



November 1, 2018

Mr. Randolph Brown
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 7
11201 Renner Blvd.
Lenexa, Kansas 66219

**Subject: Phase II Targeted Brownfields Assessment
Former AutoZone Site
Dellwood, St. Louis County, Missouri
EPA Region 7, START 4, Contract No. EP-S7-13-06, Task Order No. 0002.055
Task Monitors: Todd Davis, Site Assessment Manager
Randolph Brown, On-Scene Coordinator**

Dear Mr. Brown:

Tetra Tech, Inc. (Tetra Tech) is submitting the attached Phase II Targeted Brownfields Assessment report regarding the Former AutoZone site in Dellwood, Missouri. If you have any questions or comments pertaining to this submittal, please call the START Project Manager at (816) 412-1961.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ann Marie Pohlman'.

Ann Marie Pohlman
START Project Manager

A handwritten signature in blue ink, appearing to read 'Ted Faile'.

Ted Faile, PG, CHMM
START Program Manager

Enclosures

cc: Debra Dorsey, START Project Officer (cover letter only)
Whitney Bynum, EPA Brownfields and Land Revitalization Branch

PHASE II TARGETED BROWNFIELDS ASSESSMENT

**FORMER AUTOZONE SITE
DELLWOOD, ST. LOUIS COUNTY, MISSOURI**

Superfund Technical Assessment and Response Team (START) 4 Contract

Contract No. EP-S7-13-06, Task Order No. 0002.055

Prepared For:

U.S. Environmental Protection Agency
Region 7
11201 Renner Blvd.
Lenexa, Kansas 66219

November 1, 2018

Prepared By:

Tetra Tech, Inc.
415 Oak Street
Kansas City, Missouri 64106
(816) 412-1741

CONTENTS

<u>Section</u>	<u>Page</u>
EXECUTIVE SUMMARY	ES-1
1.0 INTRODUCTION	1
1.1 PURPOSES.....	1
1.2 SPECIAL TERMS AND CONDITIONS	2
2.0 BACKGROUND AND SITE HISTORY	3
2.1 PHYSICAL SETTING	3
2.2 SITE DESCRIPTION AND FEATURES	3
2.3 SITE HISTORY AND LAND USE	4
2.4 ADJACENT PROPERTY USE.....	4
2.5 SUMMARY OF PREVIOUS ASSESSMENTS	4
3.0 PHASE II TARGETED BROWNFIELDS ASSESSMENT ACTIVITIES	5
3.1 SURFACE SOIL SAMPLING	5
3.2 SUBSURFACE SOIL SAMPLING	7
3.3 GROUNDWATER SAMPLING.....	9
3.4 DEVIATIONS FROM THE QAPP.....	10
4.0 PRESENTATION AND EVALUATION OF RESULTS	11
4.1 SURFACE SOIL SAMPLES.....	11
4.2 SUBSURFACE SOIL SAMPLES	12
4.3 GROUNDWATER SAMPLES	12
4.4 QUALITY CONTROL SAMPLES	14
5.0 DISCUSSION OF FINDINGS AND CONCLUSIONS	15
6.0 REFERENCES	17

APPENDICES

Appendix

A	FIGURES
B	PHOTOGRAPHIC DOCUMENTATION
C	SITE LOGBOOK
D	BORING LOGS
E	ANALYTICAL REPORT AND DATA VALIDATION
F	SUMMARY OF ANALYTICAL RESULTS

CONTENTS (Continued)

ATTACHMENTS

Attachment

- 1 FORMER AUTOZONE PROPERTY PROFILE PHASE II FORM

TABLES

<u>Table</u>	<u>Page</u>
1 SURFACE SOIL SAMPLE SUMMARY	6
2 SUBSURFACE SOIL SAMPLE SUMMARY.....	8
3 GROUNDWATER SAMPLE SUMMARY	10

EXECUTIVE SUMMARY

Tetra Tech, Inc. (Tetra Tech) was tasked by the U.S. Environmental Protection Agency (EPA) under the Superfund Technical Assessment and Response Team (START) Contract (EP-S7-13-06) to conduct a Phase I Targeted Brownfields Assessment (TBA), Phase II TBA, and Analysis of Brownfields Cleanup Alternatives (ABCA) at the Former AutoZone site (the site), an approximately 1.96-acre property at 9901 and 9947 West Florissant Avenue in Dellwood, Missouri. Phase II activities proceeded as specified in a site-specific Quality Assurance Project Plan (QAPP) developed by START and submitted to EPA in July 2018 (Tetra Tech 2018a).

In June 2018, Tetra Tech conducted a Phase I TBA of the site on behalf of the EPA. The following findings and opinions resulted from the TBA, primarily based on interviews, a site reconnaissance, previous investigations, and examination of historical documentation:

- Review of city directories identified the site address (9947 W Florissant Ave.) as an AutoZone from 2001 to at least as late as 2010. Improvements at the site were destroyed by fire in November 2014 due to civil unrest. Possible fill and grading associated with the fire at the former AutoZone property poses a recognized environmental condition (REC) to the site.
- Review of historical documents revealed that the New York Grill (9901 W Florissant Ave.) was built in 1978. Lead-based paint (LBP) and asbestos-containing building materials (ACBM) were likely used in construction of the restaurant.
- Tetra Tech completed a Tier 1 non-invasive vapor encroachment screen of the site. Even though the site is not listed on the vapor encroachment screen, a vapor encroachment condition (VEC) is posed to the site based on possible presence of soil and groundwater contamination because the site hosted an AutoZone that burned down during civil unrest. This poses a REC to the site.

Purposes of this Phase II TBA were to determine if historical activities at the site had impacted soils and groundwater. During this investigation at the site, soil and groundwater samples were collected for laboratory analysis. Surface soil sampling results were compared to (1) Missouri Risk-Based Corrective Action (MRBCA) Lowest Default Target Levels (LDTL) and (2) MRBCA Tier 1 Risk-based Target Levels (RBTL) for residential and non-residential land use, soil type 3, ingestion, inhalation (vapor emissions and particulates), and dermal contact. Subsurface and groundwater sampling results were compared to (1) MRBCA LDTLs and (2) MRBCA Tier 1 RBTLs for residential and non-residential land use, soil type 3, indoor inhalation of vapor emissions. Findings and conclusions are as follows:

- All six surface soil samples contained at least one volatile organic compound (VOC) at a concentration above the laboratory reporting limit. None of the samples contained a VOC at a concentration above an LDTL. Four surface soil samples contained at least one polycyclic aromatic hydrocarbon (PAH) at concentration exceeding a laboratory reporting limit.

One sample contained a benzo[a]pyrene concentration exceeding the LDTL and the residential RBTL. Five surface soil samples contained at least one total petroleum hydrocarbon (TPH) level above the laboratory reporting limit. No sample contained TPH at concentration above the LDTL. Five surface soil samples contained arsenic, barium, chromium, and lead concentrations exceeding laboratory reporting limits. Additionally, four surface soil sample results exceeded the LDTL for lead, and five sample results exceeded the LDTL and residential RBTL for arsenic; however, those concentrations of lead and arsenic were comparable to naturally occurring surface soil concentrations within St. Louis County, Missouri (U.S. Geological Survey [USGS] 2018).

- Nine of the 19 subsurface soil samples contained at least one VOC at a concentration above the laboratory reporting limit. No sample contained a VOC at concentration above an LDTL. Two subsurface soil samples contained at least one PAH at concentration above a laboratory reporting limit. No sample contained a PAH at a concentration above the LDTL. None of the 19 subsurface soil samples contained a TPH level above the laboratory reporting limit, and no sample contained TPH at a concentration above the LDTL. All subsurface soil samples contained concentrations of arsenic, barium, and chromium above laboratory reporting limits. Fourteen of 19 subsurface soil samples contained concentrations of lead above laboratory reporting limits. Additionally, all detected results for lead exceeded the LDTL, and 17 of the 19 sample results for arsenic exceeded the LDTL; however, those lead and arsenic concentrations were comparable to naturally occurring surface soil concentrations within St. Louis County, Missouri. No subsurface soil sample analyte concentration exceeded an RBTL.
- Results from groundwater samples were compared to MRBCA LDTLs and RBTLs. Two groundwater samples were collected from one soil boring location on site. Acetone and chloromethane, which are laboratory contaminants, were detected in sample GW-3; acetone was detected in GW-3-FD. Neither groundwater sample contained a site-related VOC at a concentration above a laboratory reporting limit or an LDTL. Neither groundwater sample contained a detectable PAH or TPH concentration. Sample GW-3 contained arsenic, barium, chromium, lead, and selenium at concentrations above laboratory reporting limits. Sample GW-3-FD contained barium, chromium, and selenium above laboratory reporting limits. Neither sample contained a Resource Conservation and Recovery Act (RCRA) metal at a concentration above an LDTL. In no groundwater sample did an analyte concentration exceed an RBTL.

Analytical results indicate detections of analytes at the former AutoZone site. However, follow-up action appears unwarranted to address subsurface soil and groundwater because no analyte concentration in subsurface soil and groundwater samples exceeded an RBTL. The benzo[a]pyrene concentration exceeded the residential RBTL in surface soil sample SS-5, collected at 9901 West Florissant Avenue (New York Grill). If future use of this portion of the site is to be for residential purposes, additional sampling is recommended. Further, asbestos sampling and an LBP survey should be completed prior to any renovation or demolition of the restaurant and/or storage outbuilding.

1.0 INTRODUCTION

Tetra Tech, Inc. (Tetra Tech) was tasked by the U.S. Environmental Protection Agency (EPA) under the Superfund Technical Assessment and Response Team (START) Contract (EP-S7-13-06) to conduct a Phase I Targeted Brownfields Assessment (TBA), Phase II TBA, and Analysis of Brownfields Cleanup Alternatives (ABCA) at the Former AutoZone site (the site), an approximately 1.96-acre property at 9901 and 9947 West Florissant Avenue in Dellwood, Missouri. The site currently consists of a vacant lot with a partial concrete parking area (where the former AutoZone was located) and an operating restaurant (New York Grill) with a storage outbuilding and an asphalt parking area. The vacant lot is currently used by Missouri American Water to store equipment and supplies. The site has historically been occupied by a residence, restaurants, and an AutoZone. The most recent usage of the site was as a restaurant and AutoZone. According to the City of Dellwood representative, the restaurant and outbuilding are to be demolished, and the site is to be redeveloped into a senior living center.

In June 2018, Tetra Tech conducted a Phase I TBA of the site on behalf of EPA. The following findings and opinions resulted from the TBA, primarily based on interviews, a site reconnaissance, previous investigations, and examination of historical documentation:

- Review of city directories identified the site address (9947 W Florissant Ave.) as an AutoZone from 2001 to at least as late as 2010. Improvements at the site were destroyed by fire in November 2014 due to civil unrest. Possible fill and grading associated with the fire at the former AutoZone property poses a recognized environmental condition (REC) to the site.
- Review of historical documents revealed that the New York Grill (9901 W Florissant Ave.) was built in 1978. Lead-based paint (LBP) and asbestos-containing building materials (ACBM) were likely used in construction of the restaurant.
- Tetra Tech completed a Tier 1 non-invasive vapor encroachment screen of the site. Even though the site is not listed on the vapor encroachment screen, a vapor encroachment condition (VEC) is posed to the site based on possible presence of soil and groundwater contamination because the site hosted an AutoZone that burned down during civil unrest. This poses a REC to the site.

The following sections address the background and site history, describe Phase II TBA activities, present and evaluate analytical results, discuss findings, and offer conclusions.

1.1 PURPOSES

Purposes of this Phase II TBA included a determination on whether historical activities at the site had impacted soil and groundwater. During this Phase II TBA, sampling of soil and groundwater occurred to

confirm or eliminate the RECs to the site (i.e., possible historical releases of contaminants) identified during a Phase I TBA in June 2018.

1.2 SPECIAL TERMS AND CONDITIONS

No special terms or conditions were identified during the Phase II TBA.

2.0 BACKGROUND AND SITE HISTORY

This section briefly describes the site (physical setting, site location and land use, and adjacent land use), and summarizes previous assessments.

2.1 PHYSICAL SETTING

The site is in St. Louis County in eastern Missouri. Soils at the site predominantly are Urban land-Harvester complex (U.S. Department of Agriculture [USDA] 2018). Urban land soils have generally been modified by disturbance of the natural layers. The Harvester series consists of moderately well-drained silt and clay loam material. Slopes range from 9 to 20 percent. The Fishpot-Urban land complex make up the rest of the soils on the site. The Fishpot series consists of somewhat poorly-drained stratified silty or clay loam. Slopes range from 0 to 5 percent (USDA 2018). The site is within the Central Lowland Groundwater Province and lies within the Mississippi River's 500-year floodplain. Geology in the region is generally characterized by crystalline, Precambrian rocks that underlie Paleozoic and younger sedimentary rocks (U.S. Geological Survey [USGS] 1997).

Groundwater in the site area likely flows south-southeast (following the topographic gradient) toward Maline Creek. Potable water in the site area is supplied by Missouri American Water via surface water intakes on the Mississippi and Missouri Rivers (Tetra Tech 2018b).

Runoff from precipitation at the site likely flows over paved surfaces toward the south-southeast, where it is directed into stormwater drains on the property and along West Florissant Avenue (Tetra Tech 2018b).

2.2 SITE DESCRIPTION AND FEATURES

The site is at 9947 (former AutoZone) and 9901 West Florissant Avenue (New York Grill) in Dellwood, St. Louis County, Missouri. The site encompasses 1.96 acres and consists of a vacant lot with a partial concrete parking area (east and north of the former AutoZone building) on the northern portion, and an operating restaurant (New York Grill) with a storage outbuilding and an asphalt parking area on the southern portion. The vacant lot is currently used by Missouri American Water to store equipment and supplies.

The site is included on the Clayton, Missouri, U.S. Geological Survey (USGS) 7.5- minute topographic series map (USGS 2015) (see Appendix A, Figure 1). Coordinates at the approximate center of the site are 39.7473700 degrees north latitude and 90.2801510 degrees west longitude.

2.3 SITE HISTORY AND LAND USE

The site currently consists of a vacant lot with a partial concrete parking area (east and north of the former AutoZone building) on the northern portion, and an operating restaurant (New York Grill) with a storage outbuilding and an asphalt parking area on the southern portion. The vacant lot is currently used by Missouri American Water to store equipment and supplies. The site has historically been occupied by a residence, restaurants, and an AutoZone. The site hosted an AutoZone from 2001 to 2014. Improvements at the site were destroyed by fire in November 2014 due to civil unrest. Intended future use of the site is redevelopment consisting of a senior living center.

2.4 ADJACENT PROPERTY USE

The site is bounded north by Taco Bell, east by West Florissant Avenue with Auto Spa Speedy Wash beyond, south by Fast Track Urgent Care, and west by residential properties.

2.5 SUMMARY OF PREVIOUS ASSESSMENTS

This section summarizes a Phase I TBA, the only known previous environmental investigation at the site. In June 2018, Tetra Tech conducted the Phase I TBA of the site on behalf of EPA. Historical documentation in the Phase I TBA report indicates that the site at 9901 West Florissant Avenue was identified in the city directories as a residence from 1949 to 1958 and restaurants from 1986 to 2014. New York City Grill was listed as the restaurant in 2014. The site at 9947 West Florissant Avenue was identified in the city directories as an AutoZone from approximately 2001 to 2010. The Phase I TBA identified a REC associated with former presence of an AutoZone parts store on the site. The AutoZone was destroyed by fire in November 2014 due to civil unrest (Tetra Tech 2018b).

3.0 PHASE II TARGETED BROWNFIELDS ASSESSMENT ACTIVITIES

The following sections describe the scope of the Phase II TBA, field exploration and methods, and associated quality assurance (QA)/quality control (QC) activities. START members Ann Marie Pohlman, Jenna Pratt, and Tetra Tech subcontractor, Bulldog Drilling out of Dupo, Illinois, performed sampling from September 11 through 12, 2018. Photographic documentation is in Appendix B. A copy of the site logbook with documented site activities is in Appendix C. Soil and groundwater samples were collected to identify contamination possibly present at the site. An objective was to characterize possible historical releases to the environment. Activities proceeded as specified in a site-specific Quality Assurance Project Plan (QAPP) for the Phase II TBA developed by START and submitted to EPA in July 2018 (Tetra Tech 2018a).

3.1 SURFACE SOIL SAMPLING

Surface soil samples were collected at five locations on the site. Two locations were within the former building (AutoZone) footprint, one was on the west side of the former building footprint, one location was on the west side of the storage outbuilding, and one location was on the east side of the restaurant (see Appendix A, Figure 2). Surface soil samples were collected within 0 to 2 inches below ground surface (bgs) by use of a stainless-steel garden trowel. A duplicate sample was collected at location SS-2 to be used as a QA/QC measure of total method precision.

At each sampling interval, three to five aliquots per composite sample were placed in a disposable aluminum pie pan, and a grab sample for analysis for volatile organic compounds (VOC) and total petroleum hydrocarbons (TPH) – gasoline range organics (GRO) was collected in accordance with EPA SW-846 Method 5035; approximately 5-gram plugs of soil (one plug per sample container) were collected by use of a disposable, tipless, plastic syringe, and transferred to two 40-milliliter (mL) vials preserved with sodium bisulfate, and one 40-mL vial preserved with methanol. In addition, one unpreserved 40-mL vial or similar container was packed with soil for percent solids determination. Remaining soil from each composite sample was homogenized and placed into two 8-ounce jars for analyses for TPH – diesel range organics (DRO), TPH – oil range organics (ORO), polycyclic aromatic hydrocarbons (PAH), and total Resource Conservation and Recovery Act (RCRA) metals (including mercury). Table 1 below lists soil sample information, coordinates, and collection dates and times.

TABLE 1
SURFACE SOIL SAMPLE SUMMARY
FORMER AUTOZONE, DELLWOOD, MISSOURI

Sample No.	Latitude (°N)	Longitude (°W)	Sample Date	Sample Time	Analyses
SS-1	38.747358	90.280489	9/11/2018	1545	VOCs, TPH-GRO, TPH-DRO, TPH-ORO, PAHs, RCRA total metals (including mercury)
SS-2	38.747458	90.280190	9/11/2018	1620	
SS-2-FD			9/11/2018	1620	
SS-3	38.747275	90.280084	9/12/2018	1340	
SS-4	38.746958	90.280337	9/12/2018	1400	
SS-5	38.746997	90.279777	9/12/2018	1415	

Notes:

Latitude and longitude are based on North American Datum (NAD) 83.

DRO Diesel-range organics
 FD Field duplicate
 GRO Gasoline-range organics
 ORO Oil-range organics
 PAH Polycyclic aromatic hydrocarbon
 RCRA Resource Conservation and Recovery Act
 TPH Total petroleum hydrocarbons
 VOC Volatile organic compound
 °N Degrees north
 °W Degrees west

3.2 SUBSURFACE SOIL SAMPLING

Bulldog Drilling advanced nine direct-push technology (DPT) soil borings into groundwater (anticipated at 15 to 20 feet bgs), or to geologic refusal (approximately 19 to 29 feet bgs), whichever occurred first. One boring was along the northern edge of the site, one boring was within the former building (AutoZone) footprint, one boring was at the northeast corner of the site, two borings were along the western portion of the former building footprint, one boring was along the eastern portion of the former building footprint, one boring was at the eastern portion of the site, one boring was west of the storage outbuilding at the southwest portion of the site, and one boring was east of the restaurant at the southeast portion of the site (see Appendix A, Figure 2). Continuous soil borings were collected at 4- and 5-foot depth intervals and screened by use of a photoionization detector (PID). PID readings and soil classifications such as color, type, and moisture content were documented in boring logs (see Appendix D). At each boring location, two soil samples were collected and submitted for laboratory analysis. Soil samples were collected within depth intervals inducing the highest PID readings. If no elevated readings were observed, collection occurred within intervals where visual impacts appeared or odors were detected. If no indications of contamination were found, the soil samples were collected within depth intervals selected by the START field team, including intervals within the capillary fringe (if groundwater was encountered) or within the bottom portion of the boring (if refusal was encountered). At sample location SB-3, sandy soils were encountered; at other sampling locations, clay was encountered. A duplicate sample was collected at boring location SB-7 (0-2 feet bgs) to be used as a QA/QC measure of total method precision.

