-06	08/28/17	0.0050	0.0010	1.1600	0.8660		10.00		97.74	92.74	73.14	2.0	81.19	16.55		0	no	8.05	
SVE-07	08/28/17								97.82	92.82	73.26	2.0				0	na	0.00	DRY
SVE-08	08/28/17								97.39	92.39	73.04	2.0				0	na	0.00	DRY
CHMW-01A	11/20/17	<0.001	<0.001	<0.001	<0.001		<0.50		97.83	93.45	76.51	2.0	80.78	17.05		0	no	4.27	
CHMW-02	11/20/17								97.68	89.68	74.68	2.0	83.93	13.75		0	no	9.25	NOP
CHMW-04	11/20/17								91.80	84.80	69.80	2.0	74.03	17.77		0	no	4.23	NOP
MW-01A	11/20/17								92.50	82.50	67.50	2.0	75.90	16.60		0	no	8.40	NOP
MW-02A	11/20/17								89.82	79.82	69.82	2.0	75.66	14.16		0	no	5.84	NOP
MW-03A	11/20/17								89.60	79.60	69.60	2.0	76.32	13.28		0	no	6.72	NOP
MW-04A	11/20/17								101.19	91.19	81.19	2.0	87.08	14.11		0	no	5.89	NOP
MW-11	11/20/17	0.0670	0.0020	0.0400	0.0580		0.88		96.19	91.70	71.59	2.0	80.70	15.49		0	no	9.11	
MW-12	11/20/17	<0.001	<0.001	<0.001	<0.001		2.29		94.62	90.30	70.22	2.0	77.92	16.70		0	no	7.70	
MW-13	11/20/17	<0.001	<0.001	<0.001	<0.001		0.81		97.47	92.72	72.86	2.0	81.01	16.46		0	no	8.15	
MW-14	11/20/17	2.6300	0.1090	2.1500	3.0700		27.60		97.57	93.01	73.00	2.0	80.67	16.90		0	no	7.67	
MW-15	11/20/17	<0.001	<0.001	0.2750	0.0070		8.53		97.96	94.97	73.16	2.0	80.82	17.14		0	no	7.66	
MW-16	11/20/17	0.1690	0.0820	1.2300	0.9330		16.00		97.29	92.96	72.99	2.0	80.81	16.48		0	no	7.82	
MW-17	11/20/17	0.0010	<0.001	<0.001	<0.001		<0.50		95.16	90.86	70.86	2.0	80.38	14.78		0	no	9.52	
MW-18	11/20/17	0.0050	<0.001	<0.001	<0.001		<0.50		95.42	90.79	70.82	2.0	77.93	17.49		0	no	7.11	
MW-19	11/20/17	<0.001	<0.001	<0.001	<0.001		<0.50		96.51	92.12	72.31	2.0	80.95	15.56		0	no	8.64	
MW-20	11/20/17	0.0150	<0.001	0.0200	<0.001		0.70		94.80	90.35	70.30	2.0	80.55	14.25		0	no	10.25	
SVE-02	11/20/17								100.14	95.14	80.14	2.0	90.70	9.44		0	no	10.56	NOP
SVE-03	11/20/17								97.86	92.86	77.86	2.0	89.46	8.40		0	no	11.60	NOP
SVE-04	11/20/17	21.0000	0.2680	1.2700	0.5000		41.70		98.24	93.24	78.24	2.0	87.64	10.60		0	no	9.40	
SVE-05	11/20/17	0.0030	0.0100	0.1710	1.6700		14.50		98.69	93.69	79.61	2.0	88.81	9.88		0	no	9.20	
SVE-06	11/20/17	<0.001	<0.001	0.0080	0.0090		<0.50		97.74	92.74	73.14	2.0	80.96	16.78		0	no	7.82	
SVE-07	11/20/17	0.0010	<0.001	<0.001	<0.001		<0.50		97.82	92.82	73.26	2.0	80.77	17.05		0	no	7.51	
SVE-08	11/20/17	0.0100	<0.001	0.0030	0.0020		<0.50		97.39	92.39	73.04	2.0	80.78	16.61		0	no	7.74	
CHMW-01A	03/19/18	0.0030	<0.001	0.0110	0.0070		2.00		97.83	93.45	76.51	2.0	80.22	17.61		0	no	3.71	
CHMW-02	03/19/18								97.68	89.68	74.68	2.0	79.20	18.48		0	no	4.52	NOP
CHMW-04	03/19/18								91.80	84.80	69.80	2.0	77.58	14.22		0	no	7.78	NOP
MW-01A	03/19/18								92.50	82.50	67.50	2.0	75.14	17.36		0	no	7.64	NOP
MW-02A	03/19/18								89.82	79.82	69.82	2.0	74.65	15.17		0	no	4.83	NOP
MW-03A	03/19/18								89.60	79.60	69.60	2.0	75.71	13.89		0	no	6.11	NOP
MW-04A	03/19/18								101.19	91.19	81.19	2.0	86.73	14.46		0	no	5.54	NOP
MW-11	03/19/18	0.1070	0.0010	0.0530	0.0120		1.17		96.19	91.70	71.59	2.0	79.92	16.27		0	no	8.33	
MW-12	03/19/18	<0.001	<0.001	<0.001	<0.001		1.01		94.62	90.30	70.22	2.0	77.24	17.38		0	no	7.02	
MW-13	03/19/18	<0.001	<0.001	<0.001	<0.001		<0.50		97.47	92.72	72.86	2.0	80.16	17.31		0	no	7.30	
MW-14	03/19/18	3.0100	0.1600	3.2100	3.7000		31.20		97.57	93.01	73.00	2.0	79.83	17.74		0	no	6.83	
MW-15	03/19/18								97.96	94.97	73.16	2.0	80.01	17.95		0	no	6.85	NOP
MW-16	03/19/18	0.3240	0.1670	1.9300	1.8200		30.80		97.29	92.96	72.54	2.0	79.99	17.30		0	no	7.45	
MW-17	03/19/18	<0.001	0.0010	<0.001	<0.001		<0.50		95.16	90.86	72.25	2.0	79.61	15.55		0	no	7.36	
MW-18	03/19/18	<0.001	<0.001	<0.001	<0.001		0.51		95.42	90.79	70.82	2.0	77.71	17.71		0	no	6.89	
MW-19	03/19/18	0.3230	0.0100	0.0300	0.0370		1.67		96.51	92.12	72.31	2.0	80.27	16.24		0	no	7.96	
MW-20	03/19/18	0.0640	0.0020	0.0490	0.0060		1.65		94.80	90.35	70.30	2.0	79.85	14.95		0	no	9.55	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-02	03/19/18								100.14	95.14	80.14	2.0	90.49	9.65		0	no	10.35	NOP
SVE-03	03/19/18								97.86	92.86	77.86	2.0	89.92	7.94		0	no	12.06	NOP
SVE-04	03/19/18	13.2000	0.2410	1.5000	0.5120		36.80		98.24	93.24	78.24	2.0	87.06	11.18		0	no	8.82	
SVE-05	03/19/18	0.0010	0.0110	1.1400	2.6700		32.00		98.69	93.69	79.61	2.0	88.89	9.80		0	no	9.28	
SVE-06	03/19/18	<0.001	<0.001	0.0090	0.0110		<0.50		97.74	92.74	73.14	2.0	80.11	17.63		0	no	6.97	
SVE-07	03/19/18	0.0030	0.0010	0.0020	0.0010		<0.50		97.82	92.82	73.57	2.0	79.94	17.88		0	no	6.37	
SVE-08	03/19/18	0.0760	0.0010	0.0290	0.0190		1.11		97.39	92.39	73.04	2.0	79.96	17.43		0	no	6.92	
MW-21	05/01/18	<0.001	<0.001	<0.001	<0.001		<0.50		94.40	86.14	71.14	2.0	78.74	15.66		0	no	7.60	
MW-22	05/01/18	<0.001	<0.001	<0.001	<0.001		<0.50		94.10	85.81	70.81	2.0	79.06	15.04		0	no	8.25	
CHMW-01A	06/14/18	<0.001	<0.001	0.0050	0.0020		<0.50		97.83	93.45	76.51	2.0	84.10	13.73		0	no	7.59	
CHMW-02	06/14/18								97.68	89.68	74.68	2.0	79.78	17.90		0	no	5.10	NOP
CHMW-04	06/14/18								91.80	84.80	69.80	2.0	73.88	17.92		0	no	4.08	NOP
MW-01A	06/14/18								92.50	82.50	67.50	2.0	77.87	14.63		0	no	10.37	NOP
MW-02A	06/14/18								89.82	79.82	69.82	2.0	76.19	13.63		0	no	6.37	NOP
MW-03A	06/14/18								89.60	79.60	69.60	2.0				0	na	0.00	INA
MW-04A	06/14/18								101.19	91.19	81.19	2.0	88.26	12.93		0	no	7.07	NOP
MW-11	06/14/18	<0.001	<0.001	<0.001	<0.001		0.62		96.19	91.70	71.59	2.0	80.00	16.19		0	no	8.41	
MW-12	06/14/18	<0.001	<0.001	<0.001	<0.001		3.06		94.62	90.30	70.22	2.0	77.83	16.79		0	no	7.61	
MW-13	06/14/18	<0.001	<0.001	<0.001	<0.001		<0.50		97.47	92.72	72.86	2.0	81.34	16.13		0	no	8.48	
MW-14	06/14/18	0.7480	0.0380	0.1710	0.6680		4.98		97.57	93.01	73.00	2.0	80.99	16.58		0	no	7.99	
MW-15	06/14/18	<0.001	<0.001	0.2040	0.0120		8.04		97.96	94.97	73.16	2.0	84.14	13.82		0	no	10.98	
MW-16	06/14/18	0.3960	0.0500	0.7240	0.5130		7.13		97.29	92.96	72.54	2.0	81.09	16.20		0	no	8.55	
MW-17	06/14/18	<0.001	<0.001	<0.001	<0.001		<0.50		95.16	90.86	72.25	2.0	80.63	14.53		0	no	8.38	
MW-18	06/14/18	0.0050	<0.001	<0.001	<0.001		0.88		95.42	90.79	70.82	2.0	78.07	17.35		0	no	7.25	
MW-19	06/14/18	0.5020	0.0060	0.0020	0.0220		1.46		96.51	92.12	72.31	2.0	80.36	16.15		0	no	8.05	
MW-20	06/14/18	0.0360	<0.001	0.0030	0.0050		0.71		94.80	90.35	70.30	2.0	80.84	13.96		0	no	10.54	
MW-21	06/14/18	<0.001	<0.001	<0.001	<0.001		<0.50		94.40	86.14	71.14	2.0	80.76	13.64		0	no	9.62	
MW-22	06/14/18	<0.001	<0.001	<0.001	<0.001		<0.50		94.10	86.81	71.81	2.0	78.53	15.57		0	no	6.72	
SVE-02	06/14/18								100.14	95.14	80.14	2.0	92.08	8.06		0	no	11.94	NOP
SVE-03	06/14/18								97.86	92.86	77.86	2.0	92.49	5.37		0	no	14.63	NOP
SVE-04	06/14/18	11.8000	0.2060	1.5300	0.7980		43.80		98.24	93.24	78.24	2.0	87.76	10.48		0	no	9.52	
SVE-05	06/14/18	0.0050	0.0180	0.9640	2.2200		20.10		98.69	93.69	79.61	2.0	89.74	8.95		0	no	10.13	
SVE-06	06/14/18	<0.001	<0.001	0.0360	0.0390		0.86		97.74	92.74	73.14	2.0	81.31	16.43		0	no	8.17	
SVE-07	06/14/18	<0.001	<0.001	<0.001	<0.001		<0.50		97.82	92.82	73.57	2.0	83.08	14.74		0	no	9.51	
SVE-08	06/14/18	0.0580	<0.001	0.0180	0.0080		<0.50		97.39	92.39	73.04	2.0	83.01	14.38		0	no	9.97	
CHMW-01A	09/12/18	0.0030	0.0100	0.1000	0.0590		1.18		97.83	93.45	76.51	2.0	80.73	17.10		0	no	4.22	
CHMW-02	09/12/18								97.68	89.68	74.68	2.0	79.33	18.35		0	no	4.65	NOP
CHMW-04	09/12/18								91.80	84.80	69.80	2.0				0	na	0.00	INA
MW-13	09/12/18	<0.001	<0.001	<0.001	<0.001		<0.50		97.52	92.72	72.86	2.0	80.97	16.55		0	no	8.11	
MW-14	09/12/18	1.2300	0.0650	0.5960	0.6880		8.44		97.82	93.01	73.00	2.0	80.91	16.91		0	no	7.91	
MW-15	09/12/18								98.02	94.97	73.16	2.0	80.78	17.24		0	no	7.62	NOP
MW-16	09/12/18	0.5450	0.1340	1.0900	1.1900		20.30		97.33	92.96	72.54	2.0	80.80	16.53		0	no	8.26	
MW-19	09/12/18	0.7730	0.0260	0.0170	0.1370		2.70		96.22	92.12	72.31	2.0	80.73	15.49		0	no	8.42	
SVE-02	09/12/18								100.14	95.14	80.14	2.0	91.12	9.02		0	no	10.98	NOP

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-03	09/12/18								97.86	92.86	77.86	2.0	88.32	9.54		0	no	10.46	NOP
SVE-04	09/12/18	26.6000	0.8030	2.0100	1.4300		67.60		98.24	93.24	78.24	2.0	86.89	11.35		0	no	8.65	
SVE-05	09/12/18	0.0050	0.0220	1.0200	3.5100		40.40		98.69	93.69	79.61	2.0	89.46	9.23		0	no	9.85	
SVE-06	09/12/18	<0.001	<0.001	0.0300	0.0360		1.12		97.74	92.74	73.14	2.0	80.87	16.87		0	no	7.73	
SVE-07	09/12/18	0.0250	<0.001	0.0020	<0.001		<0.50		97.82	92.82	73.57	2.0	80.72	17.10		0	no	7.15	
SVE-08	09/12/18	0.0970	0.0030	0.0690	0.0340		0.87		97.39	92.39	73.04	2.0	80.66	16.73		0	no	7.62	
MW-01A	09/13/18								92.50	82.50	67.50	2.0	75.78	16.72		0	no	8.28	NOP
MW-02A	09/13/18								89.82	79.82	69.82	2.0	75.47	14.35		0	no	5.65	NOP
MW-03A	09/13/18								89.60	79.60	69.60	2.0	76.27	13.33		0	no	6.67	NOP
MW-04A	09/13/18								101.19	91.19	81.19	2.0	89.26	11.93		0	no	8.07	NOP
MW-11	09/13/18	<0.001	<0.001	<0.001	<0.001		<0.50		96.19	91.70	71.59	2.0	80.64	15.55		0	no	9.05	
MW-12	09/13/18	<0.001	<0.001	<0.001	<0.001		4.37		94.62	90.30	70.22	2.0	77.79	16.83		0	no	7.57	
MW-17	09/13/18	<0.001	<0.001	<0.001	<0.001		<0.50		95.22	90.86	72.25	2.0	80.22	15.00		0	no	7.97	
MW-18	09/13/18	<0.001	<0.001	<0.001	<0.001		0.56		95.50	90.79	70.82	2.0	78.01	17.49		0	no	7.19	
MW-20	09/13/18	<0.001	<0.001	<0.001	<0.001		<0.50		94.84	90.35	70.30	2.0	80.48	14.36		0	no	10.18	
MW-21	09/13/18	0.0170	<0.001	<0.001	0.0050		<0.50		94.40	86.14	71.14	2.0	80.38	14.02		0	no	9.24	
MW-22	09/13/18	2.7000	0.0020	<0.001	0.0070		3.25		94.10	86.81	71.81	2.0	80.10	14.00		0	no	8.29	
MW-20	10/09/18	0.0010	<0.001	<0.001	<0.001		0.90		94.84	90.35	70.30	2.0	80.43	14.41		0	no	10.13	
MW-21	10/09/18	0.2060	0.0160	0.0290	0.0840		1.79		94.40	86.14	71.14	2.0	80.27	14.13		0	no	9.13	
MW-22	10/09/18	1.6400	0.0010	0.0150	0.0050		5.11		94.10	86.81	71.81	2.0	80.02	14.08		0	no	8.21	
CHMW-01A	12/05/18	0.0060	0.0050	0.1080	0.0810		1.95		97.83	93.45	76.51	2.0	80.38	17.45		0	no	3.87	
CHMW-02	12/05/18								97.68	89.68	74.68	2.0	78.38	19.30		0	no	3.70	NOP
CHMW-04	12/05/18								91.80	84.80	69.80	2.0	77.81	13.99		0	no	8.01	NOP
MW-01A	12/05/18								92.50	82.50	67.50	2.0	75.43	17.07		0	no	7.93	NOP
MW-02A	12/05/18								89.82	79.82	69.82	2.0	74.98	14.84		0	no	5.16	NOP
MW-03A	12/05/18								89.60	79.60	69.60	2.0	75.93	13.67		0	no	6.33	NOP
MW-04A	12/05/18								101.19	91.19	81.19	2.0	87.01	14.18		0	no	5.82	NOP
MW-11	12/05/18	0.0290	<0.001	0.0130	0.0030		<0.50		96.19	91.70	71.59	2.0	80.26	15.93		0	no	8.67	
MW-12	12/05/18	<0.001	<0.001	<0.001	<0.001		2.26		94.62	90.30	70.22	2.0	77.56	17.06		0	no	7.34	
MW-13	12/05/18	<0.001	<0.001	<0.001	<0.001		<0.50		97.52	92.72	72.86	2.0	80.57	16.95		0	no	7.71	
MW-14	12/05/18	0.9580	0.0460	0.9470	0.9150		12.10		97.82	93.01	73.00	2.0	79.41	18.41		0	no	6.41	
MW-15	12/05/18	<0.001	<0.001	0.0260	0.0010		4.92		98.02	94.97	73.16	2.0	80.39	17.63		0	no	7.23	
MW-16	12/05/18	0.3510	0.0790	1.1700	1.0000		14.70		97.33	92.96	72.54	2.0	79.42	17.91		0	no	6.88	
MW-17	12/05/18	<0.001	<0.001	<0.001	<0.001		<0.50		95.22	90.86	72.25	2.0	79.86	15.36		0	no	7.61	
MW-18	12/05/18	<0.001	<0.001	<0.001	<0.001		0.95		95.50	90.79	70.82	2.0	77.87	17.63		0	no	7.05	
MW-19	12/05/18	0.2750	0.0020	0.0060	<0.001		0.82		96.22	92.12	72.31	2.0	80.32	15.90		0	no	8.01	
MW-20	12/05/18	0.0010	<0.001	<0.001	<0.001		<0.50		94.84	90.35	70.30	2.0	80.16	14.68		0	no	9.86	
MW-21	12/05/18	0.0090	<0.001	<0.001	<0.001		<0.50		94.40	86.14	71.14	2.0	80.08	14.32		0	no	8.94	
MW-22	12/05/18	0.3910	0.0040	0.0350	0.0160		1.78		94.10	86.81	71.81	2.0	79.87	14.23		0	no	8.06	
SVE-02	12/05/18								100.14	95.14	80.14	2.0	90.52	9.62		0	no	10.38	NOP
SVE-03	12/05/18								97.86	92.86	77.86	2.0	88.79	9.07		0	no	10.93	NOP
SVE-04	12/05/18	19.1000	0.4810	1.7700	0.8790		58.10		98.24	93.24	78.24	2.0	87.14	11.10		0	no	8.90	
SVE-05	12/05/18	<0.001	0.0090	0.1180	1.3900		12.90		98.69	93.69	79.61	2.0	88.88	9.81		0	no	9.27	
SVE-06	12/05/18	<0.001	<0.001	0.0330	0.0410		1.20		97.74	92.74	73.14	2.0	80.47	17.27		0	no	7.33	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
SVE-07	12/05/18	0.0060	<0.001	0.0020	<0.001		<0.50		97.82	92.82	73.57	2.0	80.29	17.53		0	no	6.72	
SVE-08	12/05/18	0.0060	<0.001	0.0080	<0.001		0.98		97.39	92.39	73.04	2.0	80.26	17.13		0	no	7.22	
CHMW-01A	03/27/19	<0.001	<0.001	0.0010	0.0040		0.56		97.83	93.45	76.51	2.0	80.58	17.25		0	no	4.07	
CHMW-02	03/27/19								97.68	89.68	74.68	2.0	79.72	17.96		0	no	5.04	NOP
CHMW-04	03/27/19								91.80	84.80	69.80	2.0	77.91	13.89		0	no	8.11	NOP
MW-01A	03/27/19								92.50	82.50	67.50	2.0	75.29	17.21		0	no	7.79	NOP
MW-02A	03/27/19								89.82	79.82	69.82	2.0	74.94	14.88		0	no	5.12	NOP
MW-03A	03/27/19								89.60	79.60	69.60	2.0	75.99	13.61		0	no	6.39	NOP
MW-04A	03/27/19								101.19	91.19	81.19	2.0	87.66	13.53		0	no	6.47	NOP
MW-11	03/27/19	0.2830	0.0010	0.0860	0.0330		2.71		96.19	91.70	71.59	2.0	80.44	15.75		0	no	8.85	
MW-12	03/27/19	<0.001	<0.001	<0.001	<0.001		1.97		94.62	90.30	70.22	2.0	77.44	17.18		0	no	7.22	
MW-13	03/27/19	<0.001	<0.001	<0.001	<0.001		<0.50		97.52	92.72	72.86	2.0	80.78	16.74		0	no	7.92	
MW-14	03/27/19	0.8480	0.0400	0.6730	0.5640		9.97		97.82	93.01	73.00	2.0	80.54	17.28		0	no	7.54	
MW-15	03/27/19	<0.001	<0.001	0.0680	0.0120		11.00		98.02	94.97	73.16	2.0	80.61	17.41		0	no	7.45	
MW-16	03/27/19	0.5600	0.0910	1.3100	1.0100		15.60		97.33	92.96	72.54	2.0	80.52	16.81		0	no	7.98	
MW-17	03/27/19	<0.001	<0.001	<0.001	<0.001		<0.50		95.22	90.86	72.25	2.0	79.99	15.23		0	no	7.74	
MW-18	03/27/19	<0.001	<0.001	<0.001	<0.001		1.02		95.50	90.79	70.82	2.0	78.00	17.50		0	no	7.18	
MW-19	03/27/19	1.6500	0.0290	0.0030	0.0820		4.68		96.22	92.12	72.31	2.0	80.49	15.73		0	no	8.18	
MW-20	03/27/19	0.2860	0.0200	0.3330	0.2870		5.30		94.84	90.35	70.30	2.0	80.36	14.48		0	no	10.06	
MW-21	03/27/19	<0.001	<0.001	<0.001	<0.001		<0.50		94.40	86.14	71.14	2.0	80.25	14.15		0	no	9.11	
MW-22	03/27/19	0.1510	<0.001	0.0020	<0.001		1.17		94.10	86.81	71.81	2.0	80.05	14.05		0	no	8.24	
SVE-02	03/27/19								100.14	95.14	80.14	2.0	91.62	8.52		0	no	11.48	NOP
SVE-03	03/27/19								97.86	92.86	77.86	2.0	90.71	7.15		0	no	12.85	NOP
SVE-04	03/27/19	<0.001	<0.001	<0.001	<0.001		<0.50		98.24	93.24	78.24	2.0	89.29	8.95		0	no	11.05	
SVE-05	03/27/19	0.0010	0.0100	2.4800	3.0500		27.30		98.69	93.69	79.61	2.0	90.19	8.50		0	no	10.58	
SVE-06	03/27/19	<0.001	<0.001	0.0170	0.0330		1.01		97.74	92.74	73.14	2.0	80.55	17.19		0	no	7.41	
SVE-07	03/27/19	0.0010	<0.001	0.0040	<0.001		<0.50		97.82	92.82	73.57	2.0	80.45	17.37		0	no	6.88	
SVE-08	03/27/19	0.0390	<0.001	0.0150	<0.001		<0.50		97.39	92.39	73.04	2.0	80.44	16.95		0	no	7.40	
MW-23	04/02/19	<0.001	<0.001	<0.001	<0.001		<0.50		93.72	85.72	70.72	2.0	79.26	14.46		0	no	8.54	
MW-24	04/02/19	<0.001	<0.001	<0.001	<0.001		<0.50		93.92	85.92	70.92	2.0	78.05	15.87		0	no	7.13	
MW-25	04/02/19	<0.001	<0.001	<0.001	<0.001		0.75		94.29	86.29	71.29	2.0	77.39	16.90		0	no	6.10	
CHMW-01A	06/12/19	0.0020	0.0100	0.2400	0.2210		4.14		97.83	93.45	76.51	2.0	81.82	16.01		0	no	5.31	
CHMW-02	06/12/19								97.68	89.68	74.68	2.0	80.66	17.02		0	no	5.98	NOP
CHMW-04	06/12/19								91.80	84.80	69.80	2.0	78.59	13.21		0	no	8.79	NOP
MW-01A	06/12/19								92.50	82.50	67.50	2.0	75.84	16.66		0	no	8.34	NOP
MW-02A	06/12/19								89.82	79.82	69.82	2.0	75.56	14.26		0	no	5.74	NOP
MW-03A	06/12/19								89.60	79.60	69.60	2.0	76.55	13.05		0	no	6.95	NOP
MW-04A	06/12/19								101.19	91.19	81.19	2.0	87.09	14.10		0	no	5.90	NOP
MW-11	06/12/19	0.0360	<0.001	0.0180	0.0080		2.39		96.19	91.70	71.59	2.0	81.73	14.46		0	no	10.14	
MW-12	06/12/19	<0.001	<0.001	<0.001	<0.001		2.20		94.62	90.30	70.22	2.0	78.07	16.55		0	no	7.85	
MW-13	06/12/19	<0.001	<0.001	<0.001	<0.001		0.69		97.52	92.72	72.86	2.0	82.26	15.26		0	no	9.40	
MW-14	06/12/19	0.9120	0.0390	1.0500	0.8930		16.20		97.82	93.01	73.00	2.0	81.92	15.90		0	no	8.92	
MW-15	06/12/19								98.02	94.97	73.16	2.0	81.97	16.05		0	no	8.81	NOP
MW-16	06/12/19	0.6420	0.0510	0.7770	0.5900		12.30		97.33	92.96	72.54	2.0	81.84	15.49		0	no	9.30	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"																			
Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
MW-17	06/12/19								95.22	90.86	72.25	2.0	81.33	13.89		0	no	9.08	NOP
MW-18	06/12/19	0.0100	<0.001	0.0020	0.0020		0.82		95.50	90.79	70.82	2.0	78.24	17.26		0	no	7.42	
MW-19	06/12/19	1.1200	0.0490	0.2670	0.1870		6.74		96.22	92.12	72.31	2.0	81.75	14.47		0	no	9.44	
MW-20	06/12/19	0.0290	0.0010	0.0130	0.0110		2.50		94.84	90.35	70.30	2.0	81.61	13.23		0	no	11.31	
MW-21	06/12/19	<0.001	<0.001	<0.001	<0.001		0.66		94.40	86.14	71.14	2.0	81.49	12.91		0	no	10.35	
MW-22	06/12/19	0.1690	<0.001	0.0060	0.0040		0.17		94.10	86.81	71.81	2.0	81.27	12.83		0	no	9.46	
MW-23	06/12/19	<0.001	<0.001	<0.001	<0.001		<0.50		93.72	85.72	70.72	2.0	79.80	13.92		0	no	9.08	
MW-24	06/12/19	<0.001	<0.001	<0.001	<0.001		<0.50		93.92	85.92	70.92	2.0	78.73	15.19		0	no	7.81	
MW-25	06/12/19	<0.001	<0.001	<0.001	<0.001		1.37		94.29	86.29	71.29	2.0	78.10	16.19		0	no	6.81	
SVE-02	06/12/19								100.14	95.14	80.14	2.0	91.80	8.34		0	no	11.66	NOP
SVE-03	06/12/19								97.86	92.86	77.86	2.0	90.65	7.21		0	no	12.79	NOP
SVE-04	06/12/19	0.2650	0.0090	0.2460	0.2920		2.88		98.24	93.24	78.24	2.0	88.73	9.51		0	no	10.49	
SVE-05	06/12/19	0.0050	0.0210	0.9140	2.6700		33.60		98.69	93.69	79.61	2.0	90.29	8.40		0	no	10.68	
SVE-06	06/12/19								97.74	92.74	73.14	2.0	82.01	15.73		0	no	8.87	NOP
SVE-07	06/12/19	0.0010	<0.001	0.0040	0.0010		<0.50		97.82	92.82	73.57	2.0	81.81	16.01		0	no	8.24	
SVE-08	06/12/19	0.0040	<0.001	0.0020	<0.001		0.84		97.39	92.39	73.04	2.0	81.74	15.65		0	no	8.70	
CHMW-01A	08/14/19	0.0060	0.0370	0.6310	0.5970		8.39		97.83	93.45	76.51	2.0	81.10	16.73		0	no	4.59	
CHMW-02	08/14/19								97.68	89.68	74.68	2.0	79.66	18.02		0	no	4.98	NOP
CHMW-04	08/14/19								91.80	84.80	69.80	2.0	78.44	13.36		0	no	8.64	NOP
MW-01A	08/14/19								92.50	82.50	67.50	2.0	76.10	16.40		0	no	8.60	NOP
MW-02A	08/14/19								89.82	79.82	69.82	2.0	75.94	13.88		0	no	6.12	NOP
MW-03A	08/14/19								89.60	79.60	69.60	2.0	76.73	12.87		0	no	7.13	NOP
MW-04A	08/14/19								101.19	91.19	81.19	2.0	88.07	13.12		0	no	6.88	NOP
MW-11	08/14/19	0.0730	<0.001	0.0100	0.0030		0.69		96.19	91.70	71.59	2.0	81.04	15.15		0	no	9.45	
MW-12	08/14/19	<0.001	<0.001	<0.001	<0.001		1.22		94.62	90.30	70.22	2.0	78.13	16.49		0	no	7.91	
MW-13	08/14/19	<0.001	<0.001	<0.001	<0.001		0.92		97.52	92.72	72.86	2.0	81.37	16.15		0	no	8.51	
MW-14	08/14/19	3.9700	0.1550	2.6000	2.6100		38.60		97.82	93.01	73.00	2.0	81.25	16.57		0	no	8.25	
MW-15	08/14/19	0.0040	<0.001	0.1170	0.0300		15.60		98.02	94.97	73.16	2.0	81.19	16.83		0	no	8.03	
MW-16	08/14/19	1.5100	0.2070	2.7900	2.3500		40.80		97.33	92.96	72.54	2.0	81.15	16.18		0	no	8.61	
MW-17	08/14/19	<0.001	<0.001	<0.001	<0.001		<0.50		95.22	90.86	72.25	2.0	80.67	14.55		0	no	8.42	
MW-18	08/14/19	0.0010	<0.001	<0.001	<0.001		<0.50		95.50	90.79	70.82	2.0	77.58	17.92		0	no	6.76	
MW-19	08/14/19	1.8400	0.1150	0.6830	0.5850		9.76		96.22	92.12	72.31	2.0	81.07	15.15		0	no	8.76	
MW-20	08/14/19	0.1820	<0.001	0.0610	0.0120		3.08		94.84	90.35	70.30	2.0	80.90	13.94		0	no	10.60	
MW-21	08/14/19	0.0010	<0.001	<0.001	<0.001		0.60		94.40	86.14	71.14	2.0	80.81	13.59		0	no	9.67	
MW-22	08/14/19	0.0050	<0.001	<0.001	<0.001		0.96		94.10	86.81	71.81	2.0	80.70	13.40		0	no	8.89	
MW-23	08/14/19	<0.001	<0.001	<0.001	<0.001		<0.50		93.72	85.72	70.72	2.0	79.42	14.30		0	no	8.70	
MW-24	08/14/19	<0.001	<0.001	<0.001	<0.001		<0.50		93.92	85.92	70.92	2.0	78.55	15.37		0	no	7.63	
MW-25	08/14/19	<0.001	<0.001	<0.001	<0.001		0.93		94.29	86.29	71.29	2.0	78.10	16.19		0	no	6.81	
SVE-02	08/14/19								100.14	95.14	80.14	2.0	91.10	9.04		0	no	10.96	NOP
SVE-03	08/14/19								97.86	92.86	77.86	2.0	88.58	9.28		0	no	10.72	NOP
SVE-04	08/14/19	21.2000	0.3650	1.4500	0.4940		55.50		98.24	93.24	78.24	2.0	87.20	11.04		0	no	8.96	
SVE-05	08/14/19	0.0030	0.0270	1.6400	6.0900		65.80		98.69	93.69	79.61	2.0	89.52	9.17		0	no	9.91	
SVE-06	08/14/19	<0.001	0.0040	0.1900	0.3180		9.38		97.74	92.74	73.14	2.0	81.27	16.47		0	no	8.13	
SVE-07	08/14/19	<0.001	<0.001	<0.001	<0.001		<0.50		97.82	92.82	73.57	2.0	81.07	16.75		0	no	7.50	

Groundwater Laboratory and Elevations Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Well ID	Date	Benzene (mg/L)	Toluene (mg/L)	Ethyl-Benzene (mg/L)	Xylenes (mg/L)	MTBE (mg/L)	TVPH (mg/L)	TEPH (mg/L)	TOC (ft)	TOS (ft)	BOS (ft)	Well Diameter (in)	Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	GW Above TOS	GW Column above BOS (ft)	Well Status (if not sampled)
SVE-08	08/14/19	0.0180	<0.001	0.0060	<0.001		<0.50		97.39	92.39	73.04	2.0	81.10	16.29		0	no	8.06	
RBSL		0.0050	1.0000	0.7000	1.4000	0.0200													

Click on a cell in the section in which you wish the additional row. Then click "New Row"

If concentration is less than the stated laboratory detection limit, list the detection limit (not ND); e.g. 0.0005 or <0.0005

TOC = Surveyed elevation top of casing
 TOS = Elevation top of screen
 BOS = Elevation bottom of screen
 mg/L = milligrams per liter
 RBSL = Risk-based Screening Level

DRY =Dry
 INA =Inaccessible (mention why in the narrative)
 NOP =Not on Monitoring Plan
 LNAPL =Light Non-Aqueous Phase Liquid Present
 P&A =Plugged and Abandoned

Secondary Groundwater Parameters Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"

Well ID	Date	Dissolved Oxygen (mg/L)	Temp. (°C)	pH	Specific Conductance (µS/cm)	ORP (mV)	NO3- (mg/L)	Total Fe (mg/L)	Fe ⁺² (mg/L)	SO ₄ ⁻² (mg/L)	Alkalinity (mg/L)	PO4-3 (mg/L)	HPC Aerobic (cfu/mL)	HPC Anaerobic (cfu/mL)	TOC (mg/L)	BOD (mg/L)
MW-12	03/24/15	1.47	15.5	6.9	4398	2										
MW-12	06/22/15	1.69	15.1	7.1	4414	186										
MW-12	08/25/15	0.98	15.5	7.2	4514	79										
MW-12	11/25/15	0.33	16.2	7.1	4566	-143										
MW-12	03/28/16	2.93	15.4	6.8	3540	94	41.7			915.0		<0.5	1700.0	<30		
MW-12	06/15/16	2.64	22.9	7.1	2830	114	18.0			1350.0		<0.5	5200.0	200.0		
MW-12	08/24/16	2.47	16.9	7.2	4090	67	25.8			1050.0		<0.5	2000.0	<30		
MW-12	05/16/17	0.90	15.7	7.5	4560	24	26.9	7.2	<0.05	1906.0	560	<0.5	640.0	<30		
MW-12	11/20/17	3.11	16.0	7.1	6889	258	36.2	47.8	<0.050	1750.0	494	<1.0	3700.0	30.0	7.5	2.7
MW-12	03/19/18	0.32	15.4	7.0	5371	120							2900.0	<30		
MW-12	06/14/18	0.58	15.4	7.1	4733	-112							1300.0	<30		
MW-12	09/13/18	0.92	17.2	7.2	5161	66							90.0	<30		
MW-12	12/05/18	1.56	15.7	7.2	4712	-49							3400.0	<30		
MW-12	03/27/19	0.66	14.9	7.2	5043	221							1200.0	<30		
MW-12	06/12/19	2.13	14.5	7.2	4651	76							2860.0	<30		
MW-12	08/14/19	0.78	19.4	7.8	4037	111							11400.0	90.0		
MW-13	05/25/16	2.08	15.1	7.3	4280	-81										
MW-13	06/15/16	0.63	20.8	7.4	3410	-211	2.1			2600.0		1.3	50000.0	110.0		
MW-13	08/24/16	0.99	17.1	7.4	3440	-177	<0.5			1000.0		<0.5	32000.0	30.0		
MW-13	05/16/17	0.76	16.3	7.6	3960	-114	2.5	162.0	<0.05	1676.0	564	<0.5	4000.0	<30		
MW-13	08/28/17	0.51	23.2	5.9	2880	-209	1.7	12.9	1.2	1120.0	406	<0.5	700.0	<30	2.9	2.3
MW-13	11/20/17	0.68	18.3	7.4	3328	-207	<1.0	127.0	0.8	1132.0	404	<1.0	10000.0	<30	2.9	39.0
MW-13	03/19/18	0.33	15.8	7.2	3852	-20							2000.0	<30		
MW-13	06/14/18	0.38	15.5	7.3	3453	-249							1765000.0	1575000.0		
MW-13	09/12/18	0.27	17.8	7.5	3679	-222							11600.0	220.0		
MW-13	12/05/18	0.09	17.5	7.1	3141	-152							6600.0	<30		
MW-13	03/27/19	0.15	16.0	7.3	3974	-61							2700.0	<30		
MW-13	06/12/19	0.99	14.3	7.3	3613	-204							10900.0	<30		
MW-13	08/14/19	0.52	15.8	7.4	3072	-192							3400.0	<30		
MW-14	05/17/17						<0.5	89.5	<0.05	642.0	616	<0.5	1350.0	30.0		
MW-14	08/28/17	0.44	18.8	6.3	5824	-77	<0.5	57.0	27.5	3200.0	448	<0.5	3600.0	230.0	37.0	33.0
MW-14	11/20/17	2.68	17.4	6.8	4069	-102	1.2	96.9	34.4	481.0	860	<1.0	54000.0	760.0	8.6	38.0
MW-14	03/19/18	0.13	16.0	7.2	3506	-143							29000.0	840.0		

Secondary Groundwater Parameters Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"

Well ID	Date	Dissolved Oxygen (mg/L)	Temp. (°C)	pH	Specific Conductance (µS/cm)	ORP (mV)	NO3- (mg/L)	Total Fe (mg/L)	Fe ⁺² (mg/L)	SO ₄ ⁻² (mg/L)	Alkalinity (mg/L)	PO4-3 (mg/L)	HPC Aerobic (cfu/mL)	HPC Anaerobic (cfu/mL)	TOC (mg/L)	BOD (mg/L)
SVE-05	12/29/11	2.04														
SVE-05	02/21/12	19.65	14.3	7.2	6082	-95										
SVE-05	05/22/12	6.27	14.3	7.0	5823	-196										
SVE-05	08/27/12	23.12	17.6	7.3	8003	-210										
SVE-05	11/29/12	16.48	17.1	7.0	1618	-301										
SVE-05	12/10/12						0.1	0.0	649.0							
SVE-05	02/26/13	0.79	15.0	7.5	6221	-312										
SVE-05	05/16/13	2.47	13.7	7.0	6333	-210										
SVE-05	08/20/13	0.87	15.9	6.8	4681	-235										
SVE-05	11/18/13	2.61	17.3	7.0	4189	-231										
SVE-05	04/29/14	0.26	13.8	6.9	5898	-214										
SVE-05	07/24/14	0.51	15.0	6.7	7272	-303										
SVE-05	10/16/14	0.15	16.6	7.0	4902	-266										
SVE-05	06/22/15	0.15	15.0	6.8	8264	-291										
SVE-05	08/25/15	0.35	15.5	6.9	8469	-307										
SVE-05	11/25/15	0.21	17.5	6.8	7457	-315										
SVE-05	03/28/16						<0.5			650.0		<0.5	2000.0	200.0		
SVE-05	06/15/16	0.30	22.0	7.1	6180	-280	<0.5			1020.0		1.1	2000.0	460.0		
SVE-05	08/24/16	0.31	17.8	7.1	6760	-210	<0.5			520.0		1.9	700.0	370.0		
SVE-05	05/16/17	0.33	15.1	7.3	6090	-229	<0.5	132.0	<0.05	757.0	768	<0.5	1555.0	220.0		
SVE-05	08/28/17	0.23	22.1	6.3	5668	-256	<0.5	4.6	<0.05	560.0	658	<0.5	1720.0	190.0	4.9	50.0
SVE-05	11/20/17	0.77	15.9	7.0	6576	-298	<1.0	17.3	<0.050	684.0	708	<1.0	500.0	410.0	4.7	41.0
SVE-05	03/19/18	0.15	14.8	7.0	6351	-224							1200.0	360.0		
SVE-05	06/14/18	0.15	16.2	7.0	6388	-295							1200.0	250.0		
SVE-05	09/12/18	0.15	23.0	7.2	7001	-256							210.0	80.0		
SVE-05	12/05/18	0.11	16.0	6.9	5867	-271							1160.0	260.0		
SVE-05	03/27/19	0.32	14.1	7.1	6022	-275							2050.0	300.0		
SVE-05	06/12/19	1.09	14.7	7.1	5439	-302							190.0	120.0		
SVE-05	08/14/19	0.39	17.0	7.2	5270	-251							320.0	140.0		
SVE-06	04/26/11	32.33														
SVE-06	03/28/16						<0.5			850.0		<0.5	5000.0	310.0		
SVE-06	06/15/16						<0.5			1250.0		<0.5	3000.0	790.0		
SVE-06	08/24/16	0.35	17.7	3.9	14830	511	1.6			7800.0		<0.5	500.0	150.0		

Secondary Groundwater Parameters Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"

Well ID	Date	Dissolved Oxygen (mg/L)	Temp. (°C)	pH	Specific Conductance (µS/cm)	ORP (mV)	NO3- (mg/L)	Total Fe (mg/L)	Fe ⁺² (mg/L)	SO ₄ ⁻² (mg/L)	Alkalinity (mg/L)	PO4-3 (mg/L)	HPC Aerobic (cfu/mL)	HPC Anaerobic (cfu/mL)	TOC (mg/L)	BOD (mg/L)
SVE-08	06/14/18	1.22	15.8	6.5	11751	-169										
SVE-08	09/12/18	3.80	17.4	7.0	9879	-127										
SVE-08	12/05/18	0.41	16.9	6.6	7741	-19										
SVE-08	03/27/19	2.62	16.4	6.7	7340	-92										
SVE-08	06/12/19	1.21	15.0	6.9	5754	-200										
SVE-08	08/14/19	0.21	16.0	6.9	5130	-131										
SVE-09	09/25/07	2.34	16.0	7.5	2659	60										
SVE-09	01/10/08	0.81	16.7	7.3	3297	-175										
SVE-09	04/14/08	0.35	15.7	7.5	2894	-24										
SVE-09	07/22/08	18.21	15.8	7.2	3082	-70										
SVE-09	11/05/08	0.20	17.3	7.3	2724	-172										
SVE-09	03/05/09	14.21	15.9	7.4	3445	51										
SVE-09	06/08/09	25.36	14.7	7.7	3876	-49										
SVE-09	09/08/09	0.09	15.3	7.4	2322	-239										
SVE-09	12/10/09	4.31	16.0	7.0	2986	-86										
SVE-09	03/31/10	15.84	14.8	7.8	2622	94										
SVE-09	06/24/10	13.88	14.5	7.4	5198	-105										
SVE-09	09/20/10	0.16	16.9	7.0	4459	-60										
SVE-09	12/16/10	28.30	16.9	8.0	3191	-155										
SVE-09	03/25/11	18.55	15.8	7.3	2764	-49										
SVE-09	05/25/11	2.60	15.5	7.1	3920	34										
SVE-09	08/29/11	23.71	16.2	7.0	3264	-54										
SVE-09	11/23/11	0.84	16.9	7.3	3886	-119										
SVE-09	12/29/11	4.07														
SVE-09	02/21/12	16.21	15.7	6.9	5047	-14										
SVE-09	05/22/12	19.74	15.0	7.7	1913	-80										
SVE-09	08/27/12	18.18	16.9	7.5	5205	-181										
SVE-09	11/29/12	12.38	17.6	7.1	6309	-207										
SVE-09	12/10/12						0.2	0.0	385.0							
SVE-09	02/26/13	0.85	17.1	7.4	6223	-241										
SVE-09	05/16/13	1.51	15.5	7.1	3884	-232										
SVE-10	07/22/08	21.92	15.9	7.5	4507	-17										
SVE-10	04/26/11	27.21														
SVE-10	12/10/12	18.73	16.0	7.0	5031	-178	0.1	0.0	46.6							

Secondary Groundwater Parameters Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"

Well ID	Date	Dissolved Oxygen (mg/L)	Temp. (°C)	pH	Specific Conductance (µS/cm)	ORP (mV)	NO3- (mg/L)	Total Fe (mg/L)	Fe ⁺² (mg/L)	SO ₄ ⁻² (mg/L)	Alkalinity (mg/L)	PO4-3 (mg/L)	HPC Aerobic (cfu/mL)	HPC Anaerobic (cfu/mL)	TOC (mg/L)	BOD (mg/L)

*List other analytes in header. If you wish to tabulate more analytes, contact OPS.

Groundwater Contamination Trends

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"					Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)
Well Location	Well ID	Date	Benzene (mg/L)*	TOC (ft)				
Source	SVE-04	09/25/07	31.1450	98.24	87.77	10.47	0	
Source	SVE-04	01/10/08	14.6970	98.24	88.27	9.97	0	
Source	SVE-04	04/14/08	13.7700	98.24	88.38	9.86	0	
Source	SVE-04	07/22/08	0.0007	98.24	88.42	9.82	0	
Source	SVE-04	11/05/08	0.0070	98.24	88.06	10.18	0	
Source	SVE-04	03/05/09	1.2800	98.24	88.69	9.55	0	
Source	SVE-04	06/08/09	0.0010	98.24	91.59	6.65	0	
Source	SVE-04	09/08/09	16.9000	98.24	87.97	10.27	0	
Source	SVE-04	12/10/09	7.3900	98.24	88.04	10.20	0	
Source	SVE-04	03/31/10	0.0450	98.24	89.55	8.69	0	
Source	SVE-04	06/24/10	0.0010	98.24	89.26	8.98	0	
Source	SVE-04	09/20/10	17.4000	98.24	87.52	10.72	0	
Source	SVE-04	12/16/10	25.9000	98.24	86.74	11.50	0	
Source	SVE-04	03/25/11	22.4000	98.24	87.37	10.87	0	
Source	SVE-04	05/25/11	0.0010	98.24	89.72	8.52	0	
Source	SVE-04	08/29/11	30.8000	98.24	87.09	11.15	0	
Source	SVE-04	11/23/11	18.4000	98.24	87.99	10.25	0	
Source	SVE-04	02/21/12	0.0010	98.24	89.03	9.21	0	
Source	SVE-04	05/22/12	2.6900	98.24	87.93	10.31	0	
Source	SVE-04	08/27/12	32.7000	98.24	86.24	12.00	0	
Source	SVE-04	11/29/12	33.1000	98.24	86.76	11.48	0	
Source	SVE-04	02/26/13	20.5000	98.24	86.81	11.43	0	
Source	SVE-04	05/16/13	0.0010	98.24	91.36	6.88	0	
Source	SVE-04	08/20/13	17.1000	98.24	88.06	10.18	0	
Source	SVE-04	11/18/13	3.0900	98.24	88.24	10.00	0	
Source	SVE-04	02/25/14	5.6100	98.24	88.34	9.90	0	
Source	SVE-04	04/29/14	0.0010	98.24	88.19	10.05	0	
Source	SVE-04	07/24/14	4.9400	98.24	88.23	10.01	0	
Source	SVE-04	10/16/14	22.1000	98.24	87.75	10.49	0	
Source	SVE-04	03/24/15	0.0010	98.24	89.28	8.96	0	
Source	SVE-04	06/22/15	1.0700	98.24	90.24	8.00	0	
Source	SVE-04	08/25/15	15.7000	98.24	87.52	10.72	0	
Source	SVE-04	11/25/15	17.6000	98.24	88.01	10.23	0	
Source	SVE-04	03/28/16	0.4860	98.24	91.26	6.98	0	
Source	SVE-04	06/15/16	6.7100	98.24	88.12	10.12	0	
Source	SVE-04	08/24/16	19.5000	98.24	86.24	12.00	0	
Source	SVE-04	05/16/17	2.4800	98.24	88.60	9.64	0	
Source	SVE-04	08/28/17	25.9000	98.24	87.14	11.10	0	
Source	SVE-04	11/20/17	21.0000	98.24	87.64	10.60	0	
Source	SVE-04	03/19/18	13.2000	98.24	87.06	11.18	0	
Source	SVE-04	06/14/18	11.8000	98.24	87.76	10.48	0	

Groundwater Contamination Trends

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"					Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)
Well Location	Well ID	Date	Benzene (mg/L)*	TOC (ft)				
Source	SVE-04	09/12/18	26.6000	98.24	86.89	11.35		0
Source	SVE-04	12/05/18	19.1000	98.24	87.14	11.10		0
Source	SVE-04	03/27/19	0.0010	98.24	89.29	8.95		0
Source	SVE-04	06/12/19	0.2650	98.24	88.73	9.51		0
Source	SVE-04	08/14/19	21.2000	98.24	87.20	11.04		0
Mid-plume	CHMW-01	11/12/01	6.6050	97.89	81.08	16.81		0
Mid-plume	CHMW-01	11/04/02	2.3160	97.89	79.99	17.90		0
Mid-plume	CHMW-01	07/29/03	2.0090	97.89	82.01	15.88		0
Mid-plume	CHMW-01	10/20/03	1.5500	97.89	81.71	16.18		0
Mid-plume	CHMW-01	01/19/04	1.3060	97.89	80.18	17.71		0
Mid-plume	CHMW-01	04/19/04	1.2200	97.89	79.94	17.95		0
Mid-plume	CHMW-01	07/19/04	1.1640	97.89	81.73	16.16		0
Mid-plume	CHMW-01	10/21/04	3.2620	97.89	81.42	16.47		0
Mid-plume	CHMW-01	01/21/05	3.8330	97.89	80.34	17.55		0
Mid-plume	CHMW-01	04/20/05	3.7270	97.89	80.17	17.72		0
Mid-plume	CHMW-01	07/21/05	1.5780	97.89	81.05	16.84		0
Mid-plume	CHMW-01	10/27/05	3.0040	97.89	80.91	16.98		0
Mid-plume	CHMW-01	01/19/06	3.6600	97.89	80.27	17.62		0
Mid-plume	CHMW-01	04/18/06	2.2920	97.89	79.88	18.01		0
Mid-plume	CHMW-01	07/19/06	1.8390	97.89	80.51	17.38		0
Mid-plume	CHMW-01	10/19/06	1.4440	97.89	80.71	17.18		0
Mid-plume	CHMW-01	03/28/07	0.8130	97.89	80.86	17.03		0
Mid-plume	CHMW-01	06/26/07	0.6270	97.89	81.71	16.18		0
Mid-plume	CHMW-01	09/25/07	1.3640	97.89	81.28	16.61		0
Mid-plume	CHMW-01	01/10/08	0.9290	97.89	80.46	17.43		0
Mid-plume	CHMW-01	04/14/08	0.4890	97.89	80.89	17.00		0
Mid-plume	CHMW-01	07/22/08	0.4170	97.89	81.37	16.52		0
Mid-plume	CHMW-01	11/05/08	0.3350	97.89	81.02	16.87		0
Mid-plume	CHMW-01	03/05/09	0.2950	97.89	81.83	16.06		0
Mid-plume	CHMW-01	06/08/09	1.6300	97.89	85.35	12.54		0
Mid-plume	CHMW-01	09/08/09	1.4800	97.89	82.02	15.87		0
Mid-plume	CHMW-01	12/10/09	0.9330	97.89	81.28	16.61		0
Mid-plume	CHMW-01	03/31/10	0.5950	97.89	81.16	16.73		0
Mid-plume	CHMW-01	06/24/10	0.5470	97.89	82.70	15.19		0
Mid-plume	CHMW-01	09/20/10	0.7310	97.89	81.32	16.57		0
Mid-plume	CHMW-01	12/16/10	1.1000	97.89	80.35	17.54		0
Mid-plume	CHMW-01	03/25/11	0.5790	97.89	80.49	17.40		0
Mid-plume	CHMW-01	05/25/11	0.3830	97.89	81.06	16.83		0
Mid-plume	CHMW-01	08/29/11	0.4500	97.89	81.23	16.66		0
Mid-plume	CHMW-01	11/23/11	0.3390	97.89	80.54	17.35		0
Mid-plume	CHMW-01	02/21/12	0.1280	97.89	81.54	16.35		0

Groundwater Contamination Trends

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"					Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)
Well Location	Well ID	Date	Benzene (mg/L)*	TOC (ft)				
Mid-plume	CHMW-01	05/22/12	0.1430	97.89	81.06	16.83	0	
Mid-plume	CHMW-01	08/27/12	0.1460	97.89	80.58	17.31	0	
Mid-plume	CHMW-01	11/29/12	0.1390	97.89	80.07	17.82	0	
Mid-plume	CHMW-01	02/26/13	0.1930	97.89	79.57	18.32	0	
Mid-plume	CHMW-01	05/16/13	0.1080	97.89	80.90	16.99	0	
Mid-plume	CHMW-01	08/20/13	0.0010	97.89	80.91	16.98	0	
Mid-plume	CHMW-01	11/18/13	0.0010	97.89	81.27	16.62	0	
Mid-plume	CHMW-01	02/25/14	0.0010	97.89	80.38	17.51	0	
Mid-plume	CHMW-01	04/29/14	0.0010	97.89	80.79	17.10	0	
Mid-plume	CHMW-01	07/24/14	0.0010	97.89	81.36	16.53	0	
Mid-plume	CHMW-01	10/16/14	0.0030	97.89	81.05	16.84	0	
Mid-plume	CHMW-01A	01/19/15	0.1490	97.83	80.33	17.50	0	
Mid-plume	CHMW-01A	03/24/15	2.1400	97.83	81.20	16.63	0	
Mid-plume	CHMW-01A	06/22/15	0.1800	97.83	84.56	13.27	0	
Mid-plume	CHMW-01A	08/25/15	0.1320	97.83	82.43	15.40	0	
Mid-plume	CHMW-01A	11/25/15	0.1430	97.83	81.15	16.68	0	
Mid-plume	CHMW-01A	03/28/16	0.1470	97.83	81.23	16.60	0	
Mid-plume	CHMW-01A	06/15/16	0.1320	97.83	82.30	15.53	0	
Mid-plume	CHMW-01A	08/24/16	0.0060	97.83	80.89	16.94	0	
Mid-plume	CHMW-01A	05/16/17	0.0440	97.83	80.31	17.52	0	
Mid-plume	CHMW-01A	08/28/17	0.0010	97.83	81.11	16.72	0	
Mid-plume	CHMW-01A	11/20/17	0.0010	97.83	80.78	17.05	0	
Mid-plume	CHMW-01A	03/19/18	0.0030	97.83	80.22	17.61	0	
Mid-plume	CHMW-01A	06/14/18	0.0010	97.83	84.10	13.73	0	
Mid-plume	CHMW-01A	09/12/18	0.0030	97.83	80.73	17.10	0	
Mid-plume	CHMW-01A	12/05/18	0.0060	97.83	80.38	17.45	0	
Mid-plume	CHMW-01A	03/27/19	0.0010	97.83	80.58	17.25	0	
Mid-plume	CHMW-01A	06/12/19	0.0020	97.83	81.82	16.01	0	
Mid-plume	CHMW-01A	08/14/19	0.0060	97.83	81.10	16.73	0	
Downgradient	SVE-10	09/25/07	19.3690	96.69	81.15	15.54	0	
Downgradient	SVE-10	01/10/08	18.7190	96.69	80.39	16.30	0	
Downgradient	SVE-10	07/22/08	0.8810	96.69	81.30	15.39	0	
Downgradient	SVE-10	11/05/08	0.0620	96.69	81.03	15.66	0	
Downgradient	SVE-10	03/05/09	0.0140	96.69	81.97	14.72	0	
Downgradient	SVE-10	06/08/09	0.0010	96.69	85.40	11.29	0	
Downgradient	SVE-10	09/08/09	3.6000	96.69	81.88	14.81	0	
Downgradient	SVE-10	12/10/09	0.0010	96.69	81.24	15.45	0	
Downgradient	SVE-10	03/31/10	0.0010	96.69	81.13	15.56	0	
Downgradient	SVE-10	06/24/10	0.0010	96.69	83.20	13.49	0	
Downgradient	SVE-10	09/20/10	0.0070	96.69	81.32	15.37	0	
Downgradient	SVE-10	12/16/10	0.1850	96.69	80.47	16.22	0	

Groundwater Contamination Trends

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"					Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)
Well Location	Well ID	Date	Benzene (mg/L)*	TOC (ft)				
Downgradient	SVE-10	03/25/11	0.1060	96.69	80.35	16.34		0
Downgradient	SVE-10	05/25/11	0.0010	96.69	80.99	15.70		0
Downgradient	SVE-10	08/29/11	0.0010	96.69	81.18	15.51		0
Downgradient	SVE-10	11/23/11	0.2150	96.69	80.44	16.25		0
Downgradient	SVE-10	02/21/12	0.0010	96.69	81.71	14.98		0
Downgradient	SVE-10	05/22/12	0.0010	96.69	82.09	14.60		0
Downgradient	SVE-10	08/27/12	0.2900	96.69	80.60	16.09		0
Downgradient	SVE-10	11/29/12	0.0050	96.69	80.15	16.54		0
Downgradient	SVE-10	02/26/13	2.1300	96.69	79.87	16.82		0
Downgradient	SVE-10	05/16/13	0.6800	96.69	80.75	15.94		0
Downgradient	SVE-10	08/20/13	0.0010	96.69	80.75	15.94		0
Downgradient	SVE-10	11/18/13	0.0010	96.69	81.11	15.58		0
Downgradient	SVE-10	02/25/14	0.0010	96.69	80.27	16.42		0
Downgradient	SVE-10	04/29/14	0.0010	96.69	80.19	16.50		0
Downgradient	SVE-10	07/24/14	0.0010	96.69	81.24	15.45		0
Downgradient	SVE-10	10/16/14	0.0010	96.69	80.95	15.74		0
Downgradient	MW-11	01/19/15	2.0600	96.19	80.25	15.94		0
Downgradient	MW-11	03/24/15	1.5300	96.19	80.28	15.91		0
Downgradient	MW-11	06/22/15	1.5600	96.19	84.34	11.85		0
Downgradient	MW-11	08/25/15	0.9220	96.19	82.28	13.91		0
Downgradient	MW-11	11/25/15	1.0600	96.19	81.02	15.17		0
Downgradient	MW-11	03/28/16	0.3420	96.19	83.12	13.07		0
Downgradient	MW-11	06/15/16	1.4500	96.19	82.15	14.04		0
Downgradient	MW-11	08/24/16	2.4800	96.19	80.79	15.40		0
Downgradient	MW-11	05/16/17	1.9600	96.19	80.26	15.93		0
Downgradient	MW-11	08/28/17	0.4300	96.19	80.94	15.25		0
Downgradient	MW-11	11/20/17	0.0670	96.19	80.70	15.49		0
Downgradient	MW-11	03/19/18	0.1070	96.19	79.92	16.27		0
Downgradient	MW-11	06/14/18	0.0010	96.19	80.00	16.19		0
Downgradient	MW-11	09/13/18	0.0010	96.19	80.64	15.55		0
Downgradient	MW-11	12/05/18	0.0290	96.19	80.26	15.93		0
Downgradient	MW-11	03/27/19	0.2830	96.19	80.44	15.75		0
Downgradient	MW-11	06/12/19	0.0360	96.19	81.73	14.46		0
Downgradient	MW-11	08/14/19	0.0730	96.19	81.04	15.15		0

*Enter "99" if LNAPL present.

TOC = Surveyed elevation top of casing

Corrective Action Summary	Date
Continuous System 1 Start Date	4/20/04
Continuous System 1 End Date	5/31/05
Continuous System 2 Start Date	11/29/07

Groundwater Contamination Trends

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

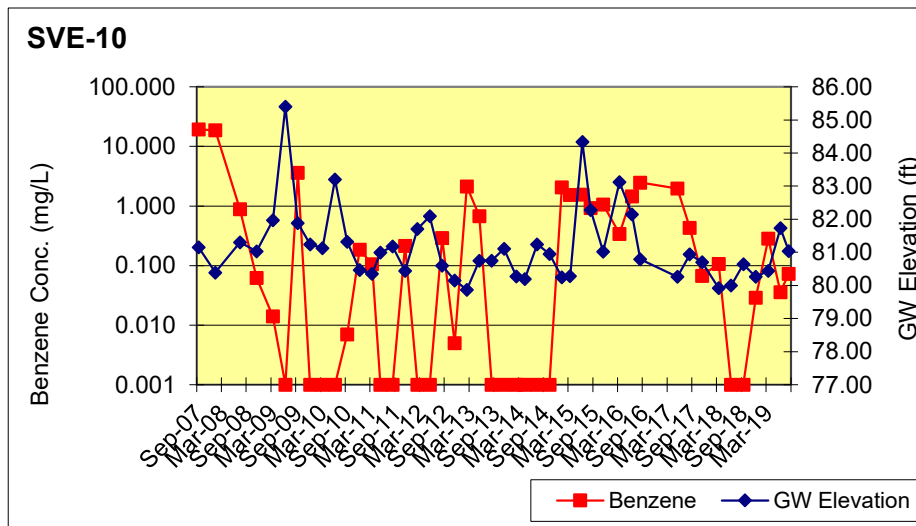
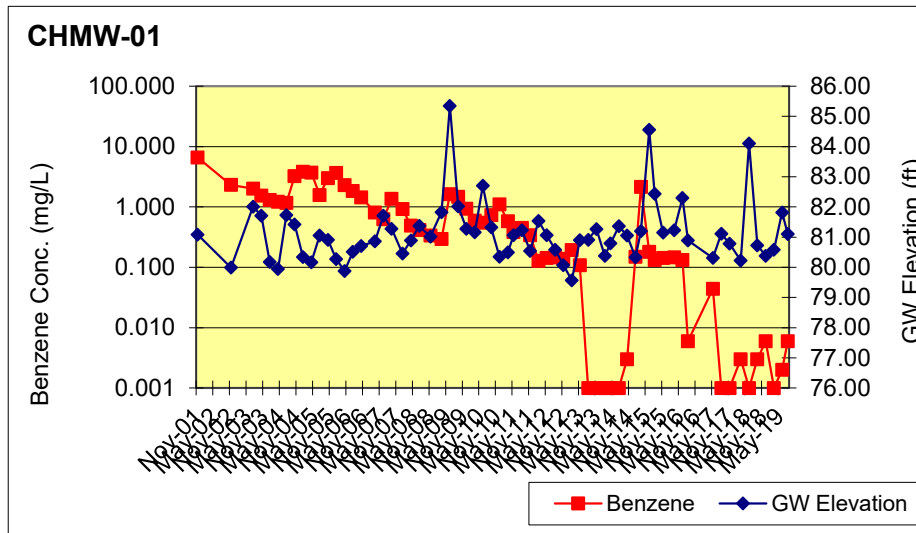
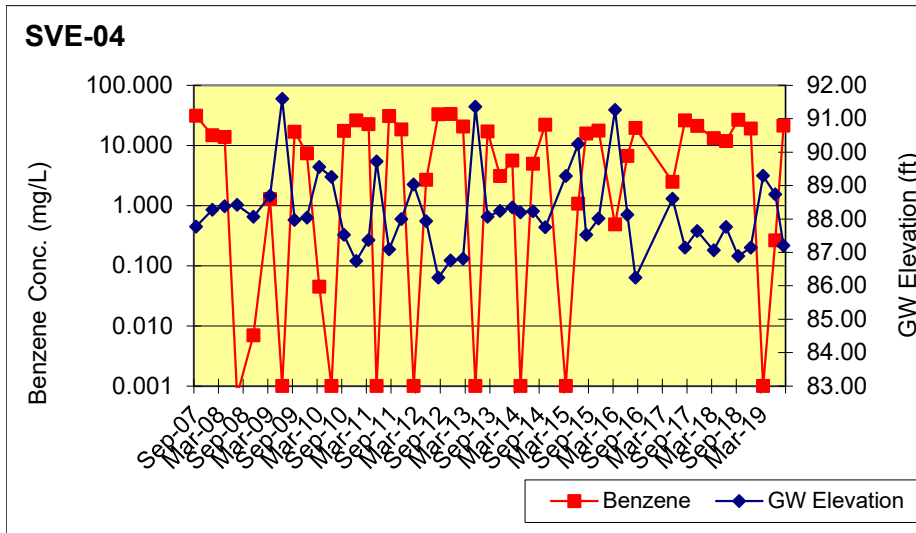
Click on a cell in the section in which you wish the additional row. Then click "New Row"					Water Table Elevation, Corrected for LNAPL Thickness (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)
Well Location	Well ID	Date	Benzene (mg/L)*	TOC (ft)				
Continuous System 2 End Date			8/25/15					
In-situ Treatment Event 1 End Date			6/12/13					
In-situ Treatment Event 2 End Date			6/24/16					
In-situ Treatment Event 3 End Date			7/22/16					
In-situ Treatment Event 4 End Date			7/20/17					

Groundwater Contamination Trend Graphs

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019



Soil Analytical Results Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"

Sample Location	Date	Rationale for sample location	Sample Depth (ft)	Vertical Interval	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Xylenes (mg/kg)	TVPH (mg/kg)	TEPH (mg/kg)	Oil & Grease (mg/kg)	Disposition of Soil	*Confirmation for Sample Location(s)
AS-01	04/01/05	DE	15.0	saturated	0.004	0	0	0	138			LIP	
CHMW-01A	01/19/15	DE	18.0	saturated	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
Comp #01	10/31/02	WC	0.0		0.003	0	0	0				EDO	
Composite	10/25/99	WC	0.0		0.003	0	0	0				EDO	
EX-01	11/28/06	SP	0.0		0.069	1	5	121	2261			EDO	
EX-02	12/01/06	SP	0.0		<0.002	0	2	3	751			EDO	
EX-03	12/01/06	SP	0.0		<0.002	0	5	26	3134			EDO	
EX-04	12/01/06	SP	0.0		<0.002	0	12	63	1349			EDO	
EX-05	12/04/06	SP	0.0		0.070	1	50	127	6603			EDO	
EX-06	12/04/06	SP	0.0		<0.002	0	0	0	380			EDO	
EX-07	12/05/06	SP	0.0		<0.002	0	1	6	227			EDO	
EX-08	12/05/06	SP	0.0		0.072	0	20	72	2785			EDO	
EX-09	12/05/06	SP	0.0		<0.002	0	2	0	641			EDO	
MW-01	02/25/97	DE	16.0	saturated	<0.002	<0.002	<0.002	<0.002	<0.5			LIP	
MW-01A	10/31/02	DE	25.0	saturated	0.005	0	0	0				LIP	
MW-02	02/25/97	DE	14.0	saturated	0.400	0	1	1	21			LIP	
MW-02A	10/31/02	DE	15.0	capillary	<0.002	0	<0.002	<0.002				LIP	
MW-03	02/25/97	DE	15.0	saturated	0.370	0	1	1	32			LIP	
MW-03A	10/31/02	DE	20.0	saturated	0.006	0	<0.002	<0.002				LIP	
MW-04	02/25/97	DE	16.0	saturated	3.100	3	2	9	97			LIP	
MW-04A	10/31/02	DE	15.0	capillary	0.007	0	0	0				LIP	
MW-11	01/19/15	DE	15.0	capillary	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-12	01/19/15	DE	17.0	capillary	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-13	05/23/16	DE	10.0	vadose	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-13	05/23/16	DE	25.0	saturated	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-14	05/24/16	DE	10.0	vadose	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-14	05/24/16	DE	20.0	saturated	0.151	0	8	11	498			LIP	
MW-15	05/23/16	DE	15.0	capillary	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-15	05/23/16	DE	20.0	saturated	<0.010	0	<0.010	<0.010	33			LIP	
MW-16	05/24/16	DE	15.0	capillary	<0.010	<0.010	<0.010	<0.010	3			LIP	
MW-16	05/24/16	DE	20.0	saturated	<0.010	<0.010	<0.010	<0.010	2			LIP	
MW-17	05/24/16	DE	15.0	capillary	<0.010	<0.010	<0.010	<0.010	1			LIP	
MW-17	05/24/16	DE	20.0	saturated	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	

Soil Analytical Results Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"

Sample Location	Date	Rationale for sample location	Sample Depth (ft)	Vertical Interval	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Xylenes (mg/kg)	TVPH (mg/kg)	TEPH (mg/kg)	Oil & Grease (mg/kg)	Disposition of Soil	*Confirmation for Sample Location(s)
MW-18	05/24/16	DE	10.0	vadose	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-18	05/24/16	DE	20.0	saturated	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-19	05/03/17	DE	15.0	capillary	<0.010	<0.010	0	0	31			LIP	
MW-19	05/03/17	DE	25.0	saturated	<0.010	<0.010	<0.010	0	1			LIP	
MW-20	05/26/17	DE	15.0	saturated	<0.010	<0.010	<0.010	<0.010	1			LIP	
MW-20	05/26/17	DE	20.0	saturated	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-21	04/23/18	DE	10.0	vadose	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-21	04/23/18	DE	20.0	saturated	<0.010	<0.010	<0.010	<0.010	7			LIP	
MW-22	04/23/18	DE	10.0	vadose	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-22	04/23/18	DE	15.0	capillary	<0.010	<0.010	<0.010	<0.010	4			LIP	
MW-23	03/28/19	DE	10.0	vadose	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-23	03/28/19	DE	15.0	capillary	<0.010	<0.010	<0.010	<0.010	1			LIP	
MW-24	03/28/19	DE	5.0	vadose	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-24	03/28/19	DE	15.0	capillary	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-25	03/28/19	DE	5.0	vadose	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
MW-25	03/28/19	DE	20.0	saturated	<0.010	<0.010	<0.010	<0.010	<0.50			LIP	
SB-01	03/26/13	DE	18.0	saturated	<0.01	<0.01	<0.01	<0.01	<0.5			LIP	
SB-02	03/26/13	DE	20.0	saturated	<0.01	<0.01	<0.01	<0.01	3			LIP	
SB-03	03/26/13	DE	16.0	capillary	<0.01	<0.01	<0.01	<0.01	<0.5			LIP	
SB-04	03/26/13	DE	18.0	saturated	<0.01	<0.01	<0.01	<0.01	26			LIP	
SB-05	03/26/13	DE	16.0	capillary	<0.01	<0.01	<0.01	<0.01	<0.5			LIP	
SB-06	07/17/15	DE	20.0	saturated	0.201	1	38	56	1864			LIP	
SB-07	07/17/15	DE	21.0	saturated	<0.010	0	0	0	35			LIP	
SB-08	07/17/15	DE	20.0	saturated	<0.010	0	0	0	253			LIP	
SB-09	07/17/15	DE	18.5	saturated	2.330	2	22	47	1772			LIP	
SB-10	07/17/15	DE	18.0	saturated	0.276	0	1	2	46			LIP	
SB-11	07/17/15	DE	20.0	saturated	<0.010	<0.010	<0.010	0	1			LIP	
SS-01	11/13/06	EXC	8.0	capillary	0.018	0	1	3	130			EDO	
Tank 1 M	09/01/92	TANK	10.0	capillary	4.800	80	82	330	2800			LIP	
Tank 1 N	09/01/92	TANK	10.0	capillary	<0.002	0	1	12	16			LIP	
Tank 1 S	09/01/92	TANK	10.0	capillary	3.300	63	72	340	2000			LIP	
Tank 2 M	09/01/92	TANK	10.0	capillary	<0.002	0	0	1	22			LIP	
Tank 2 N	09/01/92	TANK	10.0	capillary	<0.002	3	7	31	360			LIP	

Soil Vapor Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Sample Point ID	Date	Construction of Associated Structure	Sample Type	Top of Sample Screen Below Ground or Slab (ft)	Bottom of Sample Screen Below Ground or Slab (ft)	Benzene (µg/m3)	Toluene, Ethylbenzene, Total Xylenes (µg/m3)	CO2 (%)	O2 (%)	OVM reading (ppm)	Methane (%)	Sample Container Type	Sample Collection Method	Analytical Method	Well Status if Not Sampled
VP-01	08/31/15	slab on grade	soil vapor	3.5	4.0	<10.0	<10	0.8	20.1			T	HP	TO14A	
VP-01	08/31/15	slab on grade	soil vapor	6.5	7.0	<10.0	<10	4.6	17.6			T	HP	TO14A	
VP-01	11/25/15	slab on grade	soil vapor	3.5	4.0	<10.0	<10	5.0	13.9			T	HP	TO14A	
VP-01	11/25/15	slab on grade	soil vapor	6.5	7.0	<10.0	<10	0.2	20.9			T	HP	TO14A	
VP-01	03/28/16	slab on grade	soil vapor	3.5	4.0	<10.0	<10.0	5.0	14.8			T	HP	TO15	
VP-01	03/28/16	slab on grade	soil vapor	6.5	7.0										SUB
VP-01	06/15/16	slab on grade	soil vapor	3.5	4.0	<10.0	<10.0	2.4	18.4			T	HP	TO14A	
VP-01	06/15/16	slab on grade	soil vapor	6.5	7.0	<10.0	<10.0	0.7	20.2			T	HP	TO14A	
VP-02	07/13/17	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	5.0	12.6		<100	T	PP	TO15	
VP-02	08/28/17	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	5.0	14.1			T	PP	TO15	
VP-02	09/05/17	slab on grade	soil vapor	5.5	6.0						<100	T	PP		
VP-02	11/21/17	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	2.3	16.7		<100	T	PP	TO15	
VP-02	03/19/18	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	2.1	16.2			T	PP	TO15	
VP-02	06/14/18	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	5.0	11.9			T	PP	TO15	
VP-02	06/14/18	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	2.2	0.2			T	PP	TO15	
VP-02	09/12/18	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	2.2	12.9			T	PP	TO15	
VP-02	12/05/18	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	1.2	17.5			T	PP	TO15	
VP-02	03/27/19	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0					T	PP	TO15	
VP-02	06/12/19	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	4.9	8.4			T	PP	TO15	
VP-02	08/14/19	slab on grade	soil vapor	5.5	6.0	<10.0	<10.0	5.0	11.5			T	PP	TO15	
VP-03	05/16/17	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	0.3	12.3		<100	T	PP	TO15	
VP-03	08/28/17	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	5.0	26.0			T	PP	TO15	
VP-03	09/05/17	slab on grade	soil vapor	9.5	10.0						<100	T	PP		
VP-03	11/21/17	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	3.7	18.5		<100	T	PP	TO15	
VP-03	03/19/18	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	5.0	9.8			T	PP	TO15	
VP-03	06/14/18	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	5.0	6.2			T	PP	TO15	
VP-03	06/14/18	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	4.7	0.3			T	PP	TO15	
VP-03	09/12/18	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	3.1	4.7			T	PP	TO15	
VP-03	12/05/18	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	2.8	10.6			T	PP	TO15	
VP-03	03/28/19	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0					T	PP	TO15	
VP-03	06/12/19	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	5.0	0.9			T	PP	TO15	
VP-03	08/14/19	slab on grade	soil vapor	9.5	10.0	<10.0	<10.0	5.0	0.0			T	PP	TO15	

Risk-based Screening Level (RBSL) 2900

If concentration is less than the stated laboratory detection limit, list the detection limit (not ND); e.g. 0.0005

*List other analytes in header

Sample containers:

Sample collection method:

Analytical Method:

Well Status if Not Sampled:

Soil Vapor Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Sample Point ID	Date	Construction of Associated Structure	Sample Type	Top of Sample Screen Below Ground or Slab (ft)	Bottom of Sample Screen Below Ground or Slab (ft)	Benzene (µg/m3)	Toluene, Ethyl-benzene, Total Xylenes (µg/m3)	CO2 (%)	O2 (%)	OVM reading (ppm)	Methane (%)	Sample Container Type	Sample Collection Method	Analytical Method	Well Status if Not Sampled
-----------------	------	--------------------------------------	-------------	--	---	-----------------	---	---------	--------	-------------------	-------------	-----------------------	--------------------------	-------------------	----------------------------

S1 =Summa cannister 1 liter
 S3 =Summa cannister 3 liter=
 S6 =Summa cannister 6 liter
 T =Tedlar bag (no shipping)
 G =Glass cannister
 SYR =Syringe (onsite analysis only)

S =Summa cannister
 PP =Peristaltic pump
 AP =Powered air pump
 VC =Vacuum chamber
 HP =Hand pump
 FC =Flux chamber

TO1 =EPA TO1
 TO3 =EPA TO3
 TO14A =EPA TO14A
 TO15 =EPA TO15
 8021B =EPA 8021B
 8260 =EPA 8260

SUB =Submerged
 DES =Destroyed
 INA =Inaccessible
 NOP =Not on Monitoring Plan

Remediation Targets

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Click on a cell in the section in which you wish the additional row. Then click "New Row"

Attach SSTL calculations in the Model Input & Results worksheet

Groundwater Site Specific Target Levels												
Sample Location	Tier level	Benzene (mg/L)		Toluene (mg/L)		Ethylbenzene (mg/L)		Xylenes (mg/L)		MTBE (mg/L)		Date OPS Concurred
		Concentration*	SSTL	Concentration*	SSTL	Concentration*	SSTL	Concentration*	SSTL	Concentration*	SSTL	
MW-12										3.090	22.000	
SVE-4-MW-1A	4	21.200	1.500									
SVE-4-MW-1Ad	4	21.200	67.000									
SVE-4-MW-2A	4	21.200	3.800									
SVE-4-South12	4	21.200	0.580									
SVE-4-South12d	4	21.200	10.000									
Vadose Zone Soil Site Specific Target Levels												
Saturated Soil Site Specific Target Levels												
Closure Goals										Response		
Does monitoring data indicate that remediation goals will be met on time?										Yes		

* highest concentration during the last four sampling events

LNAPL Abatement and Total Fluid Recovery Table

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Well ID	Date	Operational Time During Period (hrs)	Removal Method	Pre-Abatement LNAPL Thickness (ft)	Post-Abatement LNAPL Thickness (ft)	Initial Abatement OVM Reading (ppm)	Final Abatement OVM Reading (ppm)	Groundwater Extracted (gals)	Liquid Phase LNAPL Extracted (gals)	Vapor Phase LNAPL Extracted (lbs)	Total LNAPL Extracted (gals)
MW-16	08/24/16		HB	0.02	0.00			4.00	0.04		0.04
Totals								4.00	0.04	0.00	0.04

Removal methods:

- HB =Hand-Bail *
- TFR =Total Fluid Recovery *
- PS =Passive Skimmer *
- PNS =Pneumatic Skimmer
- AS =Absorbent Sock *
- OTH =Other

***Provide and label TFR field sheets in 'Other Documents' tab**

(Empirical data suggest that LNAPL transmissivity values below 0.1 to 0.8 ft²/day indicate low r

AS and SVE Remediation System Performance

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Date	AS Unit Performance			SVE Unit Performance						Lab Analyses		Mass Removal					
	Operation Time During Period (hours)	Positive Pressure at Unit (psig)	Total Discharge Flow Rate (scfm)	Operation Time During Period (hours)	Induced Vacuum at Unit (in H ₂ O)	Effluent Temperature (°F)	System Air Flow Rate (scfm)	VOCs (PID) Pre-treatment (ppmv)	VOCs (PID) Post-treatment (ppmv)	Benzene (mg/L)	TVPH (mg/L)	VOC Emissions for Period PID (lbs)	VOC Emissions for Period TVPH (lbs)	Benzene Emissions for Period (lbs)	Total VOC Emissions PID (lbs)	Total VOC Emissions TVPH (lbs)	Total Benzene Emissions (lbs)
11/29/07				2	22.0		350	1.00	1.00	0.000	0.09	0.01	0.25	0.000	0.01	0.25	0.00
01/15/08				301	36.0		320	6.00	40.00	0.000	0.06	8.07	22.09	0.040	8.08	22.33	0.04
01/21/08				143	36.0		320	2.00	33.00	0.000	0.05	1.28	8.90	0.013	9.36	31.23	0.05
01/28/08				169	71.0		225	562.00	32.00	0.037	13.34	298.49	1900.30	5.309	307.85	1931.53	5.36
02/11/08				336	37.0		315	2.00	51.00	0.000	0.04	2.96	17.13	0.027	310.81	1948.66	5.39
02/29/08				432	38.0		310	4.00	45.00	0.000	0.10	7.48	50.68	0.015	318.29	1999.34	5.40
03/17/08				408	36.0		320	8.00	0.00	0.000	0.08	14.59	38.11	0.085	332.88	2037.45	5.49
03/31/08				333	34.0		325	34.00	0.00	0.000	0.03	51.40	13.10	0.022	384.27	2050.55	5.51
04/14/08				335	71.0		225	114.00	0.00	0.001	1.59	120.02	447.91	0.412	504.29	2498.46	5.92
07/22/08				1656	66.0		240	86.00	5.00	0.000	0.02	477.41	25.32	0.012	981.71	2523.77	5.93
11/05/08				2516	32.0		325	2.00	3.00	0.000	0.02	22.84	58.52	0.104	1004.55	2582.29	6.04
03/05/09				2839	72.0		220	395.00	142.00	0.000	0.15	3445.95	351.03	0.742	4450.50	2933.32	6.78
06/08/09				2256	78.0		190	2.00	1.00	0.000	0.02	11.97	39.35	0.316	4462.47	2972.67	7.10
09/08/09				2208	28.0		330	9.00	1.00	0.000	0.05	91.60	132.41	0.003	4554.07	3105.08	7.10
12/10/09				2232	32.0		325	1.00	1.00	0.000	0.00	10.13	2.72	0.003	4564.20	3107.79	7.10
03/31/10				2664	63.0		240	2.00	0.00	0.000	0.00	17.86	0.00	0.000	4582.06	3107.79	7.10
06/24/10				2040	62.0		205	1.00	0.00	0.000	0.00	5.84	1.57	0.002	4587.90	3109.36	7.10
09/20/10				2112	32.0		325	4.00	2.00	0.000	0.00	38.35	2.57	0.003	4626.25	3111.93	7.11
12/16/10				2065	36.0		320	22.00		0.000	0.26	203.06	641.26	0.002	4829.31	3753.19	7.11
03/24/11				2327	58.0		255	0.00		0.000	0.00	0.00	2.22	0.002	4829.31	3755.41	7.11
05/25/11				1463	40.0		270	0.00		0.000	0.00	0.00	1.48	0.000	4829.31	3756.89	7.11
08/29/11				2278	42.0		280	3.00		0.000	0.01	26.73	13.86	0.002	4856.04	3770.75	7.11
11/23/11				2020	42.0		280	18.00		0.000	0.00	142.20	2.12	0.002	4998.24	3772.87	7.12
02/21/12				2127	33.0		325	0.00		0.000	0.00	0.00	2.59	0.003	4998.24	3775.46	7.12
05/22/12				2148	36.0		280	0.00				0.00	0.00	0.000	4998.24	3775.46	7.12
08/27/12				2308	36.0		285	2.00				18.38	0.00	0.000	5016.62	3775.46	7.12
11/29/12				2233	36.0		280	2.00				17.47	0.00	0.000	5034.08	3775.46	7.12
02/26/13				2115	34.0		285	2.00		0.000	0.01	16.84	30.72	0.002	5050.92	3806.18	7.12
05/16/13				939	39.0		270	0.00		0.000	0.01	0.00	7.31	0.001	5050.92	3813.49	7.12
08/20/13				1112	46.0		255	2.00		0.000	0.07	7.92	75.11	0.071	5058.84	3888.61	7.19
11/18/13				1073	40.0		270	0.00		0.000	0.00	0.00	1.09	0.001	5058.84	3889.69	7.19
02/25/14				1178	40.0		270	0.00		0.000	0.00	0.00	1.19	0.001	5058.84	3890.89	7.19
04/29/14				749	42.0		170	0.00		0.000	0.00	0.00	0.48	0.000	5058.84	3891.36	7.20
07/24/14				1023	41.0		265	0.00		0.000	0.00	0.00	1.02	0.010	5058.84	3892.38	7.21
10/16/14				1001	65.0		200	1.00		0.000	0.00	2.80	0.75	0.001	5061.64	3893.13	7.21
03/24/15				1894	70.0		190	0.00		0.000	0.00	0.00	1.35	0.013	5061.64	3894.48	7.22
06/22/15				1071	72.0		180	0.00		0.000	0.00	0.00	0.72	0.001	5061.64	3895.20	7.22
08/25/15				710	69.0		190	0.00		0.000	0.00	0.00	0.51	0.001	5061.64	3895.70	7.22
Total	0			54816								5062	3896	7			

Calculation for Total VOC (laboratory analyses):

SVE Operational Time in hours x (60 min/1 hour) x Process Air Flow Rate (ft³/min) x (1 liter/0.03531 ft³) x concentration in mg/L x (2.205 lbs/1E6 mg) = Total Emissions in lbs.