At each sampling interval, a grab sample for analyses for VOCs and TPH-GRO was collected in accordance with EPA SW-846 Method 5035; approximately 5-gram plugs of soil (one plug per sample container) were collected by use of a disposable, tipless, plastic syringe, and transferred to two 40-mL vials preserved with sodium bisulfate, and one 40-mL vial preserved with methanol. Remaining soil was placed into two 8-ounce jars for analyses for TPH-DRO, TPH-ORO, PAHs, RCRA total metals (including mercury), and percent solids. Table 2 below lists soil sample information, including sample depths, coordinates, and collection dates and times.

TABLE 2
SUBSURFACE SOIL SAMPLE SUMMARY
FORMER AUTOZONE, DELLWOOD, MISSOURI

Sample No.	Latitude (°N)	Longitude (°W)	Sample Date	Sample Time	Analyses
SB-1 (3-5)	38.747637	90.280406	9/11/2018	0932	VOCs, TPH-GRO, TPH-DRO, TPH-ORO, PAHs, RCRA total metals (including mercury)
SB-1 (17-19)			9/11/2018	0945	
SB-2 (0-2)	38.747407	90.280502	9/11/2018	1137	
SB-2 (11-13)			9/11/2018	1155	
SB-3 (0-2)	38.747363	90.280143	9/11/2018	1310	
SB-3 (21-23)			9/11/2018	1320	
SB-4 (5-7)	38.747450	90.279926	9/11/2018	1414	
SB-4 (9-11)			9/11/2018	1420	
SB-5 (0-2)	38.747593	90.279879	9/11/2018	1500	
SB-5 (18-20)			9/11/2018	1507	
SB-6 (2-4)	38.747188	90.280473	9/12/2018	0903	
SB-6 (22-24)			9/12/2018	0910	
SB-7 (0-2)	38.747209	90.279804	9/12/2018	0953	
SB-7 (0-2)-FD			9/12/2018	0953	
SB-7 (11-13)			9/12/2018	1005	
SB-8 (7-9)	38.746956	90.280345	9/12/2018	1040	
SB-8 (9-11)			9/12/2018	1045	
SB-9 (7-9)	38.746998	90.279766	9/12/2018	1150	
SB-9 (10-12)			9/12/2018	1200	

Notes:

Number in parentheses for each sample number indicates depth interval (feet below ground surface) of sample collection.

Latitude and longitude are based on North American Datum (NAD) 83.

DRO Diesel-range organics
 FD Field duplicate
 GRO Gasoline-range organics
 ORO Oil-range organics
 PAH Polycyclic aromatic hydrocarbon
 RCRA Resource Conservation and Recovery Act
 TPH Total petroleum hydrocarbons
 VOC Volatile organic compound
 °N Degrees north
 °W Degrees west

3.3 GROUNDWATER SAMPLING

Groundwater sampling was attempted at all soil boring locations; however, groundwater was encountered only at SB-3/GW-3, where wet sands were encountered during drilling (see Appendix A, Figure 2).

Depth to groundwater at SB-3/GW-3 was 15.66 feet bgs. No groundwater samples were collected at the other locations (SB-1, SB-2, SB-4, SB-5, SB-6, SB-7, SB-8 or SB-9) because groundwater was not encountered prior to geologic refusal.

Groundwater samples were collected by use of a Geoprobe® Screen Point 16 sampling apparatus. At the sampling location where groundwater was encountered, the sampler was advanced to the bottom of the boring (about 28.5 feet bgs), and then the screen was exposed to the aquifer. After the screen was deployed at the bottom of the boring, about 1 gallon of water was purged through disposable polyethylene tubing by use of a peristaltic pump.

Samples for analyses for VOCs and TPH-GRO via SW-846 Method 8260 were collected into three 40-mL vials preserved with hydrochloric acid (HCl). Samples for analyses for TPH-DRO, TPH-ORO, and PAHs via SW-846 Method 8270 were collected in two unpreserved 1-liter (L) amber glass bottles. Samples for RCRA total metals analysis via SW-846 Method 6020 were collected in 1-L plastic bottles preserved with nitric acid (one container per sample).

Each sample was labeled, packaged accordingly, and placed in a cooler maintained at or below a temperature of 4 degrees Celsius (°C) from time of collection until submittal for laboratory analyses. After completion of sampling, soil cores were placed back in their respective boreholes, which were then plugged with bentonite. A duplicate sample was collected at boring location SB-3 (GW-3-FD) to be used as a QA/QC measure of total method precision. To evaluate effectiveness of decontamination procedures for the Geoprobe sampling equipment, an equipment rinsate blank sample was collected. To assess field- or laboratory-introduced contamination, a field blank sample was collected. Table 3 below summarizes groundwater and aqueous QC samples collected during this Phase II TBA.

TABLE 3
GROUNDWATER SAMPLE SUMMARY
FORMER AUTOZONE, DELLWOOD, MISSOURI

Boring ID	Sample No.	Latitude (°N)	Longitude (°W)	Analyses
SB-3	GW-3	38.747363	90.280143	VOCs, TPH-GRO, TPH-DRO, TPH-ORO, PAHs, total RCRA total metals (including mercury)
	GW-3-FD			
Equipment Blank	Equipment Blank	NA	NA	
Field Blank	Field Blank	NA	NA	

Notes:

Latitude and longitude are based on North American Datum (NAD) 83.

DRO	Diesel-range organics	PAH	Polycyclic aromatic hydrocarbon
FD	Field duplicate	RCRA	Resource Conservation and Recovery Act
GRO	Gasoline-range organics	TPH	Total petroleum hydrocarbons
ID	Identification	VOC	Volatile organic compound
NA	Not applicable	°N	Degrees north
ORO	Oil-range organics	°W	Degrees west

On September 13, 2018, 25 soil samples (including two field duplicates), two groundwater samples (including one field duplicate), one equipment rinsate blank, and one field blank were submitted via FedEx to the Test America laboratory in Nashville, Tennessee, for arrival on September 14, 2018.

3.4 DEVIATIONS FROM THE QAPP

The approved QAPP specified collection of groundwater samples in addition to soil samples at each boring location. However, no groundwater samples were collected at SB-1, SB-2, SB-4, SB-5, SB-6, SB-7, SB-8, and SB-9 due to geologic refusal above the depth of groundwater. Another deviation from the QAPP was use of a peristaltic pump to collect the groundwater samples instead of a check valve. Another deviation was inclusion of mercury as an analyte with the other seven RCRA metals. These deviations are not expected to adversely affect results of the investigation.

The approved QAPP specified bulk collection of suspect ACBM to be submitted to a START-contracted laboratory for analysis for asbestos. In addition, paint-covered surfaces were to be screened for lead by use of an x-ray fluorescence (XRF) spectrometer to assess presence and determine quantity of LBP. However, contacts with the owner were unsuccessful to gain access for asbestos sampling and the LBP survey. Recommendation is to complete asbestos sampling and an LBP survey prior to any renovation or demolition of the restaurant and/or storage outbuilding.

4.0 PRESENTATION AND EVALUATION OF RESULTS

Section 4.0 discusses analytical results from samples collected during Phase II activities in September 2018. A copy of the analytical report provided by Test America, the associated chain-of-custody record, and a data validation report prepared by START are in Appendix E.

4.1 SURFACE SOIL SAMPLES

In Appendix F, Table F-1 summarizes laboratory results from surface soil samples analyzed for this investigation and compares the data to Missouri Department of Natural Resources (MDNR) Risk-Based Corrective Action (MRBCA) Lowest Default Target Levels (LDTL) and MRBCA Tier 1 residential and non-residential land use, soil type 3, Risk-based Target Levels (RBTL) for inhalation (vapor emissions and particulates), and dermal contact. All surface soil samples contained at least one VOC at a concentration above the laboratory reporting limit. No sample contained a VOC at a concentration above an LDTL. All surface soil samples except SS-2 and SS-2-FD contained at least one PAH at a concentration above a laboratory reporting limit. Sample SS-5 contained benzo[a]pyrene at a concentration of 0.738 milligrams per kilogram (mg/kg), exceeding the LDTL and the residential RBTL, both at 0.620 mg/kg.

All surface soil samples except SS-1 contained at least one TPH concentration above the laboratory reporting limit. No sample contained TPH at a concentration above the LDTL.

All surface soil samples contained concentrations of arsenic, barium, chromium, and lead above laboratory reporting limits, except SS-5, which was non-detect for arsenic. Additionally, all results for lead, except in SS-2-FD and SS-5, exceeded the LDTL, and arsenic was detected at concentrations above the LDTL and the residential RBTL in all samples except SS-5; however, those concentrations were comparable to naturally occurring surface soil concentrations within St. Louis County, Missouri. Detected arsenic concentrations in site surface soil samples ranged from 5.98 to 10.2 mg/kg; the LDTL and residential RBTL for arsenic is 3.89 mg/kg, and USGS reports typical arsenic concentrations in St. Louis County soils range from 4.091 to 17.435 mg/kg, with a mean of 10.561 mg/kg. Detected lead concentrations in site surface soil samples ranged from 1.75 to 19.3 mg/kg; the LDTL for lead is 3.74 mg/kg, and USGS reports typical lead concentrations in St. Louis County soils range from 15.241 to 118.770 mg/kg, with a mean of 40.950 mg/kg (USGS 2018). No other metal was detected at a concentration exceeding an LDTL.

No other surface soil sample analyte concentration exceeded an RBTL. A full analytical report of all soil sample results is in Appendix E.

4.2 SUBSURFACE SOIL SAMPLES

In Appendix F, Table F-2 summarizes laboratory results from subsurface soil samples analyzed for this investigation and compares the data to MRBCA LDTLs and MRBCA Tier 1 residential and non-residential land use, soil type 3, RBTLs for indoor inhalation of vapor emissions. Nine of the 19 subsurface soil samples contained at least one VOC at a concentration above the laboratory reporting limit. No sample contained a VOC at a concentration above an LDTL. Two subsurface soil samples—SB-2 (0-2) and SB-5 (0-2)—contained at least one PAH at concentration above a laboratory reporting limit. No sample contained a PAH at a concentration above the LDTL.

None of the 19 subsurface soil samples contained TPH levels above the laboratory reporting limit. No sample contained TPH at a concentration above the LDTL.

All subsurface soil samples contained concentrations of arsenic, barium, and chromium above laboratory reporting limits. All subsurface soil samples except SB-7 (11-13), SB-8 (7-9), SB-8 (9-11), SB-9 (7-9), and SB-9 (10-12) contained concentrations of lead above laboratory reporting limits. Additionally, all detected results for lead exceeded the LDTL, and 17 of the 19 sample results for arsenic exceeded the LDTL; however, those concentrations were comparable to naturally occurring surface soil concentrations within St. Louis County, Missouri. Arsenic concentrations in site subsurface soil samples ranged from 3.28 to 15.8 mg/kg; the LDTL for arsenic is 3.89 mg/kg, and USGS reports typical arsenic concentrations in St. Louis County soils range from 4.091 to 17.435 mg/kg, with a mean of 10.561 mg/kg. Detected lead concentrations in the subsurface soil samples ranged from 32.9 to 106 mg/kg; the LDTL for lead is 3.74 mg/kg, and USGS reports typical lead concentrations in St. Louis County soils range from 15.241 to 118.770 mg/kg, with a mean of 40.950 mg/kg (USGS 2018). No other metal was detected at concentration exceeding an LDTL.

No subsurface soil sample analyte concentration exceeded an RBTL. A full analytical report of all soil sample results is in Appendix E.

4.3 GROUNDWATER SAMPLES

In Appendix F, Table F-3 summarizes laboratory results from groundwater samples analyzed for this investigation and compares the data to MRBCA LDTLs and RBTLs. Two groundwater samples (GW-3 and GW-3-FD) were collected at one soil boring location (SB-3). Acetone and chloromethane, which are

laboratory contaminants, were detected in sample GW-3; acetone was detected in GW-3-FD. Neither groundwater sample contained a site-related VOC at a concentration above a laboratory reporting limit or an LDTL.

Neither groundwater sample contained a detectable PAH or TPH concentration.

Sample number GW-3 contained arsenic, barium, chromium, lead, and selenium at concentrations above laboratory reporting limits. Sample number GW-3-FD contained barium, chromium, and selenium at concentrations above laboratory reporting limits. Neither sample contained a RCRA metal at a concentration above an LDTL.

In no groundwater sample did an analyte concentration exceed an RBTL. A full analytical report is in Appendix E.

4.4 QUALITY CONTROL SAMPLES

Results from soil and groundwater duplicate samples listed in Appendix F, Tables F-1, F-2, and F-3 indicated no major variances in method precision. Acetone and chromium were detected in the equipment rinsate blank and field blank at concentrations greater than method detection limits, but less than laboratory reporting limits. Trichlorofluoromethane and barium were detected in the equipment rinsate blank at concentrations greater than method detection limits, but less than laboratory reporting limits. Chloromethane was detected in the equipment rinsate blank at a concentration greater than the method detection limit, but less than the laboratory reporting limit. Chloromethane was detected in the field blank at a concentration above the laboratory reporting limit, at 1.97 micrograms per liter ($\mu\text{g/L}$). Chloromethane results from both blanks were well below the LDTL of 18.3 $\mu\text{g/L}$.

5.0 DISCUSSION OF FINDINGS AND CONCLUSIONS

In September 2018, START conducted a Phase II TBA at the site after a Phase I TBA by Tetra Tech in June 2018 had identified the following findings and opinions:

- Review of city directories identified the site address (9947 W Florissant Ave.) as an AutoZone from 2001 to at least as late as 2010. Improvements at the site were destroyed by fire in November 2014 due to civil unrest. Possible fill and grading associated with the fire at the former AutoZone property poses a REC to the site.
- Review of historical documents revealed that the New York Grill (9901 W Florissant Ave.) was built in 1978. LBP and ACBM were likely used in construction of the restaurant.
- Tetra Tech completed a Tier 1 non-invasive vapor encroachment screen of the site. Even though the site is not listed on the vapor encroachment screen, a VEC is posed to the site based on possible presence of soil and groundwater contamination because the site hosted an AutoZone that burned down during civil unrest. This poses a REC to the site.

START members Ann Marie Pohlman and Jenna Pratt completed Phase II TBA sampling activities on September 11 and 12, 2018. Nine soil borings were advanced by Tetra Tech subcontractor, Bulldog Drilling. Soil borings were screened by use of a PID, and two soil samples were collected from each boring based on screening results and judgment of field personnel. One groundwater sample was collected at one of the nine boring locations (SB-3). Samples were submitted to Test America via FedEx (on September 13, 2018), and analyzed for VOCs, TPH-GRO, TPH-DRO, TPH-ORO, PAHs, and RCRA total metals (including mercury).

Results from surface soil samples were compared to MRBCA LDTLs and MRBCA Tier 1 residential and non-residential land use, soil type 3, RBTLs for inhalation (vapor emissions and particulates), and dermal contact. All six surface soil samples contained at least one VOC at a concentration above the laboratory reporting limit. No sample contained a VOC at a concentration above an LDTL. Four surface soil samples contained at least one PAH at a concentration above a laboratory reporting limit. One sample contained a benzo[a]pyrene concentration exceeding the LDTL and the residential RBTL. Five surface soil samples contained at least one TPH level above the laboratory reporting limit. No sample contained TPH at a concentration above an LDTL. Five surface soil samples contained arsenic, barium, chromium, and lead concentrations above laboratory reporting limits. Additionally, four surface soil sample results exceeded the LDTL for lead, and five sample results exceeded the LDTL and residential RBTL for arsenic; however, those lead and arsenic concentrations were comparable to naturally occurring surface soil concentrations within St. Louis County, Missouri.

Results from subsurface soil samples were compared to MRBCA LDTLs and MRBCA Tier 1 residential and non-residential land use, soil type 3, RBTLs for indoor inhalation of vapor emissions. Nine of the 19 subsurface soil samples contained at least one VOC at a concentration above the laboratory reporting limit. No sample contained a VOC at a concentration above an LDTL. Two subsurface soil samples contained at least one PAH at a concentration above a laboratory reporting limit. No sample contained a PAH at a concentration above an LDTL. None of the 19 subsurface soil samples contained TPH levels above the laboratory reporting limit, and no sample contained TPH at a concentration above the LDTL. All subsurface soil samples contained concentrations of arsenic, barium, and chromium above laboratory reporting limits. Fourteen of 19 subsurface soil samples contained concentrations of lead above laboratory reporting limits. Additionally, all detected results for lead exceeded the LDTL, and 17 of the 19 sample results for arsenic exceeded the LDTL; however, those lead and arsenic concentrations were comparable to naturally occurring surface soil concentrations within St. Louis County, Missouri. No subsurface soil sample analyte concentration exceeded an RBTL.

Results from groundwater samples were compared to MRBCA LDTLs and RBTLs. Two groundwater samples were collected at one soil boring location on site. Acetone and chloromethane, which are laboratory contaminants, were detected in sample GW-3; acetone was detected in GW-3-FD. Neither groundwater sample contained a VOC at a concentration above a laboratory reporting limit or an LDTL. Neither groundwater sample contained detectable PAH or TPH concentrations. Sample number GW-3 contained arsenic, barium, chromium, lead, and selenium at concentrations above laboratory reporting limits. Sample number GW-3-FD contained barium, chromium, and selenium at concentrations above laboratory reporting limits. Neither sample contained a RCRA metal at concentration above an LDTL. In no groundwater sample did an analyte concentration exceed an RBTL.

No analyte concentration in subsurface soil or groundwater samples exceeded an RBTL. The benzo[a]pyrene concentration exceeded the LDTL and residential RBTL in surface soil sample SS-5.