Calculation for Total VOC (PID):

SVE Operational Time (hrs) x [(P x V x C)/(R x T)] (lb/day) x day/24 hrs = Total Emissions in lbs.

Where: P = 1742.28 lbs/ft² = Discharge pressure, based on atmospheric pressure of 12.12 lbs/ft² at 5,300 feet above mean sea level

AS and SVE Remediation System Performance

Event ID: 1989

Reporting Period: Qtr 3

Year: 2019

Date	AS Unit Performance			SVE Unit Performance						Lab Analyses		Mass Removal				
	Operation Time During Period (hours)	Positive Pressure at Unit (psig)	Total Discharge Flow Rate (scfm)	Operation Time During Period (hours)	Induced Vacuum at Unit (in H ₂ O)	Effluent Temperature (°F)	System Air Flow Rate (scfm)	VOCs (PID) Pre-treatment (ppmv)	VOCs (PID) Post-treatment (ppmv)	Benzene (mg/L)	TVPH (mg/L)	VOC Emissions for Period PID (lbs)	VOC Emissions for Period TVPH (lbs)	Benzene Emissions for Period (lbs)	Total VOC Emissions PID (lbs)	Total VOC Emissions TVPH (lbs)

V = System air flow rate in ft³/min x 1440 min/day = ft³/day

C = Fractional quantity of gas = VOC by PID/1E6

R = 16.27 lbf-ft/lb-mole-°R = Specific gas constant of gasoline = Universal gas constant (1545.33 lbf-ft/lb-mole-°R) / molecular weight of gasoline (95 lb/lb-mole)

T = Discharge temperature °F + 460 = °R

Note: Either PID or laboratory analyses can be used to calculate vapor mass removal.

Conversion of vapor units:

1 mg/L = 1E6 µg/m³

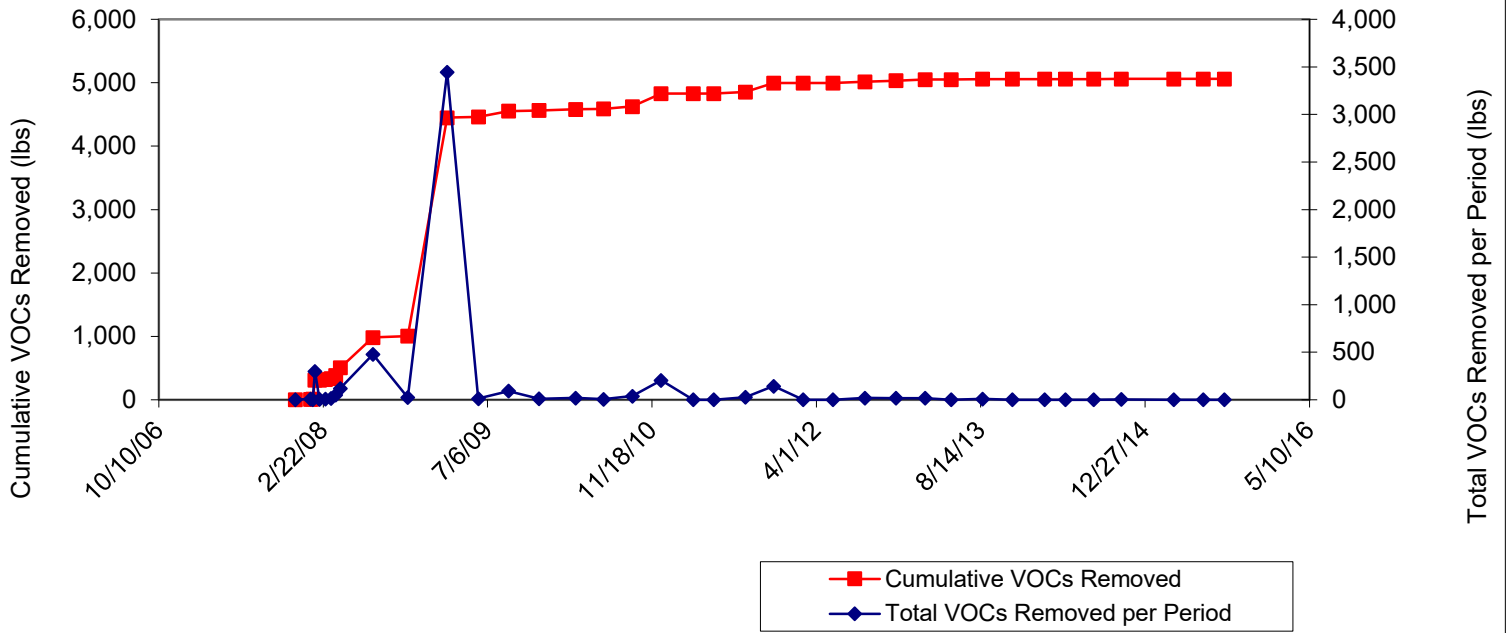
AS/SVE Remediation System Performance and Mass Removal Graphs

Event ID: 1989

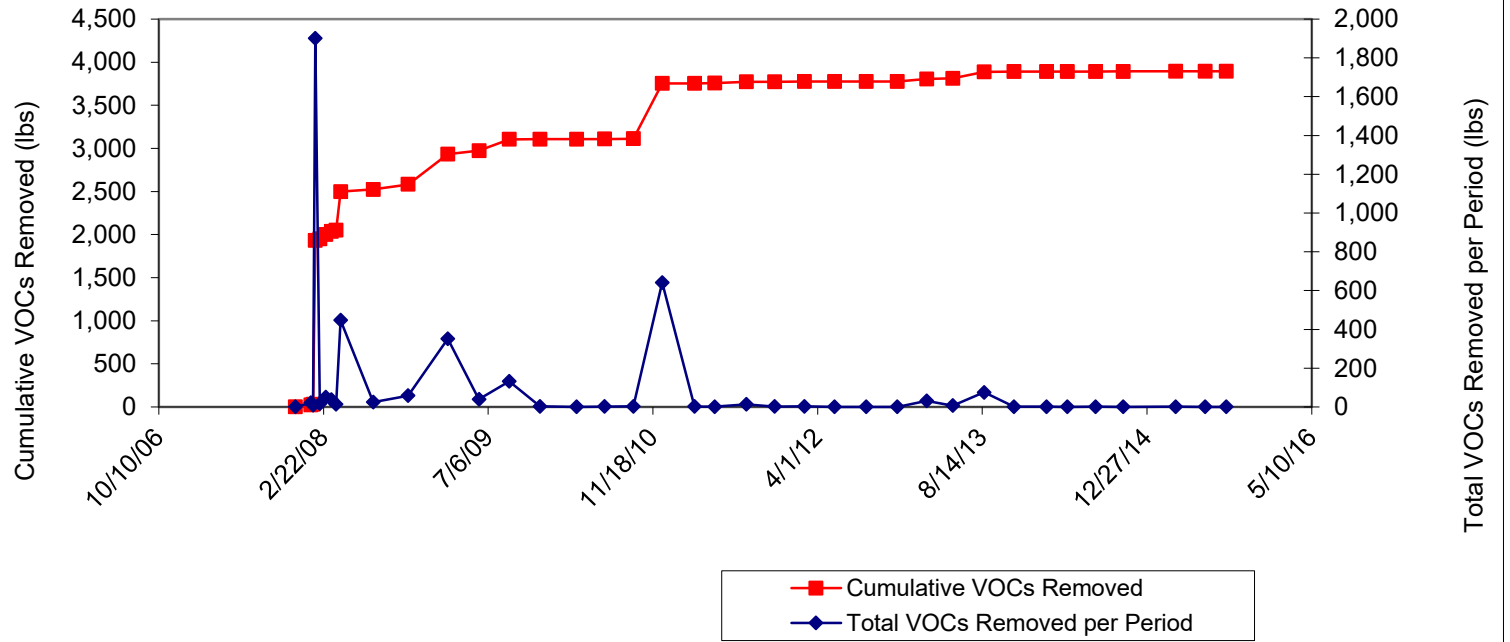
Reporting Period: Qtr 3

Year: 2019

VOCs Removed - Field PID



VOCs Removed - Lab Analysis



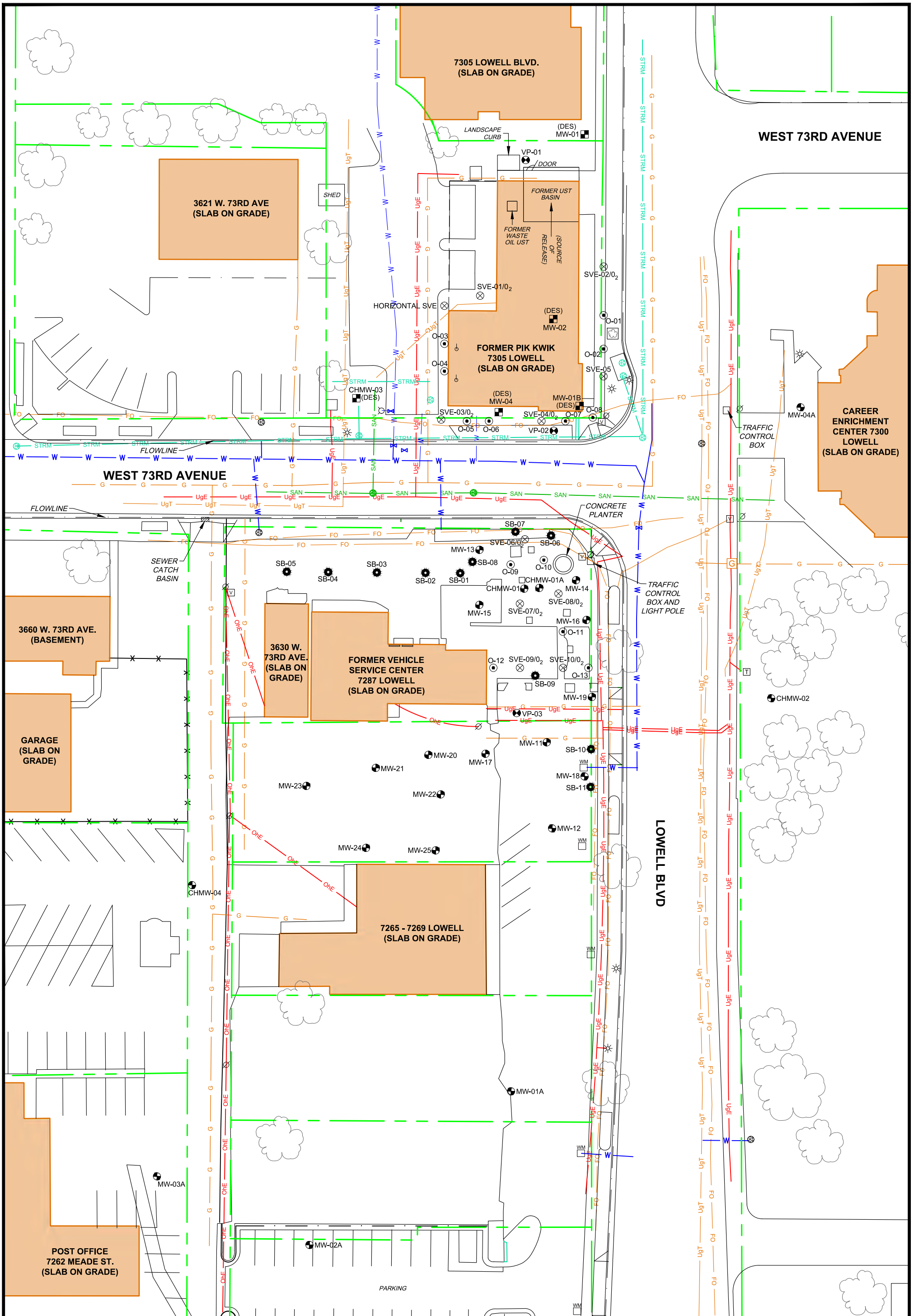
Summary of Chemical Oxidation and Bio-Enhancement

Event ID: 1989

Reporting Period: Qtr 3

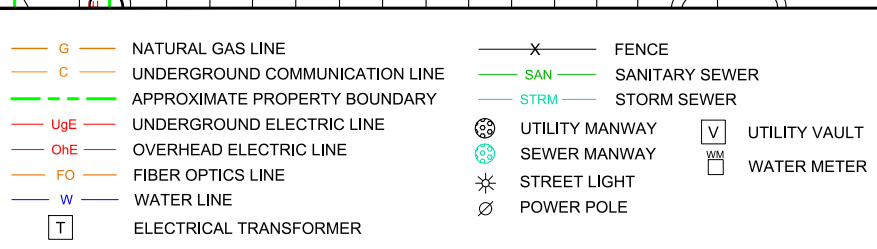
Year: 2019

Date	Oxygen or Ozone Gas Addition					Liquid or Slurry Based Addition						
	Injection Method	Total Volume of O ₂ Injected (ft ³)	Total Volume of O ₃ Injected (ft ³)	Injection Pressure (psi)	Number of Injection Points	General Chemical Descriptions and Concentrations	Means of Application	Primary Chemical by Weight (pounds)	Secondary /Catalyst Chemical by Weight (pounds)	Total Injectate Volume (Gallons)	Number of Injection Points	Injection Depth Range (ft)
07/14/08	bubbler/air stone	854			13							
07/22/08	bubbler/air stone	669			13							
09/02/08	bubbler/air stone	6685			15							
09/17/08	bubbler/air stone	1869			15							
11/05/08	bubbler/air stone	4460			12							
11/11/08	bubbler/air stone	334			9							
02/06/09	bubbler/air stone	2136			10							
02/09/09	bubbler/air stone	256			9							
03/05/09	bubbler/air stone	2508			9							
03/09/09	bubbler/air stone	220			9							
03/24/09	bubbler/air stone	900			8							
04/28/09	bubbler/air stone	1433			9							
06/08/09	bubbler/air stone	2179			9							
09/08/09	bubbler/air stone	489			9							
12/10/09	bubbler/air stone	2760			9							
03/31/10	bubbler/air stone	6717			10							
06/24/10	bubbler/air stone	4712			10							
09/20/10	bubbler/air stone	7429			9							
10/01/10	bubbler/air stone	336			7							
03/24/11	bubbler/air stone	4186			9							
04/26/11	bubbler/air stone	982			9							
05/25/11	bubbler/air stone	1113			8							
08/29/11	bubbler/air stone	247			9							
10/03/11	bubbler/air stone	1976			8							
11/23/11	bubbler/air stone	4518			9							
12/29/11	bubbler/air stone	1291			8							
01/24/12	bubbler/air stone	383			8							
02/08/12	bubbler/air stone	420			8							
02/21/12	bubbler/air stone	906			9							
03/22/12	bubbler/air stone	1991			9							
04/16/12	bubbler/air stone	1932			7							
05/22/12	bubbler/air stone	1757			7							
06/20/12	bubbler/air stone	981			8							
07/25/12	bubbler/air stone	748			8							
08/27/12	bubbler/air stone	1024			8							
11/29/12	bubbler/air stone	1381			8							
06/10/13						12% Solution of COGAC	injection into ground	2400		2400	31	9-17
06/10/13	bubbler/air stone	2238			9							
07/12/13	bubbler/air stone	1617			9							
09/25/13	bubbler/air stone	568			9							
10/29/13	bubbler/air stone	346			9							
11/18/13	bubbler/air stone	0			9							
12/27/13	bubbler/air stone	0			9							
01/20/14	bubbler/air stone	226			9							
02/25/14	bubbler/air stone	256			10							
04/29/14	bubbler/air stone	299			9							
06/24/16						10% Solution of PersulfOx	injection into ground	1708		1928	10	17-21
07/22/16						10% Solution of PersulfOx	injection into ground	1708		1928	10	17-21
07/12/17						Area 5: 15% Solution of PersulfOx	injection into ground	2377		1733	6	14.5-25
07/12/17						Area 5: 30% Slurry of ORC-A	injection into ground	720		231	7	14.5-25
07/14/17						Area 3: 15% Solution of PersulfOx	injection into ground	7548		5503	22	15-25
07/14/17						Area 3: 30% Slurry of ORC-A	injection into ground	600		198	6	15-25
07/19/17						Area 1: 6% Solution of RegenOx Part-A and Part-B	injection into ground	464		739	8	8-15.5
07/19/17						Area 1: 30% Slurry of ORC-A	injection into ground	375		124	6	8-15
07/20/17						Area 2: 6% Solution of RegenOx Part-A and Part-B	injection into ground	919		1450	12	15-25
07/20/17						Area 2: 30% Slurry of ORC-A	injection into ground	300		99	3	15-25
07/20/17						Area 4: 6% Solution of RegenOx Part-A and Part-B	injection into ground	946		1526	13	15-25
07/20/17						Area 4: 30% Slurry of ORC-A	injection into ground	1000		330	10	15-25
Totals		78332	0					21065	0	18189		



LEGEND

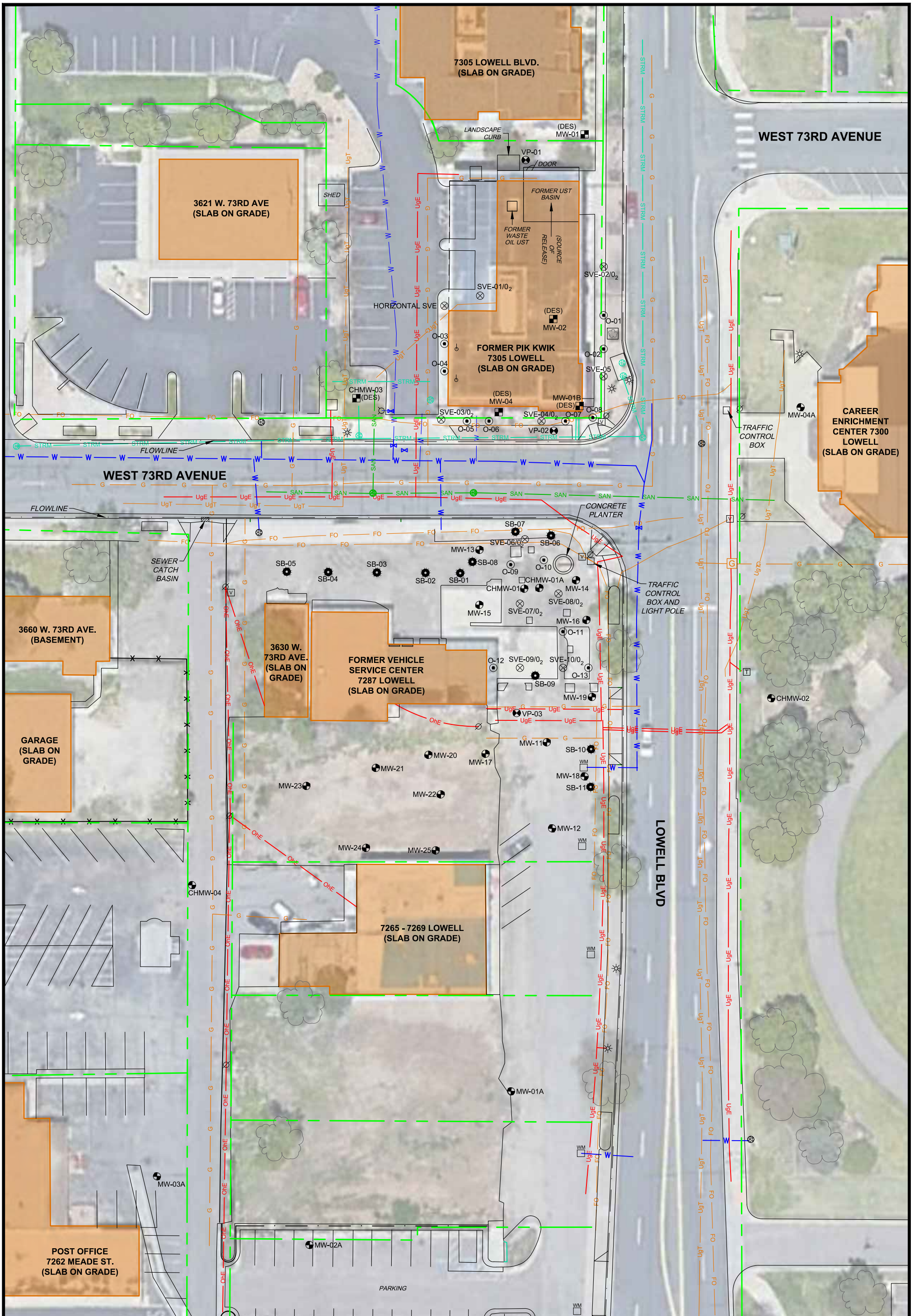
● MW-01A	MONITORING WELL	— G —	NATURAL GAS LINE	— X —	FENCE
○ O-1	OXYGEN DIFFUSION WELL	— C —	UNDERGROUND COMMUNICATION LINE	— SAN —	SANITARY SEWER
● SB-1	SOIL BORE	— G —	APPROXIMATE PROPERTY BOUNDARY	— STRM —	STORM SEWER
⊗ SVE-1/0 ₂	SOIL VAPOR EXTRACTION WELL	— U _g E —	UNDERGROUND ELECTRIC LINE	— U _g T —	UTILITY MANWAY
● VP-1	SOIL VAPOR WELL	— O _H E —	OVERHEAD ELECTRIC LINE	— V —	UTILITY VAULT
⊕	PASSIVE AIR INTAKE VENT (2" DIAMETER)	— FO —	FIBER OPTICS LINE	— WM —	WATER METER
■ (DES)	DESTROYED MONITORING WELL	— W —	WATER LINE	☼	STREET LIGHT
■ MW-02		— T —	ELECTRICAL TRANSFORMER	⊙	POWER POLE



POE LOCATION FIGURE

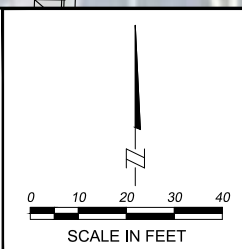
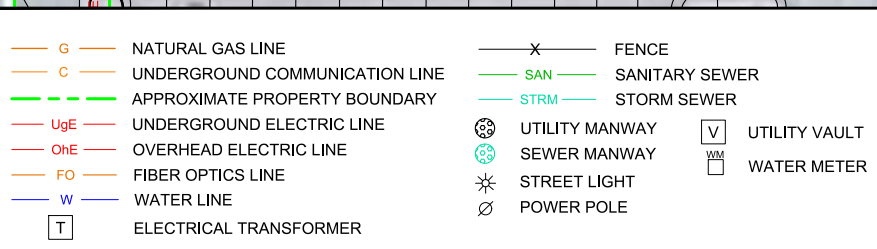
FORMER PIK KWIK
OPS EVENT ID 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

PROJECT: 1-996-9541ae	DRAFT: CLB
DATE: 4/16/2019	REVIEW: JCD



LEGEND

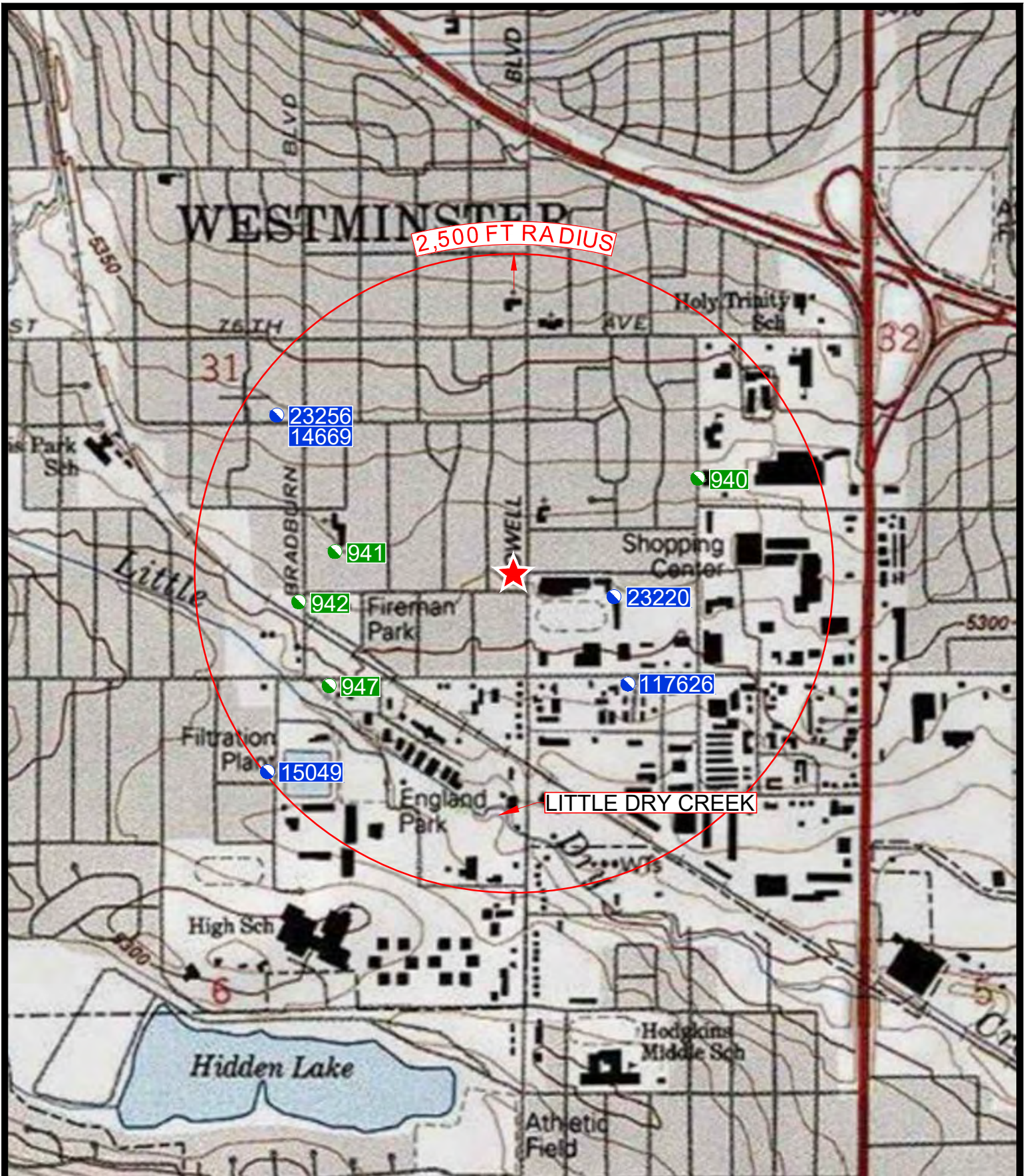
● MW-01A	MONITORING WELL	— G —	NATURAL GAS LINE	— X —	FENCE
○ O-1	OXYGEN DIFFUSION WELL	— C —	UNDERGROUND COMMUNICATION LINE	— SAN —	SANITARY SEWER
● SB-1	SOIL BORE	— --- —	APPROXIMATE PROPERTY BOUNDARY	— STRM —	STORM SEWER
⊗ SVE-1/0 ₂	SOIL VAPOR EXTRACTION WELL	— UgE —	UNDERGROUND ELECTRIC LINE	⊗	UTILITY MANWAY
● VP-1	SOIL VAPOR WELL	— OHE —	OVERHEAD ELECTRIC LINE	⊕	UTILITY VAULT
⊕	PASSIVE AIR INTAKE VENT (2" DIAMETER)	— FO —	FIBER OPTICS LINE	⊕	WATER METER
⊕ (DES)	DESTROYED MONITORING WELL	— W —	WATER LINE	⊕	
⊕ MW-02		— T —	ELECTRICAL TRANSFORMER		



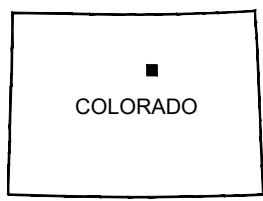
POE LOCATION FIGURE




FORMER PIK KWIK
OPS EVENT ID 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

PROJECT: 1-996-9541ae	DRAFT: CLB
DATE: 4/16/2019	REVIEW: JCD



LEGEND



-  SITE LOCATION
-  DOMESTIC WATER WELL
-  MUNICIPAL WELLS

NUMERALS WITH WELL SYMBOLS DENOTE ASSOCIATED PERMIT NUMBER



NORTH



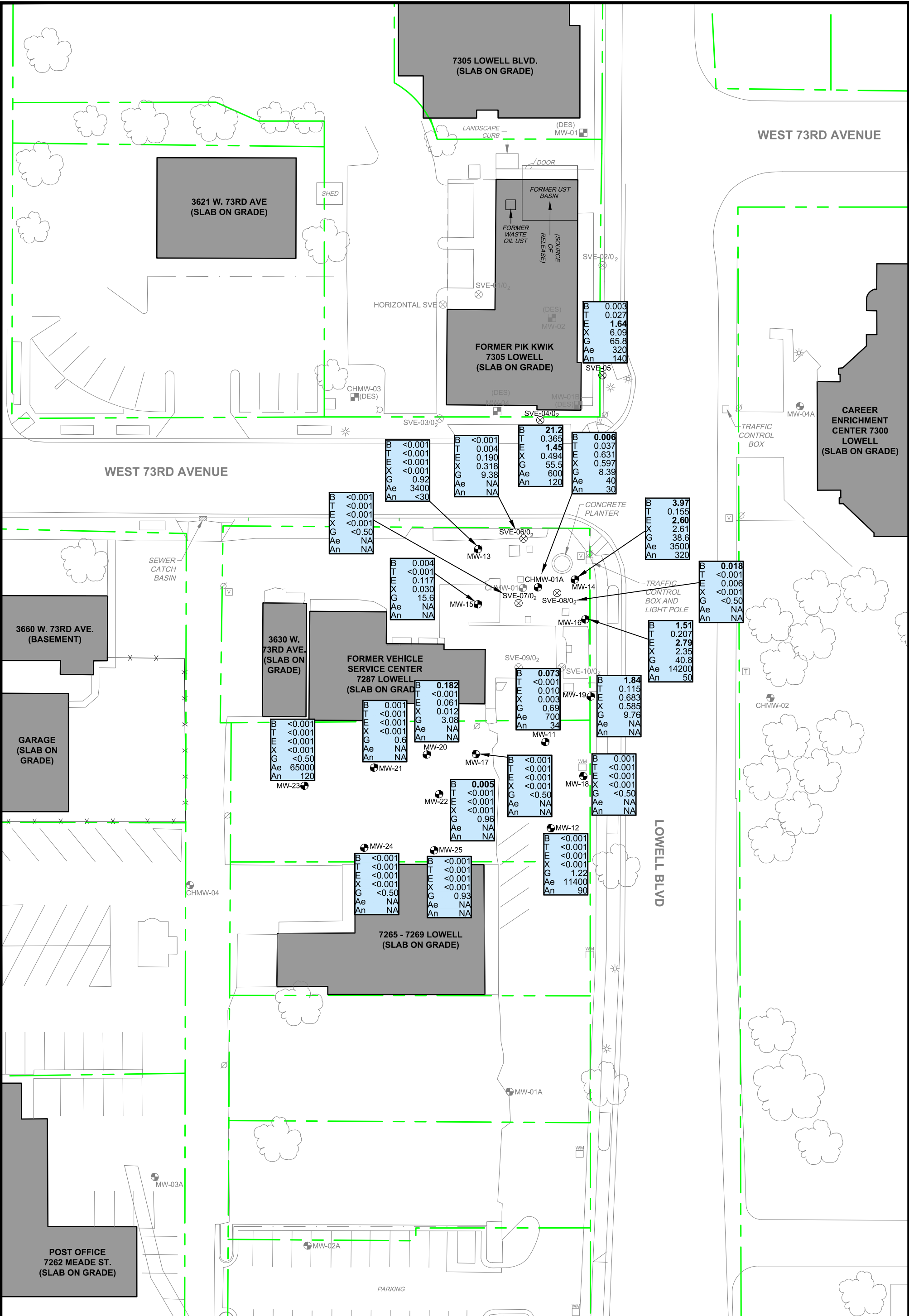
WATER WELL & SURFACE WATER FIGURE

FORMER PIK KWIK
 OPS EVENT ID 1989
 7305 LOWELL BOULEVARD
 WESTMINSTER, COLORADO

PROJECT:
1-996-9541aa
 DATE:
1/15/2016

DRAFT:
DRS
 REVIEW:



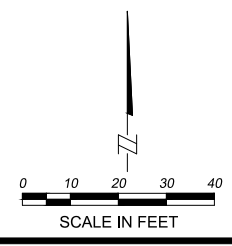


LEGEND

- MW-11 MONITORING WELL LOCATION
- SVE-04 SOIL VAPOR EXTRACTION WELL LOCATION
- (DES) DESTROYED MONITORING WELL
- MW-02 APPROXIMATE PROPERTY BOUNDARY
- NA NOT ANALYZED

NOTE: **BOLD** INDICATES CONCENTRATIONS AT OR EXCEEDING the RBSL.

B	BENZENE (mg/L)
T	TOLUENE (mg/L)
E	ETHYLBENZENE (mg/L)
X	XYLENES (mg/L)
G	TOTAL VOLATILE PETROLEUM HYDROCARBONS AS GASOLINE (mg/L)
HPC-Ae	HETEROTROPHIC PLATE COUNT - AEROBIC (cfu/mL)
HPC-An	HETEROTROPHIC PLATE COUNT - ANAEROBIC (cfu/mL)



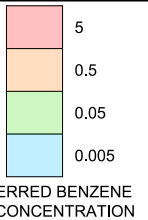
GROUNDWATER SAMPLE FIGURE
August 14, 2019
FORMER PIK KWIK
OPS EVENT ID 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

PROJECT: 1-996-9541ae	DRAFT: CLB
DATE: 9/20/2019	REVIEW: RO



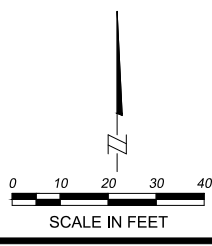
LEGEND

- MW-14 MONITORING WELL LOCATION
- SVE-05 SOIL VAPOR EXTRACTION WELL LOCATION
- (DES) DESTROYED MONITORING WELL
- INFERRED BENZENE ISOCONCENTRATION CONTOUR (mg/L)
- (<0.001) BENZENE CONCENTRATION (mg/L)



THE BENZENE CONCENTRATION FROM WELL SVE-07 WAS NOT USED TO CREATE THE INFERRED BENZENE ISOCONCENTRATIONS CONTOURS

NOTE: **BOLD VALUES** INDICATE CONCENTRATION EXCEEDS THE RISK BASED SCREENING LEVEL



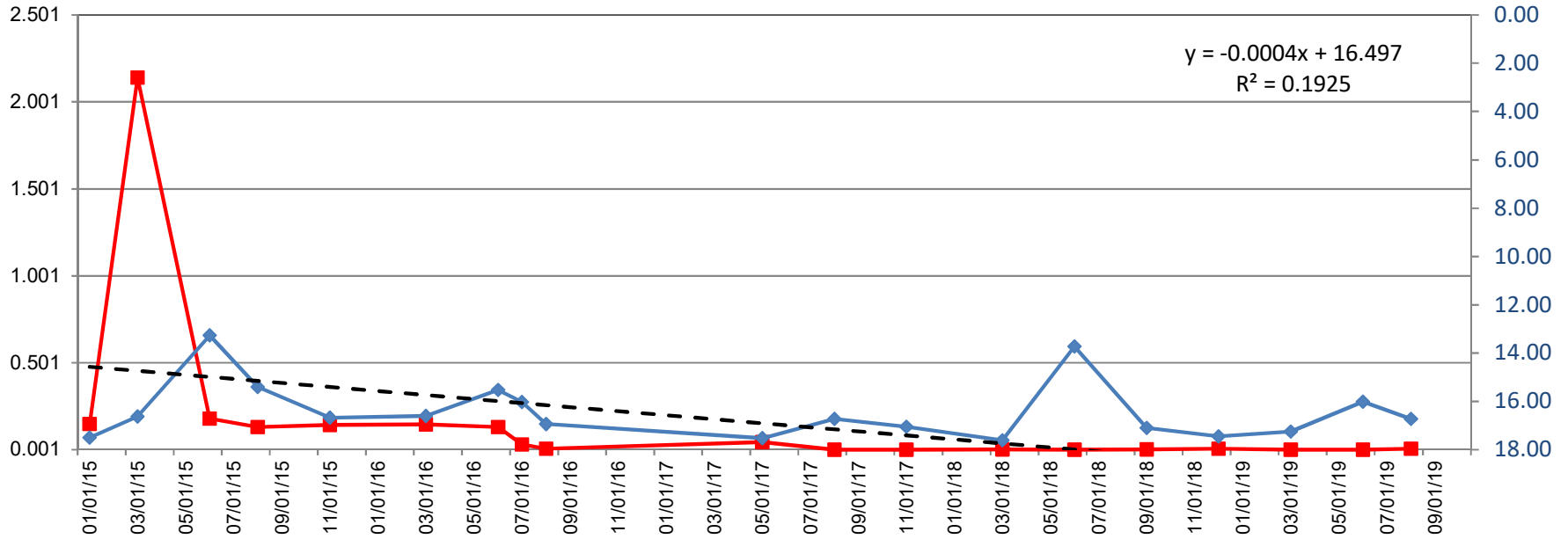
INFERRED BENZENE ISOCONCENTRATION FIGURE
August 14, 2019
FORMER PIK KWIK
OPS EVENT ID 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

PROJECT: 1-996-9541aa	DRAFT: CLB
DATE: 10/4/2019	REVIEW: RO

**Former Pik Kwik - OPS Event ID 1989
Benzene Trend - CHMW-01A**

- CHMW-01A (mg/L)
- Groundwater Depth (ft)
- Linear (CHMW-01A (mg/L))

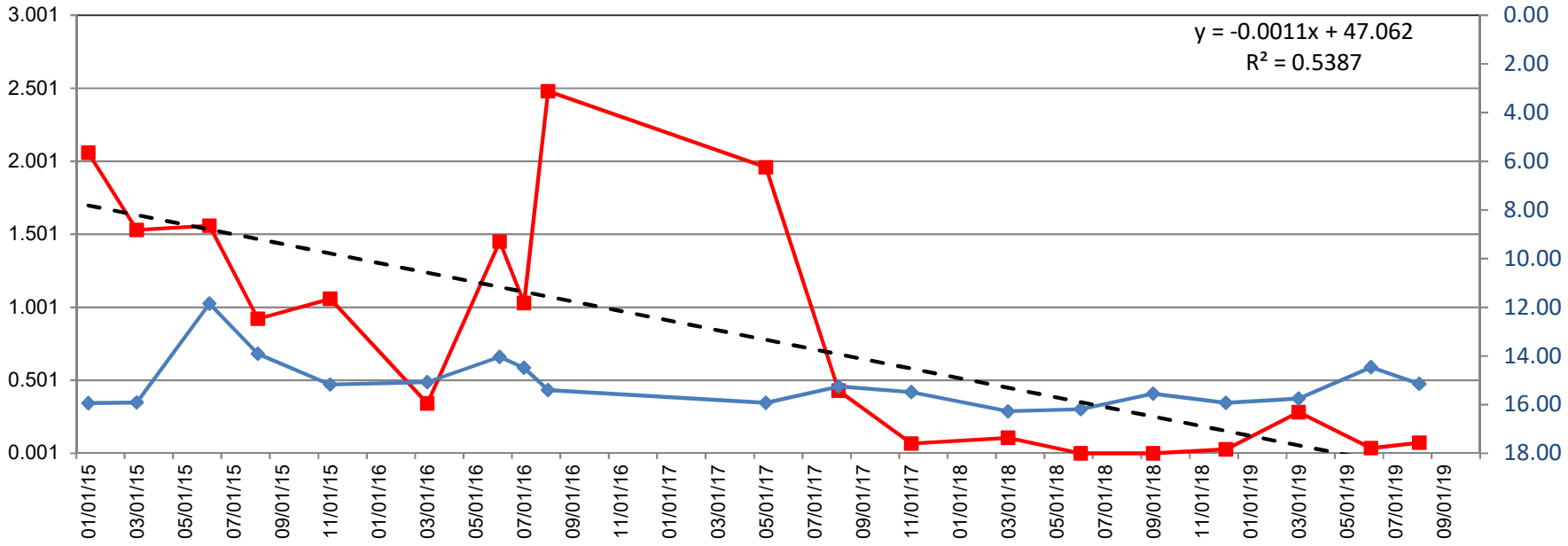
$y = -0.0004x + 16.497$
 $R^2 = 0.1925$



**Former Pik Kwik - OPS Event ID 1989
Benzene Trend - MW-11**

■ MW-11 (mg/L) ◆ Groundwater Depth (ft)
- - - Linear (MW-11 (mg/L))

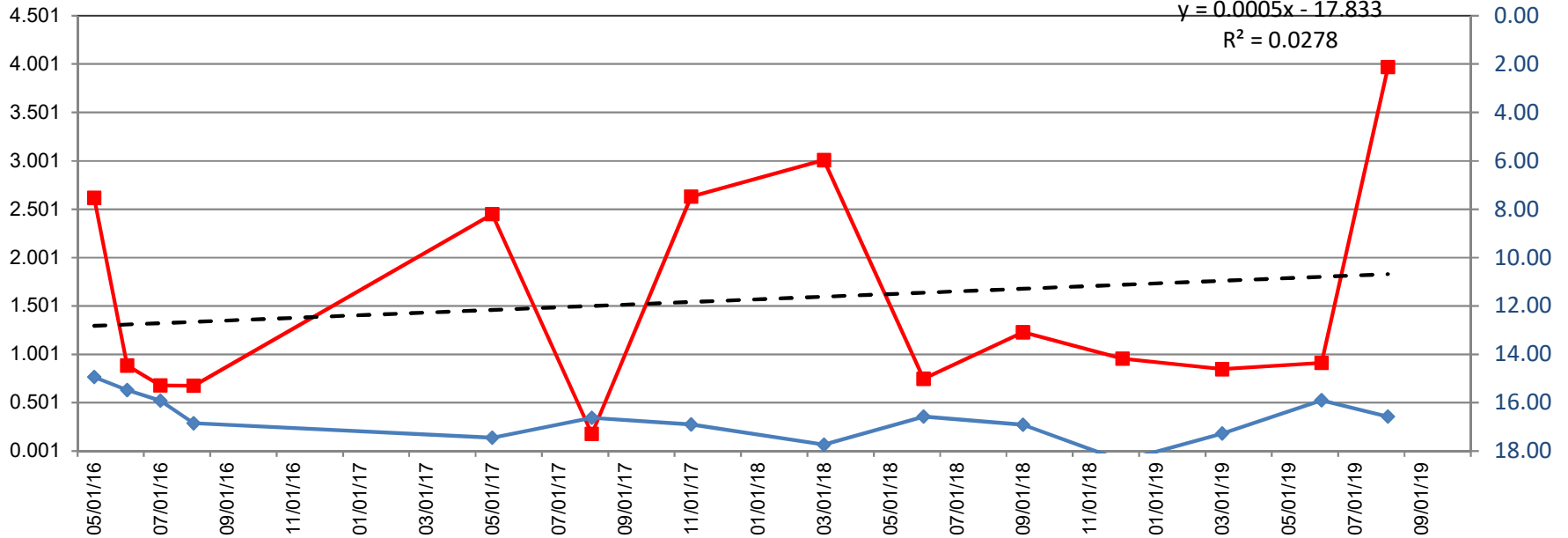
$y = -0.0011x + 47.062$
 $R^2 = 0.5387$



**Former Pik Kwik - OPS Event ID 1989
Benzene Trend - MW-14**

■ MW-14 (mg/L) ◆ Groundwater Depth (ft)
- - - Linear (MW-14 (mg/L))

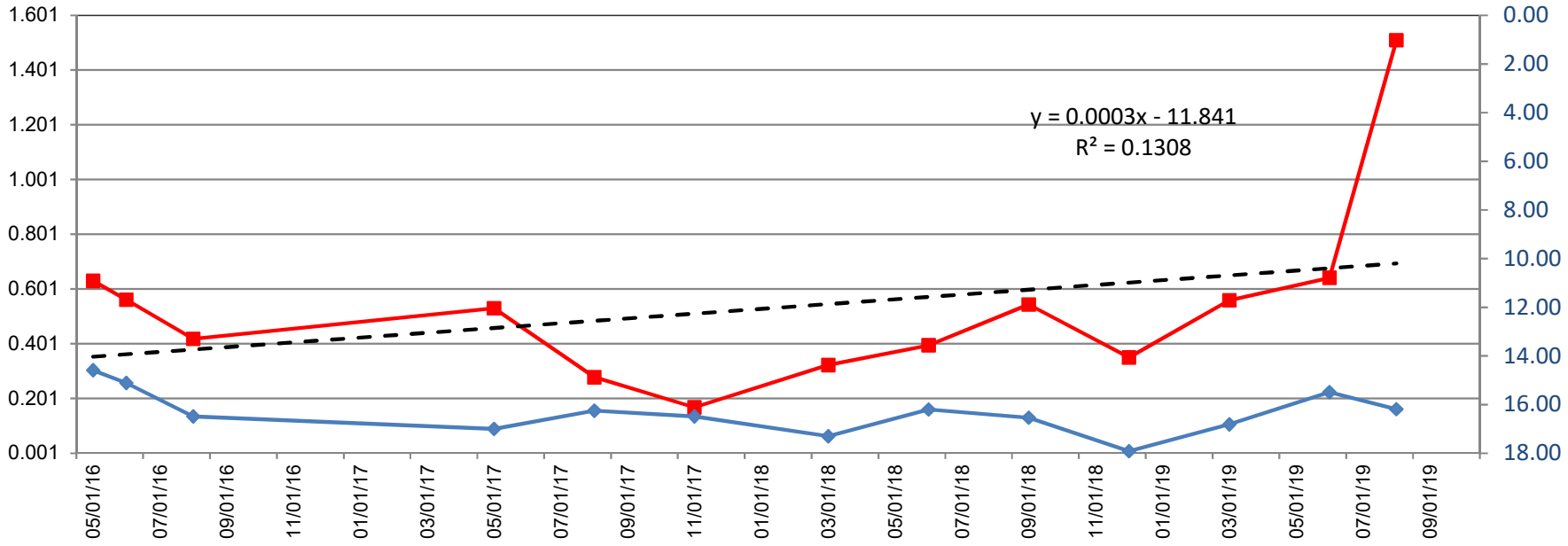
$y = 0.0005x - 17.833$
 $R^2 = 0.0278$



**Former Pik Kwik - OPS Event ID 1989
Benzene Trend - MW-16**

- MW-16 (mg/L)
- ◆ Groundwater Depth (ft)
- - - Linear (MW-16 (mg/L))

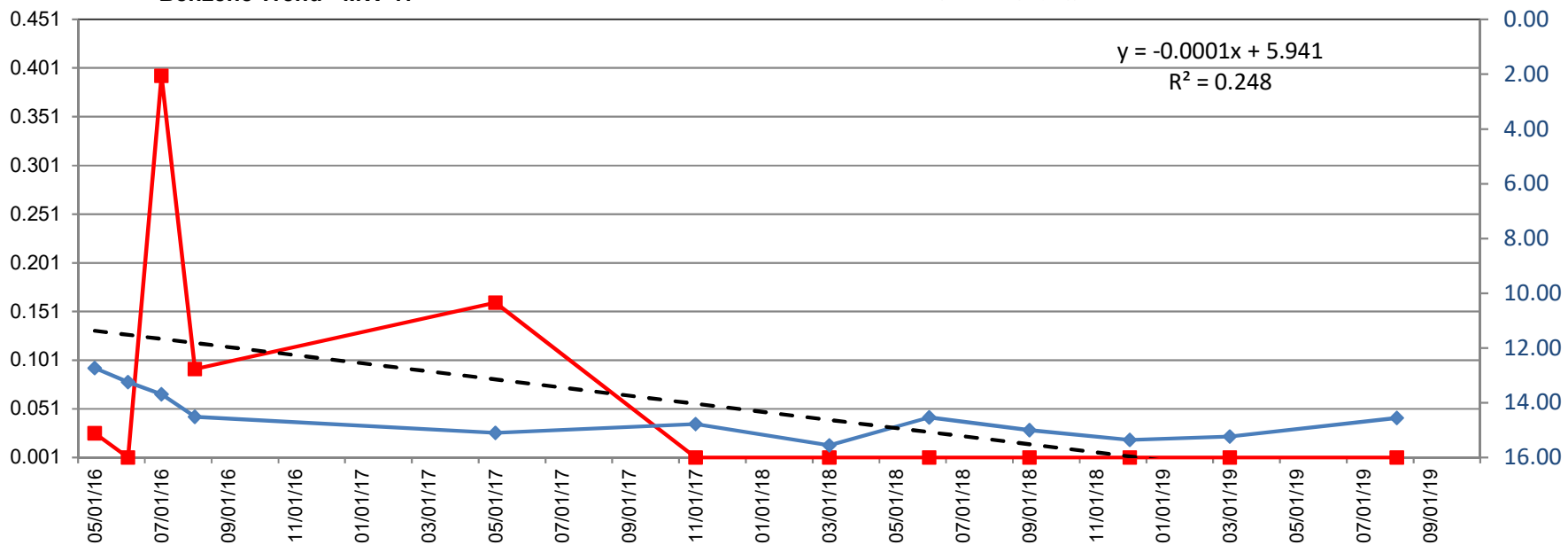
$y = 0.0003x - 11.841$
 $R^2 = 0.1308$



**Former Pik Kwik - OPS Event ID 1989
Benzene Trend - MW-17**

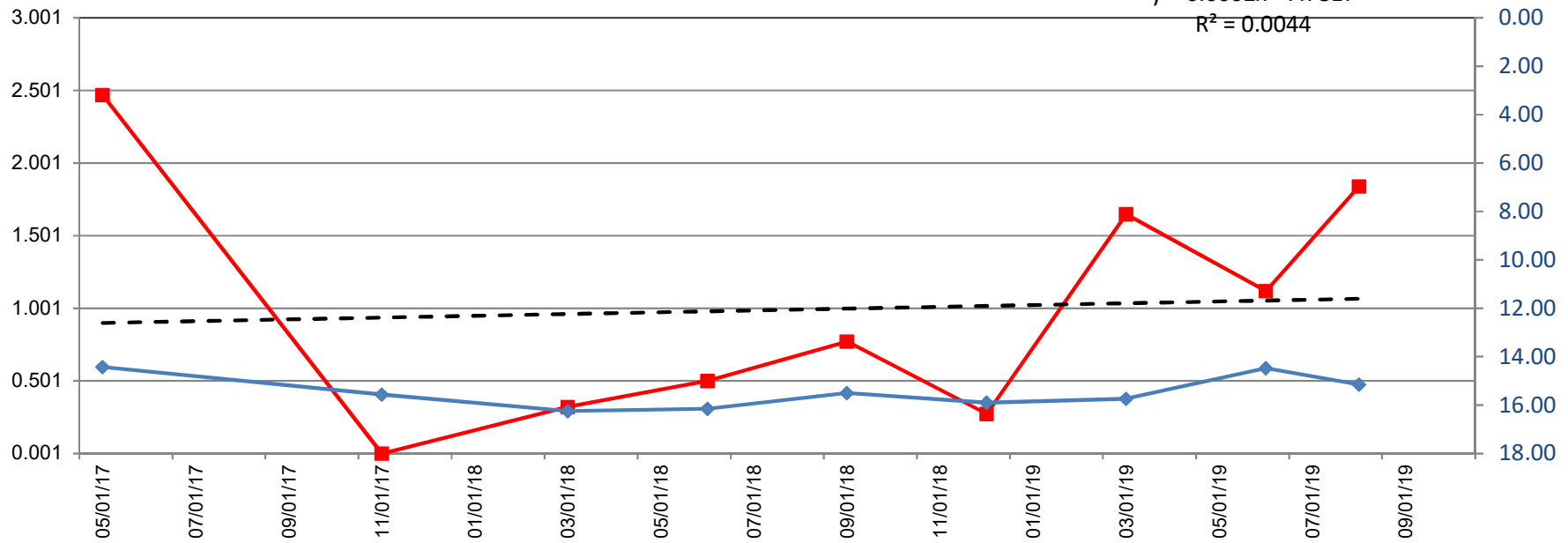
■ MW-17 (mg/L) ◆ Groundwater Depth (ft)
- - - Linear (MW-17 (mg/L))

$y = -0.0001x + 5.941$
 $R^2 = 0.248$



**Former Pik Kwik - OPS Event ID 1989
Benzene Trend - MW-19**

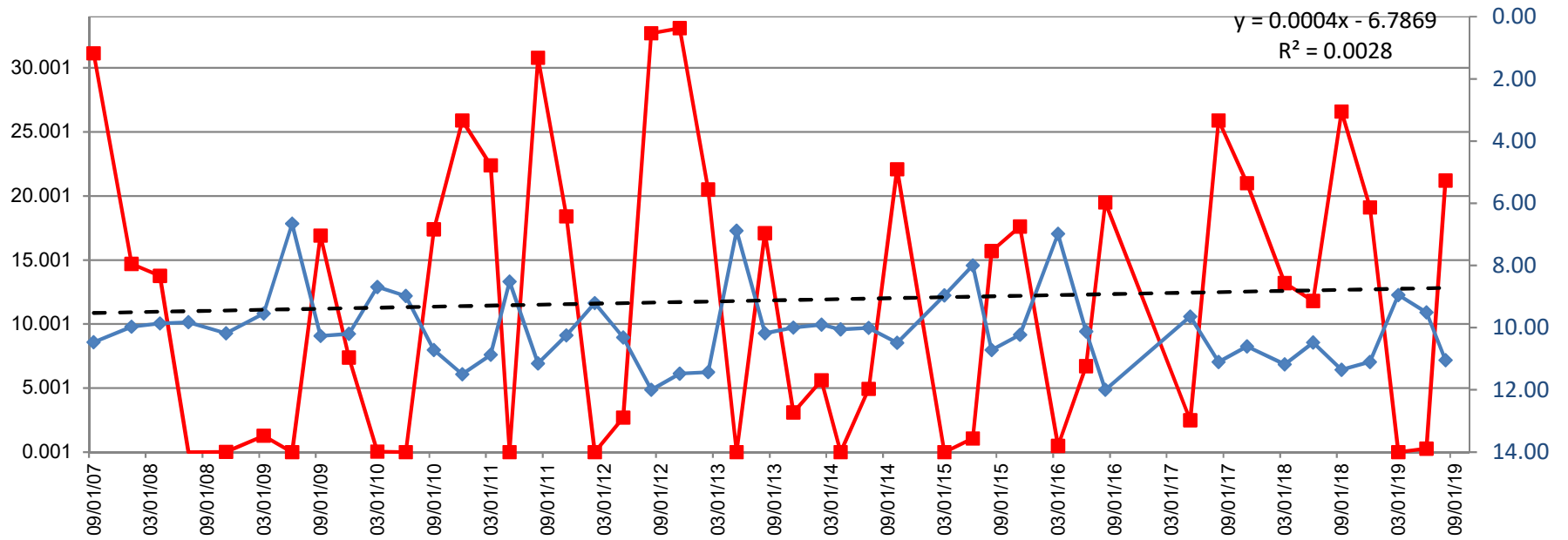
■ MW-19 (mg/L) ◆ Groundwater Depth (ft)
- - - Linear (MW-19 (mg/L)) $y = 0.0002x - 7.7817$
 $R^2 = 0.0044$

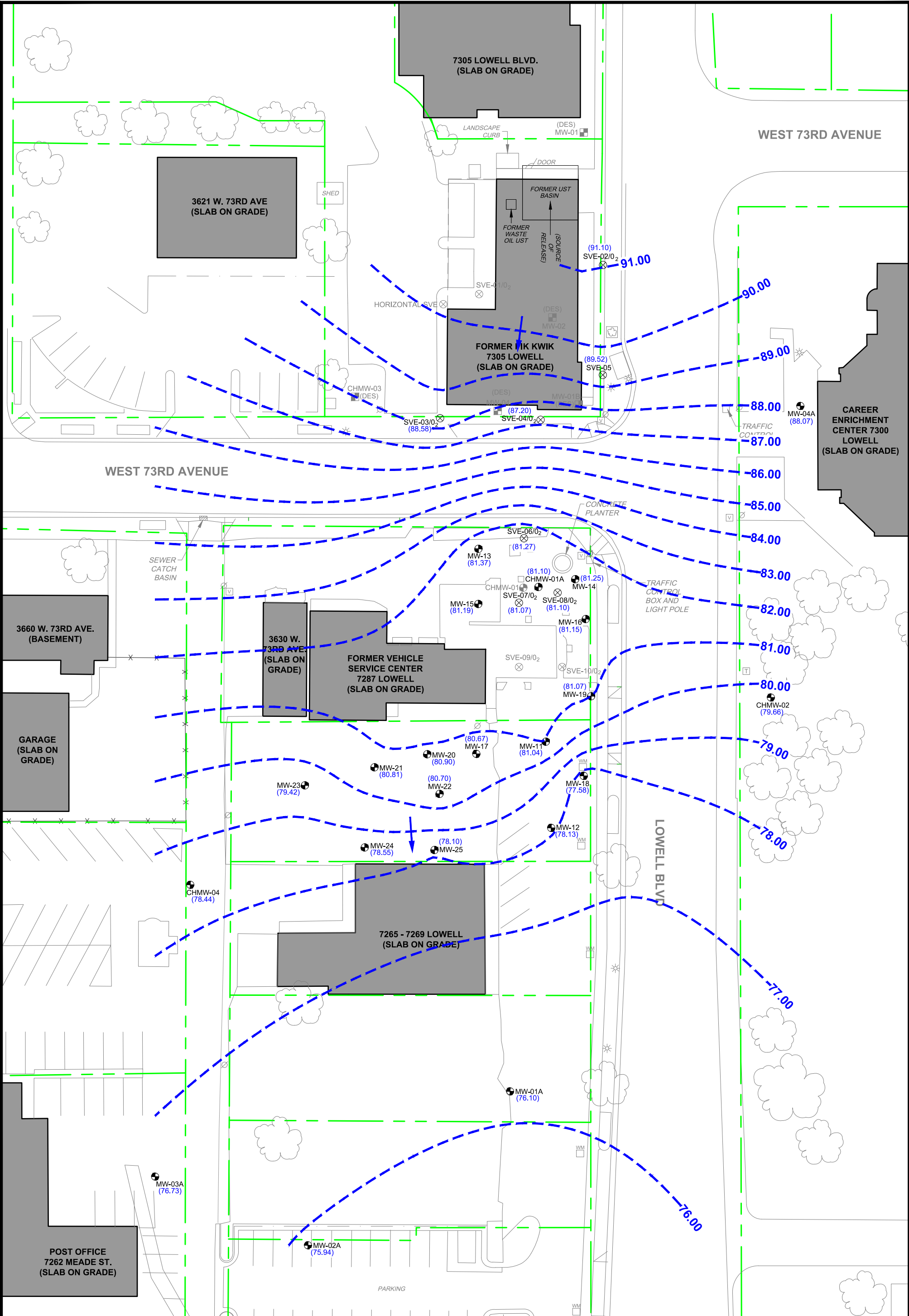


**Former Pik Kwik - OPS Event ID 1989
Benzene Trend - SVE-04**

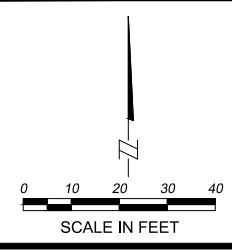
■ SVE-04 (mg/L) ◆ Groundwater Depth (ft)
- - - Linear (SVE-04 (mg/L))

$y = 0.0004x - 6.7869$
 $R^2 = 0.0028$



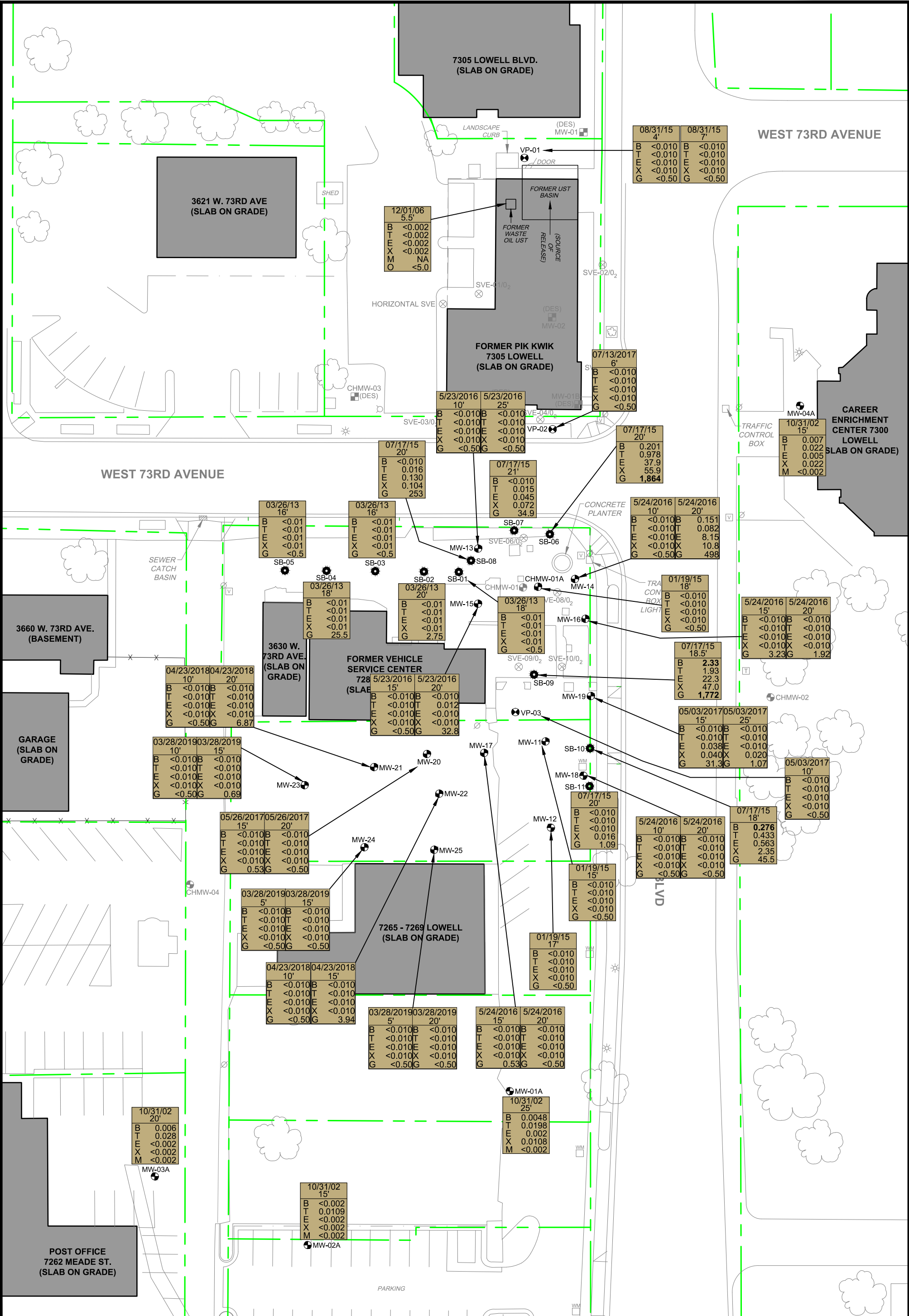


- LEGEND**
- MW-01A MONITORING WELL LOCATION
 - ⊗ SVE-1/0₂ SOIL VAPOR EXTRACTION WELL LOCATION
 - (DES) DESTROYED MONITORING WELL
 - (76.10) GROUNDWATER ELEVATION (FEET)
 - APPROXIMATE PROPERTY BOUNDARY
 - INFERRED GROUNDWATER CONTOUR
 - INFERRED FLOW DIRECTION



GROUNDWATER ELEVATION FIGURE
August 14, 2019
FORMER PIK KWIK
OPS EVENT ID 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

PROJECT: 1-996-9541ae	DRAFT: CLB
DATE: 9/20/2019	REVIEW: RO

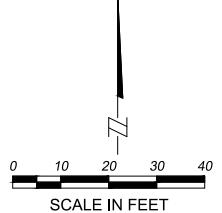


LEGEND

- MW-1 MONITORING WELL LOCATION
- VP-1 VAPOR POINT LOCATION
- SB-1 SOIL BORE LOCATION
- APPROXIMATE PROPERTY BOUNDARY

NOTE: **BOLD** VALUES INDICATE CONCENTRATION EXCEEDS THE RISK BASED SCREENING LEVEL

SAMPLE DATE	
SAMPLE DEPTH	
B	BENZENE (mg/kg)
T	TOLUENE (mg/kg)
E	ETHYLBENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
M	METHYL TERT-BUTYL ETHER (mg/kg)
G	TOTAL VOLATILE PETROLEUM HYDROCARBONS AS GASOLINE (mg/kg)
O	OIL & GREASE (mg/kg)



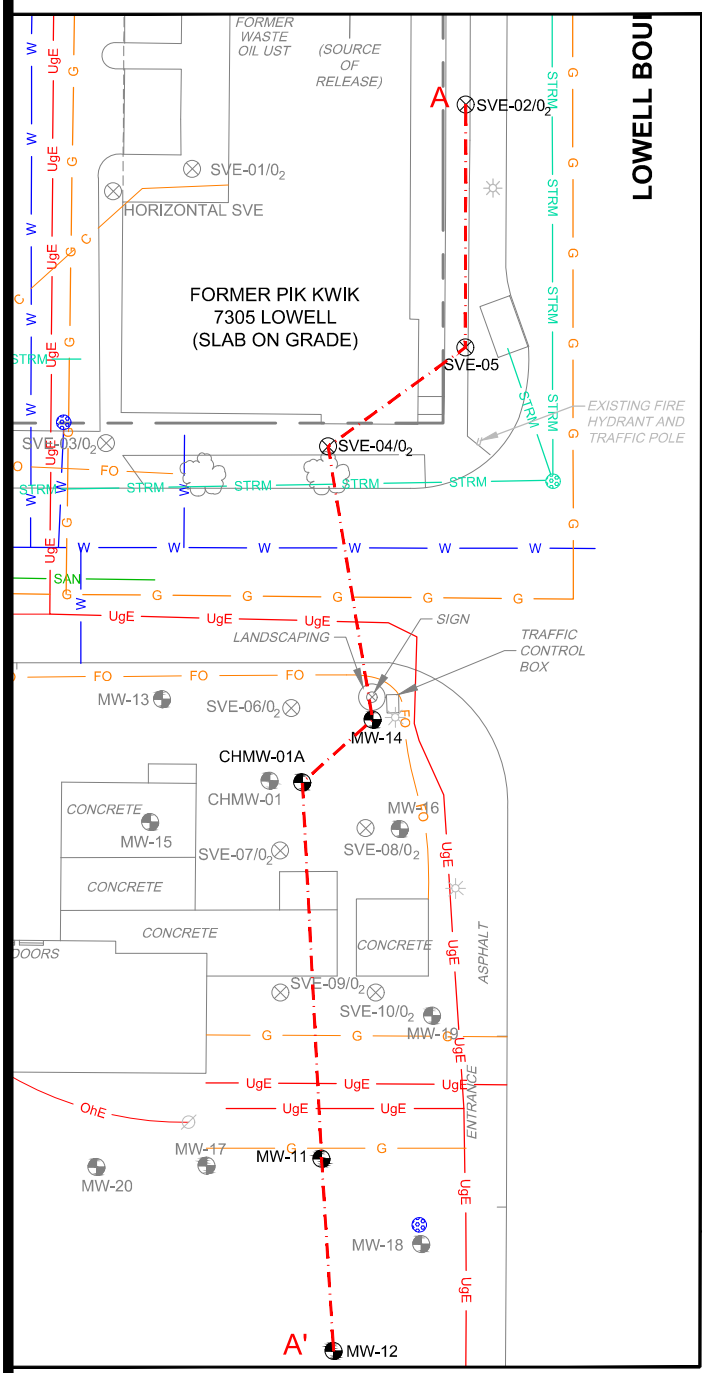
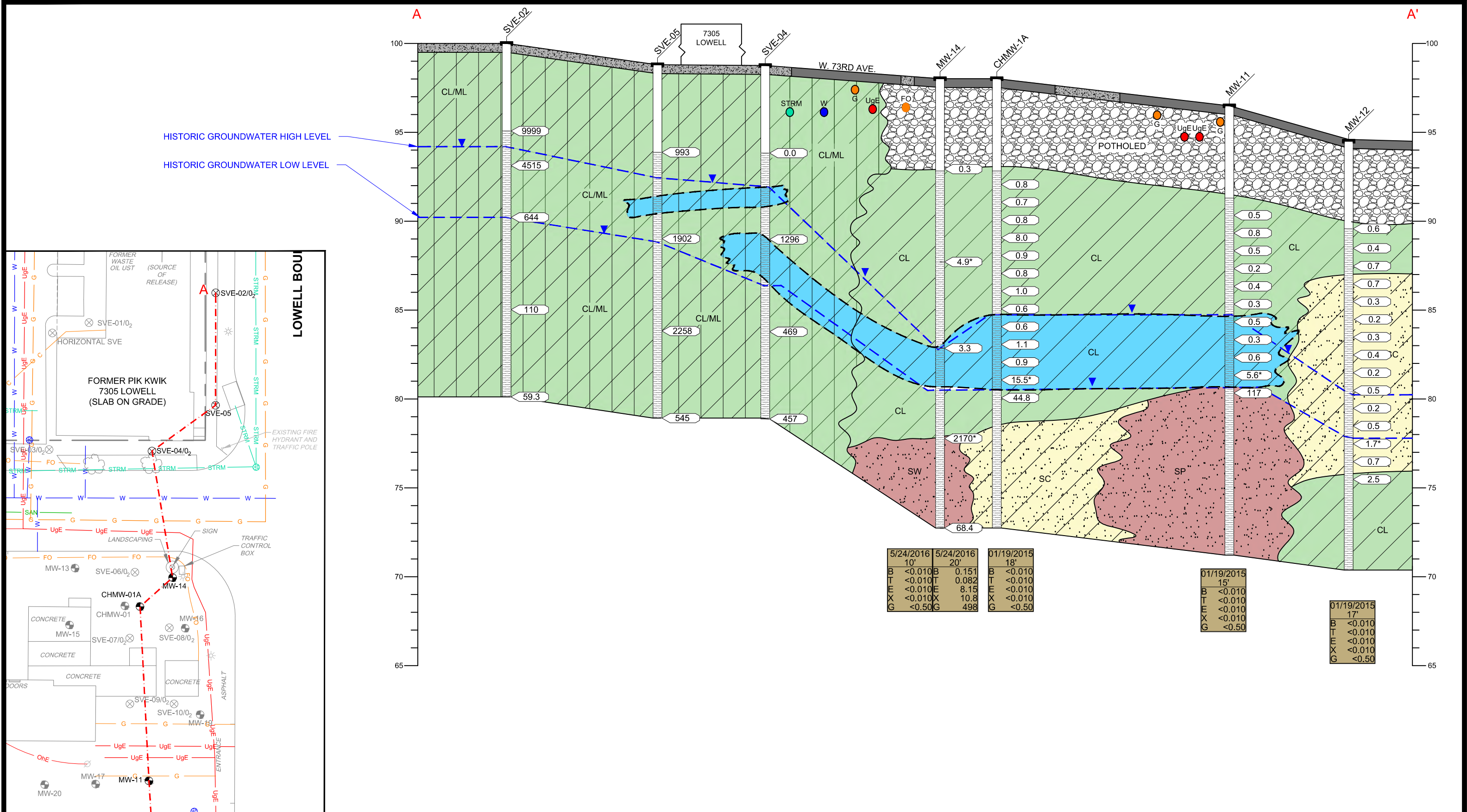
SOIL SAMPLE FIGURE

FORMER PIK KWIK
OPS EVENT ID 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

PROJECT: 1-996-9541ae
DATE: 7/8/2019

DRAFT: CLB
REVIEW: RO





LEGEND

APPROXIMATE GROUNDWATER HIGH/LOW TABLE ELEVATION
 0.0 PID READING (ppm)
 NOTE: * DENOTES SAMPLE RETAINED FOR ANALYSIS

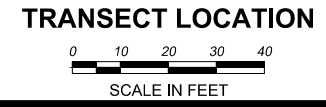
SAMPLE DATE	SAMPLE DEPTH	B	T	E	X	G
5/24/2016	10'	<0.010	<0.010	<0.010	<0.010	<0.50
5/24/2016	20'	0.151	0.082	8.15	10.8	498
01/19/2015	18'	<0.010	<0.010	<0.010	<0.010	<0.50
01/19/2015	15'	<0.010	<0.010	<0.010	<0.010	<0.50
01/19/2015	17'	<0.010	<0.010	<0.010	<0.010	<0.50

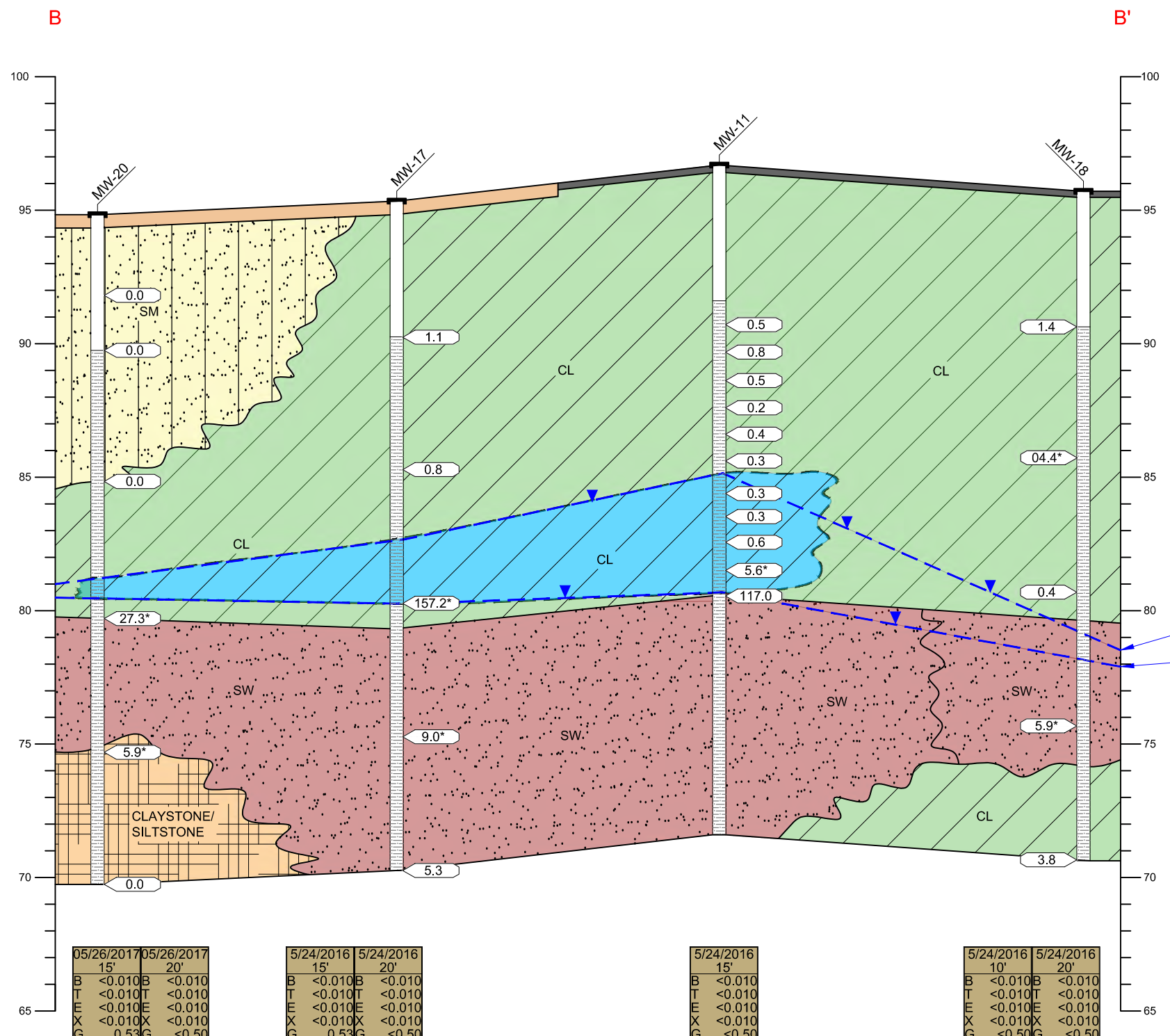
CLAY (CL)	CLAYEY SAND (SC)	ASPHALT	FIBER OPTIC LINE
GRAVELLY SAND (SW)	SILTY CLAY (CL/ML)	ESTIMATED ZONE OF BENZENE IMPACTS IN GROUNDWATER	UNDERGROUND ELECTRIC LINE
SAND (SP)	CONCRETE		GAS LINE
			WATER LINE
			STORM SEWER LINE

GEOLOGIC TRANSECT DIAGRAM (A-A')

FORMER PIK KWIK
OPS EVENT ID 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

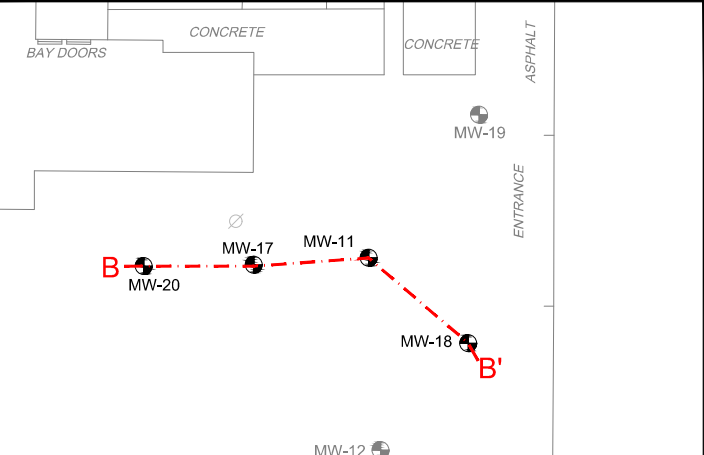
PROJECT: 1-996-9541aa	DRAFT: SJK
DATE: 2/15/2018	REVIEW:



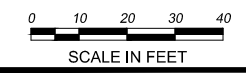


HISTORIC GROUNDWATER HIGH LEVEL
 HISTORIC GROUNDWATER LOW LEVEL

05/26/2017		05/26/2017		5/24/2016		5/24/2016		5/24/2016		5/24/2016	
15'	20'	15'	20'	15'	20'	15'	20'	10'	20'	10'	20'
B	<0.010	B	<0.010	B	<0.010	B	<0.010	B	<0.010	B	<0.010
T	<0.010	T	<0.010	T	<0.010	T	<0.010	T	<0.010	T	<0.010
E	<0.010	E	<0.010	E	<0.010	E	<0.010	E	<0.010	E	<0.010
X	<0.010	X	<0.010	X	<0.010	X	<0.010	X	<0.010	X	<0.010
G	0.53	G	<0.50	G	0.53	G	<0.50	G	<0.50	G	<0.50



TRANSECT LOCATION



LEGEND

- APPROXIMATE GROUNDWATER HIGH/LOW TABLE ELEVATION
- PID READING (ppm)

NOTES:
 * DENOTES SAMPLE RETAINED FOR ANALYSIS

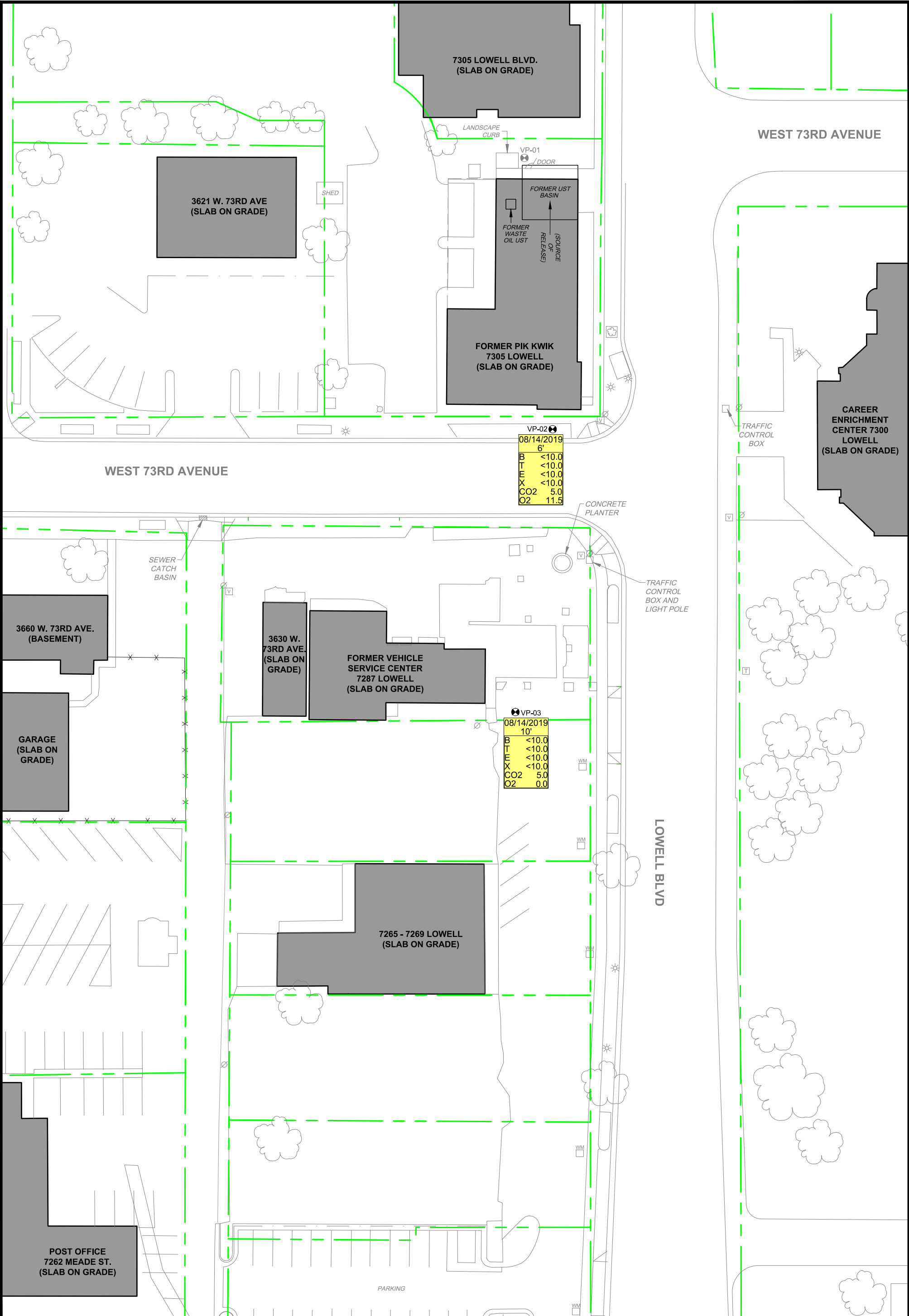
SAMPLE DATE	SAMPLE DEPTH
B	BENZENE (mg/kg)
T	TOLUENE (mg/kg)
E	ETHYLBENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
G	TOTAL VOLATILE PETROLEUM HYDROCARBONS AS GASOLINE (mg/kg)

- CLAY (CL)
- WELL-GRADED SAND (SW)
- ASPHALT
- SILTY SAND (SM)
- POORLY-GRADED SAND (SP)
- ESTIMATED ZONE OF BENZENE IMPACTS IN GROUNDWATER
- CLAYSTONE/SILTSTONE BEDROCK
- GROUND COVER

GEOLOGIC TRANSECT DIAGRAM (B-B')

FORMER PIK KWIK
 OPS EVENT ID 1989
 7305 LOWELL BOULEVARD
 WESTMINSTER, COLORADO

PROJECT: 1-996-9541aa	DRAFT: SJK	
DATE: 2/16/2018	REVIEW:	



VP-02
08/14/2019
6'

B	<10.0
T	<10.0
E	<10.0
X	<10.0
CO2	5.0
O2	11.5

VP-03
08/14/2019
10'

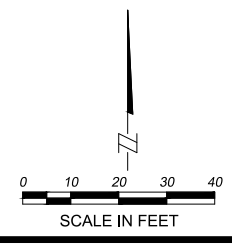
B	<10.0
T	<10.0
E	<10.0
X	<10.0
CO2	5.0
O2	0.0

LEGEND

- VP-02 VAPOR POINT LOCATION
- APPROXIMATE PROPERTY BOUNDARY
- ($\mu\text{g}/\text{m}^3$) MICROGRAMS PER CUBIC METER
- (mg/m^3) MILLIGRAMS PER CUBIC METER
- (NA) NOT ANALYZED

SAMPLE DATE
SAMPLE DEPTH (FT)