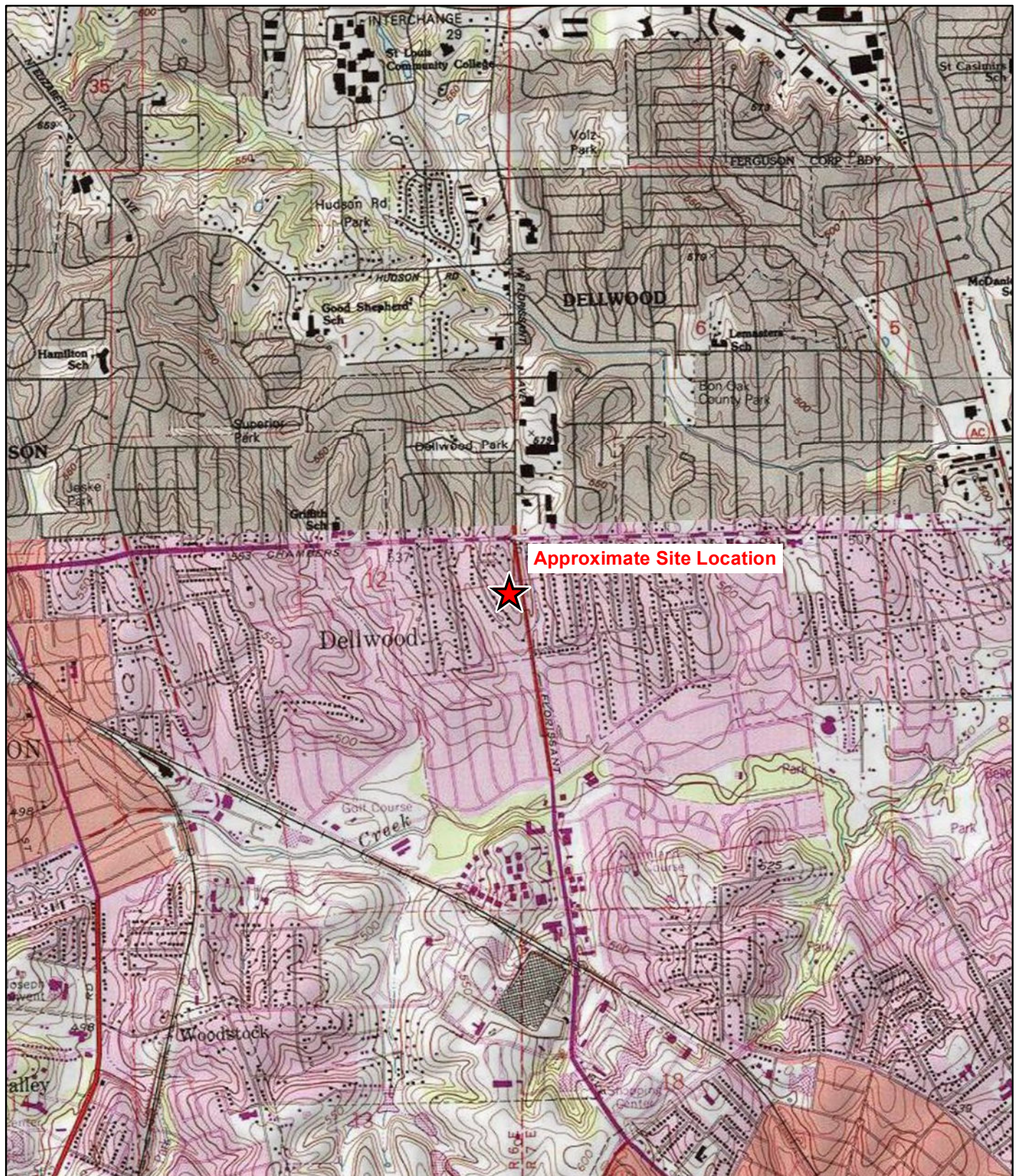
Analytical results indicate detection of analytes at the former AutoZone site. However, follow-up action appears unwarranted to address subsurface soil and groundwater contamination because no analyte concentration in subsurface soil and groundwater samples exceeded an RBTL. The benzo[a]pyrene concentration exceeded the residential RBTL in surface soil sample SS-5, collected at 9901 West Florissant Avenue (New York Grill). If future use of this portion of the site is to be for residential purposes, additional sampling is recommended. Further, asbestos sampling and an LBP survey should be completed prior to any renovation or demolition of the restaurant and/or storage outbuilding.

6.0 REFERENCES

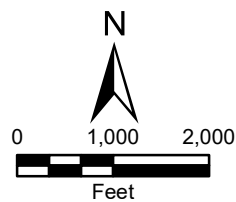
- Tetra Tech, Inc. (Tetra Tech). 2018a. Quality Assurance Project Plan for a Phase II Targeted Brownfields Assessment, Former AutoZone Site, Dellwood, Missouri. September 6.
- Tetra Tech. 2018b. Phase I Targeted Brownfields Assessment, Former AutoZone, 9901 and 9947 West Florissant Avenue, Dellwood, Missouri. July 13.
- U.S. Department of Agriculture (USDA). 2018. Soil Survey of St. Louis County, Missouri. Accessed on June 18, 2018. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- U.S. Geological Survey (USGS). 1997. Ground Water Atlas of the United States: Kansas, Missouri, and Nebraska. HA 730-D. Accessed June 18, 2018. http://pubs.usgs.gov/ha/ha730/ch_d/index.html
- USGS. 2015. Clayton, Missouri Quadrangle. USGS 7.5-Minute Topographic Series.
- USGS. 2018. Mineral Resources On-Line Spatial Data. Average Concentrations of Elements in Saint Louis County, Missouri. Accessed October 2018. <https://mrdata.usgs.gov/geochem/county.php?place=f29189&el=As&rf=central>

APPENDIX A

FIGURES



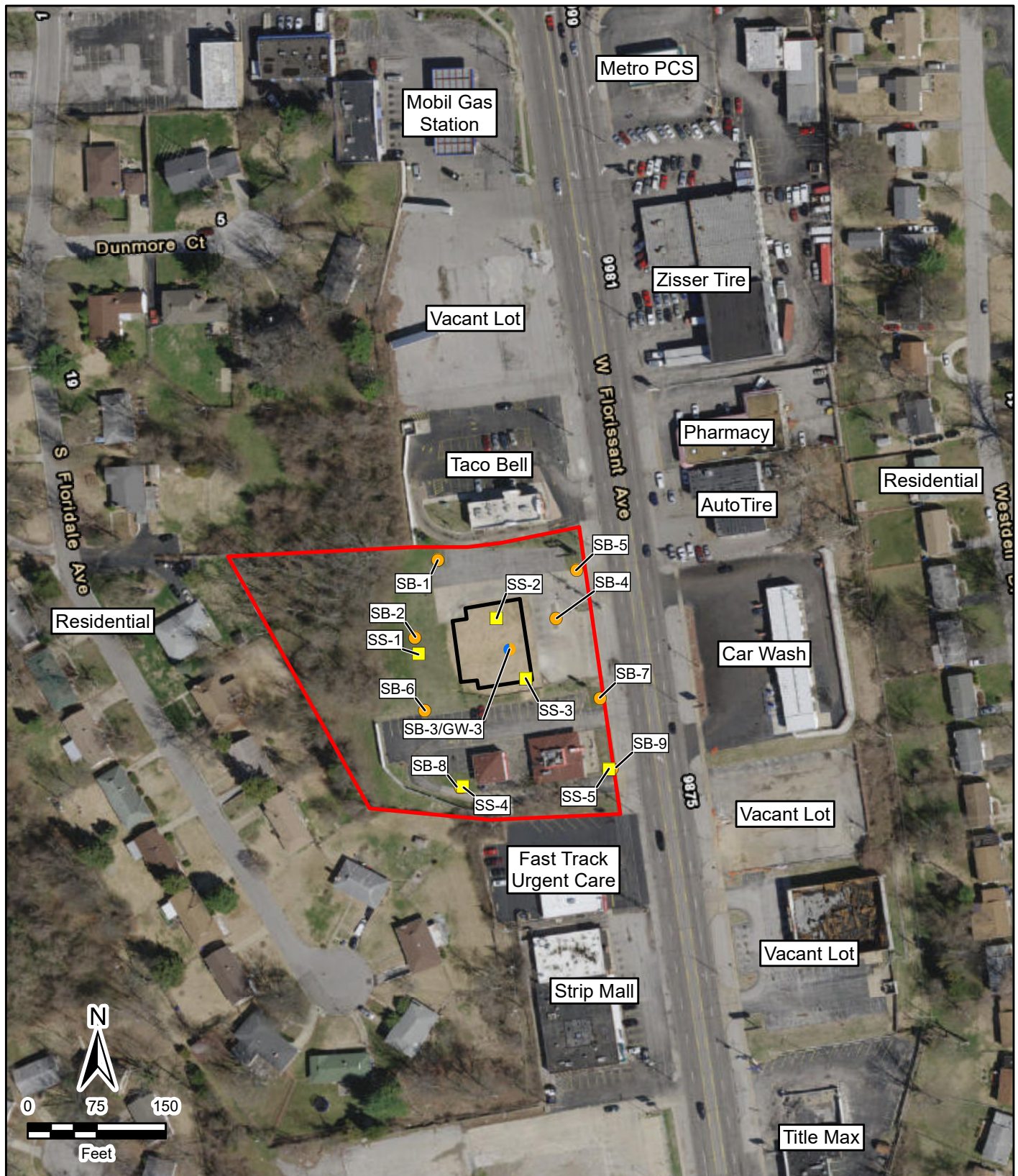
Approximate Site Location



Former AutoZone
9947 West Florissant Ave
Dellwood, Missouri

Figure 1
Site Location Map





Legend

- DPT soil sample location
- DPT soil/groundwater sample location
- Surface soil sample location
- Approximate site boundary
- Former AutoZone building footprint
- DPT Direct push technology

Former AutoZone Site
9947 West Florissant Ave
Dellwood, Missouri

Figure 2
Sample Location Map



APPENDIX B
PHOTOGRAPHIC DOCUMENTATION

**Former AutoZone Site
Dellwood, Missouri**



<p>TETRA TECH PROJECT NO. X9025.14.0002.055</p> <p>DIRECTION: West</p>	DESCRIPTION	This photograph shows soil borings from sample location SB-1.	1
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/11/18
	PHOTOGRAPHER	Ann Marie Pohlman	



<p>TETRA TECH PROJECT NO. X9025.14.0002.055</p> <p>DIRECTION: Southeast</p>	DESCRIPTION	This photograph shows Bulldog Drilling at sample location SB-2.	2
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/11/18
	PHOTOGRAPHER	Ann Marie Pohlman	

**Former AutoZone Site
Dellwood, Missouri**



<p>TETRA TECH PROJECT NO. X9025.14.0002.055</p> <p>DIRECTION: Northwest</p>	DESCRIPTION	This photograph shows soil borings from sample location SB-3.	3
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/11/18
	PHOTOGRAPHER	Ann Marie Pohlman	



<p>TETRA TECH PROJECT NO. X9025.14.0002.055</p> <p>DIRECTION: None</p>	DESCRIPTION	This photograph shows purging of groundwater prior to collection of sample GW-3.	4
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/12/18
	PHOTOGRAPHER	Ann Marie Pohlman	

**Former AutoZone Site
Dellwood, Missouri**



TETRA TECH PROJECT NO. X9025.14.0002.055 DIRECTION: West	DESCRIPTION	This photograph shows collection of sample SS-1.	5
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/11/18
	PHOTOGRAPHER	Ann Marie Pohlman	



TETRA TECH PROJECT NO. X9025.14.0002.055 DIRECTION: Southwest	DESCRIPTION	This photograph shows Bulldog Drilling at sample location SB-6.	6
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/12/18
	PHOTOGRAPHER	Ann Marie Pohlman	

**Former AutoZone Site
Dellwood, Missouri**



<p>TETRA TECH PROJECT NO. X9025.14.0002.055</p> <p>DIRECTION: None</p>	DESCRIPTION	This photograph shows soil borings from sample location SB-6.	7
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/12/18
	PHOTOGRAPHER	Ann Marie Pohlman	



<p>TETRA TECH PROJECT NO. X9025.14.0002.055</p> <p>DIRECTION: Southwest</p>	DESCRIPTION	This photograph shows Bulldog Drilling at sample location SB-8.	8
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/12/18
	PHOTOGRAPHER	Ann Marie Pohlman	

**Former AutoZone Site
Dellwood, Missouri**



<p>TETRA TECH PROJECT NO. X9025.14.0002.055</p> <p>DIRECTION: South</p>	DESCRIPTION	This photograph shows soil borings from sample location SB-8.	9
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/12/18
	PHOTOGRAPHER	Ann Marie Pohlman	



<p>TETRA TECH PROJECT NO. X9025.14.0002.055</p> <p>DIRECTION: Northeast</p>	DESCRIPTION	This photograph shows Bulldog Drilling at sample location SB-9.	10
	CLIENT	Environmental Protection Agency - Region 7	DATE 9/12/18
	PHOTOGRAPHER	Ann Marie Pohlman	

APPENDIX C
SITE LOGBOOK

COMPOSITION

Phase II - former AutoZone

Dellwood, Mo

100

SHEETS

College
Ruled

103k9025140002.055

Former Autozone 103X 902514 0002.055 9-10-18

0753 START Pohlman at Fenton office. Print HASP and QAPP, pick up supplies needed for the project.

0951 Go to EPA to pick up PID, water level indicator and gloves.

1030 At Wal-Mart to pick up supplies - first aid kit, eyewash solution, and sharpies.

1130 At Fenton office. Go through coolers and get supplies needed for sampling this week. Send START Jenna Pratt QAPP and HASP. Earlier, Pat with the St. Louis Economic Development Partnership called and stated the owner of vacant lot (former Autozone) is renting the space to Missouri American Water Company. Pat is going out later today to send me pictures of the lot.

1415 Text AMP START Pohlman receives text pictures from Pat of the lot of former Autozone; vehicles, equipment, and other miscellaneous items are located on the lot, but is still accessible and sampleable. START will work around items to perform geoprobe sampling this week. Pat is unsure if owner will allow access for asbestos and LBP survey on Thursday. Pat will let me know by mid-day tomorrow. Load truck with all sampling supplies.

1550 End day at Fenton office. Unload truck at home.

9-10-18

John Pohlman

CLASS SCHEDULE

- former AutoZone 163X 902514 0002.655 9-11-18
- 0743 Bulldog Drilling operator called START Pohlman to site say he is stuck in traffic and will be late.
- 0748 START Pohlman at 9947 W. Pleasant Ave. (Former AutoZone site). Heavy equipment, pipes, and trucks are located on-site.
- 0759 START Pratt on site. Get ice and wait for drillers to arrive.
- 0900 Bulldog Drilling on site. Have START Pratt and Bulldog Drilling workers (Josh Edwards and Joe Shawn Goy.) review and sign HHSR. Do tailgate Safety meeting also.
- 0928 Start SB-1. PID readings 0.0 ppb at all depths. Refusal at 27 feet bgs. Collected samples from 3 to 5 feet and 17 to 19 feet depths. No groundwater encountered; no groundwater sample collected. GPS Coordinates: ~~38.7476, -90.2801~~ 38.747637, -90.280406
- 1120 Start SB-2. PID readings 0.0 ppb at all depths. Refusal at 26.5 feet bgs. Collected samples from 0 to 2 feet and 11-13 feet depths. No groundwater encountered; no groundwater sample collected. GPS Coordinates: ~~38.7474, -90.2805~~ 38.747407, -90.280502
- 1210 Lunch
- 1235 Start SB-3. PID readings 0.0 ppb at all depths. Depth to refusal is 28.5 feet bgs. Collect samples at 0-2 feet and 21-23 feet depths. When putting dirt back down hole, START Pratt heard water. START Pohlman retrieved water level indicator and depth to groundwater is 15 feet, 8 inches. Bulldog Drilling installed temporary well and to let recharge for 24 hours. Will collect groundwater sample tomorrow. Bottom of well set is at 28.5 feet bgs. Driller stated about leeches of water in well. Will let set overnight to recharge.
- 1354 Start SB-4. PID readings 0.0 ppb at all depths. Depth to refusal is 19.5 feet bgs. Collected samples at 5-7 feet and

Former Auth Zone 103x9025140002.055 9-11-18

9-11 feet depth intervals GPS coordinates: 38.74745° - 90.279926

No groundwater encountered; no groundwater sample collected.

1440 Start SB-S; PID readings 0.0 ppb on all depths. Depth to refusal is 20 feet bgs. Collected samples at 0-2 feet and 18-20 feet depths. No groundwater encountered; no groundwater sample collected. GPS coordinates: 38.7476, -90.279926 38.747593,

After this location, Bulldog Drilling off-site for the day. Will return tomorrow at 0800. -90.279879

1538 Begin sample collection of SS-1. GPS coordinates: 38.7474, 38.747358, -90.280078. Collect sample at 1545.

1620 Begin sample collection of SS-2. Collect sample at 1620. Collect duplicate sample also SS-2-PD. GPS coordinates: 38.747498, 38.7475 and -90.2802. Go to Quick Trip and get ice. -90.280190

1650 START Pohlman and Kraft off-site and end day. Start Pohlman unloads vehicle and charges PID once home.

9-11-18

[Handwritten signature]

Former AutoZone 103K 9025140002.055 9-12-19

0802 START Pohlman and Pratt on site. STREET Pohlman stops on way to site to get ice. Bulldog Drilling on site. Get ready and set up.

0835 Do tailgate Safety meeting.

0838 Start SB-6. PID readings 0.0 ppb at all depths. Depth to refusal is 24.5 feet bgs. Collect samples at 2-4 feet and 22-24 feet ~~inter~~ depths. No groundwater encountered; no groundwater sample collected. GPS coordinates: ~~38.7470, -90.2805~~ 38.747188, -90.280473

0932 Start SB-7; PID readings 0.0 ppb at all depths. Depth to refusal at 20 feet bgs. Collect samples at 0-2 feet, duplicate sample 0-2 feet (SB-7-PD) and 11-13 feet depths. No groundwater encountered; no groundwater sample collected. GPS coordinates: ~~38.7470, -90.2799~~ 38.7472, -90.2799

1016 Start SB-8; PID readings 0.0 ppb at all depths. Depth to refusal is 24.5 feet bgs. Collect samples at 7-9 feet and 9-11 feet depths. No groundwater encountered; no groundwater sample collected. Finish at 1036. Performed bump test earlier this morning and air in PID and Vols were read; unit is working ok. Unit was calibrated on 9-10-19. GPS coordinates: ~~38.7470, -90.2803~~ 38.746956, -90.280345

1129 Start SB-9. PID readings 0.0 ppb at all depths. Depth to refusal is 19 feet bgs. Collect samples at 7-9 and 10-12 feet depths. No groundwater encountered; no groundwater sample collected. GPS coordinates: ~~38.7470, -90.2798~~ 38.746998, -90.279766

1215 Lunch

1245 Get ready to sample GW-3.

1307 Begin purging GW-3 location with Gaspump. Pump is really slow and water is really dirty. Well is not recharging fast.

former Auto Zone 103X 9025 14.0002.055 9-12-18

1334 Collect equipment rinse & blank sample

1340 Collect SS-03. ~~GPS coordinates: 38.74131, -90.2801 AM~~

1400 Collect SS-04. ~~GPS coordinates: 38.7470, -90.2803 AM~~

1415 Collect SS-05. ~~GPS coordinates: 38.7470, -90.2798 AM~~

1424 Collect GW-3 and GW-3-FD (field duplicate) Samples after purging 1 gallon of water. Water is cloudy, not clear.

1512 Collect PB Sample.

1550 At Quik Trip. Buy ice and ice down samples.

1625 START Pohlman and Pratt off site. End day.

GPS coordinates of SS-03: 38.747275, -90.280084

GPS coordinates of SS-04: 38.746958, -90.280337

GPS coordinates of SS-05: 38.746997, -90.279777

9-12-18

Am Bre

Former Antizone 103X9025140002.055 9-13-18

0806 START Pohlman at QuikTrip in Fenton to buy rice to ship samples today.

0815 START Pohlman at Fenton office to ship samples to Test America today for Project #: 49014172. START Pohlman labeled and taped all soil samples, checked water samples and filled out Chain of custody for all samples. START Pohlman cleaned out truck full of supplies and left them at Tetra Tech office. Will need to put supplies away and take PID and water level indicator to LPA on Monday.