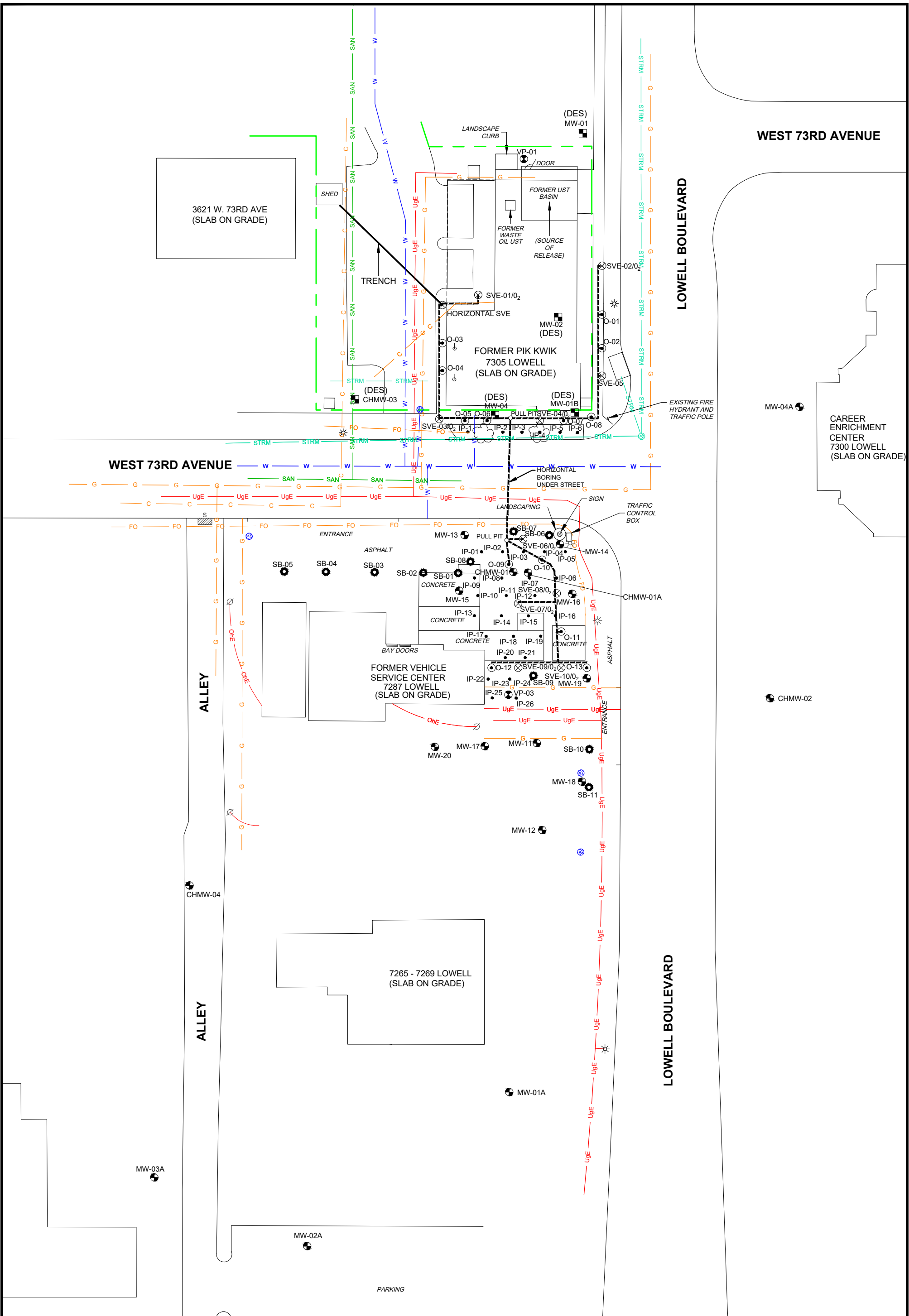
B	BENZENE ($\mu\text{g}/\text{m}^3$)
T	TOLUENE ($\mu\text{g}/\text{m}^3$)
E	ETHYLBENZENE ($\mu\text{g}/\text{m}^3$)
X	TOTAL XYLENES ($\mu\text{g}/\text{m}^3$)
CO2	CARBON DIOXIDE (%)
O2	OXYGEN (%)



SOIL VAPOR SAMPLE FIGURE

FORMER PIK KWIK
OPS EVENT ID 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

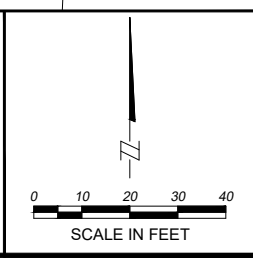
PROJECT: 1-996-9541ae	DRAFT: CLB
DATE: 9/20/2019	REVIEW: RO



- MW-1 MONITORING WELL LOCATION
- ⊙ VP-1 VAPOR POINT LOCATION
- ⊙ O-1 OXYGEN DIFFUSION WELL LOCATION
- SB-1 SOIL BORE LOCATION
- ⊗ SVE-1/0₂ SOIL VAPOR EXTRACTION WELL LOCATION
- IP-1 INJECTION LOCATION
- TRENCH AND HORIZONTAL BORING

LEGEND

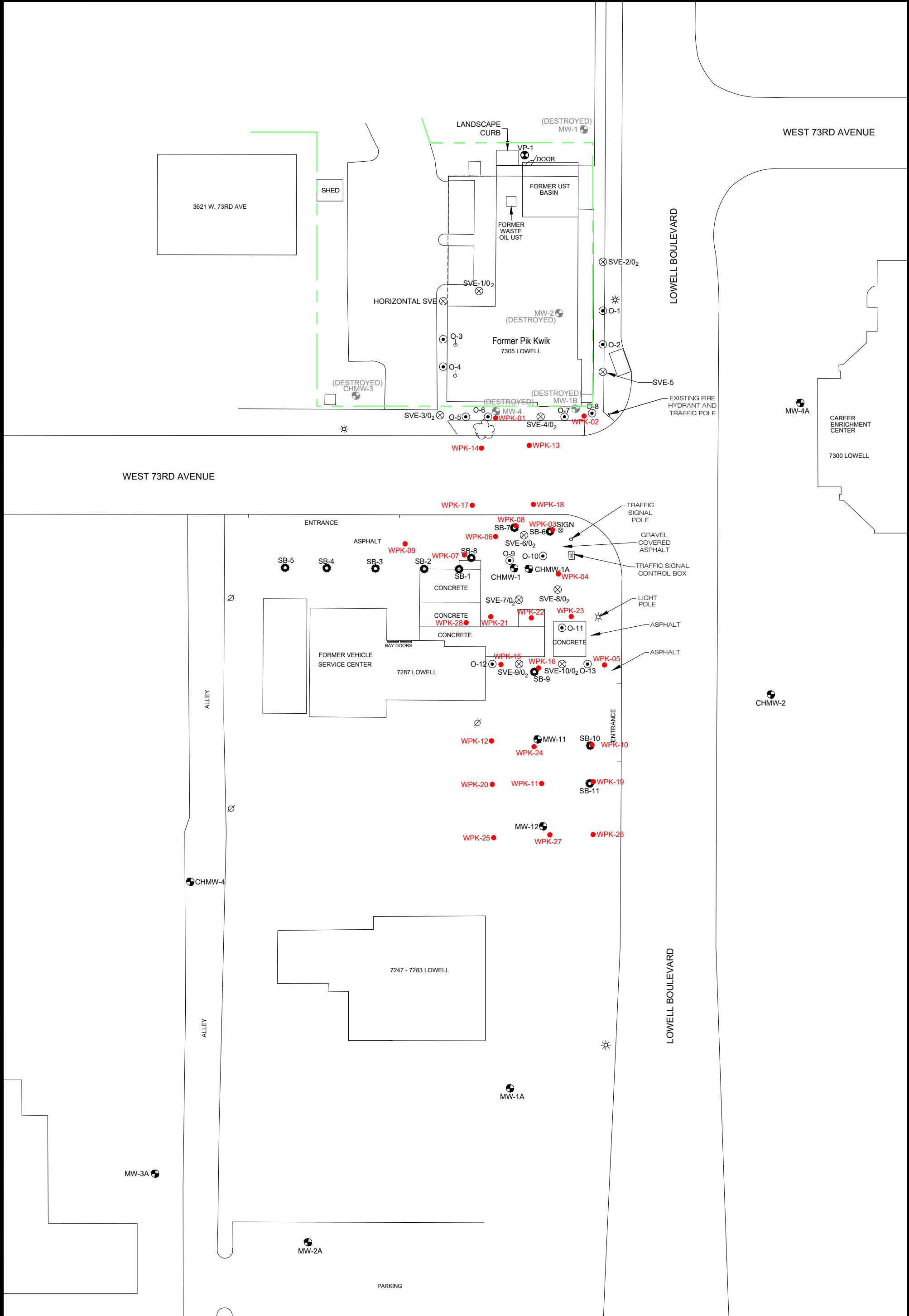
— C —	UNDERGROUND COMMUNICATION LINE	— G —	NATURAL GAS LINE
⊙	LIGHT POLE	— W —	WATER LINE
⊙	SEWER CATCH BASIN	— UgE —	UNDERGROUND ELECTRIC LINE
⊙	PASSIVE AIR INTAKE VENT (2" DIAMETER)	— OhE —	OVERHEAD ELECTRIC LINE
⊙	SEWER MANWAY	— FO —	FIBER OPTICS LINE
		— SAN —	SANITARY SEWER
		— STRM —	STORM SEWER
		— —	APPROXIMATE PROPERTY BOUNDARY



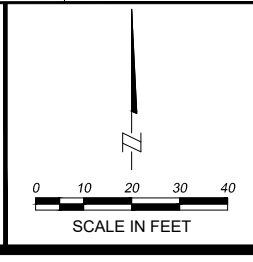
REMEDIATION SYSTEM LAYOUT

FORMER PIK KWIK
OPS EVENT ID: 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

PROJECT: 1-996-9541aa	DRAFT: SJK
DATE: 8/8/2017	REVIEW:



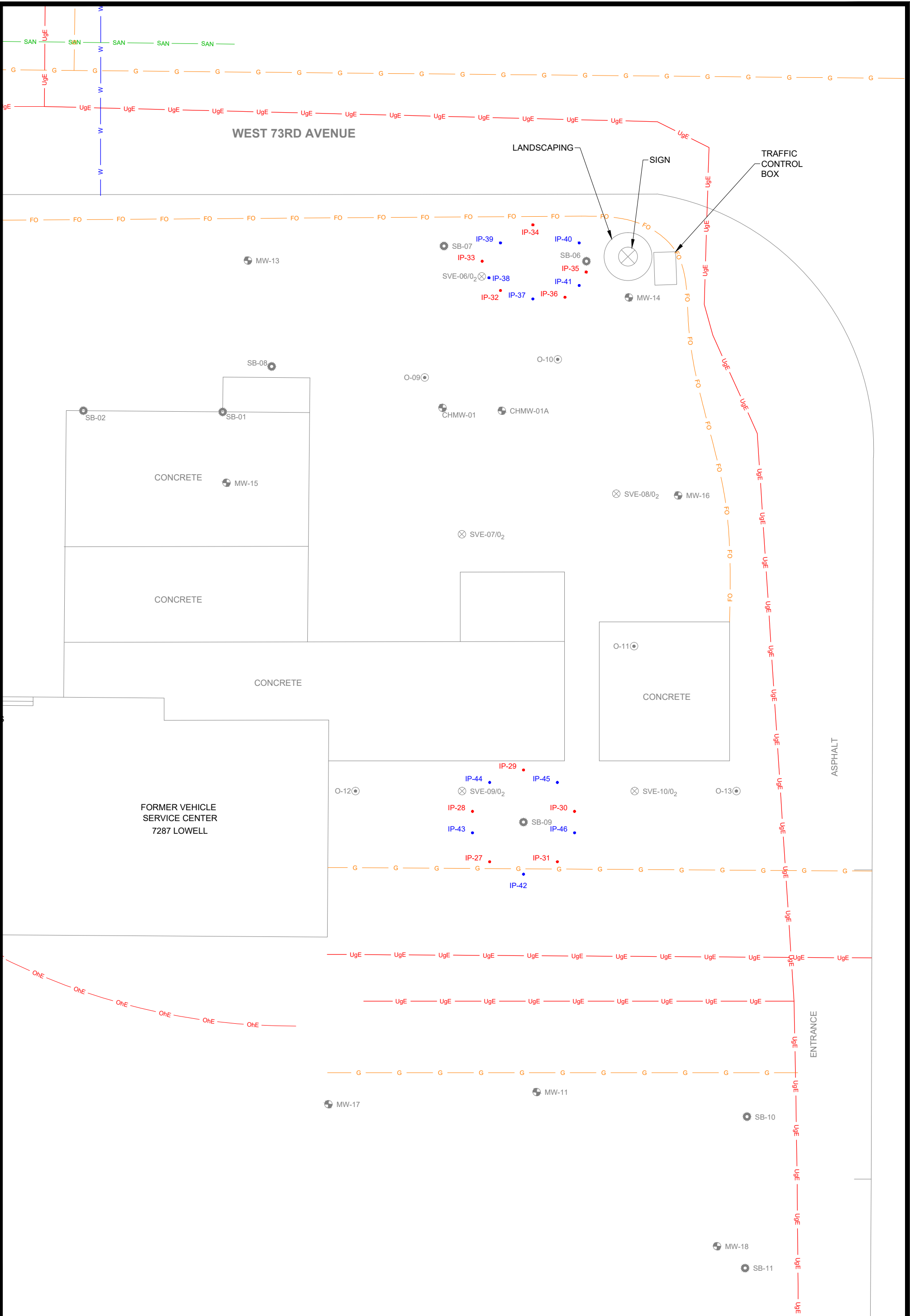
LEGEND	
MW-1	MONITORING WELL LOCATION
O-1	OXYGEN DIFFUSION WELL LOCATION
SB-1	SOIL BORE LOCATION
SVE-1/0 ₂	SOIL VAPOR EXTRACTION WELL LOCATION
VP-1	SOIL VAPOR WELL
WPK-01	LIF-MIHPT LOCATION
(circle with dot)	WATER MANWAY
UgC	UNDERGROUND COMMUNICATION LINE
(star with dot)	LIGHT POLE
(hatched rectangle)	SEWER CATCH BASIN
(circle with dot and line)	PASSIVE AIR INTAKE VENT (2" DIAMETER)
(circle with dot)	SEWER MANWAY
G	NATURAL GAS LINE
W	WATER LINE
UgE	UNDERGROUND ELECTRIC LINE
OhE	OVERHEAD ELECTRIC LINE
FO	FIBER OPTICS LINE
SAN	SANITARY SEWER
STRM	STORM SEWER
	APPROXIMATE PROPERTY BOUNDARY



LIF-MIHPT LOCATION FIGURE

FORMER PIK KWIK
OPS EVENT ID: 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

PROJECT: 1-996-9541aa	DRAFT: DEB
DATE: 6/1/2016	REVIEW:



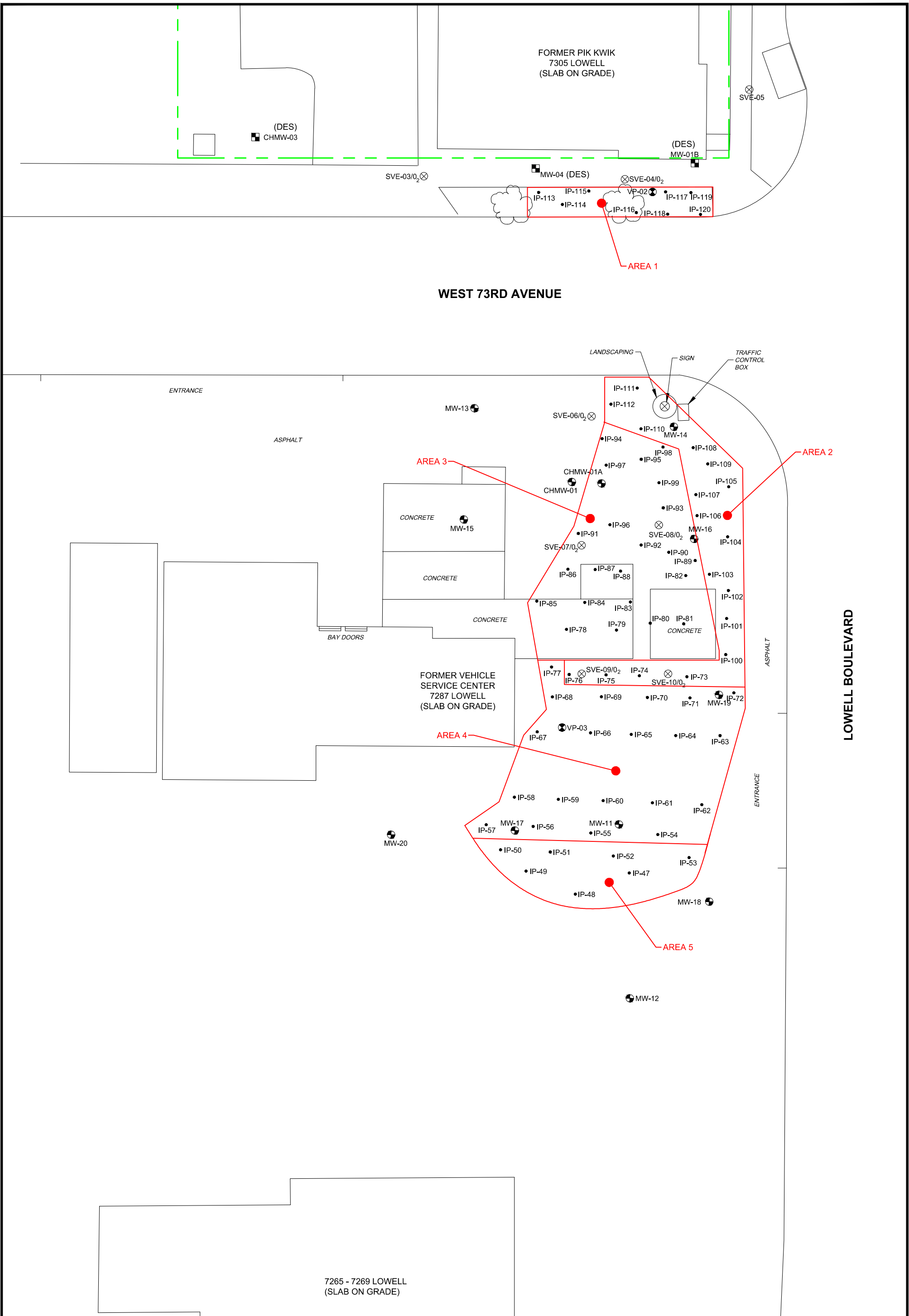
LEGEND		UTILITY LINES	
● MW-1	MONITORING WELL LOCATION	— G —	NATURAL GAS LINE
● SB-1	SOIL BORE LOCATION	— W —	WATER LINE
⊗ SVE-1/0 ₂	SOIL VAPOR EXTRACTION WELL LOCATION	— UgE —	UNDERGROUND ELECTRIC LINE
⊙ O-1	OXYGEN DIFFUSION WELL	— OhE —	OVERHEAD ELECTRIC LINE
● IP-1	INJECTION POINTS INSTALLED 06/24/2016	— FO —	FIBER OPTICS LINE
● IP-1	INJECTION POINTS INSTALLED 07/22/2016	— SAN —	SANITARY SEWER

SCALE IN FEET

PERSULFOX INJECTION PILOT TEST FIGURE

FORMER PIK KWIK
OPS EVENT ID 1989
7305 LOWELL BOULEVARD
WESTMINSTER, COLORADO

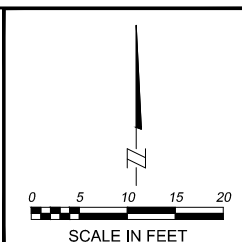
PROJECT: 1-996-9541aa	DRAFT: SJK
DATE: 10/14/2016	REVIEW:



LEGEND

- INJ-48 INJECTION POINT
- ⊙ MW-1 MONITORING WELL
- ⊗ SVE-1/0₂ SOIL VAPOR EXTRACTION WELL
- ⊙ VP-1 SOIL VAPOR WELL
- ⊙ MW-1 DESTROYED WELL

--- APPROXIMATE PROPERTY BOUNDARY



PersulfOx, RegenOx, and ORC-A
INJECTION LOCATION FIGURE
 JULY 2017
 FORMER PIK KWIK
 OPS EVENT ID 1989
 7305 LOWELL BOULEVARD
 WESTMINSTER, COLORADO

PROJECT:
1-996-9541aa

DATE:
1/24/2018

DRAFT:
SJK

REVIEW:



Test Report

eANALYTICS LABORATORY

August 26, 2019

Client: CGRS, Inc.

Project: Former Pik Kwik (1-996-9541ae)


Lab ID: 1400

Date Samples Received: 8/14/2019

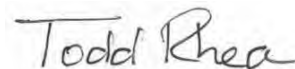
Sample Condition: Samples arrived intact and in appropriate sample containers. Samples were received within the temperature range specified in the test method(s) and/or with thermal preservation in process.

Comments:

Thank you for allowing eAnalytics Laboratory to provide laboratory services for you.



Chris Dieken
QA Manager



Todd Rhea
Lab Manager

eAnalytics Laboratory

4130 Clydesdale Parkway Loveland CO 80538

Chain of Custody

eANALYTICS

L A B O R A T O R Y

Chain of Custody Form

eANALYTICS L A B O R A T O R Y			4130 Clydesdale Parkway Loveland CO 80538 (970) 667-6975 www.eAnalyticsLab.com																
Client Information <small>(New Clients please fill out completely)</small>			Analysis Information <small>(Select analysis by checking box on corresponding sample line)</small>																
Company: CGRS, Inc.			Number of Containers	Matrix: (S) Soil (W) Water (V) Vapor (A) Air	BTEX (EPA8260)	BTEX / TVPH (EPA8260)	BTEX / MTBE / TVPH (EPA8260)	TEPH (EPA8015)	Volatiles - Full List (EPA8260)	Semi-Volatiles Full List (EPA8270)	PAHs (EPA8270)	Vapor - Soil Vapor BTEX (EPA10-15)	Vapor Emissions - BTEX / TVPH (EPA10-15)	Air (Summa) - BTEX (EPA10-15 SIM)	pH / TSS / TDS	HPC-Aerobic Plate Count	HPC-Anaerobic Plate Count		
Project: Former Pik Kwik (1-996-9541ae)																			
Send Report & Invoice To: Monica Young (monica@cgrs.com) Raina Osmundson (rosmundson@cgrs.com)																			
Sampler: <i>Emily Lawrence + Aaron Lingwall</i>																			
Phone/Email: (970) 493-7780 monica@cgrs.com/rosmundson@cgrs.com																			
Address: 1301 Academy Court Fort Collins, CO 80524																			
Lab ID	Sample Name	Sampling Date																	
1	CHMW-01A	8/14/19	3	W	X													X	X
2	MW-11		3	W	X													X	X
3	MW-12		3	W	X													X	X
4	MW-13		3	W	X													X	X
5	MW-14		3	W	X													X	X
6	MW-15		2	W	X														
7	MW-16		3	W	X													X	X
8	MW-17		2	W	X														
9	MW-18		2	W	X														
10	MW-19		2	W	X														
11	MW-20		2	W	X														
12	MW-21		2	W	X														
13	MW-22		2	W	X														
14	MW-23		3	W	X													X	X
15	MW-24		2	W	X														
Comments:																			
Turnaround Time (Business Days) <input checked="" type="checkbox"/> Standard (5-10 Days) <input type="checkbox"/> 3 Day (1.5X) <input type="checkbox"/> 1-2 Day (2X) <input type="checkbox"/> Same Day (3X)									Record of Custody Relinquished by: <i>Emily Lawrence</i> Date: <i>8/14/19</i> Company: <i>CGRS</i> Time: <i>1405</i> AM/PM Received by: _____ Date: _____ AM/PM Company: _____ Time: _____ AM/PM										
For eAnalytics Use Sample Conditions Intact? <i>Yes</i> / No Upon Arrival *On Ice? <i>Yes</i> / No <small>*Or with thermal preservation in process</small>									Relinquished by: _____ Date: _____ AM/PM Company: _____ Time: _____ AM/PM Received by: <i>WJK</i> Date: <i>8/14/19</i> Company: <i>eAnalytics Laboratory</i> Time: <i>215</i> AM/PM										

Lab ID # 1400

eAnalytics Laboratory
4130 Clydesdale Parkway Loveland CO 80538
(970) 667-6975

Page 1 of 2

eAnalytics Laboratory


4130 Clydesdale Parkway Loveland CO 80538

Chain of Custody

eANALYTICS

LABORATORY

Chain of Custody Form

 4130 Clydesdale Parkway Loveland CO 80538 (970) 667-6975 www.eAnalyticsLab.com																	
Client Information <small>(New Clients please fill out completely)</small>		Analysis Information <small>(Select analysis by checking box on corresponding sample line)</small>															
Company: CGRS, Inc.		Number of Containers	Matrix: (S) Soil (W) Water (V) Vapor (A) Air	BTEX (EPA8260)	BTEX / TVPH (EPA8260)	BTEX / MTBE / TVPH (EPA8260)	TEPH (EPA8015)	Volatiles - Full List (EPA8260)	Semi-Volatiles Full List (EPA8270)	PAHs (EPA8270)	Vapor - Soil Vapor BTEX (EPA TO-15)	Vapor Emissions - BTEX / TVPH (EPA TO-15)	Air (Summa) - BTEX (EPA TO-15 SIM)	pH / TSS / TDS	HPC-Aerobic Plate Count	HPC-Anaerobic Plate Count	
Project: Former Pik Kwik (1-996-9541ae)																	
Send Report & Invoice To: Monica Young (monica@cgrs.com) Raina Osmundson (rosmundson@cgrs.com)																	
Sampler: <i>Emily Lawrence + Aaron Lingwall</i>																	
Phone/Email: (970) 493-7780 monica@cgrs.com/rosmundson@cgrs.com																	
Address: 1301 Academy Court Fort Collins, CO 80524																	
Lab ID	Sample Name	Sampling Date															
16	MW-25	8/14/19	2	W	X												
17	SVE-04		3	W	X											X	X
18	SVE-05		3	W	X											X	X
19	SVE-06		2	W	X												
20	SVE-07		2	W	X												
21	SVE-08		2	W	X												
22	VP-02 @ 6'		1	V							X						
23	VP-03 @ 10'		1	V							X						
Comments:																	
Turnaround Time (Business Days) <input checked="" type="checkbox"/> Standard (5-10 Days) <input type="checkbox"/> 3 Day (1.5X) <input type="checkbox"/> 1-2 Day (2X) <input type="checkbox"/> Same Day (3X)									Record of Custody Relinquished by: <i>Emily Lawrence</i> Date: <i>8/14/19</i> Company: <i>CGRS</i> Time: <i>1405</i> AM/PM Received by: _____ Date: _____ AM/PM Company: _____ Time: _____ AM/PM								
For eAnalytics Use Sample Conditions Intact? <i>Yes</i> / No Upon Arrival *On Ice? <i>Yes</i> / No <small>*Or with thermal preservation in process</small>									Relinquished by: _____ Date: _____ AM/PM Company: _____ Time: _____ AM/PM Received by: <i>MWK</i> Date: <i>8/14/19</i> Company: <i>eAnalytics Laboratory</i> Time: <i>215</i> AM/PM								

Lab ID # 1400

eAnalytics Laboratory
 4130 Clydesdale Parkway Loveland CO 80538
 (970) 667-6975

Page 2 of 2



Client: CGRS, Inc. Lab ID: 1400
 Project: Former Pik Kwik (1-996-9541ae)
 Analysis: Volatile Organics - BTEX/TVPH Method: EPA8260

Sample Name	Benzene mg/L	Toluene mg/L	Ethyl- Benzene mg/L	Total Xylenes mg/L	TVPH mg/L	Date Sampled	Date Analyzed	Lab ID
CHMW-01A	0.006	0.037	0.631	0.597	8.39	08/14/19	08/15/19	1400 1
MW-11	0.073	<0.001	0.010	0.003	0.69	08/14/19	08/15/19	1400 2
MW-12	<0.001	<0.001	<0.001	<0.001	1.22	08/14/19	08/15/19	1400 3
MW-13	<0.001	<0.001	<0.001	<0.001	0.92	08/14/19	08/15/19	1400 4
MW-14	3.97	0.155	2.60	2.61	38.6	08/14/19	08/15/19	1400 5
MW-15	0.004	<0.001	0.117	0.030	15.6	08/14/19	08/15/19	1400 6
MW-16	1.51	0.207	2.79	2.35	40.8	08/14/19	08/15/19	1400 7
MW-17	<0.001	<0.001	<0.001	<0.001	<0.50	08/14/19	08/15/19	1400 8
MW-18	0.001	<0.001	<0.001	<0.001	<0.50	08/14/19	08/15/19	1400 9
MW-19	1.84	0.115	0.683	0.585	9.76	08/14/19	08/15/19	1400 10
MW-20	0.182	<0.001	0.061	0.012	3.08	08/14/19	08/15/19	1400 11
MW-21	0.001	<0.001	<0.001	<0.001	0.60	08/14/19	08/15/19	1400 12
MW-22	0.005	<0.001	<0.001	<0.001	0.96	08/14/19	08/16/19	1400 13
MW-23	<0.001	<0.001	<0.001	<0.001	<0.50	08/14/19	08/16/19	1400 14
MW-24	<0.001	<0.001	<0.001	<0.001	<0.50	08/14/19	08/16/19	1400 15
MW-25	<0.001	<0.001	<0.001	<0.001	0.93	08/14/19	08/16/19	1400 16
SVE-04	21.2	0.365	1.45	0.494	55.5	08/14/19	08/16/19	1400 17
SVE-05	0.003	0.027	1.64	6.09	65.8	08/14/19	08/15/19	1400 18
SVE-06	<0.001	0.004	0.190	0.318	9.38	08/14/19	08/15/19	1400 19
SVE-07	<0.001	<0.001	<0.001	<0.001	<0.50	08/14/19	08/16/19	1400 20



Client: CGRS, Inc. Lab ID: 1400
 Project: Former Pik Kwik (1-996-9541ae)
 Analysis: Volatile Organics - BTEX/TVPH Method: EPA8260

Sample Name	Benzene mg/L	Toluene mg/L	Ethyl- Benzene mg/L	Total Xylenes mg/L	TVPH mg/L	Date Sampled	Date Analyzed	Lab ID
SVE-08	0.018	<0.001	0.006	<0.001	<0.50	08/14/19	08/16/19	1400 21



Client: CGRS, Inc. Lab ID: 1400
 Project: Former Pik Kwik (1-996-9541ae)
 Analysis: Heterotrophic Plate Count - Aerobic Method: AOAC 990.12
 Heterotrophic Plate Count - Anaerobic Method: AOAC 990.12m

Sample Name	HPC- Aerobic cfu/mL	HPC- Anaerobic cfu/mL	Date Sampled	Date Analyzed	Lab ID
CHMW-01A	40	30	08/14/19	08/14/19	1400 1
MW-11	700	34	08/14/19	08/14/19	1400 2
MW-12	11400	90	08/14/19	08/14/19	1400 3
MW-13	3400	<30	08/14/19	08/14/19	1400 4
MW-14	3500	320	08/14/19	08/14/19	1400 5
MW-16	14200	50	08/14/19	08/14/19	1400 7
MW-23	65000	120	08/14/19	08/14/19	1400 14
SVE-04	600	120	08/14/19	08/14/19	1400 17
SVE-05	320	140	08/14/19	08/14/19	1400 18



Client: CGRS, Inc. Lab ID: 1400
 Project: Former Pik Kwik (1-996-9541ae)
 Analysis: Vapor - Volatile Organics-BTEX (Tedlar Bag) Method: EPATO-15

Sample Name	Benzene ug/m3	Toluene ug/m3	Ethyl- Benzene ug/m3	Total Xylenes ug/m3	Date Sampled	Date Analyzed	Lab ID
VP-02 @ 6'	<10.0	<10.0	<10.0	<10.0	08/14/19	08/14/19	1400 22
VP-03 @ 10'	<10.0	<10.0	<10.0	<10.0	08/14/19	08/14/19	1400 23

eANALYTICS
LABORATORY

Client: CGRS, Inc. Lab ID: 1400
Project: Former Pik Kwik (1-996-9541ae) Method: EPA8260

Sample Name	Dibromo- fluoromethane % Recovery	1,2 Dichloro- ethane-D4 % Recovery	Toluene-D8 % Recovery	4-Bromo- fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID
CHMW-01A	99	91	101	92	08/14/19	08/15/19	1400 1
MW-11	98	90	101	93	08/14/19	08/15/19	1400 2
MW-12	99	86	101	91	08/14/19	08/15/19	1400 3
MW-13	95	87	99	89	08/14/19	08/15/19	1400 4
MW-14	100	94	103	94	08/14/19	08/15/19	1400 5
MW-15	97	90	100	92	08/14/19	08/15/19	1400 6
MW-16	98	91	101	93	08/14/19	08/15/19	1400 7
MW-17	97	85	100	89	08/14/19	08/15/19	1400 8
MW-18	96	84	101	90	08/14/19	08/15/19	1400 9
MW-19	98	91	99	90	08/14/19	08/15/19	1400 10
MW-20	98	90	101	91	08/14/19	08/15/19	1400 11
MW-21	98	86	100	89	08/14/19	08/15/19	1400 12
MW-22	97	83	99	91	08/14/19	08/16/19	1400 13
MW-23	95	81	100	90	08/14/19	08/16/19	1400 14
MW-24	95	81	101	90	08/14/19	08/16/19	1400 15
MW-25	94	81	100	90	08/14/19	08/16/19	1400 16
SVE-04	95	77	101	88	08/14/19	08/16/19	1400 17
SVE-05	99	94	101	92	08/14/19	08/15/19	1400 18
SVE-06	97	89	101	91	08/14/19	08/15/19	1400 19
SVE-07	94	76	100	87	08/14/19	08/16/19	1400 20

eAnalytics Laboratory

4130 Clydesdale Parkway Loveland CO 80538

Quality Control - Surrogate Recoveries



Client: CGRS, Inc. Lab ID: 1400
 Project: Former Pik Kwik (1-996-9541ae) Method: EPA8260

Sample Name	Dibromo- fluoromethane % Recovery	1,2 Dichloro- ethane-D4 % Recovery	Toluene-D8 % Recovery	4-Bromo- fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID
SVE-08	95	77	100	88	08/14/19	08/16/19	1400 21



Client: CGRS, Inc. Lab ID: 1400
 Project: Former Pik Kwik (1-996-9541ae) Method: EPATO-15

Sample Name	Dibromo- fluoromethane % Recovery	1,2 Dichloro- ethane-D4 % Recovery	Toluene-D8 % Recovery	4-Bromo- fluorobenzene % Recovery	Date Sampled	Date Analyzed	Lab ID
VP-02 @ 6'	97	103	103	98	08/14/19	08/14/19	1400 22
VP-03 @ 10'	97	103	104	99	08/14/19	08/14/19	1400 23

eANALYTICS

L A B O R A T O R Y

Client: CGRS, Inc.

Lab ID: 1400

Project: Former Pik Kwik (1-996-9541ae)

Water		Benzene	Toluene	Ethyl-Benzene	Total Xylenes	TVPH	QC Start Date
		mg/L	mg/L	mg/L	mg/L	mg/L	
Method Blank		<0.001	<0.001	<0.001	<0.001	<0.50	
Lab Control Sample	70%-130%	92	95	94	95	99	08/15/19
		93	95	95	96	99	08/15/19

Vapor		Benzene	Toluene	Ethyl-Benzene	Total Xylenes	QC Start Date
		ug/m3	ug/m3	ug/m3	ug/m3	
Method Blank		<10.0	<10.0	<10.0	<10.0	
Lab Control Sample	80%-120%	100	102	104	103	08/14/19

Estimated Petroleum Hydrocarbon Mass Calculations
August 14, 2019, Dissolved Phase
Former Pik Kwik
7305 Lowell Boulevard
Westminster, Colorado
OPS Event ID: 1989
CGRS Project No: 1-996-9541ae

Sorbed TVPH Mass in Soil	Units	Quantity	Comments
Geometric Mean TVPH Concentration (C)	mg/kg		Geometric mean reported in borings within the area where TVPH concentrations were above 500 mg/kg, including: SB-6 and SB-9
Source Area (A)	sqft		Encompassing approximate area of the soil samples listed above
Source Area Thickness (T)	ft		Assumed ~7.25 ft zone of impacted soil at the saturated zone in groundwater, based on boring log observations and observations from wells MW-14 and MW-19
Volume (V)	cuft	0	T x A
Density (sandy clay to gravelly sand) (D lbs/cuft)	lbs/cuft	112	Assumed base on soil type
Total Sorbed TVPH Mass	lbs	0	(C mg/kg / 1x10 ⁶ * D * V)
	gals	0	
Sorbed Benzene Mass in Soil	Units	Quantity	Comments
Geometric Mean Benzene Concentration (C)	mg/kg		Geometric mean reported in borings within the area where Benzene concentrations were above the Tier 1 RBSL, including: MW-2, MW-3, MW-4, SB-9, and SB-10
Source Area (A)	sqft		Encompassing approximate area of the soil samples listed above
Source Area Thickness (T)	ft		Assumed ~2.58 ft zone of impacted soil at the smear zone in groundwater, based on observations from wells MW-2, MW-3, MW-4, and MW-19
Volume (V)	cuft	0	T x A
Density (sandy clay to gravelly sand) (D lbs/cuft)	lbs/cuft	112	Assumed base on soil type
Total Sorbed Benzene Mass	lbs	0.0	(C mg/kg / 1x10 ⁶ * D * V)
	gals	0.0	
Dissolved TVPH Mass in Groundwater	Units	Quantity	Comments
Geometric Mean TVPH Concentration (C)	mg/L	5.37	Geometric mean reported in wells within inferred area of dissolved TVPH plume including: SVE-04, SVE-05, SVE-06, CHMW-01A, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-19, MW-20, MW-21, MW-22, and MW-25
Source Area (A)	sqft	7,813	Encompassing approximate area of the groundwater samples listed above
Source Area Thickness (T)	ft	3.0	Geometric mean of smear zone thickness
Volume (V)	ft	23,125	T x A
Porosity (P)	%	25	Assumed
Total Dissolved TVPH Mass	lbs	1.93	(V*28.3L/cuft*P*C mg/L*2.2E-6lbs/mg)
	gals	0.31	
Dissolved Benzene Mass in Groundwater	Units	Quantity	Comments
Geometric Mean Benzene Concentration (C)	mg/L	0.23	Geometric mean reported in wells within inferred area of dissolved benzene plume including: CHMW-01A, MW-11, MW-14, MW-16, MW-19, MW-20, MW-22, SVE-04, and SVE-08
Source Area (A)	sqft	7,813	Encompassing approximate area of the groundwater samples listed above
Source Area Thickness (T)	ft	3.0	Geometric mean of smear zone thickness
Volume (V)	ft	23,125	T x A
Porosity (P)	%	25	Assumed
Total Dissolved Benzene Mass	lbs	0.08	(V*28.3L/cuft*P*C mg/L*2.2E-6lbs/mg)
	gals	0.01	

TEPH - Total Extractable Petroleum Hydrocarbons as Diesel

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

% - percent

Blue represents estimated input values

ft - feet

cuft - cubic feet

sqft - square feet

lbs - pounds

lbs/cuft - pounds per cubic feet



NON-HAZARDOUS WASTE MANIFEST

39994

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Former Pk Kwik 7305 Lowell Blvd. Westminster, CO 80030			5. Generating Location (if different)					
4. Phone ()			6. Phone ()					
7. Transporter #1 Company Name AGI Drill Pro Services		8. US EPA ID Number		9. Transporter #1's Phone 303-280-5380				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address RARITAN CWT 2695 S. Raritan Street Englewood, CO 80110		14. US EPA ID Number		15. Facility's Phone (303) 991-6002				
16. Waste Shipping Name and Description				18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type			
a. Non U.S. EPA or DOT regulated contaminated water/gasoline mix							Gallons	
b. Non U.S. EPA or DOT regulated contaminated water/diesel mix							Gallons	
c. Petroleum Contaminated Soil				1	55 gal.	250 gal.	CYS	
d.								
21. Additional Descriptions for Materials Listed Above AGI PD # 36558								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Raina Osmundson (CGRS) for Former Pk Kwik				Signature		Month 8	Day 19	Year 19
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month 8	Day 19	Year 19
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name				Signature		Month 08	Day 19	Year 19

ORIGINAL - RETURN TO GENERATOR

NHWM 08/15



NON-HAZARDOUS WASTE MANIFEST

39990

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Former Pk Kwik 7305 Lowell Blvd. Westminster, CO 80030				5. Generating Location (if different)				
4. Phone ()		6. Phone ()						
7. Transporter #1 Company Name Drill Pro Services			8. US EPA ID Number		9. Transporter #1's Phone 303-280-5380			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address RARITAN CWT 2695 S. Raritan Street Englewood, CO 80110			14. US EPA ID Number		15. Facility's Phone (303) 991-6002			
16. Waste Shipping Name and Description				18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type			
a. Non-U.S. EPA or DOT regulated contaminated water/gasoline mix							Gallons	
b. Non-U.S. EPA or DOT regulated contaminated water/diesel mix							Gallons	
c. Petroleum Contaminated Soil				1	Tank	300 Gallons	CYS	
d.								
21. Additional Descriptions for Materials Listed Above ACT Pb # 36558								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Raina Osmundson (UGRS) for Former Pk Kwik				Signature Raina Osmundson		Month 8	Day 20	Year 19
24. Transporter #1: Acknowledgement of Receipt of Materials				Signature		Month 8	Day 20	Year 19
25. Transporter #2: Acknowledgement of Receipt of Materials				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name Keanu Anes				Signature		Month 08	Day 20	Year 19

GENERATOR

TRANSPORTER

T/S/D FACILITY

ORIGINAL - RETURN TO GENERATOR

NHWM 08/15

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address <i>Former Pick Kwik 7305 Lowell Blvd. Westminster, CO 80030</i>				5. Generating Location (if different)				
4. Phone ()				6. Phone ()				
7. Transporter #1 Company Name <i>Or:11 Pro Services</i>			8. US EPA ID Number		9. Transporter #1's Phone <i>303-280-5380</i>			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address RARITAN CWT 2695 S. Raritan Street Englewood, CO 80110			14. US EPA ID Number		15. Facility's Phone (303) 991-6002			
16. Waste Shipping Name and Description				18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type			
a. Non U.S. EPA or DOT regulated contaminated water/gasoline mix							Gallons	
b. Non U.S. EPA or DOT regulated contaminated water/diesel mix							Gallons	
c. Petroleum Contaminated Soil				1	tank	250 gal.	CYS	
d.								
21. Additional Descriptions for Materials Listed Above <i>ACI PO# 36558</i>								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name <i>Aaron Lingwall (CGES)</i>				Signature <i>[Signature]</i>		Month <i>8</i>	Day <i>22</i>	Year <i>19</i>
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>		Month <i>8</i>	Day <i>22</i>	Year <i>19</i>
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>		Month <i>08</i>	Day <i>22</i>	Year <i>19</i>