1600 Drop samples off at Fed-EX in Fenton to ship to Test America in Nashville, TN. End day.

9-13-18

John

APPENDIX D

BORING LOGS

BOREHOLE LOG

Page 1 of 2

Boring ID: SB-1	
Monitoring Well ID: N/A	
Project Number: 103X9025140002.055	Project Name: Former AutoZone
Client: EPA R7	
Site: 9901 and 9947 W Florrisant Ave, Dellwood, MO	
Borehole Location: NW corner of property	
Latitude: 38.747637	Longitude: -90.280406
Logged By: Jenna Pratt, Tetra Tech	
Reviewed By:	Review Date:
Drilling Contractor: Bulldog Drilling	
Drill Rig Type/Method: DPT (Geoprobe, track-mounted)	
Sampler Type: acetate liner	
Borehole Diameter (inches): 2.0	
Drill Start Date: 9/11/2018	Drill Start Time: 9:28
Drill Finish Date: 9/11/2018	Drill Finish Time: 9:55
Total Borehole Depth (feet bgs): 27	
Soil Boring Backfill Date: 9/11/2018	Soil Boring Backfill Time: 14:25
Ground Surface Reference Elevation (feet NGVD):	
Well Completion Date: N/A	Well Completion Time: N/A
Screen Interval (feet bgs): N/A to N/A	Total Well Depth (feet bgs): N/A
Well Diameter: (inches) N/A	Well Casing Material: N/A

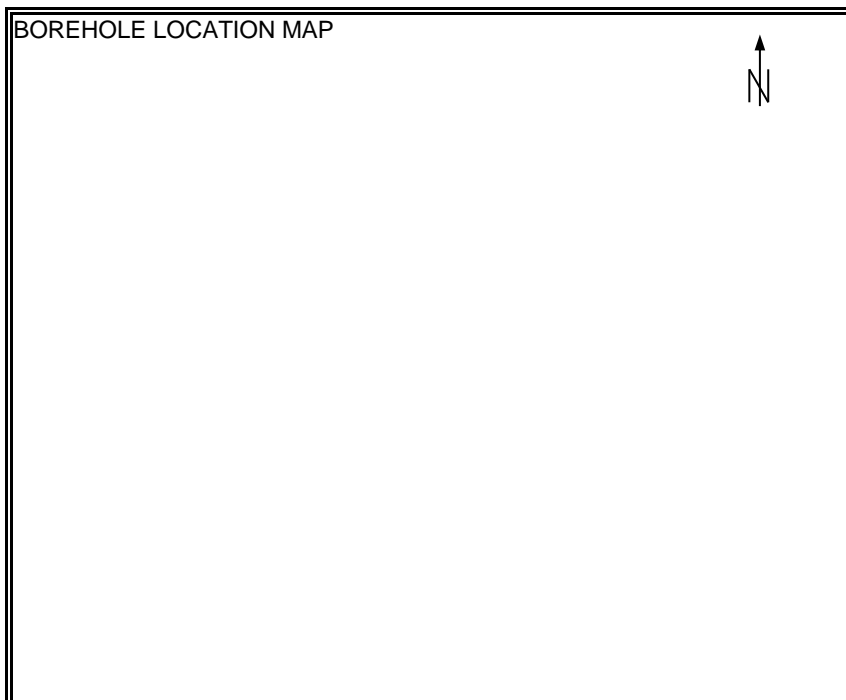
<p>BOREHOLE LOCATION MAP</p> <div style="text-align: right; margin-top: 50px;"> </div>	<p>NOTES/REMARKS</p> <p>Refusal at 27.0 feet bgs. No groundwater encountered.</p>
----------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------

PROJECT:		Former AutoZone		DATE: 9/11/2018	
SITE:		9901 and 9947 W Florissant Ave, Dellwood, MO		LOGGED BY: Jenna Pratt, Tetra Tech	
BORING ID:		SB-1	MW ID:	N/A	Page 2 of 2

Time	Recovered/Driven (in./in.)	PID Reading (ppm)	Sample Interval	Depth (feet bgs)	Soil Description
09:30		0.0	SB-1 (3-5)	1	LIGHT BROWN CLAYEY SILT, stiff
					LIGHT BROWN VERY CLAYEY SILT, soft
	48				
	60				LIGHT BROWN VERY CLAYEY SILT, soft to medium stiff
09:38		0.0		7	
	48				
	48				LIGHT BROWN CLAYEY SILT, medium stiff
09:41		0.0		11	
	33				
	48				LIGHT BROWN CLAY with silt, very stiff
09:45		0.0		15	
	37				LIGHT BROWN CLAY with silt, hard
	48				
09:49		0.0	SB-1 (17-19)	19	
	46				
	48		LIGHT BROWN CLAY, with silt, hard		
09:51		0.0		23	
	48				LIGHT BROWN CLAY, with silt, hard
	48				
09:55	24	0.0		27	SANDY CLAY LOAM, dense
	24				Refusal @ 27.0 feet bgs
				29	

BOREHOLE LOG

Boring ID: SB-2			
Monitoring Well ID: N/A			
Project Number: 103X9025140002.055		Project Name: Former AutoZone	
Client: EPA R7			
Site: 9901 and 9947 W Florrisant Ave, Dellwood, MO			
Borehole Location: West side of parcel near Former AutoZone parking lot			
Northing: 38.747407		Easting: -90.280502	
Logged By: Jenna Pratt, Tetra Tech			
Reviewed By:			Review Date:
Drilling Contractor: Bulldog Drilling			
Drill Rig Type/Method: DPT (Geoprobe, track-mounted)			
Sampler Type: acetate liner			
Borehole Diameter (inches): 2.0			
Drill Start Date: 9/11/2018		Drill Start Time: 11:20	
Drill Finish Date: 9/11/2018		Drill Finish Time: 11:50	
Total Borehole Depth (feet bgs): 26.5			
Soil Boring Backfill Date: 9/11/2018		Soil Boring Backfill Time: 12:00	
Ground Surface Reference Elevation (feet NGVD):			
Well Completion Date: N/A			Well Completion Time: N/A
Screen Interval (feet bgs): N/A to N/A			Total Well Depth (feet bgs): N/A
Well Diameter: (inches) N/A			Well Casing Material: N/A



NOTES/REMARKS

Refusal at 26.5 feet bgs. No groundwater encountered.

[illegible]

BOREHOLE LOG

Boring ID: SB-3	
Monitoring Well ID: GW-3	
Project Number: 103X9025140002.055	Project Name: Former AutoZone
Client: EPA R7	
Site: 9901 and 9947 W Florissant Ave, Dellwood, MO	
Borehole Location: Southern portion of former building footprint	
Northing: 38.747363	Easting: -90.280143
Logged By: Jenna Pratt, Tetra Tech	
Reviewed By:	Review Date:
Drilling Contractor: Bulldog Drilling	
Drill Rig Type/Method: DPT (Geoprobe, track-mounted)	
Sampler Type: Soil - acetate liner, Water - peristaltic pump	
Borehole Diameter (inches): 2.0	
Drill Start Date: 9/11/2018	Drill Start Time: 12:35
Drill Finish Date: 9/11/2018	Drill Finish Time: 13:12
Total Borehole Depth (feet bgs): 28.5	
Soil Boring Backfill Date: 9/12/2018	Soil Boring Backfill Time: 16:00
Ground Surface Reference Elevation (feet NGVD):	
Well Completion Date: 9/11/2018	Well Completion Time: 13:22
Screen Interval (feet bgs): N/A to N/A	Total Well Depth (feet bgs): 28.5'
Well Diameter: (inches) 2.0	Well Casing Material: Drill Pipe

BOREHOLE LOCATION MAP

NOTES/REMARKS

Refusal at 28.5 feet bgs. Groundwater encountered at 15.66 feet bgs.

[illegible]

BOREHOLE LOG

Page 1 of 2

Boring ID: SB-4	
Monitoring Well ID: N/A	
Project Number: 103X9025140002.055	Project Name: Former AutoZone
Client: EPA R7	
Site: 9901 and 9947 W Florissant Ave, Dellwood, MO	
Borehole Location: Eastern portion of Former AutoZone parking lot (gravel area cut out in parking lot)	
Northing: 38.747450	Easting: -90.279926
Logged By: Jenna Pratt, Tetra Tech	
Reviewed By:	Review Date:
Drilling Contractor: Bulldog Drilling	
Drill Rig Type/Method: DPT (Geoprobe, track-mounted)	
Sampler Type: acetate liner	
Borehole Diameter (inches): 2.0	
Drill Start Date: 9/11/2018	Drill Start Time: 13:54
Drill Finish Date: 9/11/2018	Drill Finish Time: 14:11
Total Borehole Depth (feet bgs): 19.5	
Soil Boring Backfill Date: 9/11/2018	Soil Boring Backfill Time: 14:25
Ground Surface Reference Elevation (feet NGVD):	
Well Completion Date: N/A	Well Completion Time: N/A
Screen Interval (feet bgs): N/A to N/A	Total Well Depth (feet bgs): N/A
Well Diameter: (inches) N/A	Well Casing Material: N/A

<p>BOREHOLE LOCATION MAP</p> <div style="text-align: right; margin-top: 50px;"> </div>	<p>NOTES/REMARKS</p> <p>Refusal at 19.5 feet bgs.</p> <p>No groundwater encountered.</p>
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[illegible]

BOREHOLE LOG

Page 1 of 2

Boring ID: SB-5	
Monitoring Well ID: N/A	
Project Number: 103X9025140002.055	Project Name: Former AutoZone
Client: EPA R7	
Site: 9901 and 9947 W Florrisant Ave, Dellwood, MO	
Borehole Location: NE corner of property	
Northing: 38.747593	Easting: -90.279879
Logged By: Jenna Pratt, Tetra Tech	
Reviewed By:	Review Date:
Drilling Contractor: Bulldog Drilling	
Drill Rig Type/Method: DPT (Geoprobe, track-mounted)	
Sampler Type: acetate liner	
Borehole Diameter (inches): 2.0	
Drill Start Date: 9/11/2018	Drill Start Time: 14:40
Drill Finish Date: 9/11/2018	Drill Finish Time: 14:58
Total Borehole Depth (feet bgs): 20.0	
Soil Boring Backfill Date: 9/11/2018	Soil Boring Backfill Time: 15:10
Ground Surface Reference Elevation (feet NGVD):	
Well Completion Date: N/A	Well Completion Time: N/A
Screen Interval (feet bgs): N/A to N/A	Total Well Depth (feet bgs): N/A
Well Diameter: (inches) N/A	Well Casing Material: N/A

BOREHOLE LOCATION MAP

NOTES/REMARKS

Refusal at 20.0 feet bgs.

No groundwater encountered.

PROJECT:		Former AutoZone			DATE:		9/11/2018	
SITE:		9901 and 9947 W Florrisant Ave, Dellwood, MO			LOGGED BY:		Jenna Pratt, Tetra Tech	
BORING ID:		SB-5		MW ID:	N/A			
					Page	2	of	2
Time	Recovered/Driven (in./in.)	PID Reading (ppm)	Sample Interval	Depth (feet bgs)	Soil Description			
14:45		0.0	SB-5 (0-2)	1				
	38		3					
	60		5	BROWN CLAY with silt, soft, moist				
14:47		0.0		7				
	30			9	BROWN CLAY with silt, soft, moist			
48								
14:51		0.0		11				
	48							
	48			13	BROWN CLAY with silt and very fine sand, stiff, moist			
14:53		0.0		15				
	48							
	48			17	BROWN SANDY CLAY with silt, stiff, moist			
14:58		0.0		19				
	36			SB-5 (18-20)	BROWN CLAYEY SAND medium to fine grained, with gravel, very stiff, moist			
					21	Refusal @ 20.0 feet bgs		
				23				
				25				
				27				
				29				

BOREHOLE LOG

Page 1 of 2

Boring ID: SB-6	
Monitoring Well ID: N/A	
Project Number: 103X9025140002.055	Project Name: Former AutoZone
Client: EPA R7	
Site: 9901 and 9947 W Florissant Ave, Dellwood, MO	
Borehole Location: SW corner of Former AutoZone lot	
Northing: 38.747188	Easting: -90.280473
Logged By: Jenna Pratt, Tetra Tech	
Reviewed By:	Review Date:
Drilling Contractor: Bulldog Drilling	
Drill Rig Type/Method: DPT (Geoprobe, track-mounted)	
Sampler Type: acetate liner	
Borehole Diameter (inches): 2.0	
Drill Start Date: 9/12/2018	Drill Start Time: 8:38
Drill Finish Date: 9/12/2018	Drill Finish Time: 9:03
Total Borehole Depth (feet bgs): 24.5	
Soil Boring Backfill Date: 9/12/2018	Soil Boring Backfill Time: 9:10
Ground Surface Reference Elevation (feet NGVD):	
Well Completion Date: N/A	Well Completion Time: N/A
Screen Interval (feet bgs): N/A to N/A	Total Well Depth (feet bgs): N/A
Well Diameter: (inches) 2.0	Well Casing Material: Drill Pipe

<p>BOREHOLE LOCATION MAP</p> <div style="text-align: right; margin-top: 50px;"> </div>	<p>NOTES/REMARKS</p> <p>Refusal at 24.5 feet bgs. No groundwater encountered.</p>
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[illegible]

BOREHOLE LOG

Page 1 of 2

Boring ID: SB-7	
Monitoring Well ID: N/A	
Project Number: 103X9025140002.055	Project Name: Former AutoZone
Client: EPA R7	
Site: 9901 and 9947 W Florissant Ave, Dellwood, MO	
Borehole Location: NE corner of 9901 W. Florissant Avenue (New York Grill)	
Northing: 38.747209	Easting: -90.279804
Logged By: Jenna Pratt, Tetra Tech	
Reviewed By:	Review Date:
Drilling Contractor: Bulldog Drilling	
Drill Rig Type/Method: DPT (Geoprobe, track-mounted)	
Sampler Type: acetate liner	
Borehole Diameter (inches): 2.0	
Drill Start Date: 9/12/2018	Drill Start Time: 9:32
Drill Finish Date: 9/12/2018	Drill Finish Time: 9:47
Total Borehole Depth (feet bgs): 20	
Soil Boring Backfill Date: 9/12/2018	Soil Boring Backfill Time: 10:00
Ground Surface Reference Elevation (feet NGVD):	
Well Completion Date: N/A	Well Completion Time: N/A
Screen Interval (feet bgs): N/A to N/A	Total Well Depth (feet bgs): N/A
Well Diameter: (inches) 2.0	Well Casing Material: Drill Pipe

<p>BOREHOLE LOCATION MAP</p> <div style="text-align: right; margin-top: 50px;"> </div>	<p>NOTES/REMARKS</p> <p>Refusal at 20.0' bgs. No groundwater encountered.</p>
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[illegible]

BOREHOLE LOG

Page 1 of 2

Boring ID: SB-8			
Monitoring Well ID: N/A			
Project Number: 103X9025140002.055		Project Name: Former AutoZone	
Client: EPA R7			
Site: 9901 and 9947 W Florissant Ave, Dellwood, MO			
Borehole Location: SW portion of 9901 W. Florissant Ave. west of storage outbuilding			
Northing: 38.746956		Easting: -90.280345	
Logged By: Jenna Pratt, Tetra Tech			
Reviewed By:			Review Date:
Drilling Contractor: Bulldog Drilling			
Drill Rig Type/Method: DPT (Geoprobe, track-mounted)			
Sampler Type: acetate liner			
Borehole Diameter (inches): 2.0			
Drill Start Date: 9/12/2018		Drill Start Time: 10:16	
Drill Finish Date: 9/12/2018		Drill Finish Time: 10:38	
Total Borehole Depth (feet bgs): 24.5			
Soil Boring Backfill Date: 9/12/2018		Soil Boring Backfill Time: 10:45	
Ground Surface Reference Elevation (feet NGVD):			
Well Completion Date: N/A			Well Completion Time: N/A
Screen Interval (feet bgs): N/A to N/A			Total Well Depth (feet bgs): N/A
Well Diameter: (inches) 2.0			Well Casing Material: Drill Pipe

BOREHOLE LOCATION MAP

NOTES/REMARKS

Refusal at 24.5' bgs.
No groundwater encountered.

[illegible]

BOREHOLE LOG

Boring ID: SB-9	
Monitoring Well ID: N/A	
Project Number: 103X9025140002.055	Project Name: Former AutoZone
Client: EPA R7	
Site: 9901 and 9947 W Florissant Ave, Dellwood, MO	
Borehole Location: SE corner of 9901 W. Florissant Ave. (east of New York Grill)	
Northing: 38.746998	Easting: -90.279766
Logged By: Jenna Pratt, Tetra Tech	
Reviewed By:	Review Date:
Drilling Contractor: Bulldog Drilling	
Drill Rig Type/Method: DPT (Geoprobe, track-mounted)	
Sampler Type: acetate liner	
Borehole Diameter (inches): 2.0	
Drill Start Date: 9/12/2018	Drill Start Time: 11:29
Drill Finish Date: 9/12/2018	Drill Finish Time: 11:44
Total Borehole Depth (feet bgs): 19.0	
Soil Boring Backfill Date: 9/12/2018	Soil Boring Backfill Time: 12:00
Ground Surface Reference Elevation (feet NGVD):	
Well Completion Date: N/A	Well Completion Time: N/A
Screen Interval (feet bgs): N/A to N/A	Total Well Depth (feet bgs): N/A
Well Diameter: (inches) N/A	Well Casing Material: N/A

<p>BOREHOLE LOCATION MAP</p> <div style="text-align: right; margin-top: 100px;"> </div>	<p>NOTES/REMARKS</p> <p>Refusal at 19.0 feet bgs.</p> <p>No groundwater encountered.</p>
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[illegible]

APPENDIX E

ANALYTICAL REPORT AND DATA VALIDATION

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

2960 Foster Creighton Drive

Nashville, TN 37204

Tel: (615)726-0177

TestAmerica Job ID: 490-159244-1

TestAmerica Sample Delivery Group: Dellwood, MO

Client Project/Site: Former Auto Zone

For:

Tetra Tech EM Inc.

415 Oak Street

Kansas City, Missouri 64106

Attn: Ms. Emily Fisher

Roxanne Cisneros

Authorized for release by:

9/28/2018 2:34:16 PM

Roxanne Cisneros, Senior Project Manager

(615)301-5761

roxanne.cisneros@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Definitions	6
Client Sample Results	7
QC Sample Results	94
QC Association	125
Chronicle	134
Method Summary	148
Certification Summary	149
Chain of Custody	150

Sample Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-159244-1	GW-3	Water	09/12/18 14:24	09/14/18 10:20
490-159244-2	GW-3-FD	Water	09/12/18 14:24	09/14/18 10:20
490-159244-3	RB	Water	09/12/18 13:34	09/14/18 10:20
490-159244-4	FB	Water	09/12/18 15:12	09/14/18 10:20
490-159244-5	SB-1 3-5'	Solid	09/11/18 09:32	09/14/18 10:20
490-159244-6	SB-1 17-19'	Solid	09/11/18 09:45	09/14/18 10:20
490-159244-7	SB-2 0-2'	Solid	09/11/18 11:37	09/14/18 10:20
490-159244-8	SB-2 11-13'	Solid	09/11/18 11:55	09/14/18 10:20
490-159244-9	SB-3 0-2'	Solid	09/11/18 13:10	09/14/18 10:20
490-159244-10	SB-3 21-23'	Solid	09/11/18 13:20	09/14/18 10:20
490-159244-11	SB-4 5-7'	Solid	09/11/18 14:14	09/14/18 10:20
490-159244-12	SB-4 9-11'	Solid	09/11/18 14:20	09/14/18 10:20
490-159244-13	SB-5 0-2'	Solid	09/11/18 15:00	09/14/18 10:20
490-159244-14	SB-5 18-20'	Solid	09/11/18 15:07	09/14/18 10:20
490-159244-15	SB-6 2-4'	Solid	09/12/18 09:03	09/14/18 10:20
490-159244-16	SB-6 22-24'	Solid	09/12/18 09:10	09/14/18 10:20
490-159244-17	SB-7 0-2'	Solid	09/12/18 09:53	09/14/18 10:20
490-159244-18	SB-7-FD 0-2'	Solid	09/12/18 09:53	09/14/18 10:20
490-159244-19	SB-7 11-13'	Solid	09/12/18 10:05	09/14/18 10:20
490-159244-20	SB-8 7-9'	Solid	09/12/18 10:40	09/14/18 10:20
490-159244-21	SB-8 9-11'	Solid	09/12/18 10:45	09/14/18 10:20
490-159244-22	SB-9 7-9'	Solid	09/12/18 11:50	09/14/18 10:20
490-159244-23	SB-9 10-12'	Solid	09/12/18 12:00	09/14/18 10:20
490-159244-24	SS-1	Solid	09/11/18 15:45	09/14/18 10:20
490-159244-25	SS-2	Solid	09/11/18 16:20	09/14/18 10:20
490-159244-26	SS-2-FD	Solid	09/11/18 16:20	09/14/18 10:20
490-159244-27	SS-03	Solid	09/12/18 13:40	09/14/18 10:20
490-159244-28	SS-04	Solid	09/12/18 14:00	09/14/18 10:20
490-159244-29	SS-05	Solid	09/12/18 14:15	09/14/18 10:20

Case Narrative

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Job ID: 490-159244-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-159244-1

Comments

No additional comments.