GENERATOR

TRANSPORTER

T/S/D FACILITY

ORIGINAL - RETURN TO GENERATOR



NON-HAZARDOUS WASTE MANIFEST

39992

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Former Pix Kwik 7305 Lowell Blvd. Westminster CO 80030				5. Generating Location (if different)				
4. Phone ()		6. Phone ()						
7. Transporter #1 Company Name Drill Pro Services			8. US EPA ID Number		9. Transporter #1's Phone 303-280-5380			
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address RARITAN CWT 2695 S. Raritan Street Englewood, CO 80110			14. US EPA ID Number		15. Facility's Phone (303) 991-6002			
16. Waste Shipping Name and Description				18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type			
a. Non U.S. EPA or DOT regulated contaminated water/gasoline mix							Gallons	
b. Non U.S. EPA or DOT regulated contaminated water/diesel mix							Gallons	
c. Petroleum Contaminated Soil				1	Tank	300 gal.	CYS	
d.								
21. Additional Descriptions for Materials Listed Above ACI ID # 36558								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Raina Osmundson (CGRS) For Former Pix Kwik				Signature <i>Raina Osmundson</i>		Month 8	Day 28	Year 19
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Blake Jones				Signature <i>Blake Jones</i>		Month 8	Day 28	Year 19
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name Moses Chua				Signature <i>Moses Chua</i>		Month 8	Day 28	Year 19

ORIGINAL - RETURN TO GENERATOR

NHWM 08/15



NON-HAZARDOUS WASTE MANIFEST

39993

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Former Pick Knick 7305 Lowell Blvd. Westminster, CO 80030			5. Generating Location (if different)					
4. Phone ()			6. Phone ()					
7. Transporter #1 Company Name DRELL PRO		8. US EPA ID Number		9. Transporter #1's Phone 303-280-5380				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address RARITAN CWT 2695 S. Raritan Street Englewood, CO 80110		14. US EPA ID Number		15. Facility's Phone (303) 991-6002				
16. Waste Shipping Name and Description				18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type			
a. Non U.S. EPA or DOT regulated contaminated water/gasoline mix							Gallons	
b. Non U.S. EPA or DOT regulated contaminated water/diesel mix							Gallons	
c. Petroleum Contaminated Soil				1	Tank	200 gal.	CYS	
d.								
21. Additional Descriptions for Materials Listed Above ACI PO# 36558								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Aaron Lingwall (CORS)				Signature 		Month 8	Day 26	Year 19
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name 				Signature 		Month 8	Day 26	Year 19
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name 				Signature 		Month 08	Day 26	Year 19

GENERATOR

TRANSPORTER

T/S/D FACILITY

ORIGINAL - RETURN TO GENERATOR

NHWM 08/15



NON-HAZARDOUS WASTE MANIFEST

39991

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of				
3. Generator's Name and Mailing Address Former Pk Kwik 7305 Lowell Blvd. Westminster, CO 80030				5. Generating Location (if different)				
4. Phone ()		80030		6. Phone ()				
7. Transporter #1 Company Name Drill Pro Services		8. US EPA ID Number		9. Transporter #1's Phone 303-280-5380				
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone				
13. Designated T/S/D Facility Name and Site Address RARITAN CWT 2695 S. Raritan Street Englewood, CO 80110		14. US EPA ID Number		15. Facility's Phone (303) 991-6002				
16. Waste Shipping Name and Description				18. Containers		19. Total Quantity	20. Unit Wt/Vol	
				No.	Type			
a. Non U.S. EPA or DOT regulated contaminated water/gasoline mix							Gallons	
b. Non U.S. EPA or DOT regulated contaminated water/diesel mix							Gallons	
c. Petroleum Contaminated Soil				1	1 tank	300 gal.	CYS	
d.								
21. Additional Descriptions for Materials Listed Above ACI PD # 36558								
22. Special Handling Instructions and Additional Information								
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.								
Printed/Typed Name Raina Osmundson (CORS) For Former Pk Kwik				Signature		Month 8	Day 23	Year 19
24. Transporter #1: Acknowledgement of Receipt of Materials								
Printed/Typed Name Blake Jones				Signature		Month 8	Day 23	Year 19
25. Transporter #2: Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month	Day	Year
26. Discrepancy Indication Space								
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)								
Printed/Typed Name Marc Hes				Signature MH		Month 8	Day 23	Year 19

GENERATOR

TRANSPORTER

T/S/D FACILITY

ORIGINAL - RETURN TO GENERATOR

NHWM 08/15



NON-HAZARDOUS WASTE MANIFEST

39996

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of			
3. Generator's Name and Mailing Address 7305 Lowell Blvd. Westminster, CO 80030			5. Generating Location (if different)				
4. Phone ()			6. Phone ()				
7. Transporter #1 Company Name Drill Pro Services		8. US EPA ID Number		9. Transporter #1's Phone 303-280-5380			
10. Transporter #2 Company Name		11. US EPA ID Number		12. Transporter #2's Phone			
13. Designated T/S/D Facility Name and Site Address RARITAN CWT 2695 S. Raritan Street Englewood, CO 80110		14. US EPA ID Number		15. Facility's Phone (303) 991-6002			
16. Waste Shipping Name and Description				18. Containers		19. Total Quantity	20. Unit Wt/Vol
				No.	Type		
a. Non U.S. EPA or DOT regulated contaminated water/gasoline mix							Gallons
b. Non U.S. EPA or DOT regulated contaminated water/diesel mix							Gallons
c. Petroleum Contaminated Soil				1	Tank	250 gal.	CYS
d.							
21. Additional Descriptions for Materials Listed Above ACI PO# 36558							
22. Special Handling Instructions and Additional Information							
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.							
Printed/Typed Name Aaron Lingwall (CCRS)				Signature 		Month Day Year 8 27 19	
24. Transporter #1: Acknowledgement of Receipt of Materials							
Printed/Typed Name Terrence Apodaca				Signature 		Month Day Year 8 27 19	
25. Transporter #2: Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
26. Discrepancy Indication Space							
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)							
Printed/Typed Name KEVIN ADAMS				Signature 		Month Day Year 08 27 19	

ORIGINAL - RETURN TO GENERATOR

NHWM 08/15



NON-HAZARDOUS WASTE MANIFEST

13938

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Former Pk Kwik 7305 Lowell Blvd. Westminster CO 80030				5. Generating Location (if different)	
4. Phone ()				6. Phone ()	
7. Transporter #1 Company Name ACI Services			8. US EPA ID Number		9. Transporter #1's Phone 303-991-6002
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone
13. Designated T/S/D Facility Name and Site Address RARITAN CWT 2696 S. Raritan Street Englewood, CO 80110			14. US EPA ID Number		15. Facility's Phone (303) 979-2730
16. Waste Shipping Name and Description					
18. Containers					
19. Total Quantity					
20. Unit Wt/Vol					
a. Non U.S. EPA or DOT regulated contaminated water/gasoline mix					
b. Non U.S. EPA or DOT regulated contaminated water/diesel mix					
c. Petroleum Contaminated Soil					
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information ACI PO: 36718					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Raina Osmundson (CORS) for Former Pk Kwik				Signature [Signature]	
Month Day Year 9 13 19					
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MOSES CHAVEZ				Signature [Signature]	
Month Day Year 9 13 19					
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name				Signature	
Month Day Year					
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name [Signature]				Signature [Signature]	
Month Day Year 09 13 19					

GENERATOR

TRANSPORTER

T/S/D FACILITY

ORIGINAL - RETURN TO GENERATOR

NHWM 01/12



NON-HAZARDOUS WASTE MANIFEST

13940

Please print or type.

1. Generator's US EPA ID Number		Manifest Document Number		2. Page 1 of	
3. Generator's Name and Mailing Address Former Pick N'wik 7305 Lowell Blvd. Westminster CO 80030				5. Generating Location (if different)	
4. Phone ()				6. Phone ()	
7. Transporter #1 Company Name ACI Services			8. US EPA ID Number		9. Transporter #1's Phone 303-991-6002
10. Transporter #2 Company Name			11. US EPA ID Number		12. Transporter #2's Phone
13. Designated T/S/D Facility Name and Site Address RARITAN CWT 2696 S. Raritan Street Englewood, CO 80110			14. US EPA ID Number		15. Facility's Phone (303) 979-2730
16. Waste Shipping Name and Description					
18. Containers					
19. Total Quantity					
20. Unit Wt/Vol					
a.		Non U.S. EPA or DOT regulated contaminated water/gasoline mix		605 Gal.	Gallons
b.		Non U.S. EPA or DOT regulated contaminated water/diesel mix			Gallons
c.		Petroleum Contaminated Soil			CYS
d.					
21. Additional Descriptions for Materials Listed Above					
22. Special Handling Instructions and Additional Information ACI ID: 36718					
23. GENERATOR'S CERTIFICATION: I certify the materials described on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.					
Printed/Typed Name Raiha Osmundson (CORS) for former Pick N'wik			Signature <i>Raiha Osmundson</i>		Month Day Year 9 20 19
24. Transporter #1: Acknowledgement of Receipt of Materials					
Printed/Typed Name MOSES CAVE			Signature <i>Moses Cave</i>		Month Day Year 9 20 19
25. Transporter #2: Acknowledgement of Receipt of Materials					
Printed/Typed Name			Signature		Month Day Year
26. Discrepancy Indication Space					
27. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest (except as noted in Item 19)					
Printed/Typed Name Karin Angus			Signature <i>Karin Angus</i>		Month Day Year 09 20 19

GENERATOR

TRANSPORTER

T/S/D FACILITY

ORIGINAL - RETURN TO GENERATOR

NHWM 01/12

APPENDIX I

Asbestos Survey Report

7287 Lowell Boulevard

Strategic Environmental

January 27, 2020



ASBESTOS SURVEY & SAMPLING REPORT

**7287 LOWELL BOULEVARD
WESTMINSTER, COLORADO 80030**



Presented to:

*Mr. Seth Plas
City of Westminster
Dept of Community Development
4800 West 92nd Avenue
Westminster, Colorado 80031*

January 27, 2020

EXECUTIVE SUMMARY

At the request of the City of Westminster, Mr. Patrick Lee, a Colorado State Certified asbestos inspector, performed an inspection and asbestos sampling at 7287 Lowell Boulevard, Westminster, Colorado 80030 (“Subject Property”).

The purpose of this survey was to identify potentially hazardous friable and non-friable asbestos containing materials (ACM) within the structure located on the Subject Property where demolition activities are contemplated. The structure consists of a 3,148 square foot commercial building.

Mr. Patrick Lee, a Colorado State Certified asbestos inspector, performed an asbestos inspection at 7287 Lowell Boulevard, Westminster, Colorado 80030, in order to identify potentially hazardous friable and non-friable asbestos containing materials (ACM) within the above referenced building where demolition activities are contemplated. The Colorado Department of Public Health and Environment’s (CDPHE) Regulation 8, Part B defines an asbestos-containing material (ACM) as a material containing more than 1% asbestos.

Mr. Lee performed asbestos bulk-sampling of surfacing materials in a total of fifty-three (53) locations in the building where demolition activities are planned. Material samples taken included drywall, block filler, ceiling tile, floor tile and floor debris. All fifty-three (53) bulk samples were analyzed by Reservoirs Environmental, Inc. (NVLAP #101896).

The laboratory results of the potential ACM sampled at the Subject Property indicate that eleven (11) samples in the structure tested positive for chrysotile asbestos. Areas identified include:

- 1. Homogeneous Area 1 - the white compound in the ceiling drywall in the dressing room.**
- 2. Homogeneous Area 7 – the white block filler on the red painted exterior walls of the building.**
- 3. Homogeneous Area 8 - the white block filler in the black painted walls on the north west theater walls.**
- 4. Homogeneous Area 10 - the white block filler in the South East room.**
- 5. Homogeneous Area 11 - the white block filler in the blue concrete block interior walls.**

The specific location for the ACM is shown in the floor plan for the structure sampled in Figure 1 along with a summary all sample results in Table 1 followed by photographic documentation. Appendix A provides a detailed summary of laboratory results.

All of these homogeneous areas will need to be abated by a Colorado-licensed asbestos abatement contractor who will perform the removal, including formal notification to the Colorado Department of Public Health and Environment prior to the abatement of the ACM.

I. Introduction

An inspection and bulk sampling for ACM was conducted at the Subject Property in Westminster, Colorado, by Mr. Patrick Lee. Mr. Lee is a Colorado State Certified inspector and has EPA Accreditation #17670. A copy of the certificate is shown in Appendix B. The purpose of the inspection was to identify, sample and assess potentially hazardous friable and non-friable ACM from within the structure where demolition activities are contemplated.

II. Structural Design

The structure consists of a single-level 3,148 square foot cement block commercial building.

III. Sampling and Analytical Procedures

The inspection and assessment were conducted by an EPA and AHERA accredited Building Inspector qualified by experience, education and training in the recognition of potential ACM and approved bulk-sampling techniques. The asbestos bulk sampling was conducted on suspect ACM with a limited number of bulk samples being collected from within the building where demolition is contemplated.

The inspection and assessment were performed in accordance with Environmental Protection Agency/AHERA recommended procedures. These procedures call for the visual inspection of the area of concern and collection and analysis of representative bulk samples of suspect material.

Some minor destructive sampling was conducted. Walls, columns and perimeter pipe chases were not broken into in order to locate and quantify suspect ACM. It should be noted that additional ACM might be located in other inaccessible areas.

Random bulk samples, representative of the suspect asbestos-containing building materials (ACBM) of each homogeneous area (HA), were collected according to the guidelines published as Environmental Protection Agency (EPA) Final Rule: Title II of the Toxic Substances Control Act (TSCA), 15 USC, Sections 2641 through 2654 and in compliance with 40 CFR, Part 763.

Representative sampling is based on the following criteria:

1. The distribution of the suspect material throughout the HA.
2. The suspect material's physical characteristics and application.
3. Random sampling patterns determined for each HA.

Suspect materials sampled and analyzed should be considered to be representative of materials in each HA if:

1. They exhibit similar physical characteristics; and
2. The application of the sampled material can be correlated to the application of unsampled material.

Bulk samples collected were analyzed utilizing the EPA's Method for the Determination of Asbestos in Bulk Building Materials (EPA 600/R/116, July, 1993) and the McCrone Research Institute's The Asbestos Particle Atlas as methods references. Analysis of the bulk samples was performed on the "date reported," as listed in the bulk sample analysis report.

IV. Notes on Report Format

Suspect materials alike in appearance and application were sampled as HAs. Suspect materials were divided into three classifications:

1. Surfacing material: sprayed or troweled onto structural building member.
2. Thermal systems insulation: any type of pipe, boiler, tank, or duct insulation.
3. Miscellaneous: other suspect materials, including flooring, ceiling tiles, insulation, and finishing materials.

Condition assessments were performed by the accredited inspector at the time of inspection. Condition assessments are listed in the following section. Ratings of "good," "damaged," and "significantly damaged" are meant to indicate the overall condition of the material. A material in "good" condition has no visible damage or deterioration, or showing only very limited damage or deterioration. A material in "damaged" condition has the following characteristics:

- The surface is crumbling, blistered, water-stained, gouged, marred or otherwise abraded over less than one-tenth of the surface if the damage is evenly distributed (one-quarter if the damage is localized). Accumulation of powder, dust or debris similar in appearance to the suspect material on surfaces beneath the material can be used as confirmatory evidence.

A material in "significantly damaged" condition has one or more of the following characteristics:

- The surface is crumbling or blistered over at least one-tenth of the surface if the damage is evenly distributed (one-quarter if the damage is localized).
- One-tenth (one-quarter, if localized) of the material is hanging from the surface, deteriorated, or showing adhesive failure.
- Water stains, gouges, or mars are over at least one-tenth of the surface if the damage is evenly distributed (one-quarter if the damage is localized).

Accumulation of powder, dust or debris similar in appearance to the suspect material on surfaces beneath the material can be used as confirmatory evidence.

Response-action recommendations for asbestos-containing HAs are listed in the section VII. Recommendations may be for more than one HA, if materials are alike. Recommendations are either "general" or "immediate." An immediate recommendation indicates the presence of asbestos greater than 1% within the bulk-sample, or a bulk-sample in the same HA, and should be addressed accordingly. A general recommendation indicates asbestos does not exist greater than 1% within the bulk-sample, or a bulk-sample in the same HA, and no further abatement activities are required for removal of the material. Any sample reporting a "TRACE" amount of

asbestos must be considered to be positive for asbestos greater than 1% unless it is analyzed by the point-count method to be less than 1%.

V. Inspector Comments

Mr. Lee performed asbestos bulk-sampling of surfacing materials in a total of fifty-three (53) locations in the building where demolition activities are planned. Material samples taken included drywall, block filler, ceiling tile, floor tile and floor debris. All fifty-three (53) bulk samples were analyzed by Reservoirs Environmental, Inc. (NVLAP #101896).

The laboratory results of the potential ACM sampled at the Subject Property indicate that eleven (11) samples in the structure tested positive for chrysotile asbestos. Areas identified include:

- 1. Homogeneous Area 1 - the white compound in the ceiling drywall in the dressing room.**
- 2. Homogeneous Area 7 – the white block filler on the red painted exterior walls of the building.**
- 3. Homogeneous Area 8 - the white block filler in the black painted walls on the north west theater walls.**
- 4. Homogeneous Area 10 - the white block filler in the South East room.**
- 5. Homogeneous Area 11 - the white block filler in the blue concrete block interior walls.**

VI. Asbestos-Containing Homogeneous Area Descriptions and Sample Locations

The specific location for the ACM is shown in the floor plan for the structure sampled in Figure 1 along with a summary all sample results in Table 1 followed by photographic documentation. Appendix A provides a detailed summary of laboratory results.

VII. Recommendations

All of these homogeneous areas will need to be abated by a Colorado-licensed asbestos abatement contractor who will perform the removal, including formal notification to the Colorado Department of Public Health and Environment prior to the abatement of the ACM.

As per Section IV. C.1.d (vi).D in Regulation 8, the signature and certification number of the inspector who completed this report is as follows:

Inspector: Patrick E. Lee

A handwritten signature in black ink, appearing to read 'P. Lee', written in a cursive style.

Certification Number: 17670

FIGURE 1

THEATER - 7287 LOWELL BOUEVARD
WESTMINSTER, COLORADO

SAMPLE LOCATION - PLAN VIEW

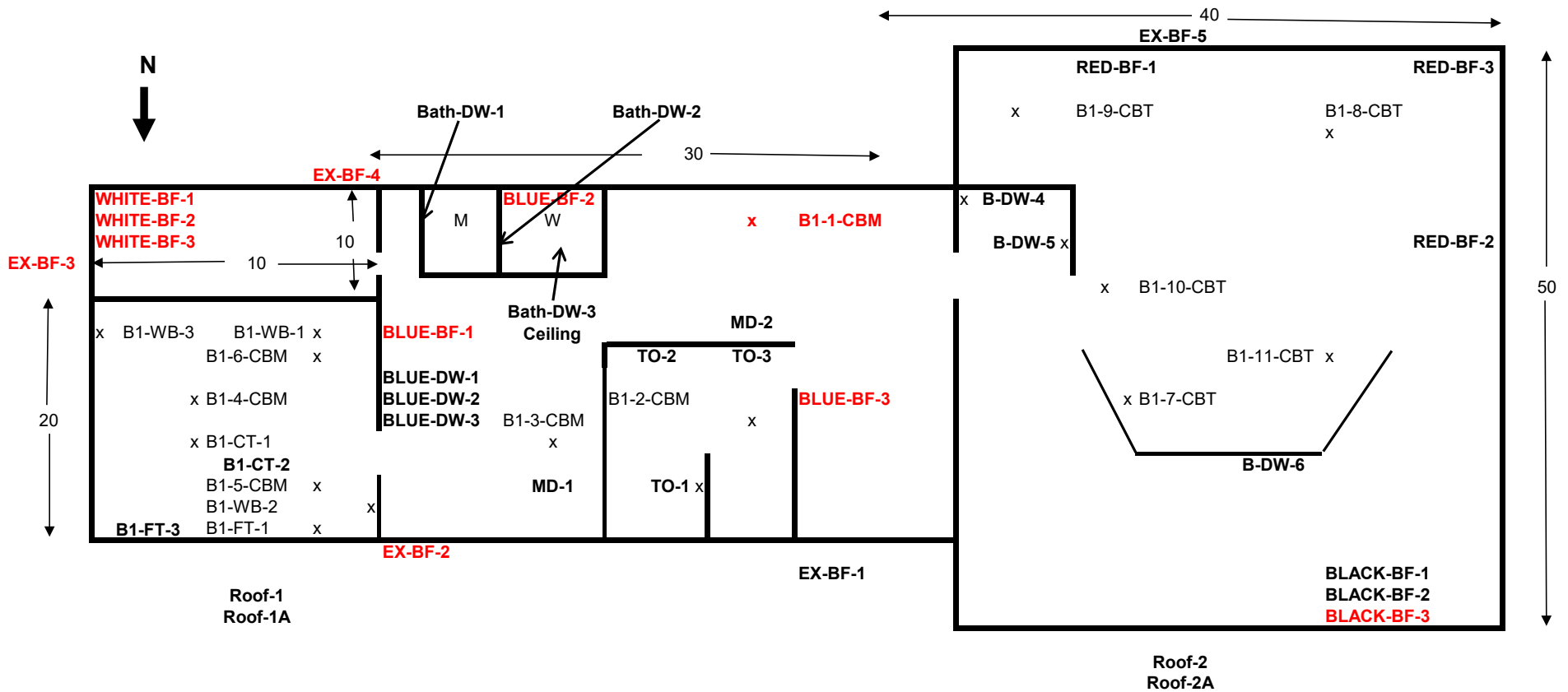


TABLE 1
THEATER
7287 LOWELL BOULEVARD, WESTMINSTER, COLORADO
ASBESTOS SURVEY SAMPLE RESULTS

SAMPLE ID	SAMPLE DATE	SAMPLE LOCATION	SAMPLE MATRIX	MATRIX MATERIAL DESCRIPTION	MATRIX QUANTITY	UNIT	PHOTO #	HOMOGENEOUS AREA	VISUAL ESTIMATE %	ASBESTOS MATERIAL%
1 B1-1-CBM	05/01/12	Dressing Room Ceiling	Drywall	White paint w/white compound Gray multi-colored paint White Compound White/tan drywall	900	SF	3	1	ND ND 3% ND	ND ND Chrysotile ND
2 B1-2-CBM	05/01/12	Dressing Room Ceiling	Drywall	White paint w/white compound White/tan drywall w/white paint	900	SF	2	1	ND ND ND	ND ND ND
3 B1-3-CBM	05/01/12	Dressing Room Ceiling	Drywall	White paint w/white compound White/tan drywall w/white paint	900	SF		1	ND ND	ND ND
4 B1-4-CBM	05/01/12	Office Sub Ceiling	Drywall	Tan paint w/ white compound White/tan drywall w/white paint	200	SF	7	2	ND ND	ND ND
5 B1-5-CBM	05/01/12	Office Sub Ceiling	Drywall	Tan paint w/ white compound White/tan drywall w/white paint	200	SF	11	2	ND ND	ND ND
6 B1-6-CBM	05/02/12	Office Sub Ceiling	Drywall	Tan paint w/ white compound White/tan drywall w/white paint	200			2	ND ND	ND ND
7 B1-WB-1	05/01/12	Office Drywall	Drywall	White/tan drywall w/red paint	400	SF	9	3	ND ND	ND ND
8 B1-WB-2	05/01/12	Office Drywall	Drywall	White paint w/white perlite plaster White/tan drywall	400	SF	10	3	ND ND	ND ND
9 B1-WB-3	05/01/12	Office Drywall	Drywall	White paint w/ white compound White/tan drywall	400	SF		3	ND ND	ND ND
10 B1-FT-1	05/01/12	Office	Floor Tile	Black mastic Black tile	200	SF	8	4	ND ND	ND ND
11 B1-CT-1	05/01/12	Office	Ceiling Tile	Gray white ceiling tile	400	SF	5 & 6	5	ND	ND
12 B1-7-CBT	05/01/12	Theater Ceiling	Drywall	Grey/multi-colored paint White/tan drywall	2,000	SF		6	ND ND	ND ND
13 B1-8-CBT	05/01/12	Theater Ceiling	Drywall	Grey/multi-colored paint w/white compound White/tan drywall	2,000	SF		6	ND ND	ND ND
14 B1-9-CBT	05/01/12	Theater Ceiling	Drywall	Grey/multi-colored paint w/white compound White/tan drywall	2,000	SF		6	ND ND	ND ND
15 B1-10-CBT	05/01/12	Theater Ceiling	Drywall	Grey/multi-colored paint w/white compound White/tan drywall	2,000	SF		6	ND ND	ND ND
16 B1-11-CBT	05/01/12	Theater Ceiling	Drywall	Grey/multi-colored paint w/white compound White/tan drywall	2,000	SF		6	ND ND	ND ND
17 EX-BF-1	02/14/17	North West Wall Building Exterior	Block Filler	White block filler w/ maroon paint Gray granular material	2,400	SF		7	ND ND	ND ND
18 EX-BF-2	02/14/17	North East Wall Building Exterior	Block Filler	Maroon/multi-colored paint White block filler Gray granular material	2,400	SF		7	ND 5% ND	ND Chrysotile ND
19 EX-BF-3	02/14/17	East Wall Building Exterior	Block Filler	Maroon/multi-colored paint White block filler Gray granular material	2,400	SF		7	ND 5% ND	ND Chrysotile ND
20 EX-BF-4	02/14/17	South East Wall Building Exterior	Block Filler	Maroon paint White block filler Gray/orange granular material	2,400	SF		7	ND 5% ND	ND Chrysotile ND
21 EX-BF-5	02/14/17	South West Wall Building Exterior	Block Filler	White block filler w/ maroon paint Gray granular material	2,400	SF		7	ND ND	ND ND
22 BLACK-BF-1	02/14/17	North West Theater Wall	Block Filler	White block filler w/ black paint Gray/red granular material	400	SF		8	ND ND	ND ND
23 BLACK-BF-2	02/14/17	North West Theater Wall	Block Filler	Black paint White block filler Gray/red granular material	400	SF		8	ND ND	ND ND
24 BLACK-BF-3	02/14/17	North West Theater Wall	Block Filler	Black paint White block filler Gray/red granular material	400	SF		8	ND 5% ND	ND Chrysotile ND
25 RED-BF-1	02/14/17	North East Theater Wall	Block Filler	White block filler w/ red paint Gray granular material	900	SF		9	ND ND	ND ND
26 RED-BF-2	02/14/17	North West Theater Wall	Block Filler	White block filler w/ red paint Gray granular material	900	SF		9	ND ND	ND ND
27 RED-BF-3	02/14/17	West Theater Wall	Block Filler	White block filler w/ red paint Gray granular material	900	SF		9	ND ND	ND ND
28 WHITE-BF-1	02/14/17	South East Store Room Wall	Block Filler	White/multi-colored paint White block filler Gray/red granular material	464	SF		10	ND 6% ND	ND Chrysotile ND
29 WHITE-BF-2	02/14/17	South East Store Room Wall	Block Filler	White/multi-colored paint White block filler Gray/red granular material	464	SF		10	ND 6% ND	ND Chrysotile ND
30 WHITE-BF-3	02/14/17	South East Store Room Wall	Block Filler	White/multi-colored paint White block filler Gray/red granular material	464	SF		10	ND 6% ND	ND Chrysotile ND
31 BLUE-BF-1	02/14/17	Change Room East Wall	Block Filler	Blue/multi-colored paint Gray/red granular material White block filler	328	SF		11	ND ND 8%	ND ND Chrysotile
32 BLUE-BF-2	02/14/17	Change Room South Wall	Block Filler	Blue/multi-colored paint Gray/red granular material White block filler	328	SF		11	ND ND 8%	ND ND Chrysotile
33 BLUE-BF-3	02/14/17	Office West Wall	Block Filler	Blue/multi-colored paint Gray/red granular material White block filler	328	SF		11	ND ND 7%	ND ND Chrysotile
34 BLUE-DW-1	02/14/17	Change Room East Wall	Drywall Texture	White compound w/ blue paint Off white/tan drywall w/ gray/white paint	50	SF		12	ND ND	ND ND
35 BLUE-DW-2	02/14/17	Change Room East Wall	Drywall Texture	Off white/tan drywall w/ blue paint	50	SF		12	ND	ND
36 BLUE-DW-3	02/14/17	Change Room East Wall	Drywall Texture	Off white/tan drywall w/ blue paint	50	SF		12	ND	ND
37 B-DW-4	12/12/19	Black Drywall inside entrance to theater - east wall	Drywall Texture	White compound w/ black/off white paint Pink/tan drywall	50	SF		13	ND ND	ND ND
38 B-DW-5	12/12/19	Black Drywall inside entrance to theater - west wall	Drywall Texture	White compound w/ black/off white paint & white fibrous woven material Gray/tan drywall	50	SF		13	ND ND	ND ND
39 B-DW-6	12/12/19	Black Drywall Theater Backdrop Wall	Drywall Texture	Gray/tan drywall w/ black/multi-colored paint	50	SF		13	ND	ND
40 TO-1	12/12/19	Ticket Office West Wall	Drywall Texture	White compound w/ maroon paint Gray/tan drywall	50	SF		14	ND	ND
41 TO-2	12/12/19	Ticket Office South Wall	Drywall Texture	Gray/tan drywall w/ blue/white paint	50	SF		14	ND	ND
42 TO-3	12/12/19	Ticket Office East Wall	Drywall Texture	White compound w/ blue paint Gray/tan drywall	50	SF		14	ND ND	ND ND
43 Bath-DW-1	12/12/19	Mens East Wall	Drywall Texture	White compound w/ white fibrous woven material & blue paint Gray/tan drywall	50	SF		15	ND ND	ND ND
44 Bath-DW-2	12/12/19	Womens East Wall	Drywall Texture	Blue paint w/ white compound Gray/tan drywall	50	SF		15	ND ND	ND ND
45 Bath-DW-3	12/12/19	Womens Ceiling	Drywall Texture	Gray/tan drywall w/ blue paint	50	SF		15	ND	ND
46 B1-CT-2	12/12/19	Office Ceiling Tile	Ceiling Tile	Gray/white ceiling tile	400	SF		5	ND	ND
47 B1-FT-3	12/12/19	Office Floor Tile	Floor Tile	Black mastic w/ yellow adhesive Black/multi-colored tile	200	SF		4	ND	ND
48 MD-1	12/12/19	Cove Base at Ticket Office	Cove Base	Cream adhesive Gray cove base	50	SF		16	ND	ND
49 MD-2	12/12/19	Cove Base at Ticket Office	Cove Base	Cream adhesive Gray cove base	50	SF		16	ND	ND
50 Roof-1	12/12/19	East Side	Shingles	Black/gray shingle Black fibrous tar	50	SF		17	ND	ND
51 Roof-1A	12/12/19	East Side	Shingles	Black fibrous tar Black/gray shingle	50	SF		17	ND	ND
52 Roof-2	12/12/19	West Side	Shingles	Black fibrous tar	50	SF		18	ND	ND
53 Roof-2A	12/12/19	West Side	Shingles	Black fibrous tar	50	SF		18	ND	ND

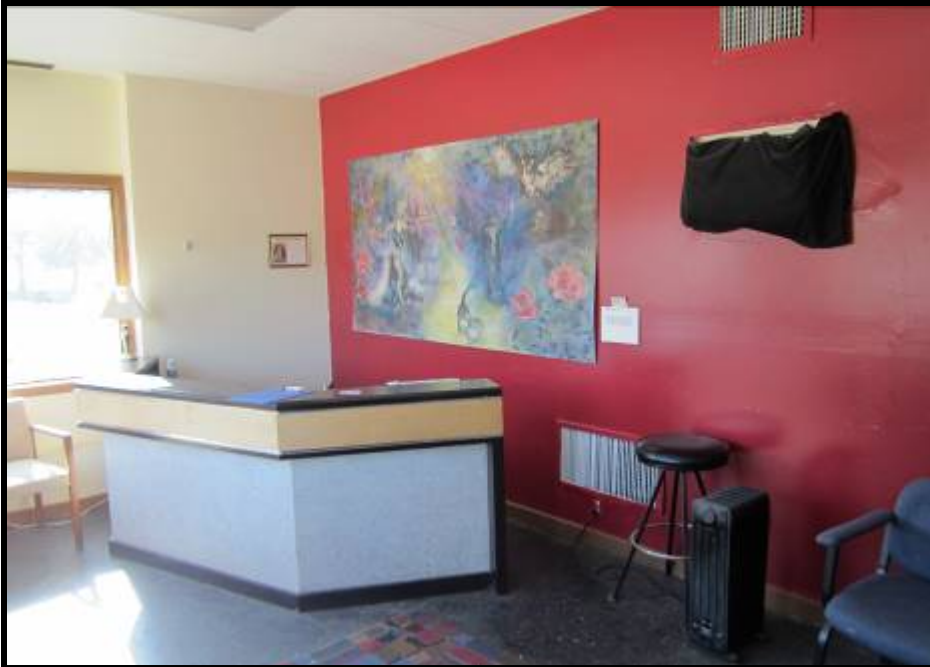


Photo 1:
Living Room
Office

Photo 2:
Dressing Room

Photo 3:
Theater Stage

**7287 Lowell Boulevard
Theater
Westminster, Colorado
80030**



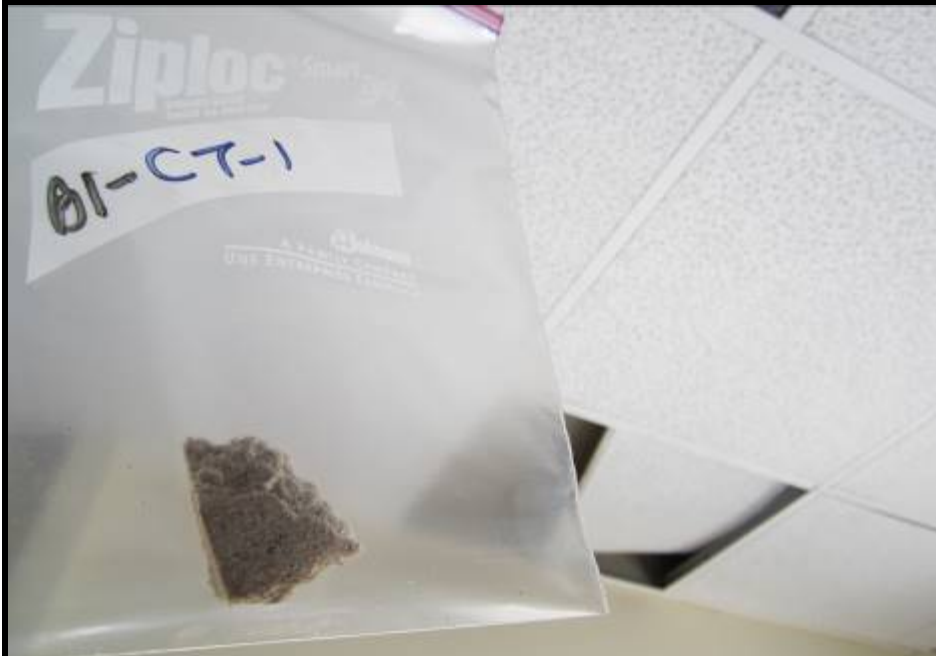


Photo 4:
Dressing Room Ceiling Sample

Photo 5:
Office Ceiling Tile

Photo 6:
Office Ceiling Tile Sample

7287 Lowell Boulevard
Theater
Westminster, Colorado
80030





Photo 7:
Sub Ceiling in Office

Photo 8:
Office Floor Tile

Photo 9:
Office Drywall Sample

7287 Lowell Boulevard
Theater
Westminster, Colorado
80030



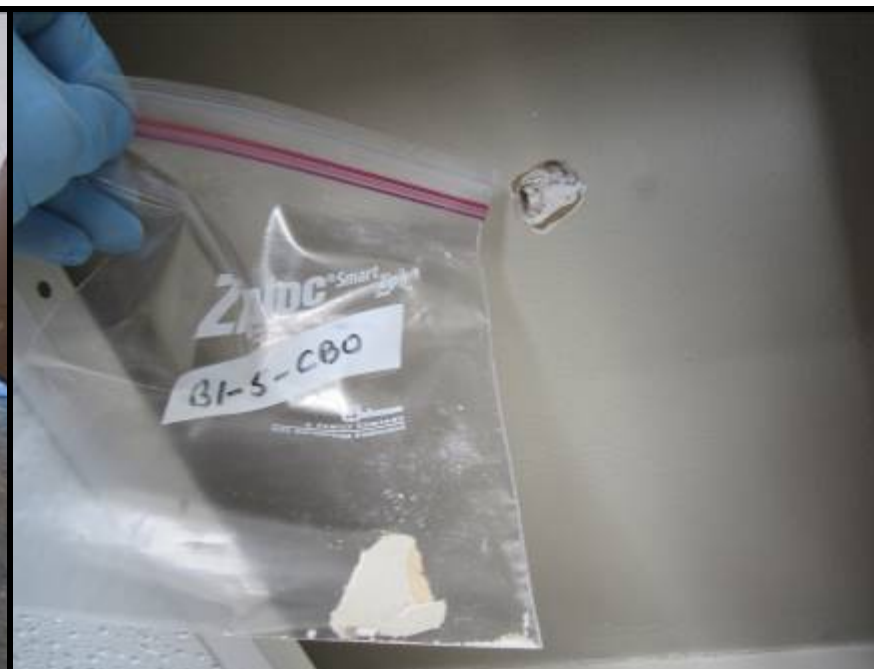


Photo 10:
Office Drywall Sample

Photo 11:
Office Sub Ceiling Sample

Photo 12:
Theater Ceiling Sample

7287 Lowell Boulevard
Theater
Westminster, Colorado
80030





December 27, 2019

Subcontractor Number:

Laboratory Report: RES 452318-1

Project #/P.O. #: None Given

Project Description: 7287 Lowell

Pat Lee
SEM - Strategic Environmental
5030 S. Fulton St.
Greenwood Village CO 80111

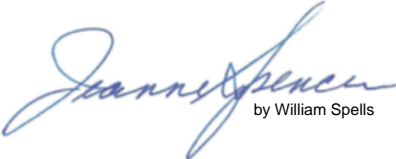
Dear Pat,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 452318-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,



by William Spells

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452318-1**
 Client: **SEM - Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **7287 Lowell**
 Date Samples Received: **December 20, 2019**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **Standard**
 Date Samples Analyzed: **December 27, 2019**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
				Mineral	Visual Estimate (%)		
B-DW-4	A	White compound w/ black/off white paint	15		ND	0	100
	B	Pink/tan drywall	85		ND	15	85
B-DW-5	A	White compound w/ black/off white paint & white fibrous woven material	25		ND	12	88
	B	Gray/tan drywall	75		ND	30	70
B-DW-6	A	Gray/tan drywall w/ black/multi-colored paint	100		ND	20	80
TO-1	A	White compound w/ maroon paint	15		ND	0	100
	B	Gray/tan drywall	85		ND	12	88
TO-2	A	Gray/tan drywall w/ blue/white paint	100		ND	12	88
TO-3	A	White compound w/ blue paint	20		ND	0	100
	B	Gray/tan drywall	80		ND	0	100
Bath-DW-1	A	White compound w/ white fibrous woven material & blue paint	35		ND	12	88
	B	Gray/tan drywall	65		ND	25	75

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452318-1**
 Client: **SEM - Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **7287 Lowell**
 Date Samples Received: **December 20, 2019**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **Standard**
 Date Samples Analyzed: **December 27, 2019**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
				Mineral	Visual Estimate (%)		
Bath-DW-2	A	Blue paint w/ white compound	10		ND	0	100
	B	Gray/tan drywall	90		ND	25	75
Bath-DW-3	A	Gray/tan drywall w/ blue paint	100		ND	12	88
B1-CT-2	A	Gray/white ceiling tile	100		ND	65	35
B1-FT-2	A	Black mastic w/ yellow adhesive	12		ND	0	100
	B	Black/multi-colored tile	88		ND	0	100
MD-1	A	Cream adhesive	7		ND	0	100
	B	Gray cove base	93		ND	0	100
MD-2	A	Cream adhesive	9		ND	0	100
	B	Gray cove base	91		ND	0	100
Roof-1	A	Black/gray shingle	50		ND	15	85
	B	Black fibrous tar	50		ND	15	85
Roof-1-A	A	Black fibrous tar	50		ND	15	85
	B	Black/gray shingle	50		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452318-1**
 Client: **SEM - Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **7287 Lowell**
 Date Samples Received: **December 20, 2019**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **Standard**
 Date Samples Analyzed: **December 27, 2019**

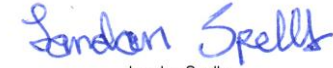
ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
				Mineral	Visual Estimate (%)		
Roof-2	A	Black fibrous tar	100		ND	15	85
Roof-2-A	A	Black fibrous tar	100		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.


Piper-Lenore O. Murphy

Analyst


Landon Spells

Analyst / Data QA



RES Job #: 452318

SUBMITTED BY		INVOICE TO		CONTACT INFORMATION		SERIES	
Company: SEM - STRATEGIC ENVIRONMENTAL		Company: SEM - STRATEGIC ENVIRONMENTAL		Contact: PAT LEE		-1 PLM STANDARD	
Address: 5030 S. FULTON ST.		Address: 5030 S. FULTON ST.		Phone: (720) 841-2200			
GREENWOOD VILLAGE, CO 80111		GREENWOOD VILLAGE, CO 80111		Fax:			
Project Number and/or P.O. #: NONE GIVEN		Project Description/Location: 7287 LOWELL		Final Data Deliverable Email Address: PATLEE@STRATEGICENVIRO.COM			

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm		REQUESTED ANALYSIS				VALID MATRIX CODES		LAB NOTES
PLM / PCM / TEM	DTL RUSH PRIORITY STANDARD					Air = A	Bulk = B	<p>Drinking Water = DW</p> <p>Waste Water = WW</p> <p>**ASTM E1792 approved wipe media only**</p>
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm						Dust = D	Food = F	
Dust	RUSH PRIORITY STANDARD					Paint = P	Soil = S	
Metals	RUSH PRIORITY STANDARD					Surface = SU	Swab = SW	
Organics*	SAME DAY RUSH PRIORITY STANDARD					Tape = T	Wipe = W	
MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm						Drinking Water = DW		
Viable Analysis**	PRIORITY STANDARD					Waste Water = WW		
Medical Device Analysis	RUSH STANDARD					**ASTM E1792 approved wipe media only**		
Mold Analysis	RUSH PRIORITY STANDARD							
Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.								
Special Instructions:		PLM - Short Report	Long Report, CARB 435			Sample Volume (L) / Area	Matrix Code	Laboratory Analysis Instructions
Client Sample ID Number (Sample ID's must be unique)		ASBESTOS	CHEMISTRY	MICROBIOLOGY		Date Collected mm/dd/yy		
1	B-DW-4	X					B	
2	B-DW-5	X					B	
3	B-DW-6	X					B	
4	TO-1	X					B	
5	TO-2	X					B	
6	TO-3	X					B	
7	BATH-DW-1	X					B	
8	BATH-DW-2	X					B	
9	BATH-DW-3	X					B	
10	B1-CT-2	X					B	
11	B1-FT-2	X					B	
12	MD-1	X					B	
13	MD-2	X					B	

REI will analyze incoming samples based on information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing, client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By:		PAT LEE	Date/Time: 12/20/2019 14:59:28	Sample Condition: ACCEPTABLE - INTACT
Received By:		ANNEMARIE KIEFFER	Date/Time: 12/20/2019 14:59:28	Carrier: HAND



Res Job#: 452318

Submitted By: SEM - STRATEGIC ENVIRONMENTAL

Client Sample ID Number (Sample ID's must be unique)	REQUESTED ANALYSIS						VALID MATRIX CODES		LAB NOTES					
	ASBESTOS	CHEMISTRY	MICROBIOLOGY	PLM - Short Report Long Report, CARB 435	TEM - AHERA, +/- or Quantified, Microvac +/- or Quantified, Wipe (+/- or Quantified), NIOSH 7402, ISO 10312, ISO 13794, Chatfield, Waste Water, Drinking Water, Bulk +/-	PCM - 74100A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) Lead Only (7092, 7420, Waste Water, Foodware), Multi Metal (7303, 6020A, 200.8, Waste Water, Foodware), pH (Liquid, Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan	ORGANICS - Methamphetamine, TSS	Viables	MEDICAL - Biorburden, LAL	MOLD - Spore Trap, Bulk Mold, Particulate Identification	Air = A Bulk = B Dust = D Food = F Paint = P Soil = S Surface = SU Swab = SW Tape = T Wipe = W Drinking Water = DW Waste Water = WW **ASTM E1792 approved wipe media only**	Laboratory Analysis Instructions
			Sample Volume (L) / Area	Matrix Code	Date Collected mm/dd/yy									
14 ROOF-1	X													
15 ROOF-1-A	X													
16 ROOF-2	X													
17 ROOF-2-A	X													



February 22, 2017

Subcontract Number: NA
Laboratory Report: RES 372196-1
Project # / P.O. # None Given
Project Description: 7287-Lowell Boulevard

SGM
5030 S. Fulton St.
Greenwood Village CO 80111

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 372196-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

A handwritten signature in blue ink that reads "Charlotte Davidson". Below the signature, the name "Charlotte Davidson" is printed in a small, blue, sans-serif font.

Charlotte Davidson for

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 372196-1**
 Client: **SGM**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **7287-Lowell Boulevard**
 Date Samples Received: **February 14, 2017**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **February 22, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
EX-BF-1	EM 1802849	A	White block filler w/ maroon paint	20		ND	TR	100
			B	Gray granular material	80		ND	0
EX-BF-2	EM 1802850	A	Maroon/multi-colored paint	10		ND	0	100
		B	White block filler	20	Chrysotile	5	0	95
		C	Gray granular material	70		ND	0	100
EX-BF-3	EM 1802851	A	Maroon/multi-colored paint	20		ND	0	100
		B	White block filler	40	Chrysotile	5	0	95
		C	Gray granular material	40		ND	0	100
EX-BF-4	EM 1802852	A	Maroon paint	5		ND	0	100
		B	White block filler	15	Chrysotile	5	0	95
		C	Gray/orange granular material	80		ND	0	100
EX-BF-5	EM 1802853	A	White block filler w/ maroon paint	25		ND	0	100
		B	Gray granular material	75		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 372196-1**
 Client: **SGM**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **7287-Lowell Boulevard**
 Date Samples Received: **February 14, 2017**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **February 22, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
Black-BF-1	EM 1802854	A	White block filler w/ black paint	10		ND	0	100
		B	Gray/red granular material	90		ND	0	100
Black-BF-2	EM 1802855	A	White block filler w/ black paint	10		ND	0	100
		B	Gray/red granular material	90		ND	0	100
Black-BF-3	EM 1802856	A	Black paint	10	Chrysotile	ND	0	100
		B	White block filler	20		5	0	95
		C	Gray/red granular material	70		ND	0	100
RED-BF-1	EM 1802857	A	White block filler w/ red paint	20		ND	0	100
		B	Gray granular material	80		ND	0	100
RED-BF-2	EM 1802858	A	White block filler w/ red paint	20		ND	0	100
		B	Gray granular material	80		ND	0	100
RED-BF-3	EM 1802859	A	White block filler w/ red paint	20		ND	0	100
		B	Gray granular material	80		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 372196-1**
 Client: **SGM**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **7287-Lowell Boulevard**
 Date Samples Received: **February 14, 2017**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **February 22, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
White-BF-1	EM 1802860	A	White/multi-colored paint	5		ND	0	100
		B	White block filler	15	Chrysotile	6	0	94
		C	Gray/red granular material	80		ND	0	100
White-BF-2	EM 1802861	A	White/multi-colored paint	5		ND	0	100
		B	White block filler	13	Chrysotile	6	0	94
		C	Gray/red granular material	82		ND	0	100
White-BF-3	EM 1802862	A	White/multi-colored paint	5		ND	0	100
		B	White block filler	15	Chrysotile	6	0	94
		C	Gray/red granular material	80		ND	0	100
Blue-BF-1	EM 1802863	A	Blue/multi-colored paint	20		ND	0	100
		B	Gray/red granular material	35		ND	0	100
		C	White block filler	45	Chrysotile	8	0	92

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0


TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 372196-1**
 Client: **SGM**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **7287-Lowell Boulevard**
 Date Samples Received: **February 14, 2017**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **February 22, 2017**

ND=None Detected TR=Trace, <1% Visual Estimate Trem/Act=Tremolite/Actinolite
--

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
Blue-BF-2	EM 1802864	A	Blue/multi-colored paint	20		ND	0	100
		B	Gray/red granular material	35		ND	0	100
		C	White block filler	45	Chrysotile	8	0	92
Blue-BF-3	EM 1802865	A	Blue/multi-colored paint	20		ND	0	100
		B	Gray/red granular material	35		ND	0	100
		C	White block filler	45	Chrysotile	7	0	93
Blue-DW-1	EM 1802866	A	White compound w/ blue paint	25		ND	0	100
		B	Off white/tan drywall w/ gray/white paint	75		ND	25	75
Blue-DW-2	EM 1802867	A	Off white/tan drywall w/ blue paint	100		ND	40	60
Blue-DW-3	EM 1802868	A	Off white/tan drywall w/ blue paint	100		ND	25	75

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.


 Que Pham
 Analyst / Data QA

Due Date: 2.17.22
 Due Time: _____

RES 372196

REILAB Reservoirs Environmental, Inc.
 5801 Logan St. Denver, CO 80216 • Ph: 303-964-1986 • Fax: 303-477-4275 • Toll Free 866-RES-ENV
 After Hours Cell Phone: 720-339-9228

INVOICE TO: (IF DIFFERENT)

CONTACT INFORMATION:

Company: SGM Contact: _____
 Address: _____ Phone: _____
 _____ Fax: _____
 _____ Cell/pager: _____
 Final Data Deliverable Email Address: _____

REQUESTED ANALYSIS		VALID MATRIX CODES		LAB NOTES:	
ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm PLM / PCM / TEM _____ RUSH (Same Day) _____ PRIORITY (Next Day) _____ STANDARD (3-5 Day) (Rush PCM = 2hr, TEM = 6hr.) CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm Metal(s) / Dust** _____ RUSH _____ 24 hr. _____ 3-5 Day RCR 8 / Metals & Welding _____ RUSH (3 Day) _____ 5 Day _____ 10 Day Fume Scan / TCLP** _____ 24 hr. _____ 3 day _____ 5 Day Organics _____ MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm E.coli and/or Coliforms* _____ 24-48 Hour Pathogens* _____ 24-48 Hour Microbial Growth* _____ 5-10 Day Legionella _____ 10 Day Mold _____ RUSH _____ 24 Hr _____ 48 Hr _____ 3 Day _____ 5 Day **Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.** Special Instructions: _____ Client sample ID number (Sample ID's must be unique) 1 <u>EX - BF - 2</u> 2 _____ 3 _____ 4 _____ 5 _____ 6 <u>BULK BF - 2</u> 7 _____ 8 _____ 9 <u>RCR - BF - 1</u> 10 <u>RCR - BF - 2</u>	PLM - Short report, Point Count, Long report, Qualitative TEM - AHERA, Level II, 7402, ISO, +/- (Air, Bulk or Dust), Quant, Semi-Quant, Micro-vac, ISO-Indirect Preps PCM - 7400A, 7400B, OSHA DUST - Total, Respirable METALS - Analyte(s) _____ RCRA 8 , TCLP, Welding Fume, Metals Scan, PH ORGANICS - METH, TSS Pathogens: Aerobic Plate Count, Salmonella, E. coli O157:H7, Listeria, S. aureus, Campylobacter, +/- or Quantification E. coli and/or Coliforms: +/- or Quantification State Water (Please Circle One) Yes / No Microbial Growth: Aerobic Plate Count ID, Y & M or Bacteria, Fungal, +/- or Quantification Legionella: +/- or Quantification Other: Biorburden, LAL or Environmental, Mold, Spore Trap or Bulk: +/-, Identification, Quantification, Viable or Non-Viable SAMPLER'S INITIALS OR OTHER NOTES: _____	Air = A Bulk = B Dust = D Paint = P Soil = S Wipe = W F = Food Swab = SW Drinking Water = DW Waste Water = WW O = Other **ASTM E1752 approved wipe media only**	Matrix Code # Containers Date Collected mm/dd/yyyy Time Collected hh:mm a/p Sample Volume (L) / Area EM Number (Laboratory Use Only) <u>1802849</u> <u>50 - 2045070</u>		

Number of samples received: _____ (Additional samples shall be listed on attached long form.)
 NOTE: REI will analyze incoming samples based upon information received, and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: _____ Date/Time: 2/14/22 4:50 PM
 Laboratory Use Only: _____ Date/Time: 2.17.22 4:10
 Data Entry: _____ Phone Email Fax: _____ Carrier: _____
 QA: _____ Phone Email Fax: _____ Contact: _____
 Sample Condition: On Ice _____ Yes / No _____ Sealed _____ Yes / No _____ Intact _____ Yes / No _____
 Temp. (F°) _____
 Date _____ Time _____
 Date _____ Time _____

May 11, 2012

Laboratory Code: RES
Subcontract Number: NA
Laboratory Report: RES 234944-1
Project # / P.O. # None Given
Project Description: None Given

Pat Lee
Strategic Environmental
5030 S. Fulton St.
Greenwood CO 80111

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 234944-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,



Jeanne Spencer
President



Analyst(s): _____

Paul D. LoScalzo Wenlong Liu
Michael Scales Adam Humphreys
Anita Grigg Robert R. Workman Jr.
Bethany Nichols Anya Angst

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B1-1-CBM	EM 124183	A	White paint w/ white compound	20	Chrysotile	ND	TR	100
		B	Gray/multi-colored paint	20		ND	0	100
		C	White compound	20		3	2	95
		D	White/tan drywall	40		ND	15	85
B1-2-CBM	EM 124184	A	White paint w/ white compound	10	ND	ND	0	100
		B	White/tan drywall w/ white paint	90	ND	ND	15	85
B1-3-CBM	EM 124185	A	White paint w/ white compound	10	ND	ND	0	100
		B	White/tan drywall w/ white paint	90	ND	ND	15	85
B1-4-CBM (Labeled B1-4-CBO)	EM 124186	A	Tan paint w/ white compound	5	ND	ND	0	100
		B	White/tan drywall w/ white paint	95	ND	ND	15	85
B1-5-CBM (Labeled B1-5-CBO)	EM 124187	A	Tan paint w/ white compound	5	ND	ND	0	100
		B	White/tan drywall w/ white paint	95	ND	ND	15	85
B1-6-CBM (Labeled B1-6-CBO)	EM 124188	A	Tan paint w/ white compound	5	ND	ND	0	100
		B	White/tan drywall w/ white paint	95	ND	ND	15	85
B1-WB-1	EM 124189	A	White/tan drywall w/ red paint	100	ND	ND	5	95

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected TR=Trace, <1% Visual Estimate Trem-Act=Tremolite-Actinolite
--

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B1-WB-2	EM 124190	A	White paint w/ white perlitic plaster	20		ND	0	100
		B	White/tan drywall	80		ND	60	40
B1-WB-3	EM 124191	A	White paint w/ white compound	30		ND	0	100
		B	White/tan drywall	70		ND	15	85
B1-FT-1	EM 124192	A	Black mastic	3		ND	0	100
		B	Black tile	97		ND	0	100
B1-CT-1	EM 124193	A	Gray/white ceiling tile	100		ND	60	40
B1-7-CBT	EM 124194	A	Gray/multi-colored paint	5		ND	0	100
		B	White/tan drywall	95		ND	20	80
B1-8-CBT	EM 124195	A	Gray/multi-colored paint w/ white compound	5		ND	0	100
		B	White/tan drywall	95		ND	15	85
B1-9-CBT	EM 124196	A	Gray/multi-colored paint w/ white compound	5		ND	0	100
		B	White/tan drywall	95		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B1-10-CBT	EM 124197	A	Gray/multi-colored paint w/ white compound	5		ND	0	100
		B	White/tan drywall	95		ND	15	85
B1-11-CBT	EM 124198	A	Gray/multi-colored paint w/ white compound	2		ND	0	100
		B	White/tan drywall	98		ND	15	85
B2-WB-1	EM 124199	A	White/multi-colored paint	5		ND	0	100
		B	White plaster	35		ND	0	100
		C	Gray granular plaster	60		ND	TR	100
B2-WB-2	EM 124200	A	White/multi-colored paint w/ white compound	10		ND	0	100
		B	White compound	90	Chrysotile	3	0	97
B2-WB-3	EM 124201	A	White/multi-colored paint	10		ND	0	100
		B	White plaster	30		ND	0	100
		C	Gray granular plaster	60		ND	TR	100
B2-CT-1	EM 124202	A	Tan/white ceiling tile	100		ND	90	10

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B2-CT-2	EM 124203	A	Tan/white ceiling tile	100		ND	90	10
B2-CT-3	EM 124204	A	Tan/white ceiling tile	100		ND	90	10
B2-CTX-1	EM 124205	A	White texture w/ white paint	5		ND	0	100
		B	White/tan drywall	95		ND	15	85
B2-CTX-2	EM 124206	A	White texture w/ white paint	20		ND	0	100
		B	White tape	20		ND	90	10
		C	White joint compound	20		ND	2	98
		D	White/tan drywall	40		ND	20	80
B2-CTX-3	EM 124207	A	White texture w/ white paint	5		ND	TR	100
		B	White/tan drywall	95		ND	15	85
B2-FT-1	EM 124208	A	Black mastic	5	Chrysotile	6	0	94
		B	Blue tile	45	Chrysotile	10	0	90
		C	Tan tile	50	Chrysotile	5	0	95
B2-FT-2	EM 124209	A	Tan mastic	2		ND	0	100
		B	Tan tile	98	Chrysotile	12	0	88

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B2-FT-3	EM 124210	A	Tan tile w/ colorless adhesive	100		ND	0	100
B2-FT-4	EM 124211	A	Black mastic	5	Chrysotile	ND	0	100
		B	Green tile	35		6	0	94
		C	Tan tile	60		ND	0	100
CB3-WB-1	EM 124212	A	White paint	20		ND	0	100
		B	White/tan drywall	80		ND	30	70
CB3-WB-2	EM 124213	A	Tan/white paint w/ a trace of white compound	45		ND	0	100
		B	White/tan drywall	55		ND	60	40
CB3-WB-3	EM 124214	A	White paint w/ a trace of white compound	20		ND	0	100
		B	White/tan drywall	80		ND	40	60
CB3-WB-4	EM 124215	A	White/multi-colored paint w/ white compound	10		ND	0	100
		B	White/tan drywall	90		ND	30	70
CB3-WB-5	EM 124216	A	White/tan compound	10		ND	0	100
		B	White/tan drywall	90		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
RB3-FT-1	EM 124217	A	Tan resinous material	5		ND	0	100
		B	Tan sheet vinyl w/ black fibrous backing	95		ND	30	70
RB3-FT-2	EM 124218	A	Tan tile w/ colorless adhesive	40		ND	0	100
		B	Tan/blue tile w/ colorless adhesive	60		ND	0	100
RB3-FT-3	EM 124219		Not Analyzed - Sample Bag Empty					
RB3-WB-1	EM 124220	A	White granular plaster	10		ND	0	100
		B	White plaster	20		ND	0	100
		C	White/multi-colored paint w/ blue compound	70		ND	0	100
RB3-WB-2	EM 124221	A	White granular plaster	5		ND	0	100
		B	White plaster	20		ND	0	100
		C	White/multi-colored paint w/ blue compound	75		ND	0	100
RB3-WB-3	EM 124222	A	White plaster	10		ND	0	100
		B	White compound w/ white paint	20		ND	0	100
		C	Tan resinous material	20		ND	0	100
		D	Tan granular plaster	50		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
RB3-WB-4	EM 124223	A	White/multi-colored paint	20		ND	0	100
		B	White plaster	20		ND	0	100
		C	Tan granular plaster	60		ND	TR	100
RB3-WB-5	EM 124224	A	Tan fibrous material	5		ND	90	10
		B	White/multi-colored paint w/ white compound	10		ND	0	100
		C	Tan paint w/ white plaster	10		ND	0	100
		D	Tan granular plaster	75		ND	TR	100
B4-WB-1	EM 124225	A	White paint w/ white texture	30		ND	0	100
		B	White/tan drywall	70		ND	60	40
B4-WB-2	EM 124226	A	White paint w/ white texture	10		ND	0	100
		B	White/tan drywall	90		ND	90	10
B4-WB-3	EM 124227	A	White paint w/ white texture	10		ND	0	100
		B	White/tan drywall	90		ND	30	70
B4-WB-4	EM 124228	A	Gray/tan drywall	100		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B4-WB-5	EM 124229	A	White/multi-colored paint	10	Chrysotile	ND	0	100
		B	White compound	10		3	0	97
		C	White/tan drywall	80		ND	30	70
B4-CT-1	EM 124230	A	Gray/white ceiling tile	100		ND	60	40
B4-CT-2	EM 124231	A	Gray/white ceiling tile	100		ND	60	40
B4-CT-3	EM 124232	A	Gray/white ceiling tile	100		ND	60	40
B4-CB-1	EM 124233	A	White/tan drywall	100		ND	20	80
B4-CB-2	EM 124234	A	White/tan drywall w/ white paint	100		ND	15	85
B4-CB-3	EM 124235	A	White/tan drywall w/ white paint	100		ND	15	85
B4-FT-1	EM 124236	A	Black mastic	5	Chrysotile	TR	0	100
		B	Black mastic	5	Chrysotile	5	0	95
		C	Tan tile	90		ND	0	100
B4-FT-2	EM 124237	A	Black mastic	5	Chrysotile	2	0	98
		B	White tile	95		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B5-CT-1	EM 124238	A	Gray/white ceiling tile	100		ND	60	40
B5-CT-2	EM 124239	A	Brown resinous material	40		ND	0	100
		B	Tan/white ceiling tile	60		ND	90	10
B5-CT-3	EM 124240	A	White/tan drywall	100		ND	15	85
B5-CB-1	EM 124241	A	White/tan drywall	100		ND	10	90
B5-CB-2	EM 124242	A	White paint	20		ND	0	100
		B	White compound	20	Chrysotile	2	0	98
		C	White tape	20		ND	90	10
		D	White joint compound	20	Chrysotile	2	0	98
		E	White/tan drywall	20		ND	15	85
B5-CB-3	EM 124243	A	White paint	5		ND	0	100
		B	White compound	10	Chrysotile	2	0	98
		C	White/tan drywall	85		ND	15	85
B5-WB-1	EM 124244	A	White paint	5		ND	0	100
		B	White compound	10	Chrysotile	2	0	98
		C	White/tan drywall	85		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B5-WB-2	EM 124245	A	White paint	10	Chrysotile	ND	0	100
		B	White compound	10		2	0	98
		C	White/tan drywall	80		ND	15	85
B5-WB-3	EM 124246	A	White paint	5	Chrysotile	ND	0	100
		B	White compound	15		2	0	98
		C	White tape	15		ND	90	10
		D	White joint compound	15		2	0	98
		E	White/tan drywall	50		ND	15	85
B5-FT-1	EM 124247	A	Tan resinous material	5	Chrysotile	ND	0	100
		B	Black resinous material	5		ND	0	100
		C	Tan granular material	20		ND	0	100
		D	Gray tile	70		ND	2	98
B6-WB-1	EM 124248	A	White/tan drywall	100		ND	15	85
B6-CB-1	EM 124249	A	White/tan drywall	100		ND	5	95
B6-CT-1	EM 124250	A	Gray/white ceiling tile	100		ND	60	40

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B6-CT-2	EM 124251	A	White paint w/ white compound	30		ND	0	100
		B	White/tan drywall	70		ND	40	60
B6-CT-3	EM 124252	A	Gray/white ceiling tile	100		ND	60	40
B6-CT-4	EM 124253	A	White paint	5		ND	0	100
		B	White compound	10	Chrysotile	2	0	98
		C	White tape	10		ND	90	10
		D	White joint compound	10	Chrysotile	2	0	98
		E	White/tan drywall	65		ND	15	85
B6-CT-5	EM 124254	A	Gray/white ceiling tile	100		ND	60	40
B6-CT-6	EM 124255	A	White/multi-colored paint w/ a trace of white compound	10		ND	0	100
		B	White/tan drywall	90		ND	15	85
B6-INSUL	EM 124256	A	Gray fibrous material	100		ND	90	10
R-WB-1	EM 124257	A	White/multi-colored paint w/ white compound	10		ND	0	100
		B	White/tan drywall	90		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
R-WB-2	EM 124258	A	White compound w/ white paint	100	Chrysotile	ND	0	100
R-WB-3	EM 124259	A	White/multi-colored paint	10		ND	0	100
		B	White compound	10		3	0	97
		C	White/tan drywall	80	ND	15	85	
R-WB-4	EM 124260	A	Blue paint w/ a trace of white compound	10	ND	0	100	
		B	Tan fibrous material	90	ND	90	10	
R-WB-5	EM 124261	A	White foam	10	ND	0	100	
		B	White paint w/ white texture	10	ND	0	100	
		C	White/tan drywall	80	ND	30	70	
R-ST-1	EM 124262	A	Gray granular plaster	10	ND	0	100	
		B	Pink plaster w/ white paint	90	ND	0	100	
R-ST-2	EM 124263	A	Gray granular plaster	10	ND	0	100	
		B	Blue plaster w/ white paint	90	ND	0	100	
R-ST-3	EM 124264	A	Gray granular plaster	10	ND	0	100	
		B	Blue plaster w/ white paint & a trace of white compound	90	ND	0	100	

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
R-ST-4	EM 124265	A	Gray granular plaster	10		ND	0	100
		B	Blue plaster w/ white paint & a trace of white compound	90		ND	0	100
R-ST-5	EM 124266	A	Gray granular plaster	15		ND	0	100
		B	Yellow plaster w/ white/multi-colored paint	85		ND	0	100
R-FT-1	EM 124267	A	Tan mastic	5		ND	0	100
		B	Green tile	95		ND	0	100
R-FT-2	EM 124268	A	Black mastic	5	Chrysotile	12	0	88
		B	Tan tile	95	Chrysotile	8	0	92
R-FT-3	EM 124269	A	Tan resinous material w/ black debris	10		ND	0	100
		B	Gray tile w/ colorless adhesive	30		ND	2	98
		C	Gray tile	60		ND	0	100
R-FT-4	EM 124270	A	Brown mastic	5		ND	0	100
		B	Tan tile	95		ND	0	100
R-AT-1	EM 124271	A	Gray fibrous material	100		ND	90	10

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

Due Date: 5-8-10
 Due Time: _____

REILAB Reservoirs Environmental, Inc.
 5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax 303-477-4275 • Toll Free 866 RES-LENU

After Hours Cell Phone: 720-339-9228

INVOICE TO: (IF DIFFERENT)

Company: STRATEGIC ENVIRONMENTAL
 Address: 5030 S. FULTON ST
GREENWOOD VILLAGE, CO
80120

Company: Pondwice
 Address: _____
 Project Number and/or P.O. #: _____
 Project Description/Location: _____

Final Data Deliverable Email Address: _____

CONTACT INFORMATION:
 Contact: _____
 Phone: _____
 Fax: _____
 Cellpager: _____

Client sample ID number (Sample ID's must be unique)	REQUESTED ANALYSIS		VALID MATRIX CODES		LAB NOTES																		
	PLM - Short report, Long report, Point Count	TEM - AHERA Level II, 7402, ISO, +/-, Quant, Sem-quant, Micro-vac, ISO-Indirect Preps	PCB - 7400A, 7400B, OSHA	DUST - Total, Respirable		METALS - Analyte(s)	ORGANICS - METH, TSS	Salmonella: +/-	E.coli O157:H7: +/-	Listeria: +/-	Aerobic Plate Count: +/- or Quantification	Form: +/- or Quantification	Coliforms: +/- or Quantification	S.aureus: +/- or Quantification	Y & M: +/- or Quantification	Mold: +/-, Identification, Quantification	SAMPLER'S INITIALS OR OTHER NOTES	Sample Volume (l) / Area	Matrix Code	# Containers	Date Collected mmm/dd/yy	Time Collected h:mm a/p	EM Number (Laboratory Use Only)
1																						124183	
2																							84
3																							85
4																							86
5																							87
6																							88
7																							89
8																							90
9																							91
10																							92

Number of samples received: 89 (Additional samples shall be listed on attached long form.)
 NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: [Signature] Date/Time: 5/11/12 3:40PM

Laboratory Use Only
 Received By: [Signature] Date/Time: 5-1-12 3:40P
 Results: _____

Carrier: [Signature]

Sample Condition: On Ice Yes/No _____ Sealed Yes/No _____
 Temp. (F) _____ Date: 5/1/12 Time: _____
 Date: _____ Time: _____

RES Job # Z34944 Page 2 of
 Submitted by: Strategic

Client sample ID number (Sample ID's must be unique)	REQUESTED ANALYSIS		VALID MATRIX CODES		LAB NOTES	
	PLM - Short report, Long report, Point Count TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps PCM - 7400A, 7400B, OSHA DUST - Total, Respirable METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan ORGANICS - METH Salmonella: +/- E. coli O157:H7: +/- Listeria: +/- Aerobic Plate Count: +/- or Quantification E. coli: +/- or Quantification Coliforms: +/- or Quantification S. aureus: +/- or Quantification Y & M: +/- or Quantification Mold: +/- or Quantification OTHER -	(L) / Area	Matrix Code	# Containers		Date Collected mm/dd/yy
11	B1-CT-1			Air = A	Bulk = B	124193
12	B1-TCBT			Dust = D	Paint = P	94
13	B1-8CBT			Soil = S	Wipe = W	95
14	B1-9-CBT			Swab = SW	F = Food	96
15	B1-10-CBT			Drinking Water = DW	Waste Water = WW	97
16	B1-11-CBT			O = Other	**ASTM E1792 approved wipe media only**	98
17	B2-WB-1					99
18	B2-WB-2					Z00
19	B2-WB-3					1
20	B2-CT-1					2
21	B2-CT-2					3
22	B2-CT-3					4
23	B2-CTX-1					5
24	B2-CTX-2					6
25	B2-CTX-3					7
26	B2-FT-1					8
27	B2-FT-2					9
28	B2-FT-3					10
29	B2-FT-4					11
30	CB3-WB-1					12
31	CB3-WB-2					13
32	CB3-WB-3					14
33	CB3-WB-4					15
34	CB3-WB-5					16
35	RB3-FT-1					17
36	RB3-FT-2					18
37	RB3-CT-3					19
38	RB3-WB-1					Z0
39	RB3-WB-2					Z1
40	RB3-WB-3					Z2
41	RB3-WB-4					Z3

Submitted by: Strategic

Client sample ID number (Sample ID's must be unique)	REQUESTED ANALYSIS				VALID MATRIX CODES				LAB NOTES						
	PLM - Short report, Long report, Point Count	TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vec, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan	ORGANICS - BTEX, MTBE, 8260, GRO, METH	SALMONELLA +/-	E. coli O157:H7 +/-		Listeria +/-	Aerobic Plate Count +/- or Quantification	E. coli +/- or Quantification	Coliforms +/- or Quantification	S. aureus +/- or Quantification	Yeast Mold +/- or Quantification
42	R33-WB-5														1 2 3 4 5
43	B4-WB-1														2 3
44	B4-WB-2														2 3
45	B4-WB-3														2 3
46	B4-WB-4														2 3
47	B4-WB-5														2 3
48	B4-CT-1														30
49	B4-CT-2														31
50	B4-CT-3														32
51	B4-CB-1														33
52	B4-CB-2														34
53	B4-CB-3														35
54	B4-FT-1														36
55	B4-FT-2														37
56	B5-CT-1														38
57	B5-CT-2														39
58	B5-CT-3														40
59	B5-CB-1														1
60	B5-CB-2														2
61	B5-CB-3														3
62	B5-WB-1														4
63	B5-WB-2														5
64	B5-WB-3														6
65	B5-FT-1														7
66	B6-WB-1														8
67	B6-CB-1														9
68	B6-CT-1														50
69	B6-CT-2														1
70	B6-CT-3														2
71	B6-CT-4														3
72	B6-CT-5														4



Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

Patrick E Lee

Certification No.: 17670

has met the requirements of 25-7-507, C.R.S. and Air Quality Control
Commission Regulation No. 8, Part B, and is hereby certified by the
state of Colorado in the following discipline:

Building Inspector*

Issued: November 06, 2019

Expires: November 08, 2020

** This certificate is valid only with the possession of a
current Division-approved training course certification
in the discipline specified above.*

Josephine Barak
Authorized APCD Representative

SEAL



Colorado Department
of Public Health
and Environment

ASBESTOS CONSULTING FIRM

This certifies that

Strategic Environmental Management, LLC

Registration No.: ACF - 18474

has met the registration requirements of 25-7-507, C.R.S. and the Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos consulting activities as required under Regulation No 8, Part B, in the state of Colorado.

Issued: December 11, 2019

Expires: January 01, 2021

Authorized APCD Representative

SEAL

APPENDIX J

Asbestos Survey Report

3630 West 73rd Avenue

Strategic Environmental

January 27, 2020



ASBESTOS SURVEY & SAMPLING REPORT

**3630 WEST 73rd AVENUE
WESTMINSTER, COLORADO 80030**



Presented to:

*Mr Seth Plas
City of Westminster
Dept of Community Development
4800 West 92nd Avenue
Westminster, Colorado 80031*

January 27, 2020

EXECUTIVE SUMMARY

At the request of the City of Westminster, Mr. Patrick Lee, a Colorado State Certified asbestos inspector, performed an inspection and asbestos sampling at 3630 West 73rd Avenue, Westminster, Colorado 80030 (“Subject Property”).

The purpose of this survey was to identify potentially hazardous friable and non-friable asbestos containing materials (ACM) within the structure located on the Subject Property where demolition activities are contemplated. The structure consists of a 1,000 square foot commercial building.

Mr. Patrick Lee, a Colorado State Certified asbestos inspector, performed an asbestos inspection at 3630 West 73rd Avenue, Westminster, Colorado 80030, in order to identify potentially hazardous friable and non-friable asbestos containing materials (ACM) within the above referenced building where demolition activities are contemplated. The Colorado Department of Public Health and Environment’s (CDPHE) Regulation 8, Part B defines an asbestos-containing material (ACM) as a material containing more than 1% asbestos.

Mr. Lee performed asbestos bulk-sampling of surfacing materials in a total of thirty-five (35) locations in the building where demolition activities are planned. Material samples taken included drywall, block filler, ceiling tile, wall insulation, carpet adhesive and linoleum, floor debris and shingles. All thirty-five (35) bulk samples were analyzed by Reservoirs Environmental, Inc. (NVLAP #101896).

The laboratory results of the potential ACM sampled at the Subject Property indicate that eight (8) samples in the structure tested positive for chrysotile asbestos. Areas identified include:

- 1. Homogeneous Area 3 - the white compound in the ceiling drywall above the ceiling tile in the main room.**
- 2. Homogeneous Area 5 – the blue compound and the white compound in the drywall texture in the back room.**
- 3. Homogeneous Area 7 - the tan and the red multi-colored block filler on the exterior of the building.**
- 4. Homogeneous Area 12 - the brown compound in the exterior block filler on the east exterior wall.**

The specific location for the ACM is shown in the floor plan for the structure sampled in Figure 1 along with a summary all sample results in Table 1 followed by photographic documentation. Appendix A provides a detailed summary of laboratory results.

All of these homogeneous areas will need to be abated by a Colorado-licensed asbestos abatement contractor who will perform the removal, including formal notification to the Colorado Department of Public Health and Environment prior to the abatement of the ACM.

I. Introduction

An inspection and bulk sampling for ACM was conducted at the Subject Property in Westminster by Mr. Patrick Lee. Mr. Lee is a Colorado State Certified inspector and has EPA Accreditation #17670. A copy of the certificate is shown in Appendix B. The purpose of the inspection was to identify, sample and assess potentially hazardous friable and non-friable ACM from within the structure where demolition activities are contemplated.

II. Structural Design

The building is a 1,000 square foot, single-level, slab on grade, cement block structure with asphalt roofing material.

III. Sampling and Analytical Procedures

The inspection and assessment were conducted by an EPA and AHERA accredited Building Inspector qualified by experience, education and training in the recognition of potential ACM and approved bulk-sampling techniques. The asbestos bulk sampling was conducted on suspect ACM with a limited number of bulk samples being collected from within the building where demolition is contemplated.

The inspection and assessment were performed in accordance with Environmental Protection Agency/AHERA recommended procedures. These procedures call for the visual inspection of the area of concern and collection and analysis of representative bulk samples of suspect material.

Some minor destructive sampling was conducted. Walls, columns and perimeter pipe chases were not broken into in order to locate and quantify suspect ACM. It should be noted that additional ACM might be located in other inaccessible areas.

Random bulk samples, representative of the suspect asbestos-containing building materials (ACBM) of each homogeneous area (HA), were collected according to the guidelines published as Environmental Protection Agency (EPA) Final Rule: Title II of the Toxic Substances Control Act (TSCA), 15 USC, Sections 2641 through 2654 and in compliance with 40 CFR, Part 763.

Representative sampling is based on the following criteria:

1. The distribution of the suspect material throughout the HA.
2. The suspect material's physical characteristics and application.
3. Random sampling patterns determined for each HA.

Suspect materials sampled and analyzed should be considered to be representative of materials in each HA if:

1. They exhibit similar physical characteristics; and
2. The application of the sampled material can be correlated to the application of unsampled material.

Bulk samples collected were analyzed utilizing the EPA's Method for the Determination of Asbestos in Bulk Building Materials (EPA 600/R/116, July, 1993) and the McCrone Research Institute's The Asbestos Particle Atlas as methods references. Analysis of the bulk samples was performed on the "date reported," as listed in the bulk sample analysis report.

IV. Notes on Report Format

Suspect materials alike in appearance and application were sampled as HAs. Suspect materials were divided into three classifications:

1. Surfacing material: sprayed or troweled onto structural building member.
2. Thermal systems insulation: any type of pipe, boiler, tank, or duct insulation.
3. Miscellaneous: other suspect materials, including flooring, ceiling tiles, insulation, and finishing materials.

Condition assessments were performed by the accredited inspector at the time of inspection. Condition assessments are listed in the following section. Ratings of "good," "damaged," and "significantly damaged" are meant to indicate the overall condition of the material. A material in "good" condition has no visible damage or deterioration, or showing only very limited damage or deterioration. A material in "damaged" condition has the following characteristics:

- The surface is crumbling, blistered, water-stained, gouged, marred or otherwise abraded over less than one-tenth of the surface if the damage is evenly distributed (one-quarter if the damage is localized). Accumulation of powder, dust or debris similar in appearance to the suspect material on surfaces beneath the material can be used as confirmatory evidence.

A material in "significantly damaged" condition has one or more of the following characteristics:

- The surface is crumbling or blistered over at least one-tenth of the surface if the damage is evenly distributed (one-quarter if the damage is localized).
- One-tenth (one-quarter, if localized) of the material is hanging from the surface, deteriorated, or showing adhesive failure.
- Water stains, gouges, or mars are over at least one-tenth of the surface if the damage is evenly distributed (one-quarter if the damage is localized).

Accumulation of powder, dust or debris similar in appearance to the suspect material on surfaces beneath the material can be used as confirmatory evidence.

Response-action recommendations for asbestos-containing HAs are listed in the section VII. Recommendations may be for more than one HA, if materials are alike. Recommendations are either "general" or "immediate." An immediate recommendation indicates the presence of asbestos greater than 1% within the bulk-sample, or a bulk-sample in the same HA, and should be addressed accordingly. A general recommendation indicates asbestos does not exist greater than 1% within the bulk-sample, or a bulk-sample in the same HA, and no further abatement activities are required for removal of the material. Any sample reporting a "TRACE" amount of

asbestos must be considered to be positive for asbestos greater than 1% unless it is analyzed by the point-count method to be less than 1%.

V. Inspector Comments

Mr. Lee performed asbestos bulk-sampling of surfacing materials in a total of thirty-five (35) locations in the building where demolition activities are planned. Material samples taken included drywall, block filler, ceiling tile, wall insulation, carpet adhesive and linoleum, floor debris and shingles. All thirty-five (35) bulk samples were analyzed by Reservoirs Environmental, Inc. (NVLAP #101896).

The laboratory results of the potential ACM sampled at the Subject Property indicate that eight (8) samples in the structure tested positive for chrysotile asbestos. Areas identified include:

- 1. Homogeneous Area 3 - the white compound in the ceiling drywall above the ceiling tile in the main room.**
- 2. Homogeneous Area 5 – the blue compound and the white compound in the drywall texture in the back room.**
- 3. Homogeneous Area 7 - the tan and the red multi-colored block filler on the exterior of the building.**
- 4. Homogeneous Area 12 - the brown compound in the exterior block filler on the east exterior wall.**

VI. Asbestos-Containing Homogeneous Area Descriptions and Sample Locations

The specific location for the ACM is shown in the floor plan for the structure sampled in Figure 1 along with a summary all sample results in Table 1 followed by photographic documentation. Appendix A provides a detailed summary of laboratory results.

VII. Recommendations

All of these homogeneous areas will need to be abated by a Colorado-licensed asbestos abatement contractor who will perform the removal, including formal notification to the Colorado Department of Public Health and Environment prior to the abatement of the ACM.

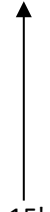
As per Section IV. C.1.d (vi).D in Regulation 8, the signature and certification number of the inspector who completed this report is as follows:

Inspector: Patrick E. Lee

A handwritten signature in black ink, appearing to read 'P. Lee', written in a cursive style.