Receipt

The samples were received on 9/14/2018 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6° C.

Receipt Exceptions

1 SOBI vial broken in lab - SB-2 0-2' (490-159244-7)

GC/MS VOA

Method(s) 8260B: The method blank for analytical batch 490-543507 contained Acetone above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction or re-analysis of samples was not performed.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-544809.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 490-544990.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 490-545407 recovered outside control limits for the following analytes: trans-1,2-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 490-545407 recovered outside control limits for the following analytes: 1,2-Dichlorobenzene, 1,3-Dichlorobenzene and 1,4-Dichlorobenzene. These analytes were not reported from the associated samples.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 490-543591 and analytical batch 490-543785.

Method(s) 8270C: Surrogate recovery for the following sample was outside the upper control limit: SB-6 2-4' (490-159244-15). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6020A: The method blank for 490-543559 contained Chromium above the method detection limit (MDL). Associated samples were not re-analyzed because results were less than the reporting limit (RL) OR practical quantitation limit (PQL).

Method(s) 6020A: The continuing calibration verification (CCV) associated with batch 490-544895 recovered above the upper control limit for Chromium. The samples associated with this CCV were Batch QC for the affected analytes and passed; therefore, the data have been reported. The following samples are impacted: (LCS 490-543559/2-A), (LCSD 490-543559/3-A), (MB 490-543559/1-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Case Narrative

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Job ID: 490-159244-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Definitions/Glossary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: GW-3
Date Collected: 09/12/18 14:24
Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	7.25	J B	25.0	2.66	ug/L			09/18/18 19:00	1
Benzene	ND		1.00	0.200	ug/L			09/18/18 19:00	1
Bromobenzene	ND		1.00	0.210	ug/L			09/18/18 19:00	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/18/18 19:00	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/18/18 19:00	1
Bromoform	ND		1.00	0.290	ug/L			09/18/18 19:00	1
Bromomethane	ND		1.00	0.350	ug/L			09/18/18 19:00	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/18 19:00	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/18/18 19:00	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/18/18 19:00	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/18/18 19:00	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/18/18 19:00	1
Chloroethane	ND		1.00	0.360	ug/L			09/18/18 19:00	1
Chloroform	ND		1.00	0.230	ug/L			09/18/18 19:00	1
Chloromethane	0.784	J	1.00	0.360	ug/L			09/18/18 19:00	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/18/18 19:00	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/18/18 19:00	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/18/18 19:00	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/18/18 19:00	1
Dibromomethane	ND		1.00	0.450	ug/L			09/18/18 19:00	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/18/18 19:00	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/18/18 19:00	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/18/18 19:00	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/18/18 19:00	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/18/18 19:00	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/18/18 19:00	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/18/18 19:00	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/18/18 19:00	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/18/18 19:00	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/18/18 19:00	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/18/18 19:00	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/18/18 19:00	1
2-Hexanone	ND		10.0	1.28	ug/L			09/18/18 19:00	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/18/18 19:00	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/18/18 19:00	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/18/18 19:00	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/18/18 19:00	1
Naphthalene	ND		5.00	0.210	ug/L			09/18/18 19:00	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/18/18 19:00	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
Styrene	ND		1.00	0.280	ug/L			09/18/18 19:00	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/18/18 19:00	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/18/18 19:00	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: GW-3

Date Collected: 09/12/18 14:24

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			09/18/18 19:00	1
Toluene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/18/18 19:00	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/18/18 19:00	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/18/18 19:00	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 19:00	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 19:00	1
Trichloroethene	ND		1.00	0.200	ug/L			09/18/18 19:00	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/18/18 19:00	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/18/18 19:00	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:00	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/18/18 19:00	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/18/18 19:00	1
GRO (C6-C10)	ND		400	200	ug/L			09/18/18 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130		09/18/18 19:00	1
Dibromofluoromethane (Surr)	112		70 - 130		09/18/18 19:00	1
1,2-Dichloroethane-d4 (Surr)	117		70 - 130		09/18/18 19:00	1
Toluene-d8 (Surr)	99		70 - 130		09/18/18 19:00	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		549	153	ug/L		09/18/18 13:56	09/19/18 19:14	1
Oil Range Organics C21-C35	ND		549	153	ug/L		09/18/18 13:56	09/19/18 19:14	1
Acenaphthene	ND		2.20	0.578	ug/L		09/18/18 13:56	09/19/18 19:14	1
Acenaphthylene	ND		2.20	0.495	ug/L		09/18/18 13:56	09/19/18 19:14	1
Anthracene	ND		2.20	0.524	ug/L		09/18/18 13:56	09/19/18 19:14	1
Benzo[a]anthracene	ND		2.20	0.531	ug/L		09/18/18 13:56	09/19/18 19:14	1
Benzo[a]pyrene	ND		2.20	0.455	ug/L		09/18/18 13:56	09/19/18 19:14	1
Benzo[b]fluoranthene	ND		2.20	0.283	ug/L		09/18/18 13:56	09/19/18 19:14	1
Benzo[g,h,i]perylene	ND		2.20	0.405	ug/L		09/18/18 13:56	09/19/18 19:14	1
Benzo[k]fluoranthene	ND		2.20	0.679	ug/L		09/18/18 13:56	09/19/18 19:14	1
Chrysene	ND		2.20	0.510	ug/L		09/18/18 13:56	09/19/18 19:14	1
Dibenz(a,h)anthracene	ND		2.20	0.484	ug/L		09/18/18 13:56	09/19/18 19:14	1
Fluoranthene	ND		2.20	0.493	ug/L		09/18/18 13:56	09/19/18 19:14	1
Fluorene	ND		2.20	0.540	ug/L		09/18/18 13:56	09/19/18 19:14	1
Indeno[1,2,3-cd]pyrene	ND		2.20	0.423	ug/L		09/18/18 13:56	09/19/18 19:14	1
Naphthalene	ND		2.20	0.691	ug/L		09/18/18 13:56	09/19/18 19:14	1
Phenanthrene	ND		2.20	0.495	ug/L		09/18/18 13:56	09/19/18 19:14	1
Pyrene	ND		2.20	0.435	ug/L		09/18/18 13:56	09/19/18 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	52		29 - 120	09/18/18 13:56	09/19/18 19:14	1
Nitrobenzene-d5 (Surr)	44		27 - 120	09/18/18 13:56	09/19/18 19:14	1
Terphenyl-d14 (Surr)	75		13 - 120	09/18/18 13:56	09/19/18 19:14	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: GW-3

Date Collected: 09/12/18 14:24

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-1

Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00215		0.00200	0.000400	mg/L		09/18/18 12:36	09/20/18 15:39	1
Barium	0.0552	B	0.00200	0.000100	mg/L		09/18/18 12:36	09/20/18 15:39	1
Cadmium	ND		0.00100	0.000100	mg/L		09/18/18 12:36	09/20/18 15:39	1
Chromium	0.00910	B	0.00200	0.000500	mg/L		09/18/18 12:36	09/20/18 15:39	1
Lead	0.00407		0.00200	0.000100	mg/L		09/18/18 12:36	09/20/18 15:39	1
Selenium	0.00233		0.00200	0.000300	mg/L		09/18/18 12:36	09/20/18 15:39	1
Silver	ND		0.00200	0.000800	mg/L		09/18/18 12:36	09/20/18 15:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/18/18 10:17	09/21/18 20:03	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: GW-3-FD

Date Collected: 09/12/18 14:24

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	7.32	J B	25.0	2.66	ug/L			09/18/18 19:27	1
Benzene	ND		1.00	0.200	ug/L			09/18/18 19:27	1
Bromobenzene	ND		1.00	0.210	ug/L			09/18/18 19:27	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/18/18 19:27	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/18/18 19:27	1
Bromoform	ND		1.00	0.290	ug/L			09/18/18 19:27	1
Bromomethane	ND		1.00	0.350	ug/L			09/18/18 19:27	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/18 19:27	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/18/18 19:27	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/18/18 19:27	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/18/18 19:27	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/18/18 19:27	1
Chloroethane	ND		1.00	0.360	ug/L			09/18/18 19:27	1
Chloroform	ND		1.00	0.230	ug/L			09/18/18 19:27	1
Chloromethane	ND		1.00	0.360	ug/L			09/18/18 19:27	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/18/18 19:27	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/18/18 19:27	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/18/18 19:27	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/18/18 19:27	1
Dibromomethane	ND		1.00	0.450	ug/L			09/18/18 19:27	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/18/18 19:27	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/18/18 19:27	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/18/18 19:27	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/18/18 19:27	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/18/18 19:27	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/18/18 19:27	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/18/18 19:27	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/18/18 19:27	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/18/18 19:27	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/18/18 19:27	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/18/18 19:27	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/18/18 19:27	1
2-Hexanone	ND		10.0	1.28	ug/L			09/18/18 19:27	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/18/18 19:27	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/18/18 19:27	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/18/18 19:27	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/18/18 19:27	1
Naphthalene	ND		5.00	0.210	ug/L			09/18/18 19:27	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/18/18 19:27	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
Styrene	ND		1.00	0.280	ug/L			09/18/18 19:27	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/18/18 19:27	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/18/18 19:27	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: GW-3-FD

Lab Sample ID: 490-159244-2

Date Collected: 09/12/18 14:24

Matrix: Water

Date Received: 09/14/18 10:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			09/18/18 19:27	1
Toluene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/18/18 19:27	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/18/18 19:27	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/18/18 19:27	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 19:27	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 19:27	1
Trichloroethene	ND		1.00	0.200	ug/L			09/18/18 19:27	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/18/18 19:27	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/18/18 19:27	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 19:27	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/18/18 19:27	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/18/18 19:27	1
GRO (C6-C10)	ND		400	200	ug/L			09/18/18 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130		09/18/18 19:27	1
Dibromofluoromethane (Surr)	113		70 - 130		09/18/18 19:27	1
1,2-Dichloroethane-d4 (Surr)	116		70 - 130		09/18/18 19:27	1
Toluene-d8 (Surr)	100		70 - 130		09/18/18 19:27	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		518	144	ug/L		09/18/18 13:56	09/19/18 19:36	1
Oil Range Organics C21-C35	ND		518	144	ug/L		09/18/18 13:56	09/19/18 19:36	1
Acenaphthene	ND		2.07	0.544	ug/L		09/18/18 13:56	09/19/18 19:36	1
Acenaphthylene	ND		2.07	0.467	ug/L		09/18/18 13:56	09/19/18 19:36	1
Anthracene	ND		2.07	0.494	ug/L		09/18/18 13:56	09/19/18 19:36	1
Benzo[a]anthracene	ND		2.07	0.500	ug/L		09/18/18 13:56	09/19/18 19:36	1
Benzo[a]pyrene	ND		2.07	0.429	ug/L		09/18/18 13:56	09/19/18 19:36	1
Benzo[b]fluoranthene	ND		2.07	0.267	ug/L		09/18/18 13:56	09/19/18 19:36	1
Benzo[g,h,i]perylene	ND		2.07	0.382	ug/L		09/18/18 13:56	09/19/18 19:36	1
Benzo[k]fluoranthene	ND		2.07	0.640	ug/L		09/18/18 13:56	09/19/18 19:36	1
Chrysene	ND		2.07	0.480	ug/L		09/18/18 13:56	09/19/18 19:36	1
Dibenz(a,h)anthracene	ND		2.07	0.456	ug/L		09/18/18 13:56	09/19/18 19:36	1
Fluoranthene	ND		2.07	0.465	ug/L		09/18/18 13:56	09/19/18 19:36	1
Fluorene	ND		2.07	0.509	ug/L		09/18/18 13:56	09/19/18 19:36	1
Indeno[1,2,3-cd]pyrene	ND		2.07	0.399	ug/L		09/18/18 13:56	09/19/18 19:36	1
Naphthalene	ND		2.07	0.651	ug/L		09/18/18 13:56	09/19/18 19:36	1
Phenanthrene	ND		2.07	0.467	ug/L		09/18/18 13:56	09/19/18 19:36	1
Pyrene	ND		2.07	0.410	ug/L		09/18/18 13:56	09/19/18 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	53		29 - 120	09/18/18 13:56	09/19/18 19:36	1
Nitrobenzene-d5 (Surr)	44		27 - 120	09/18/18 13:56	09/19/18 19:36	1
Terphenyl-d14 (Surr)	77		13 - 120	09/18/18 13:56	09/19/18 19:36	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: GW-3-FD

Lab Sample ID: 490-159244-2

Date Collected: 09/12/18 14:24

Matrix: Water

Date Received: 09/14/18 10:20

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00102	J	0.00200	0.000400	mg/L	—	09/18/18 12:36	09/20/18 15:43	1
Barium	0.0409	B	0.00200	0.000100	mg/L	—	09/18/18 12:36	09/20/18 15:43	1
Cadmium	ND		0.00100	0.000100	mg/L	—	09/18/18 12:36	09/20/18 15:43	1
Chromium	0.00580	B	0.00200	0.000500	mg/L	—	09/18/18 12:36	09/20/18 15:43	1
Lead	0.00181	J	0.00200	0.000100	mg/L	—	09/18/18 12:36	09/20/18 15:43	1
Selenium	0.00250		0.00200	0.000300	mg/L	—	09/18/18 12:36	09/20/18 15:43	1
Silver	ND		0.00200	0.000800	mg/L	—	09/18/18 12:36	09/20/18 15:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L	—	09/18/18 10:17	09/21/18 20:06	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: RB

Date Collected: 09/12/18 13:34

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	16.2	J B	25.0	2.66	ug/L			09/18/18 18:33	1
Benzene	ND		1.00	0.200	ug/L			09/18/18 18:33	1
Bromobenzene	ND		1.00	0.210	ug/L			09/18/18 18:33	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/18/18 18:33	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/18/18 18:33	1
Bromoform	ND		1.00	0.290	ug/L			09/18/18 18:33	1
Bromomethane	ND		1.00	0.350	ug/L			09/18/18 18:33	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/18 18:33	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/18/18 18:33	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/18/18 18:33	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/18/18 18:33	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/18/18 18:33	1
Chloroethane	ND		1.00	0.360	ug/L			09/18/18 18:33	1
Chloroform	ND		1.00	0.230	ug/L			09/18/18 18:33	1
Chloromethane	0.817	J	1.00	0.360	ug/L			09/18/18 18:33	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/18/18 18:33	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/18/18 18:33	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/18/18 18:33	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/18/18 18:33	1
Dibromomethane	ND		1.00	0.450	ug/L			09/18/18 18:33	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/18/18 18:33	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/18/18 18:33	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/18/18 18:33	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/18/18 18:33	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/18/18 18:33	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/18/18 18:33	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/18/18 18:33	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/18/18 18:33	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/18/18 18:33	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/18/18 18:33	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/18/18 18:33	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/18/18 18:33	1
2-Hexanone	ND		10.0	1.28	ug/L			09/18/18 18:33	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/18/18 18:33	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/18/18 18:33	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/18/18 18:33	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/18/18 18:33	1
Naphthalene	ND		5.00	0.210	ug/L			09/18/18 18:33	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/18/18 18:33	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
Styrene	ND		1.00	0.280	ug/L			09/18/18 18:33	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/18/18 18:33	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/18/18 18:33	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: RB

Date Collected: 09/12/18 13:34

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			09/18/18 18:33	1
Toluene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/18/18 18:33	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/18/18 18:33	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/18/18 18:33	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 18:33	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 18:33	1
Trichloroethene	ND		1.00	0.200	ug/L			09/18/18 18:33	1
Trichlorofluoromethane	0.259	J	1.00	0.210	ug/L			09/18/18 18:33	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/18/18 18:33	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:33	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/18/18 18:33	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/18/18 18:33	1
GRO (C6-C10)	ND		400	200	ug/L			09/18/18 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130		09/18/18 18:33	1
Dibromofluoromethane (Surr)	114		70 - 130		09/18/18 18:33	1
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		09/18/18 18:33	1
Toluene-d8 (Surr)	99		70 - 130		09/18/18 18:33	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		535	149	ug/L		09/18/18 13:56	09/19/18 19:58	1
Oil Range Organics C21-C35	ND		535	149	ug/L		09/18/18 13:56	09/19/18 19:58	1
Acenaphthene	ND		2.14	0.563	ug/L		09/18/18 13:56	09/19/18 19:58	1
Acenaphthylene	ND		2.14	0.482	ug/L		09/18/18 13:56	09/19/18 19:58	1
Anthracene	ND		2.14	0.510	ug/L		09/18/18 13:56	09/19/18 19:58	1
Benzo[a]anthracene	ND		2.14	0.517	ug/L		09/18/18 13:56	09/19/18 19:58	1
Benzo[a]pyrene	ND		2.14	0.443	ug/L		09/18/18 13:56	09/19/18 19:58	1
Benzo[b]fluoranthene	ND		2.14	0.276	ug/L		09/18/18 13:56	09/19/18 19:58	1
Benzo[g,h,i]perylene	ND		2.14	0.395	ug/L		09/18/18 13:56	09/19/18 19:58	1
Benzo[k]fluoranthene	ND		2.14	0.661	ug/L		09/18/18 13:56	09/19/18 19:58	1
Chrysene	ND		2.14	0.496	ug/L		09/18/18 13:56	09/19/18 19:58	1
Dibenz(a,h)anthracene	ND		2.14	0.472	ug/L		09/18/18 13:56	09/19/18 19:58	1
Fluoranthene	ND		2.14	0.480	ug/L		09/18/18 13:56	09/19/18 19:58	1
Fluorene	ND		2.14	0.526	ug/L		09/18/18 13:56	09/19/18 19:58	1
Indeno[1,2,3-cd]pyrene	ND		2.14	0.412	ug/L		09/18/18 13:56	09/19/18 19:58	1
Naphthalene	ND		2.14	0.673	ug/L		09/18/18 13:56	09/19/18 19:58	1
Phenanthrene	ND		2.14	0.482	ug/L		09/18/18 13:56	09/19/18 19:58	1
Pyrene	ND		2.14	0.423	ug/L		09/18/18 13:56	09/19/18 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	61		29 - 120	09/18/18 13:56	09/19/18 19:58	1
Nitrobenzene-d5 (Surr)	53		27 - 120	09/18/18 13:56	09/19/18 19:58	1
Terphenyl-d14 (Surr)	78		13 - 120	09/18/18 13:56	09/19/18 19:58	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: RB

Date Collected: 09/12/18 13:34

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-3

Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.00200	0.000400	mg/L		09/18/18 12:36	09/20/18 15:46	1
Barium	0.000249	J B	0.00200	0.000100	mg/L		09/18/18 12:36	09/20/18 15:46	1
Cadmium	ND		0.00100	0.000100	mg/L		09/18/18 12:36	09/20/18 15:46	1
Chromium	0.000720	J B	0.00200	0.000500	mg/L		09/18/18 12:36	09/20/18 15:46	1
Lead	ND		0.00200	0.000100	mg/L		09/18/18 12:36	09/20/18 15:46	1
Selenium	ND		0.00200	0.000300	mg/L		09/18/18 12:36	09/20/18 15:46	1
Silver	ND		0.00200	0.000800	mg/L		09/18/18 12:36	09/20/18 15:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/18/18 10:17	09/21/18 20:08	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: FB

Date Collected: 09/12/18 15:12

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	15.1	J B	25.0	2.66	ug/L			09/18/18 18:05	1
Benzene	ND		1.00	0.200	ug/L			09/18/18 18:05	1
Bromobenzene	ND		1.00	0.210	ug/L			09/18/18 18:05	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/18/18 18:05	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/18/18 18:05	1
Bromoform	ND		1.00	0.290	ug/L			09/18/18 18:05	1
Bromomethane	ND		1.00	0.350	ug/L			09/18/18 18:05	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/18 18:05	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/18/18 18:05	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/18/18 18:05	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/18/18 18:05	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/18/18 18:05	1
Chloroethane	ND		1.00	0.360	ug/L			09/18/18 18:05	1
Chloroform	ND		1.00	0.230	ug/L			09/18/18 18:05	1
Chloromethane	1.97		1.00	0.360	ug/L			09/18/18 18:05	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/18/18 18:05	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/18/18 18:05	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/18/18 18:05	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/18/18 18:05	1
Dibromomethane	ND		1.00	0.450	ug/L			09/18/18 18:05	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/18/18 18:05	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/18/18 18:05	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/18/18 18:05	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/18/18 18:05	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/18/18 18:05	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/18/18 18:05	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/18/18 18:05	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/18/18 18:05	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/18/18 18:05	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/18/18 18:05	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/18/18 18:05	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/18/18 18:05	1
2-Hexanone	ND		10.0	1.28	ug/L			09/18/18 18:05	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/18/18 18:05	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/18/18 18:05	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/18/18 18:05	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/18/18 18:05	1
Naphthalene	ND		5.00	0.210	ug/L			09/18/18 18:05	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/18/18 18:05	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
Styrene	ND		1.00	0.280	ug/L			09/18/18 18:05	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/18/18 18:05	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/18/18 18:05	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: FB

Date Collected: 09/12/18 15:12

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			09/18/18 18:05	1
Toluene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/18/18 18:05	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/18/18 18:05	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/18/18 18:05	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 18:05	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 18:05	1
Trichloroethene	ND		1.00	0.200	ug/L			09/18/18 18:05	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/18/18 18:05	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/18/18 18:05	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 18:05	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/18/18 18:05	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/18/18 18:05	1
GRO (C6-C10)	ND		400	200	ug/L			09/18/18 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130		09/18/18 18:05	1
Dibromofluoromethane (Surr)	112		70 - 130		09/18/18 18:05	1
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		09/18/18 18:05	1
Toluene-d8 (Surr)	100		70 - 130		09/18/18 18:05	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		536	149	ug/L		09/18/18 13:56	09/19/18 20:21	1
Oil Range Organics C21-C35	ND		536	149	ug/L		09/18/18 13:56	09/19/18 20:21	1
Acenaphthene	ND		2.14	0.564	ug/L		09/18/18 13:56	09/19/18 20:21	1
Acenaphthylene	ND		2.14	0.484	ug/L		09/18/18 13:56	09/19/18 20:21	1
Anthracene	ND		2.14	0.511	ug/L		09/18/18 13:56	09/19/18 20:21	1
Benzo[a]anthracene	ND		2.14	0.518	ug/L		09/18/18 13:56	09/19/18 20:21	1
Benzo[a]pyrene	ND		2.14	0.444	ug/L		09/18/18 13:56	09/19/18 20:21	1
Benzo[b]fluoranthene	ND		2.14	0.277	ug/L		09/18/18 13:56	09/19/18 20:21	1
Benzo[g,h,i]perylene	ND		2.14	0.396	ug/L		09/18/18 13:56	09/19/18 20:21	1
Benzo[k]fluoranthene	ND		2.14	0.663	ug/L		09/18/18 13:56	09/19/18 20:21	1
Chrysene	ND		2.14	0.498	ug/L		09/18/18 13:56	09/19/18 20:21	1
Dibenz(a,h)anthracene	ND		2.14	0.473	ug/L		09/18/18 13:56	09/19/18 20:21	1
Fluoranthene	ND		2.14	0.481	ug/L		09/18/18 13:56	09/19/18 20:21	1
Fluorene	ND		2.14	0.528	ug/L		09/18/18 13:56	09/19/18 20:21	1
Indeno[1,2,3-cd]pyrene	ND		2.14	0.413	ug/L		09/18/18 13:56	09/19/18 20:21	1
Naphthalene	ND		2.14	0.674	ug/L		09/18/18 13:56	09/19/18 20:21	1
Phenanthrene	ND		2.14	0.484	ug/L		09/18/18 13:56	09/19/18 20:21	1
Pyrene	ND		2.14	0.425	ug/L		09/18/18 13:56	09/19/18 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	56		29 - 120	09/18/18 13:56	09/19/18 20:21	1
Nitrobenzene-d5 (Surr)	47		27 - 120	09/18/18 13:56	09/19/18 20:21	1
Terphenyl-d14 (Surr)	77		13 - 120	09/18/18 13:56	09/19/18 20:21	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: FB

Date Collected: 09/12/18 15:12

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-4

Matrix: Water

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.00200	0.000400	mg/L		09/18/18 12:36	09/20/18 15:49	1
Barium	ND		0.00200	0.000100	mg/L		09/18/18 12:36	09/20/18 15:49	1
Cadmium	ND		0.00100	0.000100	mg/L		09/18/18 12:36	09/20/18 15:49	1
Chromium	0.000725	J B	0.00200	0.000500	mg/L		09/18/18 12:36	09/20/18 15:49	1
Lead	ND		0.00200	0.000100	mg/L		09/18/18 12:36	09/20/18 15:49	1
Selenium	ND		0.00200	0.000300	mg/L		09/18/18 12:36	09/20/18 15:49	1
Silver	ND		0.00200	0.000800	mg/L		09/18/18 12:36	09/20/18 15:49	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/18/18 10:17	09/21/18 20:11	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-1 3-5'

Date Collected: 09/11/18 09:32

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-5

Matrix: Solid

Percent Solids: 77.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0174	J	0.0313	0.00525	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Benzene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Bromobenzene	ND		0.00125	0.000450	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Bromochloromethane	ND		0.00125	0.000344	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Bromodichloromethane	ND		0.00125	0.000344	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Bromoform	ND		0.00125	0.000344	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Bromomethane	ND		0.00125	0.000750	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
2-Butanone (MEK)	0.00355	J	0.0313	0.00319	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Carbon disulfide	ND		0.00313	0.00225	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Carbon tetrachloride	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Chlorobenzene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Chlorodibromomethane	ND		0.00125	0.000213	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Chloroethane	ND		0.00313	0.00119	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Chloroform	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Chloromethane	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
2-Chlorotoluene	ND		0.00125	0.000556	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
4-Chlorotoluene	ND		0.00125	0.000525	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
cis-1,2-Dichloroethene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
cis-1,3-Dichloropropene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,2-Dibromo-3-Chloropropane	ND		0.00313	0.000438	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,2-Dibromoethane (EDB)	ND		0.00125	0.000625	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Dibromomethane	ND		0.00125	0.000350	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,2-Dichlorobenzene	ND		0.00125	0.000213	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,3-Dichlorobenzene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,4-Dichlorobenzene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Dichlorodifluoromethane	ND		0.00125	0.000625	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,1-Dichloroethane	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,2-Dichloroethane	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,1-Dichloroethene	ND		0.00125	0.000356	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,2-Dichloropropane	ND		0.00125	0.000588	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,3-Dichloropropane	ND		0.00125	0.000588	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
2,2-Dichloropropane	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,1-Dichloropropene	ND		0.00125	0.000319	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Ethylbenzene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Hexachlorobutadiene	ND		0.00313	0.000713	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
2-Hexanone	ND		0.0313	0.0104	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Isopropylbenzene	ND		0.00125	0.000256	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Methylene Chloride	ND		0.00625	0.000538	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.0313	0.00119	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Methyl tert-butyl ether	ND		0.00125	0.000600	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Naphthalene	ND		0.00313	0.00106	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
n-Butylbenzene	ND		0.00125	0.000613	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
N-Propylbenzene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
p-Isopropyltoluene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
sec-Butylbenzene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Styrene	ND		0.00125	0.000688	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
tert-Butylbenzene	ND		0.00125	0.000563	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,1,1,2-Tetrachloroethane	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,1,2,2-Tetrachloroethane	ND		0.00125	0.000625	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-1 3-5'

Date Collected: 09/11/18 09:32

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-5

Matrix: Solid

Percent Solids: 77.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00125	0.000456	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Toluene	0.000743	J	0.00125	0.000463	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
trans-1,2-Dichloroethene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
trans-1,3-Dichloropropene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,2,3-Trichlorobenzene	ND		0.00125	0.000238	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,2,4-Trichlorobenzene	ND		0.00125	0.000419	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,1,1-Trichloroethane	ND		0.00125	0.000575	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,1,2-Trichloroethane	ND		0.00313	0.000875	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Trichloroethene	ND		0.00125	0.000600	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Trichlorofluoromethane	ND		0.00125	0.000625	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,2,3-Trichloropropane	ND		0.00125	0.000344	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,2,4-Trimethylbenzene	ND		0.00125	0.000625	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
1,3,5-Trimethylbenzene	ND		0.00125	0.000469	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Vinyl chloride	ND		0.00125	0.000688	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
Xylenes, Total	ND		0.00375	0.000769	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1
GRO (C6-C10)	ND		0.250	0.125	mg/Kg	☼	09/11/18 09:32	09/24/18 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/11/18 09:32	09/24/18 15:31	1
Dibromofluoromethane (Surr)	97		70 - 130	09/11/18 09:32	09/24/18 15:31	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	09/11/18 09:32	09/24/18 15:31	1
Toluene-d8 (Surr)	104		70 - 130	09/11/18 09:32	09/24/18 15:31	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		21.4	7.54	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Oil Range Organics C21-C35	ND		21.4	7.54	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Acenaphthene	ND		0.0857	0.0409	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Acenaphthylene	ND		0.0857	0.0371	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Anthracene	ND		0.0857	0.0371	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Benzo[a]anthracene	ND		0.0857	0.0384	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Benzo[a]pyrene	ND		0.0857	0.0345	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Benzo[b]fluoranthene	ND		0.0857	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Benzo[g,h,i]perylene	ND		0.0857	0.0422	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Benzo[k]fluoranthene	ND		0.0857	0.0345	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Chrysene	ND		0.0857	0.0473	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Dibenz(a,h)anthracene	ND		0.0857	0.0409	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Fluoranthene	ND		0.0857	0.0435	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Fluorene	ND		0.0857	0.0371	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Indeno[1,2,3-cd]pyrene	ND		0.0857	0.0371	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Naphthalene	ND		0.0857	0.0371	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Phenanthrene	ND		0.0857	0.0435	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1
Pyrene	ND		0.0857	0.0435	mg/Kg	☼	09/17/18 14:06	09/20/18 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	70		29 - 120	09/17/18 14:06	09/20/18 17:54	1
Nitrobenzene-d5 (Surr)	59		27 - 120	09/17/18 14:06	09/20/18 17:54	1
Terphenyl-d14 (Surr)	77		13 - 120	09/17/18 14:06	09/20/18 17:54	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-1 3-5'

Lab Sample ID: 490-159244-5

Date Collected: 09/11/18 09:32

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 77.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.54		2.43	1.46	mg/Kg	☼	09/18/18 17:13	09/19/18 11:44	1
Barium	168		2.43	1.22	mg/Kg	☼	09/18/18 17:13	09/19/18 11:44	1
Cadmium	0.584	J	1.22	0.122	mg/Kg	☼	09/18/18 17:13	09/19/18 11:44	1
Chromium	9.87		1.22	1.09	mg/Kg	☼	09/18/18 17:13	09/19/18 11:44	1
Lead	51.3		1.22	0.608	mg/Kg	☼	09/18/18 17:13	09/19/18 11:44	1
Selenium	ND		12.2	6.69	mg/Kg	☼	09/18/18 17:13	09/19/18 16:21	5
Silver	ND		1.22	0.486	mg/Kg	☼	09/18/18 17:13	09/19/18 11:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.129	0.0387	mg/Kg	☼	09/19/18 11:45	09/22/18 17:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.4		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	77.6		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-1 17-19'

Date Collected: 09/11/18 09:45

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-6

Matrix: Solid

Percent Solids: 80.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0325	0.00546	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Benzene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Bromobenzene	ND		0.00130	0.000468	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Bromochloromethane	ND		0.00130	0.000358	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Bromodichloromethane	ND		0.00130	0.000358	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Bromoform	ND		0.00130	0.000358	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Bromomethane	ND		0.00130	0.000780	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
2-Butanone (MEK)	ND		0.0325	0.00332	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Carbon disulfide	ND		0.00325	0.00234	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Carbon tetrachloride	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Chlorobenzene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Chlorodibromomethane	ND		0.00130	0.000221	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Chloroethane	ND		0.00325	0.00124	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Chloroform	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Chloromethane	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
2-Chlorotoluene	ND		0.00130	0.000579	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
4-Chlorotoluene	ND		0.00130	0.000546	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
cis-1,2-Dichloroethene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
cis-1,3-Dichloropropene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,2-Dibromo-3-Chloropropane	ND		0.00325	0.000455	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,2-Dibromoethane (EDB)	ND		0.00130	0.000650	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Dibromomethane	ND		0.00130	0.000364	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,2-Dichlorobenzene	ND		0.00130	0.000221	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,3-Dichlorobenzene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,4-Dichlorobenzene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Dichlorodifluoromethane	ND		0.00130	0.000650	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,1-Dichloroethane	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,2-Dichloroethane	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,1-Dichloroethene	ND		0.00130	0.000371	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,2-Dichloropropane	ND		0.00130	0.000611	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,3-Dichloropropane	ND		0.00130	0.000611	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
2,2-Dichloropropane	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,1-Dichloropropene	ND		0.00130	0.000332	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Ethylbenzene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Hexachlorobutadiene	ND		0.00325	0.000741	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
2-Hexanone	ND		0.0325	0.0109	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Isopropylbenzene	ND		0.00130	0.000267	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Methylene Chloride	ND		0.00650	0.000559	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
4-Methyl-2-pentanone (MIBK)	ND		0.0325	0.00124	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Methyl tert-butyl ether	ND		0.00130	0.000624	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Naphthalene	ND		0.00325	0.00111	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
n-Butylbenzene	ND		0.00130	0.000637	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
N-Propylbenzene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
p-Isopropyltoluene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
sec-Butylbenzene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Styrene	ND		0.00130	0.000715	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
tert-Butylbenzene	ND		0.00130	0.000585	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,1,1,2-Tetrachloroethane	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,1,2,2-Tetrachloroethane	ND		0.00130	0.000650	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-1 17-19'

Lab Sample ID: 490-159244-6

Date Collected: 09/11/18 09:45

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00130	0.000475	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Toluene	ND		0.00130	0.000481	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
trans-1,2-Dichloroethene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
trans-1,3-Dichloropropene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,2,3-Trichlorobenzene	ND		0.00130	0.000247	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,2,4-Trichlorobenzene	ND		0.00130	0.000436	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,1,1-Trichloroethane	ND		0.00130	0.000598	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,1,2-Trichloroethane	ND		0.00325	0.000910	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Trichloroethene	ND		0.00130	0.000624	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Trichlorofluoromethane	ND		0.00130	0.000650	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,2,3-Trichloropropane	ND		0.00130	0.000358	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,2,4-Trimethylbenzene	ND		0.00130	0.000650	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
1,3,5-Trimethylbenzene	ND		0.00130	0.000488	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Vinyl chloride	ND		0.00130	0.000715	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
Xylenes, Total	ND		0.00390	0.000800	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1
GRO (C6-C10)	ND		0.260	0.130	mg/Kg	☼	09/11/18 09:45	09/24/18 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/11/18 09:45	09/24/18 16:01	1
Dibromofluoromethane (Surr)	95		70 - 130	09/11/18 09:45	09/24/18 16:01	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	09/11/18 09:45	09/24/18 16:01	1
Toluene-d8 (Surr)	107		70 - 130	09/11/18 09:45	09/24/18 16:01	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.6	7.28	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Oil Range Organics C21-C35	ND		20.6	7.28	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Acenaphthene	ND		0.0826	0.0395	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Acenaphthylene	ND		0.0826	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Anthracene	ND		0.0826	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Benzo[a]anthracene	ND		0.0826	0.0370	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Benzo[a]pyrene	ND		0.0826	0.0333	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Benzo[b]fluoranthene	ND		0.0826	0.0345	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Benzo[g,h,i]perylene	ND		0.0826	0.0407	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Benzo[k]fluoranthene	ND		0.0826	0.0333	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Chrysene	ND		0.0826	0.0456	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Dibenz(a,h)anthracene	ND		0.0826	0.0395	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Fluoranthene	ND		0.0826	0.0419	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Fluorene	ND		0.0826	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Indeno[1,2,3-cd]pyrene	ND		0.0826	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Naphthalene	ND		0.0826	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Phenanthrene	ND		0.0826	0.0419	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1
Pyrene	ND		0.0826	0.0419	mg/Kg	☼	09/17/18 14:06	09/20/18 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	65		29 - 120	09/17/18 14:06	09/20/18 18:17	1
Nitrobenzene-d5 (Surr)	57		27 - 120	09/17/18 14:06	09/20/18 18:17	1
Terphenyl-d14 (Surr)	83		13 - 120	09/17/18 14:06	09/20/18 18:17	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-1 17-19'

Lab Sample ID: 490-159244-6

Date Collected: 09/11/18 09:45

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.08		2.23	1.34	mg/Kg	☼	09/18/18 17:13	09/19/18 11:49	1
Barium	86.0		2.23	1.11	mg/Kg	☼	09/18/18 17:13	09/19/18 11:49	1
Cadmium	0.245	J	1.11	0.111	mg/Kg	☼	09/18/18 17:13	09/19/18 11:49	1
Chromium	9.09		1.11	1.00	mg/Kg	☼	09/18/18 17:13	09/19/18 11:49	1
Lead	35.2		1.11	0.557	mg/Kg	☼	09/18/18 17:13	09/19/18 11:49	1
Selenium	ND		2.23	1.23	mg/Kg	☼	09/18/18 17:13	09/19/18 11:49	1
Silver	ND		1.11	0.445	mg/Kg	☼	09/18/18 17:13	09/19/18 11:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.124	0.0372	mg/Kg	☼	09/19/18 11:45	09/22/18 18:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.8		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	80.2		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-2 0-2'

Date Collected: 09/11/18 11:37

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-7

Matrix: Solid

Percent Solids: 78.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.119		0.0327	0.00549	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Benzene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Bromobenzene	ND		0.00131	0.000470	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Bromochloromethane	ND		0.00131	0.000359	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Bromodichloromethane	ND		0.00131	0.000359	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Bromoform	ND		0.00131	0.000359	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Bromomethane	ND		0.00131	0.000784	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
2-Butanone (MEK)	0.00813	J	0.0327	0.00333	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Carbon disulfide	ND		0.00327	0.00235	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Carbon tetrachloride	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Chlorobenzene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Chlorodibromomethane	ND		0.00131	0.000222	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Chloroethane	ND		0.00327	0.00124	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Chloroform	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Chloromethane	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
2-Chlorotoluene	ND		0.00131	0.000581	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
4-Chlorotoluene	ND		0.00131	0.000549	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
cis-1,2-Dichloroethene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
cis-1,3-Dichloropropene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,2-Dibromo-3-Chloropropane	ND		0.00327	0.000457	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,2-Dibromoethane (EDB)	ND		0.00131	0.000653	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Dibromomethane	ND		0.00131	0.000366	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,2-Dichlorobenzene	ND		0.00131	0.000222	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,3-Dichlorobenzene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,4-Dichlorobenzene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Dichlorodifluoromethane	ND		0.00131	0.000653	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,1-Dichloroethane	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,2-Dichloroethane	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,1-Dichloroethene	ND		0.00131	0.000372	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,2-Dichloropropane	ND		0.00131	0.000614	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,3-Dichloropropane	ND		0.00131	0.000614	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
2,2-Dichloropropane	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,1-Dichloropropene	ND		0.00131	0.000333	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Ethylbenzene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Hexachlorobutadiene	ND		0.00327	0.000745	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
2-Hexanone	ND		0.0327	0.0109	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Isopropylbenzene	ND		0.00131	0.000268	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Methylene Chloride	0.000932	J	0.00653	0.000562	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.0327	0.00124	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Methyl tert-butyl ether	ND		0.00131	0.000627	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Naphthalene	ND		0.00327	0.00111	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
n-Butylbenzene	ND		0.00131	0.000640	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
N-Propylbenzene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
p-Isopropyltoluene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
sec-Butylbenzene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Styrene	ND		0.00131	0.000719	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
tert-Butylbenzene	ND		0.00131	0.000588	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,1,1,2-Tetrachloroethane	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,1,2,2-Tetrachloroethane	ND		0.00131	0.000653	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-2 0-2'