Certification Number: 17670

Bath-6
Ceiling



15'

3630 - EBF-2



35'

3630 - EBF-1

3



TABLE 1

3630 WEST 73RD AVENUE, WESTMINSTER, COLORADO

ASBESTOS SURVEY SAMPLE RESULTS

SAMPLE ID	SAMPLE DATE	SAMPLE LOCATION	SAMPLE MATRIX	MATRIX MATERIAL DESCRIPTION	MATRIX QUANTITY	UNIT	PHOTO #	HOMOGENEOUS AREA	VISUAL ESTIMATE %	ASBESTOS MATERIAL%
1 B6-CT-1	05/01/12	NE Side of Main Room	Ceiling Tile	Grey/white ceiling tile	400	SF	#1	1	ND	ND
2 B6-CT-3	05/01/12	Center of Main Room	Ceiling Tile	Grey/white ceiling tile	400	SF		2	ND	ND
3 B6-CT-4	05/01/12	Center of Main Room	Ceiling Drywall (2nd layer)	White paint White compound White tape White joint compound White/tan drywall	800	SF	#3	3	ND 2% ND 2% ND	Chrysotile Chrysotile ND
4 B6-CT-2	05/01/12	NE Side of Main Room	Ceiling Drywall (2nd layer)	White paint w/ white compound White/tan drywall	800	SF	#2	3	ND ND ND	ND ND ND
5 B6-CT-6	05/01/12	SW Side of Main Room	Ceiling Drywall (2nd layer)	White /multi-colored paint w/ a trace of white compound White/tan drywall	800	SF		3	ND ND	ND ND
6 B6-CT-5	05/01/12	SW Side of Main Room	Ceiling Tile	Grey/white ceiling tile	200	SF		4	ND	ND
7 B6-CB-1	05/01/12	Back Room	Ceiling DryWall	White/tan drywall	300	SF		5	ND	ND
8 B6-WB-1	05/01/12	Back Room	Drywall	White/tan drywall	300	SF		5	ND	ND
9 3630 - B6-2	2/14/2017	Back Room	Drywall	White compound Blue compound Off white compound White/multi-colored paint White/brown drywall	300	SF		5	ND Chrysotile Chrysotile ND ND	TRACE ND 2% ND ND
10 B6-INSUL	05/01/12	Back Room	Ceiling Insulation	Grey fibrous material	100	SF		6	ND	ND
11 3630 - EBF-1	2/14/2017	Exterior Building North West Wall	Block Filler	Tan block filler Red/multi-colored paint Gray cinder block	700	SF		7	Chrysotile ND ND	TRACE ND ND
12 3630 - EBF-2	2/14/2017	Exterior Building South West Wall	Block Filler	Tan block filler Gray cinder block Red/multi-colored paint	700	SF		7	Chrysotile ND ND	TRACE ND ND
13 3630 - EBF-3	2/14/2017	Exterior Building South Wall	Block Filler	Red/multi-colored paint w/ tan block filler Gray/beige cinder block	700	SF		7	Chrysotile ND	TRACE ND
14 3630 - IBF-1	2/14/2017	Interior Building North East Wall	Block Filler	Blue compound White compound Gray/tan cinder block White/multi-colored paint w/ white plaster	950	SF		8	TRACE <.25% ND ND ND	Chrysotile ND ND ND
15 3630 - IBF-2	2/14/2017	Interior Building South East Wall	Block Filler	Blue compound White/multi-colored paint White plaster Gray/tan cinder block	950	SF		8	TRACE<.50% ND ND ND	Chrysotile ND ND ND
16 3630 - IBF-3	2/14/2017	Interior Building West Wall	Block Filler	Blue compound White plaster Gray/tan cinder block White/multi-colored paint	950	SF		8	TRACE<.50% ND ND ND	Chrysotile ND ND ND
17 3630 - CT-7	2/14/2017	Floor Debris	Ceiling Tile	Tan/white ceiling tile	50	SF		9	ND	ND
18 Bath-4	12/20/2019	Small Bath in SW Corner Right Wall	Drywall	Colorless fibrous woven material Off white/green wall paper w/ colorless adhesive Off white compound w/ white paint Tan/off white drywall	75	SF		10	ND ND ND ND	ND ND ND ND
19 Bath-5	12/20/2019	Small Bath in SW Corner Left Wall	Drywall	Off white wall covering w/ white adhesive Tan/off white drywall	75	SF		10	ND ND	ND ND
20 Bath-6	12/20/2019	Small Bath in SW Corner Ceiling	Drywall	Tan/off white drywall w/ white/multi-colored paint	75	SF		10	ND	ND
21 Lino-1	12/20/2019	Small Bath Floor	Linoleum	Tan adhesive Gray/multi-colored sheet vinyl	10	SF		11	ND ND	ND ND
22 Lino-2	12/20/2019	Small Bath Floor	Linoleum	Tan adhesive Beige adhesive Gray/multi-colored sheet vinyl	10	SF		11	ND ND ND	ND ND ND
23 EEX-BF-1	12/20/2019	East Exterior Wall North Side	Block Filler	Bluish-gray paint Brown compound Gray granular cementitious material	500	SF		12	ND Chrysotile ND	ND 3% ND
24 EEX-BF-2	12/20/2019	East Exterior Wall Center	Block Filler	Bluish-gray paint Brown compound Gray granular cementitious material	500	SF		12	ND Chrysotile ND	ND 3% ND
25 EEX-BF-3	12/20/2019	East Exterior Wall South	Block Filler	Bluish-gray paint Brown compound Gray granular cementitious material	500	SF		12	ND Chrysotile ND	ND 2% ND
26 IBF-4	12/20/2019	South Interior Wall	Block Filler	Tan granular cementitious material w/ gray/light blue paint	200	SF		13	ND	ND
27 IBF-5	12/20/2019	South Interior Wall	Block Filler	Tan granular cementitious material w/ gray/light blue paint	200	SF		13	ND	ND
28 IBF-6	12/20/2019	South Interior Wall	Block Filler	Gray granular material w/ greenish-gray paint	200	SF		13	ND	ND
29 CA-1	12/20/2019	South Portion of Room outside of Small Bath	Carpet Adhesive	Yellow adhesive Gray/white carpet	25	SF		14	ND ND	ND ND
30 CA-2	12/20/2019	South Portion of Room outside of Small Bath	Carpet Adhesive	Gray/white carpet	25	SF		14	ND	ND
31 Roof-3	12/20/2019	North End of Roof	Shingles	Black/white shingle	39	SF		15	ND	ND
32 Roof-3A	12/20/2019	North End of Roof	Shingles	Black/tan shingle	40	SF		15	ND	ND
33 Roof-4	12/20/2019	South End of Roof	Shingles	Black/white fibrous Black/white shingle	41	SF		16	ND ND	ND ND
34 Roof-4A	12/20/2019	South End of Roof	Shingles	Black/white shingle Black fibrous tar	42	SF		16	ND ND	ND ND
35 3630-CT-7A	12/20/2019	Floor Debris	Ceiling Tile	Tan/white ceiling tile	50	SF		9	ND	ND



Photo 1:
Main Room View
Location of ACM

Photo 2:
Typical Ceiling Complex
2 Layers

Photo 3:
Ceiling sample

3630 West 73RD Avenue
Westminster, Colorado
80030



May 11, 2012

Laboratory Code: RES
Subcontract Number: NA
Laboratory Report: RES 234944-1
Project # / P.O. # None Given
Project Description: None Given

Pat Lee
Strategic Environmental
5030 S. Fulton St.
Greenwood CO 80111

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 234944-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,



Jeanne Spencer
President



Analyst(s): _____

Paul D. LoScalzo Wenlong Liu
Michael Scales Adam Humphreys
Anita Grigg Robert R. Workman Jr.
Bethany Nichols Anya Angst

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B1-1-CBM	EM 124183	A	White paint w/ white compound	20	Chrysotile	ND	TR	100
		B	Gray/multi-colored paint	20		ND	0	100
		C	White compound	20		3	2	95
		D	White/tan drywall	40		ND	15	85
B1-2-CBM	EM 124184	A	White paint w/ white compound	10	ND	ND	0	100
		B	White/tan drywall w/ white paint	90	ND	ND	15	85
B1-3-CBM	EM 124185	A	White paint w/ white compound	10	ND	ND	0	100
		B	White/tan drywall w/ white paint	90	ND	ND	15	85
B1-4-CBM (Labeled B1-4-CBO)	EM 124186	A	Tan paint w/ white compound	5	ND	ND	0	100
		B	White/tan drywall w/ white paint	95	ND	ND	15	85
B1-5-CBM (Labeled B1-5-CBO)	EM 124187	A	Tan paint w/ white compound	5	ND	ND	0	100
		B	White/tan drywall w/ white paint	95	ND	ND	15	85
B1-6-CBM (Labeled B1-6-CBO)	EM 124188	A	Tan paint w/ white compound	5	ND	ND	0	100
		B	White/tan drywall w/ white paint	95	ND	ND	15	85
B1-WB-1	EM 124189	A	White/tan drywall w/ red paint	100	ND	ND	5	95

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected TR=Trace, <1% Visual Estimate Trem-Act=Tremolite-Actinolite
--

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B1-WB-2	EM 124190	A	White paint w/ white perlitic plaster	20		ND	0	100
		B	White/tan drywall	80		ND	60	40
B1-WB-3	EM 124191	A	White paint w/ white compound	30		ND	0	100
		B	White/tan drywall	70		ND	15	85
B1-FT-1	EM 124192	A	Black mastic	3		ND	0	100
		B	Black tile	97		ND	0	100
B1-CT-1	EM 124193	A	Gray/white ceiling tile	100		ND	60	40
B1-7-CBT	EM 124194	A	Gray/multi-colored paint	5		ND	0	100
		B	White/tan drywall	95		ND	20	80
B1-8-CBT	EM 124195	A	Gray/multi-colored paint w/ white compound	5		ND	0	100
		B	White/tan drywall	95		ND	15	85
B1-9-CBT	EM 124196	A	Gray/multi-colored paint w/ white compound	5		ND	0	100
		B	White/tan drywall	95		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B1-10-CBT	EM 124197	A	Gray/multi-colored paint w/ white compound	5		ND	0	100
		B	White/tan drywall	95		ND	15	85
B1-11-CBT	EM 124198	A	Gray/multi-colored paint w/ white compound	2		ND	0	100
		B	White/tan drywall	98		ND	15	85
B2-WB-1	EM 124199	A	White/multi-colored paint	5		ND	0	100
		B	White plaster	35		ND	0	100
		C	Gray granular plaster	60		ND	TR	100
B2-WB-2	EM 124200	A	White/multi-colored paint w/ white compound	10		ND	0	100
		B	White compound	90	Chrysotile	3	0	97
B2-WB-3	EM 124201	A	White/multi-colored paint	10		ND	0	100
		B	White plaster	30		ND	0	100
		C	Gray granular plaster	60		ND	TR	100
B2-CT-1	EM 124202	A	Tan/white ceiling tile	100		ND	90	10

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B2-CT-2	EM 124203	A	Tan/white ceiling tile	100		ND	90	10
B2-CT-3	EM 124204	A	Tan/white ceiling tile	100		ND	90	10
B2-CTX-1	EM 124205	A	White texture w/ white paint	5		ND	0	100
		B	White/tan drywall	95		ND	15	85
B2-CTX-2	EM 124206	A	White texture w/ white paint	20		ND	0	100
		B	White tape	20		ND	90	10
		C	White joint compound	20		ND	2	98
		D	White/tan drywall	40		ND	20	80
B2-CTX-3	EM 124207	A	White texture w/ white paint	5		ND	TR	100
		B	White/tan drywall	95		ND	15	85
B2-FT-1	EM 124208	A	Black mastic	5	Chrysotile	6	0	94
		B	Blue tile	45	Chrysotile	10	0	90
		C	Tan tile	50	Chrysotile	5	0	95
B2-FT-2	EM 124209	A	Tan mastic	2		ND	0	100
		B	Tan tile	98	Chrysotile	12	0	88

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B2-FT-3	EM 124210	A	Tan tile w/ colorless adhesive	100		ND	0	100
B2-FT-4	EM 124211	A	Black mastic	5	Chrysotile	ND	0	100
		B	Green tile	35		6	0	94
		C	Tan tile	60		ND	0	100
CB3-WB-1	EM 124212	A	White paint	20		ND	0	100
		B	White/tan drywall	80		ND	30	70
CB3-WB-2	EM 124213	A	Tan/white paint w/ a trace of white compound	45		ND	0	100
		B	White/tan drywall	55		ND	60	40
CB3-WB-3	EM 124214	A	White paint w/ a trace of white compound	20		ND	0	100
		B	White/tan drywall	80		ND	40	60
CB3-WB-4	EM 124215	A	White/multi-colored paint w/ white compound	10		ND	0	100
		B	White/tan drywall	90		ND	30	70
CB3-WB-5	EM 124216	A	White/tan compound	10		ND	0	100
		B	White/tan drywall	90		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
RB3-FT-1	EM 124217	A	Tan resinous material	5		ND	0	100
		B	Tan sheet vinyl w/ black fibrous backing	95		ND	30	70
RB3-FT-2	EM 124218	A	Tan tile w/ colorless adhesive	40		ND	0	100
		B	Tan/blue tile w/ colorless adhesive	60		ND	0	100
RB3-FT-3	EM 124219		Not Analyzed - Sample Bag Empty					
RB3-WB-1	EM 124220	A	White granular plaster	10		ND	0	100
		B	White plaster	20		ND	0	100
		C	White/multi-colored paint w/ blue compound	70		ND	0	100
RB3-WB-2	EM 124221	A	White granular plaster	5		ND	0	100
		B	White plaster	20		ND	0	100
		C	White/multi-colored paint w/ blue compound	75		ND	0	100
RB3-WB-3	EM 124222	A	White plaster	10		ND	0	100
		B	White compound w/ white paint	20		ND	0	100
		C	Tan resinous material	20		ND	0	100
		D	Tan granular plaster	50		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
RB3-WB-4	EM 124223	A	White/multi-colored paint	20		ND	0	100
		B	White plaster	20		ND	0	100
		C	Tan granular plaster	60		ND	TR	100
RB3-WB-5	EM 124224	A	Tan fibrous material	5		ND	90	10
		B	White/multi-colored paint w/ white compound	10		ND	0	100
		C	Tan paint w/ white plaster	10		ND	0	100
		D	Tan granular plaster	75		ND	TR	100
B4-WB-1	EM 124225	A	White paint w/ white texture	30		ND	0	100
		B	White/tan drywall	70		ND	60	40
B4-WB-2	EM 124226	A	White paint w/ white texture	10		ND	0	100
		B	White/tan drywall	90		ND	90	10
B4-WB-3	EM 124227	A	White paint w/ white texture	10		ND	0	100
		B	White/tan drywall	90		ND	30	70
B4-WB-4	EM 124228	A	Gray/tan drywall	100		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B4-WB-5	EM 124229	A	White/multi-colored paint	10	Chrysotile	ND	0	100
		B	White compound	10		3	0	97
		C	White/tan drywall	80		ND	30	70
B4-CT-1	EM 124230	A	Gray/white ceiling tile	100		ND	60	40
B4-CT-2	EM 124231	A	Gray/white ceiling tile	100		ND	60	40
B4-CT-3	EM 124232	A	Gray/white ceiling tile	100		ND	60	40
B4-CB-1	EM 124233	A	White/tan drywall	100		ND	20	80
B4-CB-2	EM 124234	A	White/tan drywall w/ white paint	100		ND	15	85
B4-CB-3	EM 124235	A	White/tan drywall w/ white paint	100		ND	15	85
B4-FT-1	EM 124236	A	Black mastic	5	Chrysotile	TR	0	100
		B	Black mastic	5	Chrysotile	5	0	95
		C	Tan tile	90		ND	0	100
B4-FT-2	EM 124237	A	Black mastic	5	Chrysotile	2	0	98
		B	White tile	95		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B5-CT-1	EM 124238	A	Gray/white ceiling tile	100		ND	60	40
B5-CT-2	EM 124239	A	Brown resinous material	40		ND	0	100
		B	Tan/white ceiling tile	60		ND	90	10
B5-CT-3	EM 124240	A	White/tan drywall	100		ND	15	85
B5-CB-1	EM 124241	A	White/tan drywall	100		ND	10	90
B5-CB-2	EM 124242	A	White paint	20		ND	0	100
		B	White compound	20	Chrysotile	2	0	98
		C	White tape	20		ND	90	10
		D	White joint compound	20	Chrysotile	2	0	98
		E	White/tan drywall	20		ND	15	85
B5-CB-3	EM 124243	A	White paint	5		ND	0	100
		B	White compound	10	Chrysotile	2	0	98
		C	White/tan drywall	85		ND	15	85
B5-WB-1	EM 124244	A	White paint	5		ND	0	100
		B	White compound	10	Chrysotile	2	0	98
		C	White/tan drywall	85		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B5-WB-2	EM 124245	A	White paint	10	Chrysotile	ND	0	100
		B	White compound	10		2	0	98
		C	White/tan drywall	80		ND	15	85
B5-WB-3	EM 124246	A	White paint	5	Chrysotile	ND	0	100
		B	White compound	15		2	0	98
		C	White tape	15		ND	90	10
		D	White joint compound	15		2	0	98
		E	White/tan drywall	50		ND	15	85
B5-FT-1	EM 124247	A	Tan resinous material	5	Chrysotile	ND	0	100
		B	Black resinous material	5		ND	0	100
		C	Tan granular material	20		ND	0	100
		D	Gray tile	70		ND	2	98
B6-WB-1	EM 124248	A	White/tan drywall	100		ND	15	85
B6-CB-1	EM 124249	A	White/tan drywall	100		ND	5	95
B6-CT-1	EM 124250	A	Gray/white ceiling tile	100		ND	60	40

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
B6-CT-2	EM 124251	A	White paint w/ white compound	30		ND	0	100
		B	White/tan drywall	70		ND	40	60
B6-CT-3	EM 124252	A	Gray/white ceiling tile	100		ND	60	40
B6-CT-4	EM 124253	A	White paint	5		ND	0	100
		B	White compound	10	Chrysotile	2	0	98
		C	White tape	10		ND	90	10
		D	White joint compound	10	Chrysotile	2	0	98
		E	White/tan drywall	65		ND	15	85
B6-CT-5	EM 124254	A	Gray/white ceiling tile	100		ND	60	40
B6-CT-6	EM 124255	A	White/multi-colored paint w/ a trace of white compound	10		ND	0	100
		B	White/tan drywall	90		ND	15	85
B6-INSUL	EM 124256	A	Gray fibrous material	100		ND	90	10
R-WB-1	EM 124257	A	White/multi-colored paint w/ white compound	10		ND	0	100
		B	White/tan drywall	90		ND	15	85

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
R-WB-2	EM 124258	A	White compound w/ white paint	100	Chrysotile	ND	0	100
R-WB-3	EM 124259	A	White/multi-colored paint	10		ND	0	100
		B	White compound	10		3	0	97
		C	White/tan drywall	80		ND	15	85
R-WB-4	EM 124260	A	Blue paint w/ a trace of white compound	10	ND	0	100	
		B	Tan fibrous material	90	ND	90	10	
R-WB-5	EM 124261	A	White foam	10	ND	0	100	
		B	White paint w/ white texture	10	ND	0	100	
		C	White/tan drywall	80	ND	30	70	
R-ST-1	EM 124262	A	Gray granular plaster	10	ND	0	100	
		B	Pink plaster w/ white paint	90	ND	0	100	
R-ST-2	EM 124263	A	Gray granular plaster	10	ND	0	100	
		B	Blue plaster w/ white paint	90	ND	0	100	
R-ST-3	EM 124264	A	Gray granular plaster	10	ND	0	100	
		B	Blue plaster w/ white paint & a trace of white compound	90	ND	0	100	

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

RESERVOIRS ENVIRONMENTAL, INC.

NVLAP Lab Code 101896-0
TDH Licensed Laboratory # 30-0136

TABLE PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 234944-1**
 Client: **Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **None Given**
 Date Samples Received: **May 2, 2012**
 Analysis Type: **PLM, Short Report**
 Turnaround: **3-5 Day**
 Date Analyzed: **May 8, 2012 - May 9, 2012**

ND=None Detected
TR=Trace, <1% Visual Estimate
Trem-Act=Tremolite-Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
R-ST-4	EM 124265	A	Gray granular plaster	10		ND	0	100
		B	Blue plaster w/ white paint & a trace of white compound	90		ND	0	100
R-ST-5	EM 124266	A	Gray granular plaster	15		ND	0	100
		B	Yellow plaster w/ white/multi-colored paint	85		ND	0	100
R-FT-1	EM 124267	A	Tan mastic	5		ND	0	100
		B	Green tile	95		ND	0	100
R-FT-2	EM 124268	A	Black mastic	5	Chrysotile	12	0	88
		B	Tan tile	95	Chrysotile	8	0	92
R-FT-3	EM 124269	A	Tan resinous material w/ black debris	10		ND	0	100
		B	Gray tile w/ colorless adhesive	30		ND	2	98
		C	Gray tile	60		ND	0	100
R-FT-4	EM 124270	A	Brown mastic	5		ND	0	100
		B	Tan tile	95		ND	0	100
R-AT-1	EM 124271	A	Gray fibrous material	100		ND	90	10

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

Data QA

Due Date: 5-8-10
 Due Time: _____

REILAB Reservoirs Environmental, Inc.
 5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax 303-477-4275 • Toll Free 866 RES-LENU

After Hours Cell Phone: 720-339-9228

INVOICE TO: (IF DIFFERENT)

Company: STRATEGIC ENVIRONMENTAL
 Address: 5030 S. FULTON ST
GREENWOOD VILLAGE, CO
80120

Company: Pondwice
 Address: _____
 Project Number and/or P.O. #: _____
 Project Description/Location: _____

Final Data Deliverable Email Address: _____

CONTACT INFORMATION:
 Contact: _____
 Phone: _____
 Fax: _____
 Cellpager: _____

Client sample ID number (Sample ID's must be unique)	REQUESTED ANALYSIS		VALID MATRIX CODES		LAB NOTES																	
	PLM - Short report, Long report, Point Count	TEM - AHERA Level II, 7402, ISO, +/-, Quant, Sem-quant, Micro-vac, ISO-Indirect Preps	PCB - 7400A, 7400B, OSHA	DUST - Total, Respirable		METALS - Analyte(s)	ORGANICS - METH, TSS	Salmonella: +/-	E.coli O157:H7: +/-	Listeria: +/-	Aerobic Plate Count: +/- or Quantification	Form: +/- or Quantification	Coliforms: +/- or Quantification	S.aureus: +/- or Quantification	Y & M: +/- or Quantification	Mold: +/-, Identification, Quantification	SAMPLER'S INITIALS OR OTHER NOTES	Sample Volume (L) / Area	Matrix Code	Date Collected mm/dd/yyyy	Time Collected h:mm a/p	EM Number (Laboratory Use Only)
1																					124183	
2																						84
3																						85
4																						86
5																						87
6																						88
7																						89
8																						90
9																						91
10																						92

Number of samples received: 89
 NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: [Signature] Date/Time: 5/11/12 3:40PM

Laboratory Use Only
 Received By: [Signature] Date/Time: 5-1-12 3:40P
 Results: _____

Carrier: [Signature]

Sample Condition: On Ice Yes / No _____
 Sealed Yes / No _____
 Temp. (F) _____

Date: 5/1/12 Time: _____
 Date: _____ Time: _____

Phone / Email / Fax: _____
 Phone / Email / Fax: _____

Initials: _____
 Initials: _____

RES Job # Z34944 Page 2 of
 Submitted by: Strategic

Client sample ID number (Sample ID's must be unique)	REQUESTED ANALYSIS		VALID MATRIX CODES		LAB NOTES	
	PLM - Short report, Long report, Point Count TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps PCM - 7400A, 7400B, OSHA DUST - Total, Respirable METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan ORGANICS - METH Salmonella: +/- E. coli O157:H7: +/- Listeria: +/- Aerobic Plate Count: +/- or Quantification E. coli: +/- or Quantification Coliforms: +/- or Quantification S. aureus: +/- or Quantification Y & M: +/- or Quantification Mold: +/- or Quantification OTHER -	(L) / Area	Matrix Code	# Containers		Date Collected mm/dd/yy
11	B1-CT-1			Air = A	Bulk = B	124193
12	B1-TCBT			Dust = D	Paint = P	94
13	B1-8CBT			Soil = S	Wipe = W	95
14	B1-9-CBT			Swab = SW	F = Food	96
15	B1-10-CBT			Drinking Water = DW	Waste Water = WW	97
16	B1-11-CBT			O = Other	**ASTM E1792 approved wipe media only**	98
17	B2-WB-1					99
18	B2-WB-2					Z00
19	B2-WB-3					1
20	B2-CT-1					2
21	B2-CT-2					3
22	B2-CT-3					4
23	B2-CTX-1					5
24	B2-CTX-2					6
25	B2-CTX-3					7
26	B2-FT-1					8
27	B2-FT-2					9
28	B2-FT-3					10
29	B2-FT-4					11
30	CB3-WB-1					12
31	CB3-WB-2					13
32	CB3-WB-3					14
33	CB3-WB-4					15
34	CB3-WB-5					16
35	RB3-FT-1					17
36	RB3-FT-2					18
37	RB3-CT-3					19
38	RB3-WB-1					Z0
39	RB3-WB-2					Z1
40	RB3-WB-3					Z2
41	RB3-WB-4					Z3

Submitted by: Strategic

Client sample ID number (Sample ID's must be unique)	REQUESTED ANALYSIS				VALID MATRIX CODES				LAB NOTES						
	PLM - Short report, Long report, Point Count	TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vec, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan	ORGANICS - BTEX, MTBE, 8260, GRO, METH	SALMONELLA +/-	E. coli O157:H7 +/-		Listeria +/-	Aerobic Plate Count +/- or Quantification	E. coli +/- or Quantification	Coliforms +/- or Quantification	S. aureus +/- or Quantification	Yeast Mold +/- or Quantification
42															
43															
44															
45															
46															
47															
48															
49															
50															
51															
52															
53															
54															
55															
56															
57															
58															
59															
60															
61															
62															
63															
64															
65															
66															
67															
68															
69															
70															
71															
72															



December 27, 2019

Subcontractor Number:

Laboratory Report: RES 452320-1

Project #/P.O. #: None Given

Project Description: 3630 W. 73rd

Pat Lee
SEM - Strategic Environmental
5030 S. Fulton St.
Greenwood Village CO 80111

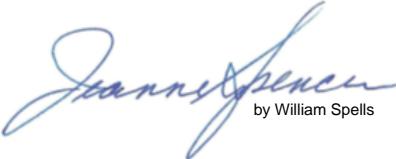
Dear Pat,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 452320-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,



by William Spells

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452320-1**
 Client: **SEM - Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **3630 W. 73rd**
 Date Samples Received: **December 20, 2019**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **Standard**
 Date Samples Analyzed: **December 27, 2019**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
				Mineral	Visual Estimate (%)		
Bath-4	A	Colorless fibrous woven material	7		ND	90	10
	B	Off white/green wall paper w/ colorless adhesive	10		ND	90	10
	C	Off white compound w/ white paint	30		ND	0	100
	D	Tan/off white drywall	53		ND	60	40
Bath-5	A	Off white wall covering w/ white adhesive	7		ND	80	20
	B	Tan/off white drywall	93		ND	20	80
Bath-6	A	Tan/off white drywall w/ white/multi-colored paint	100		ND	40	60
Lino-1	A	Tan adhesive	4		ND	0	100
	B	Gray/multi-colored sheet vinyl	96		ND	0	100
Lino-2	A	Tan adhesive	6		ND	0	100
	B	Beige adhesive	7		ND	0	100
	C	Gray/multi-colored sheet vinyl	87		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452320-1**
 Client: **SEM - Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **3630 W. 73rd**
 Date Samples Received: **December 20, 2019**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **Standard**
 Date Samples Analyzed: **December 27, 2019**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
				Mineral	Visual Estimate (%)		
EEX-BF-1	A	Bluish-gray paint	20		ND	0	100
	B	Brown compound	25	Chrysotile	3	0	97
	C	Gray granular cementitious material	55		ND	0	100
EEX-BF-2	A	Bluish-gray paint	10		ND	0	100
	B	Brown compound	15	Chrysotile	3	0	97
	C	Gray granular cementitious material	75		ND	0	100
EEX-BF-3	A	Bluish-gray paint	25		ND	0	100
	B	Brown compound	30	Chrysotile	2	0	98
	C	Gray granular cementitious material	45		ND	0	100
IBF-4	A	Tan granular cementitious material w/ gray/light blue paint	100		ND	0	100
IBF-5	A	Tan granular cementitious material w/ gray/light blue paint	100		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 452320-1**
 Client: **SEM - Strategic Environmental**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **3630 W. 73rd**
 Date Samples Received: **December 20, 2019**
 Method: **EPA 600/R-93/116 - Short Report, Bulk**
 Turnaround: **Standard**
 Date Samples Analyzed: **December 27, 2019**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
				Mineral	Visual Estimate (%)		
IBF-6	A	Gray granular material w/ greenish-gray paint	100		ND	0	100
CA-1	A	Yellow adhesive	8		ND	0	100
	B	Gray/white carpet	92		ND	80	20
CA-2	A	Gray/white carpet	100		ND	80	20
Roof-3	A	Black/white shingle	100		ND	15	85
Roof-3A	A	Black/tan shingle	100		ND	15	85
Roof-4	A	Black/white fibrous	50		ND	15	85
	B	Black/white shingle	50		ND	15	85
Roof-4A	A	Black/white shingle	50		ND	15	85
	B	Black fibrous tar	50		ND	15	85
3630-CT7A	A	Tan/white ceiling tile	100		ND	65	35

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.



John C. McIntyre

Analyst



Landon Spells

Analyst / Data QA



RES Job #: 452320

SUBMITTED BY		INVOICE TO		CONTACT INFORMATION		SERIES	
Company:	SEM - STRATEGIC ENVIRONMENTAL	Company:	SEM - STRATEGIC ENVIRONMENTAL	Contact:	PAT LEE	-1 PLM STANDARD	
Address:	5030 S. FULTON ST.	Address:	5030 S. FULTON ST.	Phone:	(720) 841-2200		
				Fax:			
	GREENWOOD VILLAGE, CO 80111		GREENWOOD VILLAGE, CO 80111	Cell:			
Project Number and/or P.O. #:	NONE GIVEN	Final Data Deliverable Email Address:					
Project Description/Location:	3630 W. 73RD	PATLEE@STRATEGICENVIRO.COM					

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm		REQUESTED ANALYSIS				VALID MATRIX CODES		LAB NOTES		
PLM / PCM / TEM	DTL RUSH PRIORITY STANDARD					Air = A	Bulk = B			
CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm						Dust = D	Food = F			
Dust	RUSH PRIORITY STANDARD					Paint = P	Soil = S			
Metals	RUSH PRIORITY STANDARD					Surface = SU	Swab = SW			
Organics*	SAME DAY RUSH PRIORITY STANDARD					Tape = T	Wipe = W			
MICROBIOLOGY LABORATORY HOURS: Weekdays: 8am - 5pm						Drinking Water = DW				
Viable Analysis**	PRIORITY STANDARD					Waste Water = WW				
Medical Device Analysis	RUSH STANDARD					**ASTM E1792 approved wipe media only**				
Mold Analysis	RUSH PRIORITY STANDARD									
Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.										
Special Instructions:		PLM - Short Report	TEM - AHERA (+/- or Quantified)	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s)	ORGANICS - Methamphetamine, TSS	VIABLES - Viable Microbial Count (wo/ID, w/ID), Enterococcus (+/- or Quantification)	MEDICAL - Bioburden, LAL	MOLD - Spore Trap, Bulk Mold, Particulate Identification
Client Sample ID Number	(Sample ID's must be unique)	ASBESTOS	CHEMISTRY	MICROBIOLOGY		Sample Volume (L) / Area	Matrix Code	Date Collected mm/dd/yy	Laboratory Analysis Instructions	
1 BATH-4		X					B			
2 BATH-5		X					B			
3 BATH-6		X					B			
4 LINO-1		X					B			
5 LINO-2		X					B			
6 EEX-BF-1		X					B			
7 EEX-BF-2		X					B			
8 EEX-BF-3		X					B			
9 IBF-4		X					B			
10 IBF-5		X					B			
11 IBF-6		X					B			
12 CA-1		X					B			
13 CA-2		X					B			

REI will analyze incoming samples based on information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing, client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days. Failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By:		PAT LEE	Date/Time: 12/20/2019 15:03:19	Sample Condition: ACCEPTABLE - INTACT
Received By:		ANNEMARIE KIEFFER	Date/Time: 12/20/2019 15:03:19	Carrier: HAND



Res Job#: 452320

Submitted By: SEM - STRATEGIC ENVIRONMENTAL

Client Sample ID Number (Sample ID's must be unique)	REQUESTED ANALYSIS						VALID MATRIX CODES		LAB NOTES					
	ASBESTOS	CHEMISTRY	MICROBIOLOGY	PLM - Short Report Long Report, CARB 435	TEM - AHERA, +/- or Quantified, Microvac +/- or Quantified, Wipe (+/- or Quantified), NIOSH 7402, ISO 10312, ISO 13794, Chatfield, Waste Water, Drinking Water, Bulk +/-	PCM - 74100A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) Lead Only (7092, 7420, Waste Water, Foodware), Multi Metal (7303, 6020A, 200.8, Waste Water, Foodware), pH (Liquid, Non-Liquid), TCLP, RCRA 8 Scan, Welding Fume Scan, Full Metals Scan	ORGANICS - Methamphetamine, TSS	Viables	MEDICAL - Biorburden, LAL	MOLD - Spore Trap, Bulk Mold, Particulate Identification	Air = A Bulk = B Dust = D Food = F Paint = P Soil = S Surface = SU Swab = SW Tape = T Wipe = W Drinking Water = DW Waste Water = WW **ASTM E1792 approved wipe media only**	Laboratory Analysis Instructions
Date Collected mm/dd/yy	Sample Volume (L) / Area	Matrix Code												
14 ROOF-3	X												B	
15 ROOF-3A	X												B	
16 ROOF-4	X												B	
17 ROOF-4A	X												B	
18 3630-CT7A	X												B	



February 23, 2017

Subcontract Number: NA
Laboratory Report: RES 372191-2
Project # / P.O. # None Given
Project Description: 3630 W 73rd Ave

SGM
5030 S. Fulton St.
Greenwood Village CO 80111

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the National Voluntary Laboratory Accreditation Program (NVLAP), Lab Code 101896-0 for Transmission Electron Microscopy (TEM) and Polarized Light Microscopy (PLM) analysis and the American Industrial Hygiene Association (AIHA), Lab ID 101533 - Accreditation Certificate #480 for Phase Contrast Microscopy (PCM) analysis. This laboratory is currently proficient in both Proficiency Testing and PAT programs respectively.

Reservoirs Environmental, Inc. has analyzed the following samples for asbestos content as per your request. The analysis has been completed in general accordance with the appropriate methodology as stated in the attached analysis table. The results have been submitted to your office.

RES 372191-2 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those of the client. The results described in this report only apply to the samples analyzed. This report must not be used to claim endorsement of products or analytical results by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you have any questions about this report, please feel free to call 303-964-1986.

Sincerely,

A handwritten signature in blue ink that reads "Elisa Mari". Below the signature, the text "Elisa Mari for" is printed in a smaller, blue, sans-serif font.

Jeanne Spencer
President

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 372191-2**
 Client: **SGM**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **3630 W 73rd Ave**
 Date Samples Received: **February 14, 2017**
 Method: **EPA 600/R-93/116 - Point Count, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **February 23, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
3630-EBF-1	EM 1802794	A	Tan block filler	8	Chrysotile	TR	0	100
		B	Red/multi-colored paint	42		ND	0	100
		C	Gray cinder block	50		ND	0	100
3630-EBF-2	EM 1802795	A	Tan block filler	10	Chrysotile	2	0	98
		B	Gray cinder block	30		ND	0	100
		C	Red/multi-colored paint	60		ND	0	100
3630-EBF-3	EM 1802796	A	Red/multi-colored paint w/ tan block filler	25	Chrysotile	TR	0	100
		B	Gray/beige cinder block	75		ND	0	100
3630-IBF-1	EM 1802797	A	Blue compound	TR	Chrysotile	TR	0	100
					Point Count	0.25		
		B	White compound	5		ND	0	100
		C	Gray/tan cinder block	15		ND	0	100
		D	White/multi-colored paint w/ white plaster	80		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 372191-2**
 Client: **SGM**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **3630 W 73rd Ave**
 Date Samples Received: **February 14, 2017**
 Method: **EPA 600/R-93/116 - Point Count, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **February 23, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
3630-IBF-2	EM 1802798	A	Blue compound	4	Chrysotile Point Count	TR	0	100
		B	White/multi-colored paint	10		ND	0	100
		C	White plaster	16		ND	0	100
		D	Gray/tan cinder block	70		ND	0	100
3630-IBF-3	EM 1802799	A	Blue compound	4	Chrysotile Point Count	TR	0	100
		B	White plaster	16		ND	0	100
		C	Gray/tan cinder block	35		ND	0	100
		D	White/multi-colored paint	45		ND	0	100

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.

RESERVOIRS ENVIRONMENTAL INC.

NVLAP Lab Code 101896-0

TABLE: PLM BULK ANALYSIS, PERCENTAGE COMPOSITION BY VOLUME

RES Job Number: **RES 372191-2**
 Client: **SGM**
 Client Project Number / P.O.: **None Given**
 Client Project Description: **3630 W 73rd Ave**
 Date Samples Received: **February 14, 2017**
 Method: **EPA 600/R-93/116 - Point Count, Bulk**
 Turnaround: **3-5 Day**
 Date Samples Analyzed: **February 23, 2017**

ND=None Detected
 TR=Trace, <1% Visual Estimate
 Trem/Act=Tremolite/Actinolite

Client Sample Number	Lab ID Number	L A Y E R	Physical Description	Sub Part (%)	Asbestos Content		Non Asbestos Fibrous Components (%)	Non-Fibrous Components (%)
					Mineral	Visual Estimate (%)		
3630-B6-2	EM 1802800	A	White compound	2		ND	0	100
		B	Blue compound	3	Chrysotile	TR	0	100
		C	Off white compound	15	Chrysotile	3	0	97
		D	White/multi-colored paint	20		ND	0	100
		E	White/brown drywall	60		ND	35	65
3630-CT-7	EM 1802801	A	Tan/white ceiling tile	100		ND	70	30

TEM Analysis recommended for organically bound material (i.e. floor tile) if PLM results are <1%.



Daniel Erhard

Analyst



Paul D. LoScalzo

Analyst / Data QA

Due Date: 2.17-2.21
 Due Time: _____

REILAB Reservoirs Environmental, Inc.
 5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax: 303-477-4275 • Toll Free: 866 RES-ENV
 After Hours Cell Phone: 720-339-9228

INVOICE TO: (IF DIFFERENT)
 Company: _____
 Address: _____

CONTACT INFORMATION:
 Contact: _____
 Phone: _____
 Fax: _____
 Cell/pager: _____

SUBMITTED BY: SEM
 Final Data Deliverable Email Address: _____

Project Number and/or P.O. #: _____
 Project Description/Location: 3630 W 73rd Ave

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm & Sat. 8am - 5pm
 PLM / PCM / TEM _____ RUSH (Same Day) _____ PRIORITY (Next Day) _____ STANDARD (3-5 Day)
 (Rush PCM = 2hr, TEM = 6hr.)

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm
 Metal(s) / Dust** _____ RUSH _____ 24 hr. _____ 3-5 Day
 RCRA 8 / Metals & Welding _____ RUSH (3 Day) _____ 5 Day _____ 10 Day
 Fume Scan / TCLP** _____ RUSH _____ 24 hr. _____ 3 day _____ 5 Day

MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm
 E.coli and/or Coliforms* _____ 24-48 Hour Other: _____
 Pathogens* _____ 24-48 Hour
 Microbial Growth* _____ 5-10 Day *TAT dependent on speed of
 Legionella _____ 10 Day microbial growth.*
 Mold _____ RUSH _____ 24 Hr _____ 48 Hr _____ 3 Day _____ 5 Day

Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.

Special Instructions: _____

Client sample ID number (Sample ID's must be unique)	PLM - Short report, Point Count, Long report, Qualitative	TEM - AHERA, Level II, 7402, ISO, +/- (Air, Bulk or Dust), Quant, Semi-Quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) RCRA 8, TCLP, Welding Fume, Metals Scan, pH	ORGANICS - METH, TSS	Pathogens: Aerobic Plate Count, Salmonella, E. coli O157:H7, Listeria, S. aureus, Campylobacter: +/- or Quantification	R. coli and/or Coliforms: +/- or Quantification (State Water (Please Circle One) Yes / No)	Microbial Growth: Aerobic Plate Count ID, Y & M or Bacteria, Fungal, +/- or Quantification	Legionella: +/- or Quantification	Other: Bioburden, LAL or Environmental Mold: Spore Trap or Bulk: +/- Identification, Quantification, Viable or Non-Viable	SAMPLER'S INITIALS OR OTHER NOTES:	VALID MATRIX CODES	LAB NOTES:
1													Air = A Dust = D Soil = S Swab = SW Drinking Water = DW Waste Water = WW O = Other **ASTM E1792 approved wipe media only**	
2													Bulk = B Paint = P Wipe = W F = Food	
3														
4														
5														
6														
7														
8														
9														
10														

Number of samples received: 8
 NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: [Signature] Date/Time: 2/14/17 4:10
 Phone Email Fax: _____
 Date Time: _____

Received By: [Signature] Date/Time: 2/14/17 4:10
 Phone Email Fax: _____
 Date Time: _____

Carrier: Hand / FedEx / UPS / USPS / Drop Box / Courier
 Date/Time: 2/14/17 4:00 PM

Sample Condition:	On Ice	Sealed	Intact
Temp. (F°)	Yes / No	Yes / No	Yes / No
Date	Time	Time	Time
Date	Time	Time	Time



Colorado Department
of Public Health
and Environment

ASBESTOS CERTIFICATION*

This certifies that

Patrick E Lee

Certification No.: 17670


has met the requirements of 25-7-507, C.R.S. and Air Quality Control
Commission Regulation No. 8, Part B, and is hereby certified by the
state of Colorado in the following discipline:

Building Inspector*

Issued: November 06, 2019

Expires: November 08, 2020

** This certificate is valid only with the possession of a
current Division-approved training course certification
in the discipline specified above.*


Authorized APCD Representative

SEAL



Colorado Department
of Public Health
and Environment

ASBESTOS CONSULTING FIRM

This certifies that

Strategic Environmental Management, LLC

Registration No.: ACF - 18474

has met the registration requirements of 25-7-507, C.R.S. and the Air Quality Control Commission Regulation No. 8, Part B, and is hereby authorized to perform asbestos consulting activities as required under Regulation No 8, Part B, in the state of Colorado.

Issued: December 11, 2019

Expires: January 01, 2021

Authorized APCD Representative

SEAL

APPENDIX K

Certification & Resume

PATRICK E. LEE

5030 South Fulton Street
Greenwood Village, CO 80111
patlee@strategicenviro.com

(720) 841-2200

ENVIRONMENTAL AND PETROLEUM EXECUTIVE

Professional Engineer with environmental, petroleum, real estate and financial management experience. Strong environmental and petroleum background provides excellent technical and environmental understanding of the real estate and petroleum business, both upstream and downstream. Lead teams for acquisition/divestiture of reserves, field development studies as well as new business development and economic evaluation of business decisions. Proficient in regulatory agency negotiation in hazardous and solid waste management, evaluation and development of environmental remedies, including remedial investigations, feasibility studies, site investigations and remedial actions. Skilled in the implementation of cost-effective solutions that are integrated into the highest and best use of environmentally impaired real estate.

SIGNIFICANT ACCOMPLISHMENTS

- Sourced Brownfields Capital's first project, a \$20 million financing contract for the 900 unit Gold Hill Mesa redevelopment in Colorado Springs.
 - Completed detailed environmental studies and investigations in Denver that lead to the redevelopment of complex urban in-fill projects such as the historic Lowenstein Theater, the conversion of the historic Officer's Row duplexes at Lowry Air Force Base into luxury single family residences, the redevelopment of the former Benjamin Moore paint factory in the Ballpark neighborhood into condos, and the conversion of the former Rock Island night club into an office building.
 - Authored a 150 page book entitled "Handbook for the Redevelopment of Former Operating Sites" that was published by BP Amoco.
 - Developed a comprehensive "Environmental Criteria Scoring System" that screened and prioritized environmentally contaminated real estate presented for financing.
 - Led the financial and operational management of Cyprus' nation-wide remedial operations, providing technical direction and program management with a budget of \$100 million on over 50 sites in 17 states. Successfully negotiated and sold a CERCLA Superfund site to a real estate development company in Pennsylvania, thereby removing a \$17 million liability from the balance sheet.
 - Responsible for sourcing, evaluating, negotiating and recommending equity ownership in oil and gas reserves for Cyprus Power Corporation and acquired \$800 million in reserves over a two-year period.
 - Completed several hundred Phase I Environmental Site Assessments and Property Condition Assessments in the United States and Canada.
 - Directed the activities of the Reservoir Engineering and Production Operations Departments including the profitable operation of over 1,600 oil and gas wells in the Rocky Mountain, Mid-Continent and Gulf Coast areas.
-

- Established and implemented a \$30 million divestiture program that allowed the Home Petroleum to sell over 800 marginally economic wells over a three-year period at prices in excess of book value.
- Returned an unprofitable 17 million barrel underground gas liquids storage facility to profitability during a period of shrinking demand by reorganizing and downsizing the operation to fit the market.

P O S I T I O N H I S T O R Y

Strategic Environmental Management LLC – Greenwood Village, CO Principal	2008 - Present
Brownfields Capital LLC – Denver, CO Managing Director and Partner	2003 - 2008
EMC² and Strategic Environmental Management LLC - Englewood, CO Principal	1999 - 2003
Phelps Dodge and Cyprus Amax - Englewood, CO Manager, Environmental Engineering	1990 - 1999
Home Petroleum Corporation, Denver, CO	1977 - 1990

E D U C A T I O N

University of Western Ontario, London, Ontario, Canada – B. Engineering Science (Mechanical)

University of Western Ontario, Richard Ivey School of Business - Master of Business Admin.

Frequent speaker and guest lecturer on real estate finance. Speaking resume includes moderator and panelist at industry conferences: National Brownfields Conference (St. Louis, Boston, and Denver) The Canadian Institute – Vancouver, The Strategy Conference (Toronto, New Orleans, and Phoenix).