Date Collected: 09/11/18 11:37

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-7

Matrix: Solid

Percent Solids: 78.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00131	0.000477	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Toluene	ND		0.00131	0.000483	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
trans-1,2-Dichloroethene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
trans-1,3-Dichloropropene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,2,3-Trichlorobenzene	ND		0.00131	0.000248	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,2,4-Trichlorobenzene	ND		0.00131	0.000438	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,1,1-Trichloroethane	ND		0.00131	0.000601	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,1,2-Trichloroethane	ND		0.00327	0.000915	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Trichloroethene	ND		0.00131	0.000627	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Trichlorofluoromethane	ND		0.00131	0.000653	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,2,3-Trichloropropane	ND		0.00131	0.000359	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,2,4-Trimethylbenzene	ND		0.00131	0.000653	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
1,3,5-Trimethylbenzene	ND		0.00131	0.000490	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Vinyl chloride	ND		0.00131	0.000719	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
Xylenes, Total	ND		0.00392	0.000804	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1
GRO (C6-C10)	ND		0.261	0.131	mg/Kg	☼	09/11/18 11:37	09/24/18 16:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/11/18 11:37	09/24/18 16:31	1
Dibromofluoromethane (Surr)	97		70 - 130	09/11/18 11:37	09/24/18 16:31	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	09/11/18 11:37	09/24/18 16:31	1
Toluene-d8 (Surr)	102		70 - 130	09/11/18 11:37	09/24/18 16:31	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.9	7.38	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Oil Range Organics C21-C35	ND		20.9	7.38	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Acenaphthene	ND		0.0838	0.0400	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Acenaphthylene	ND		0.0838	0.0363	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Anthracene	ND		0.0838	0.0363	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Benzo[a]anthracene	0.0523	J	0.0838	0.0375	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Benzo[a]pyrene	0.0511	J	0.0838	0.0338	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Benzo[b]fluoranthene	0.0759	J	0.0838	0.0350	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Benzo[g,h,i]perylene	ND		0.0838	0.0413	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Benzo[k]fluoranthene	ND		0.0838	0.0338	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Chrysene	0.0677	J	0.0838	0.0463	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Dibenz(a,h)anthracene	ND		0.0838	0.0400	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Fluoranthene	0.122		0.0838	0.0425	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Fluorene	ND		0.0838	0.0363	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Indeno[1,2,3-cd]pyrene	0.0435	J	0.0838	0.0363	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Naphthalene	ND		0.0838	0.0363	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Phenanthrene	0.0731	J	0.0838	0.0425	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1
Pyrene	0.0957		0.0838	0.0425	mg/Kg	☼	09/17/18 14:06	09/20/18 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	57		29 - 120	09/17/18 14:06	09/20/18 18:40	1
Nitrobenzene-d5 (Surr)	48		27 - 120	09/17/18 14:06	09/20/18 18:40	1
Terphenyl-d14 (Surr)	62		13 - 120	09/17/18 14:06	09/20/18 18:40	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-2 0-2'

Lab Sample ID: 490-159244-7

Date Collected: 09/11/18 11:37

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 78.5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.3		2.40	1.44	mg/Kg	☼	09/18/18 17:13	09/19/18 11:54	1
Barium	188		2.40	1.20	mg/Kg	☼	09/18/18 17:13	09/19/18 11:54	1
Cadmium	0.264	J	1.20	0.120	mg/Kg	☼	09/18/18 17:13	09/19/18 11:54	1
Chromium	11.9		1.20	1.08	mg/Kg	☼	09/18/18 17:13	09/19/18 11:54	1
Lead	62.2		1.20	0.601	mg/Kg	☼	09/18/18 17:13	09/19/18 11:54	1
Selenium	ND		12.0	6.61	mg/Kg	☼	09/18/18 17:13	09/19/18 16:27	5
Silver	ND		1.20	0.481	mg/Kg	☼	09/18/18 17:13	09/19/18 11:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0676	J	0.125	0.0376	mg/Kg	☼	09/19/18 11:45	09/22/18 18:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.5		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	78.5		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-2 11-13'

Lab Sample ID: 490-159244-8

Date Collected: 09/11/18 11:55

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0329	0.00553	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Benzene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Bromobenzene	ND		0.00132	0.000474	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Bromochloromethane	ND		0.00132	0.000362	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Bromodichloromethane	ND		0.00132	0.000362	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Bromoform	ND		0.00132	0.000362	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Bromomethane	ND		0.00132	0.000790	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
2-Butanone (MEK)	ND		0.0329	0.00336	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Carbon disulfide	ND		0.00329	0.00237	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Carbon tetrachloride	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Chlorobenzene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Chlorodibromomethane	ND		0.00132	0.000224	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Chloroethane	ND		0.00329	0.00125	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Chloroform	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Chloromethane	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
2-Chlorotoluene	ND		0.00132	0.000586	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
4-Chlorotoluene	ND		0.00132	0.000553	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
cis-1,2-Dichloroethene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
cis-1,3-Dichloropropene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,2-Dibromo-3-Chloropropane	ND		0.00329	0.000461	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,2-Dibromoethane (EDB)	ND		0.00132	0.000658	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Dibromomethane	ND		0.00132	0.000369	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,2-Dichlorobenzene	ND		0.00132	0.000224	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,3-Dichlorobenzene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,4-Dichlorobenzene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Dichlorodifluoromethane	ND		0.00132	0.000658	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,1-Dichloroethane	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,2-Dichloroethane	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,1-Dichloroethene	ND		0.00132	0.000375	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,2-Dichloropropane	ND		0.00132	0.000619	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,3-Dichloropropane	ND		0.00132	0.000619	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
2,2-Dichloropropane	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,1-Dichloropropene	ND		0.00132	0.000336	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Ethylbenzene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Hexachlorobutadiene	ND		0.00329	0.000751	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
2-Hexanone	ND		0.0329	0.0110	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Isopropylbenzene	ND		0.00132	0.000270	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Methylene Chloride	ND		0.00658	0.000566	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
4-Methyl-2-pentanone (MIBK)	ND		0.0329	0.00125	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Methyl tert-butyl ether	ND		0.00132	0.000632	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Naphthalene	ND		0.00329	0.00112	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
n-Butylbenzene	ND		0.00132	0.000645	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
N-Propylbenzene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
p-Isopropyltoluene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
sec-Butylbenzene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Styrene	ND		0.00132	0.000724	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
tert-Butylbenzene	ND		0.00132	0.000593	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,1,1,2-Tetrachloroethane	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,1,2,2-Tetrachloroethane	ND		0.00132	0.000658	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-2 11-13'

Lab Sample ID: 490-159244-8

Date Collected: 09/11/18 11:55

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00132	0.000481	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Toluene	0.000970	J	0.00132	0.000487	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
trans-1,2-Dichloroethene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
trans-1,3-Dichloropropene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,2,3-Trichlorobenzene	ND		0.00132	0.000250	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,2,4-Trichlorobenzene	ND		0.00132	0.000441	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,1,1-Trichloroethane	ND		0.00132	0.000606	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,1,2-Trichloroethane	ND		0.00329	0.000922	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Trichloroethene	ND		0.00132	0.000632	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Trichlorofluoromethane	ND		0.00132	0.000658	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,2,3-Trichloropropane	ND		0.00132	0.000362	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,2,4-Trimethylbenzene	ND		0.00132	0.000658	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
1,3,5-Trimethylbenzene	ND		0.00132	0.000494	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Vinyl chloride	ND		0.00132	0.000724	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
Xylenes, Total	ND		0.00395	0.000810	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1
GRO (C6-C10)	ND		0.263	0.132	mg/Kg	☼	09/11/18 11:55	09/24/18 17:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	09/11/18 11:55	09/24/18 17:01	1
Dibromofluoromethane (Surr)	96		70 - 130	09/11/18 11:55	09/24/18 17:01	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	09/11/18 11:55	09/24/18 17:01	1
Toluene-d8 (Surr)	105		70 - 130	09/11/18 11:55	09/24/18 17:01	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.6	7.26	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Oil Range Organics C21-C35	ND		20.6	7.26	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Acenaphthene	ND		0.0825	0.0394	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Acenaphthylene	ND		0.0825	0.0357	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Anthracene	ND		0.0825	0.0357	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Benzo[a]anthracene	ND		0.0825	0.0369	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Benzo[a]pyrene	ND		0.0825	0.0332	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Benzo[b]fluoranthene	ND		0.0825	0.0345	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Benzo[g,h,i]perylene	ND		0.0825	0.0406	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Benzo[k]fluoranthene	ND		0.0825	0.0332	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Chrysene	ND		0.0825	0.0455	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Dibenz(a,h)anthracene	ND		0.0825	0.0394	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Fluoranthene	ND		0.0825	0.0419	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Fluorene	ND		0.0825	0.0357	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Indeno[1,2,3-cd]pyrene	ND		0.0825	0.0357	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Naphthalene	ND		0.0825	0.0357	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Phenanthrene	ND		0.0825	0.0419	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1
Pyrene	ND		0.0825	0.0419	mg/Kg	☼	09/17/18 14:06	09/20/18 19:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	67		29 - 120	09/17/18 14:06	09/20/18 19:48	1
Nitrobenzene-d5 (Surr)	58		27 - 120	09/17/18 14:06	09/20/18 19:48	1
Terphenyl-d14 (Surr)	73		13 - 120	09/17/18 14:06	09/20/18 19:48	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-2 11-13'

Lab Sample ID: 490-159244-8

Date Collected: 09/11/18 11:55

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.90		2.26	1.35	mg/Kg	☼	09/18/18 17:13	09/19/18 12:10	1
Barium	78.9		2.26	1.13	mg/Kg	☼	09/18/18 17:13	09/19/18 12:10	1
Cadmium	0.293	J	1.13	0.113	mg/Kg	☼	09/18/18 17:13	09/19/18 12:10	1
Chromium	9.89		1.13	1.02	mg/Kg	☼	09/18/18 17:13	09/19/18 12:10	1
Lead	38.0		1.13	0.564	mg/Kg	☼	09/18/18 17:13	09/19/18 12:10	1
Selenium	ND		11.3	6.21	mg/Kg	☼	09/18/18 17:13	09/19/18 16:32	5
Silver	ND		1.13	0.452	mg/Kg	☼	09/18/18 17:13	09/19/18 12:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.125	0.0376	mg/Kg	☼	09/19/18 11:45	09/22/18 18:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.5		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	80.5		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-3 0-2'

Date Collected: 09/11/18 13:10

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-9

Matrix: Solid

Percent Solids: 84.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0278	J	0.0411	0.00690	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Benzene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Bromobenzene	ND		0.00164	0.000591	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Bromochloromethane	ND		0.00164	0.000452	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Bromodichloromethane	ND		0.00164	0.000452	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Bromoform	ND		0.00164	0.000452	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Bromomethane	ND		0.00164	0.000985	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
2-Butanone (MEK)	0.00550	J	0.0411	0.00419	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Carbon disulfide	ND		0.00411	0.00296	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Carbon tetrachloride	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Chlorobenzene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Chlorodibromomethane	ND		0.00164	0.000279	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Chloroethane	ND		0.00411	0.00156	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Chloroform	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Chloromethane	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
2-Chlorotoluene	ND		0.00164	0.000731	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
4-Chlorotoluene	ND		0.00164	0.000690	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
cis-1,2-Dichloroethene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
cis-1,3-Dichloropropene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,2-Dibromo-3-Chloropropane	ND		0.00411	0.000575	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,2-Dibromoethane (EDB)	ND		0.00164	0.000821	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Dibromomethane	ND		0.00164	0.000460	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,2-Dichlorobenzene	ND		0.00164	0.000279	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,3-Dichlorobenzene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,4-Dichlorobenzene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Dichlorodifluoromethane	ND		0.00164	0.000821	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,1-Dichloroethane	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,2-Dichloroethane	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,1-Dichloroethene	ND		0.00164	0.000468	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,2-Dichloropropane	ND		0.00164	0.000772	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,3-Dichloropropane	ND		0.00164	0.000772	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
2,2-Dichloropropane	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,1-Dichloropropene	ND		0.00164	0.000419	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Ethylbenzene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Hexachlorobutadiene	ND		0.00411	0.000936	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
2-Hexanone	ND		0.0411	0.0137	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Isopropylbenzene	ND		0.00164	0.000337	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Methylene Chloride	ND		0.00821	0.000706	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
4-Methyl-2-pentanone (MIBK)	ND		0.0411	0.00156	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Methyl tert-butyl ether	ND		0.00164	0.000788	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Naphthalene	ND		0.00411	0.00140	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
n-Butylbenzene	ND		0.00164	0.000805	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
N-Propylbenzene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
p-Isopropyltoluene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
sec-Butylbenzene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Styrene	ND		0.00164	0.000903	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
tert-Butylbenzene	ND		0.00164	0.000739	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,1,1,2-Tetrachloroethane	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,1,2,2-Tetrachloroethane	ND		0.00164	0.000821	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-3 0-2'

Date Collected: 09/11/18 13:10

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-9

Matrix: Solid

Percent Solids: 84.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00164	0.000599	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Toluene	0.00124	J	0.00164	0.000608	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
trans-1,2-Dichloroethene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
trans-1,3-Dichloropropene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,2,3-Trichlorobenzene	ND		0.00164	0.000312	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,2,4-Trichlorobenzene	ND		0.00164	0.000550	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,1,1-Trichloroethane	ND		0.00164	0.000755	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,1,2-Trichloroethane	ND		0.00411	0.00115	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Trichloroethene	ND		0.00164	0.000788	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Trichlorofluoromethane	ND		0.00164	0.000821	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,2,3-Trichloropropane	ND		0.00164	0.000452	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,2,4-Trimethylbenzene	ND		0.00164	0.000821	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
1,3,5-Trimethylbenzene	ND		0.00164	0.000616	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Vinyl chloride	ND		0.00164	0.000903	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
Xylenes, Total	ND		0.00493	0.00101	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1
GRO (C6-C10)	ND		0.328	0.164	mg/Kg	☼	09/11/18 13:10	09/24/18 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	09/11/18 13:10	09/24/18 17:31	1
Dibromofluoromethane (Surr)	97		70 - 130	09/11/18 13:10	09/24/18 17:31	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	09/11/18 13:10	09/24/18 17:31	1
Toluene-d8 (Surr)	102		70 - 130	09/11/18 13:10	09/24/18 17:31	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		19.3	6.83	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Oil Range Organics C21-C35	ND		19.3	6.83	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Acenaphthene	ND		0.0776	0.0371	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Acenaphthylene	ND		0.0776	0.0336	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Anthracene	ND		0.0776	0.0336	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Benzo[a]anthracene	ND		0.0776	0.0347	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Benzo[a]pyrene	ND		0.0776	0.0313	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Benzo[b]fluoranthene	ND		0.0776	0.0324	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Benzo[g,h,i]perylene	ND		0.0776	0.0382	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Benzo[k]fluoranthene	ND		0.0776	0.0313	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Chrysene	ND		0.0776	0.0428	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Dibenz(a,h)anthracene	ND		0.0776	0.0371	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Fluoranthene	ND		0.0776	0.0394	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Fluorene	ND		0.0776	0.0336	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Indeno[1,2,3-cd]pyrene	ND		0.0776	0.0336	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Naphthalene	ND		0.0776	0.0336	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Phenanthrene	ND		0.0776	0.0394	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1
Pyrene	ND		0.0776	0.0394	mg/Kg	☼	09/17/18 14:06	09/20/18 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	64		29 - 120	09/17/18 14:06	09/20/18 20:11	1
Nitrobenzene-d5 (Surr)	57		27 - 120	09/17/18 14:06	09/20/18 20:11	1
Terphenyl-d14 (Surr)	71		13 - 120	09/17/18 14:06	09/20/18 20:11	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-3 0-2'

Lab Sample ID: 490-159244-9

Date Collected: 09/11/18 13:10

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 84.7

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.54		2.27	1.36	mg/Kg	☼	09/18/18 17:13	09/19/18 12:16	1
Barium	73.7		2.27	1.14	mg/Kg	☼	09/18/18 17:13	09/19/18 12:16	1
Cadmium	0.182	J	1.14	0.114	mg/Kg	☼	09/18/18 17:13	09/19/18 12:16	1
Chromium	7.81		1.14	1.02	mg/Kg	☼	09/18/18 17:13	09/19/18 12:16	1
Lead	39.9		1.14	0.568	mg/Kg	☼	09/18/18 17:13	09/19/18 12:16	1
Selenium	ND		11.4	6.24	mg/Kg	☼	09/18/18 17:13	09/19/18 16:37	5
Silver	ND		1.14	0.454	mg/Kg	☼	09/18/18 17:13	09/19/18 12:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.118	0.0355	mg/Kg	☼	09/19/18 11:45	09/22/18 18:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.3		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	84.7		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-3 21-23'

Date Collected: 09/11/18 13:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-10

Matrix: Solid

Percent Solids: 82.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0391		0.0314	0.00528	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Benzene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Bromobenzene	ND		0.00126	0.000453	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Bromochloromethane	ND		0.00126	0.000346	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Bromodichloromethane	ND		0.00126	0.000346	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Bromoform	ND		0.00126	0.000346	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Bromomethane	ND		0.00126	0.000754	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
2-Butanone (MEK)	0.00565	J	0.0314	0.00321	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Carbon disulfide	ND		0.00314	0.00226	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Carbon tetrachloride	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Chlorobenzene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Chlorodibromomethane	ND		0.00126	0.000214	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Chloroethane	ND		0.00314	0.00119	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Chloroform	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Chloromethane	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
2-Chlorotoluene	ND		0.00126	0.000559	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
4-Chlorotoluene	ND		0.00126	0.000528	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
cis-1,2-Dichloroethene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
cis-1,3-Dichloropropene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,2-Dibromo-3-Chloropropane	ND		0.00314	0.000440	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,2-Dibromoethane (EDB)	ND		0.00126	0.000629	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Dibromomethane	ND		0.00126	0.000352	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,2-Dichlorobenzene	ND		0.00126	0.000214	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,3-Dichlorobenzene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,4-Dichlorobenzene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Dichlorodifluoromethane	ND		0.00126	0.000629	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,1-Dichloroethane	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,2-Dichloroethane	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,1-Dichloroethene	ND		0.00126	0.000358	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,2-Dichloropropane	ND		0.00126	0.000591	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,3-Dichloropropane	ND		0.00126	0.000591	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
2,2-Dichloropropane	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,1-Dichloropropene	ND		0.00126	0.000321	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Ethylbenzene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Hexachlorobutadiene	ND		0.00314	0.000717	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
2-Hexanone	ND		0.0314	0.0105	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Isopropylbenzene	ND		0.00126	0.000258	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Methylene Chloride	ND		0.00629	0.000541	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
4-Methyl-2-pentanone (MIBK)	ND		0.0314	0.00119	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Methyl tert-butyl ether	ND		0.00126	0.000603	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Naphthalene	ND		0.00314	0.00107	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
n-Butylbenzene	ND		0.00126	0.000616	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
N-Propylbenzene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
p-Isopropyltoluene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
sec-Butylbenzene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Styrene	ND		0.00126	0.000691	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
tert-Butylbenzene	ND		0.00126	0.000566	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,1,1,2-Tetrachloroethane	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,1,2,2-Tetrachloroethane	ND		0.00126	0.000629	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-3 21-23'

Lab Sample ID: 490-159244-10

Date Collected: 09/11/18 13:20

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 82.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00126	0.000459	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Toluene	ND		0.00126	0.000465	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
trans-1,2-Dichloroethene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
trans-1,3-Dichloropropene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,2,3-Trichlorobenzene	ND		0.00126	0.000239	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,2,4-Trichlorobenzene	ND		0.00126	0.000421	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,1,1-Trichloroethane	ND		0.00126	0.000578	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,1,2-Trichloroethane	ND		0.00314	0.000880	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Trichloroethene	ND		0.00126	0.000603	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Trichlorofluoromethane	ND		0.00126	0.000629	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,2,3-Trichloropropane	ND		0.00126	0.000346	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,2,4-Trimethylbenzene	ND		0.00126	0.000629	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
1,3,5-Trimethylbenzene	ND		0.00126	0.000471	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Vinyl chloride	ND		0.00126	0.000691	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
Xylenes, Total	ND		0.00377	0.000773	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1
GRO (C6-C10)	ND		0.251	0.126	mg/Kg	☼	09/11/18 13:20	09/24/18 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/11/18 13:20	09/24/18 18:01	1
Dibromofluoromethane (Surr)	98		70 - 130	09/11/18 13:20	09/24/18 18:01	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	09/11/18 13:20	09/24/18 18:01	1
Toluene-d8 (Surr)	103		70 - 130	09/11/18 13:20	09/24/18 18:01	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		19.7	6.95	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Oil Range Organics C21-C35	ND		19.7	6.95	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Acenaphthene	ND		0.0789	0.0377	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Acenaphthylene	ND		0.0789	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Anthracene	ND		0.0789	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Benzo[a]anthracene	ND		0.0789	0.0353	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Benzo[a]pyrene	ND		0.0789	0.0318	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Benzo[b]fluoranthene	ND		0.0789	0.0330	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Benzo[g,h,i]perylene	ND		0.0789	0.0389	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Benzo[k]fluoranthene	ND		0.0789	0.0318	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Chrysene	ND		0.0789	0.0436	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Dibenz(a,h)anthracene	ND		0.0789	0.0377	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Fluoranthene	ND		0.0789	0.0400	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Fluorene	ND		0.0789	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Indeno[1,2,3-cd]pyrene	ND		0.0789	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Naphthalene	ND		0.0789	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Phenanthrene	ND		0.0789	0.0400	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1
Pyrene	ND		0.0789	0.0400	mg/Kg	☼	09/17/18 14:06	09/20/18 20:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	68		29 - 120	09/17/18 14:06	09/20/18 20:33	1
Nitrobenzene-d5 (Surr)	55		27 - 120	09/17/18 14:06	09/20/18 20:33	1
Terphenyl-d14 (Surr)	69		13 - 120	09/17/18 14:06	09/20/18 20:33	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-3 21-23'

Lab Sample ID: 490-159244-10

Date Collected: 09/11/18 13:20

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 82.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.24		2.06	1.24	mg/Kg	☼	09/18/18 17:13	09/19/18 12:21	1
Barium	117		2.06	1.03	mg/Kg	☼	09/18/18 17:13	09/19/18 12:21	1
Cadmium	0.515	J	1.03	0.103	mg/Kg	☼	09/18/18 17:13	09/19/18 12:21	1
Chromium	12.6		1.03	0.927	mg/Kg	☼	09/18/18 17:13	09/19/18 12:21	1
Lead	70.6		1.03	0.515	mg/Kg	☼	09/18/18 17:13	09/19/18 12:21	1
Selenium	ND		10.3	5.67	mg/Kg	☼	09/18/18 17:13	09/19/18 16:43	5
Silver	ND		1.03	0.412	mg/Kg	☼	09/18/18 17:13	09/19/18 12:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.121	0.0364	mg/Kg	☼	09/19/18 11:45	09/22/18 18:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.7		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	82.3		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-4 5-7'

Date Collected: 09/11/18 14:14

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-11

Matrix: Solid

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0228	0.00383	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Benzene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Bromobenzene	ND		0.000913	0.000329	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Bromochloromethane	ND		0.000913	0.000251	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Bromodichloromethane	ND		0.000913	0.000251	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Bromoform	ND		0.000913	0.000251	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Bromomethane	ND		0.000913	0.000548	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
2-Butanone (MEK)	ND		0.0228	0.00233	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Carbon disulfide	ND		0.00228	0.00164	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Carbon tetrachloride	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Chlorobenzene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Chlorodibromomethane	ND		0.000913	0.000155	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Chloroethane	ND		0.00228	0.000867	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Chloroform	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Chloromethane	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
2-Chlorotoluene	ND		0.000913	0.000406	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
4-Chlorotoluene	ND		0.000913	0.000383	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
cis-1,2-Dichloroethene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
cis-1,3-Dichloropropene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,2-Dibromo-3-Chloropropane	ND		0.00228	0.000320	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,2-Dibromoethane (EDB)	ND		0.000913	0.000456	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Dibromomethane	ND		0.000913	0.000256	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,2-Dichlorobenzene	ND		0.000913	0.000155	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,3-Dichlorobenzene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,4-Dichlorobenzene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Dichlorodifluoromethane	ND		0.000913	0.000456	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,1-Dichloroethane	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,2-Dichloroethane	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,1-Dichloroethene	ND		0.000913	0.000260	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,2-Dichloropropane	ND		0.000913	0.000429	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,3-Dichloropropane	ND		0.000913	0.000429	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
2,2-Dichloropropane	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,1-Dichloropropene	ND		0.000913	0.000233	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Ethylbenzene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Hexachlorobutadiene	ND		0.00228	0.000520	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
2-Hexanone	ND		0.0228	0.00762	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Isopropylbenzene	ND		0.000913	0.000187	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Methylene Chloride	ND		0.00456	0.000393	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
4-Methyl-2-pentanone (MIBK)	ND		0.0228	0.000867	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Methyl tert-butyl ether	ND		0.000913	0.000438	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Naphthalene	ND		0.00228	0.000776	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
n-Butylbenzene	ND		0.000913	0.000447	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
N-Propylbenzene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
p-Isopropyltoluene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
sec-Butylbenzene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Styrene	ND		0.000913	0.000502	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
tert-Butylbenzene	ND		0.000913	0.000411	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,1,1,2-Tetrachloroethane	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,1,2,2-Tetrachloroethane	ND		0.000913	0.000456	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-4 5-7'

Date Collected: 09/11/18 14:14

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-11

Matrix: Solid

Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.000913	0.000333	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Toluene	0.000896	J	0.000913	0.000338	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
trans-1,2-Dichloroethene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
trans-1,3-Dichloropropene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,2,3-Trichlorobenzene	ND		0.000913	0.000173	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,2,4-Trichlorobenzene	ND		0.000913	0.000306	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,1,1-Trichloroethane	ND		0.000913	0.000420	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,1,2-Trichloroethane	ND		0.00228	0.000639	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Trichloroethene	ND		0.000913	0.000438	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Trichlorofluoromethane	ND		0.000913	0.000456	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,2,3-Trichloropropane	ND		0.000913	0.000251	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,2,4-Trimethylbenzene	ND		0.000913	0.000456	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
1,3,5-Trimethylbenzene	ND		0.000913	0.000342	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Vinyl chloride	ND		0.000913	0.000502	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
Xylenes, Total	ND		0.00274	0.000561	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1
GRO (C6-C10)	ND		0.183	0.0913	mg/Kg	☼	09/11/18 14:14	09/24/18 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	09/11/18 14:14	09/24/18 18:30	1
Dibromofluoromethane (Surr)	95		70 - 130	09/11/18 14:14	09/24/18 18:30	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	09/11/18 14:14	09/24/18 18:30	1
Toluene-d8 (Surr)	105		70 - 130	09/11/18 14:14	09/24/18 18:30	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.6	7.28	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Oil Range Organics C21-C35	ND		20.6	7.28	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Acenaphthene	ND		0.0827	0.0395	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Acenaphthylene	ND		0.0827	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Anthracene	ND		0.0827	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Benzo[a]anthracene	ND		0.0827	0.0370	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Benzo[a]pyrene	ND		0.0827	0.0333	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Benzo[b]fluoranthene	ND		0.0827	0.0346	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Benzo[g,h,i]perylene	ND		0.0827	0.0407	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Benzo[k]fluoranthene	ND		0.0827	0.0333	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Chrysene	ND		0.0827	0.0457	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Dibenz(a,h)anthracene	ND		0.0827	0.0395	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Fluoranthene	ND		0.0827	0.0420	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Fluorene	ND		0.0827	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Indeno[1,2,3-cd]pyrene	ND		0.0827	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Naphthalene	ND		0.0827	0.0358	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Phenanthrene	ND		0.0827	0.0420	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1
Pyrene	ND		0.0827	0.0420	mg/Kg	☼	09/17/18 14:06	09/20/18 20:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	69		29 - 120	09/17/18 14:06	09/20/18 20:56	1
Nitrobenzene-d5 (Surr)	61		27 - 120	09/17/18 14:06	09/20/18 20:56	1
Terphenyl-d14 (Surr)	72		13 - 120	09/17/18 14:06	09/20/18 20:56	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-4 5-7'

Lab Sample ID: 490-159244-11

Date Collected: 09/11/18 14:14

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.57		2.21	1.33	mg/Kg	☼	09/18/18 17:13	09/19/18 12:26	1
Barium	68.0		2.21	1.10	mg/Kg	☼	09/18/18 17:13	09/19/18 12:26	1
Cadmium	0.177	J	1.10	0.110	mg/Kg	☼	09/18/18 17:13	09/19/18 12:26	1
Chromium	9.72		1.10	0.994	mg/Kg	☼	09/18/18 17:13	09/19/18 12:26	1
Lead	33.9		1.10	0.552	mg/Kg	☼	09/18/18 17:13	09/19/18 12:26	1
Selenium	ND		2.21	1.21	mg/Kg	☼	09/18/18 17:13	09/19/18 12:26	1
Silver	ND		1.10	0.442	mg/Kg	☼	09/18/18 17:13	09/19/18 12:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.124	0.0371	mg/Kg	☼	09/19/18 11:45	09/22/18 18:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.2		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	80.8		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-4 9-11'

Date Collected: 09/11/18 14:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-12

Matrix: Solid

Percent Solids: 81.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0362	0.00609	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Benzene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Bromobenzene	ND		0.00145	0.000522	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Bromochloromethane	ND		0.00145	0.000399	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Bromodichloromethane	ND		0.00145	0.000399	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Bromoform	ND		0.00145	0.000399	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Bromomethane	ND		0.00145	0.000870	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
2-Butanone (MEK)	ND		0.0362	0.00370	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Carbon disulfide	ND		0.00362	0.00261	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Carbon tetrachloride	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Chlorobenzene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Chlorodibromomethane	ND		0.00145	0.000246	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Chloroethane	ND		0.00362	0.00138	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Chloroform	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Chloromethane	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
2-Chlorotoluene	ND		0.00145	0.000645	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
4-Chlorotoluene	ND		0.00145	0.000609	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
cis-1,2-Dichloroethene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
cis-1,3-Dichloropropene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,2-Dibromo-3-Chloropropane	ND		0.00362	0.000507	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,2-Dibromoethane (EDB)	ND		0.00145	0.000725	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Dibromomethane	ND		0.00145	0.000406	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,2-Dichlorobenzene	ND		0.00145	0.000246	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,3-Dichlorobenzene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,4-Dichlorobenzene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Dichlorodifluoromethane	ND		0.00145	0.000725	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,1-Dichloroethane	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,2-Dichloroethane	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,1-Dichloroethene	ND		0.00145	0.000413	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,2-Dichloropropane	ND		0.00145	0.000681	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,3-Dichloropropane	ND		0.00145	0.000681	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
2,2-Dichloropropane	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,1-Dichloropropene	ND		0.00145	0.000370	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Ethylbenzene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Hexachlorobutadiene	ND		0.00362	0.000826	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
2-Hexanone	ND		0.0362	0.0121	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Isopropylbenzene	ND		0.00145	0.000297	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Methylene Chloride	0.00258	J	0.00725	0.000623	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
4-Methyl-2-pentanone (MIBK)	ND		0.0362	0.00138	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Methyl tert-butyl ether	ND		0.00145	0.000696	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Naphthalene	ND		0.00362	0.00123	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
n-Butylbenzene	ND		0.00145	0.000710	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
N-Propylbenzene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
p-Isopropyltoluene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
sec-Butylbenzene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Styrene	ND		0.00145	0.000797	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
tert-Butylbenzene	ND		0.00145	0.000652	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,1,1,2-Tetrachloroethane	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,1,2,2-Tetrachloroethane	ND		0.00145	0.000725	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-4 9-11'

Lab Sample ID: 490-159244-12

Date Collected: 09/11/18 14:20

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 81.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00145	0.000529	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Toluene	0.000694	J	0.00145	0.000536	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
trans-1,2-Dichloroethene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
trans-1,3-Dichloropropene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,2,3-Trichlorobenzene	ND		0.00145	0.000275	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,2,4-Trichlorobenzene	ND		0.00145	0.000486	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,1,1-Trichloroethane	ND		0.00145	0.000667	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,1,2-Trichloroethane	ND		0.00362	0.00101	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Trichloroethene	ND		0.00145	0.000696	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Trichlorofluoromethane	ND		0.00145	0.000725	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,2,3-Trichloropropane	ND		0.00145	0.000399	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,2,4-Trimethylbenzene	ND		0.00145	0.000725	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
1,3,5-Trimethylbenzene	ND		0.00145	0.000544	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Vinyl chloride	ND		0.00145	0.000797	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
Xylenes, Total	ND		0.00435	0.000892	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1
GRO (C6-C10)	ND		0.290	0.145	mg/Kg	☼	09/11/18 14:20	09/24/18 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	09/11/18 14:20	09/24/18 19:00	1
Dibromofluoromethane (Surr)	99		70 - 130	09/11/18 14:20	09/24/18 19:00	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	09/11/18 14:20	09/24/18 19:00	1
Toluene-d8 (Surr)	104		70 - 130	09/11/18 14:20	09/24/18 19:00	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.3	7.19	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Oil Range Organics C21-C35	ND		20.3	7.19	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Acenaphthene	ND		0.0816	0.0390	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Acenaphthylene	ND		0.0816	0.0353	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Anthracene	ND		0.0816	0.0353	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Benzo[a]anthracene	ND		0.0816	0.0365	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Benzo[a]pyrene	ND		0.0816	0.0329	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Benzo[b]fluoranthene	ND		0.0816	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Benzo[g,h,i]perylene	ND		0.0816	0.0402	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Benzo[k]fluoranthene	ND		0.0816	0.0329	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Chrysene	ND		0.0816	0.0451	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Dibenz(a,h)anthracene	ND		0.0816	0.0390	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Fluoranthene	ND		0.0816	0.0414	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Fluorene	ND		0.0816	0.0353	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Indeno[1,2,3-cd]pyrene	ND		0.0816	0.0353	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Naphthalene	ND		0.0816	0.0353	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Phenanthrene	ND		0.0816	0.0414	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1
Pyrene	ND		0.0816	0.0414	mg/Kg	☼	09/17/18 14:06	09/20/18 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	71		29 - 120	09/17/18 14:06	09/20/18 21:19	1
Nitrobenzene-d5 (Surr)	63		27 - 120	09/17/18 14:06	09/20/18 21:19	1
Terphenyl-d14 (Surr)	76		13 - 120	09/17/18 14:06	09/20/18 21:19	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-4 9-11'

Lab Sample ID: 490-159244-12

Date Collected: 09/11/18 14:20

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 81.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.72		2.27	1.36	mg/Kg	☼	09/18/18 17:13	09/19/18 12:31	1
Barium	85.0		2.27	1.13	mg/Kg	☼	09/18/18 17:13	09/19/18 12:31	1
Cadmium	0.227	J	1.13	0.113	mg/Kg	☼	09/18/18 17:13	09/19/18 12:31	1
Chromium	13.6		1.13	1.02	mg/Kg	☼	09/18/18 17:13	09/19/18 12:31	1
Lead	46.2		1.13	0.567	mg/Kg	☼	09/18/18 17:13	09/19/18 12:31	1
Selenium	ND		11.3	6.24	mg/Kg	☼	09/18/18 17:13	09/19/18 18:52	5
Silver	ND		1.13	0.454	mg/Kg	☼	09/18/18 17:13	09/19/18 12:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.123	0.0368	mg/Kg	☼	09/19/18 11:45	09/22/18 18:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.4		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	81.6		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-5 0-2'

Date Collected: 09/11/18 15:00

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-13

Matrix: Solid

Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.116		0.0369	0.00621	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Benzene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Bromobenzene	ND		0.00148	0.000532	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Bromochloromethane	ND		0.00148	0.000406	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Bromodichloromethane	ND		0.00148	0.000406	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Bromoform	ND		0.00148	0.000406	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Bromomethane	ND		0.00148	0.000887	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
2-Butanone (MEK)	0.00662	J	0.0369	0.00377	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Carbon disulfide	0.00505		0.00369	0.00266	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Carbon tetrachloride	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Chlorobenzene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Chlorodibromomethane	ND		0.00148	0.000251	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Chloroethane	ND		0.00369	0.00140	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Chloroform	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Chloromethane	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
2-Chlorotoluene	ND		0.00148	0.000658	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
4-Chlorotoluene	ND		0.00148	0.000621	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
cis-1,2-Dichloroethene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
cis-1,3-Dichloropropene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,2-Dibromo-3-Chloropropane	ND		0.00369	0.000517	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,2-Dibromoethane (EDB)	ND		0.00148	0.000739	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Dibromomethane	ND		0.00148	0.000414	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,2-Dichlorobenzene	ND		0.00148	0.000251	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,3-Dichlorobenzene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,4-Dichlorobenzene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Dichlorodifluoromethane	ND		0.00148	0.000739	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,1-Dichloroethane	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,2-Dichloroethane	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,1-Dichloroethene	ND		0.00148	0.000421	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,2-Dichloropropane	ND		0.00148	0.000695	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,3-Dichloropropane	ND		0.00148	0.000695	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
2,2-Dichloropropane	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,1-Dichloropropene	ND		0.00148	0.000377	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Ethylbenzene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Hexachlorobutadiene	ND		0.00369	0.000842	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
2-Hexanone	ND		0.0369	0.0123	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Isopropylbenzene	ND		0.00148	0.000303	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Methylene Chloride	ND		0.00739	0.000635	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
4-Methyl-2-pentanone (MIBK)	ND		0.0369	0.00140	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Methyl tert-butyl ether	ND		0.00148	0.000709	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Naphthalene	ND		0.00369	0.00126	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
n-Butylbenzene	ND		0.00148	0.000724	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
N-Propylbenzene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
p-Isopropyltoluene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
sec-Butylbenzene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Styrene	ND		0.00148	0.000813	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
tert-Butylbenzene	ND		0.00148	0.000665	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,1,1,2-Tetrachloroethane	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,1,2,2-Tetrachloroethane	ND		0.00148	0.000739	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-5 0-2'

Lab Sample ID: 490-159244-13

Date Collected: 09/11/18 15:00

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00148	0.000539	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Toluene	0.000777	J	0.00148	0.000547	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
trans-1,2-Dichloroethene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
trans-1,3-Dichloropropene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,2,3-Trichlorobenzene	ND		0.00148	0.000281	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,2,4-Trichlorobenzene	ND		0.00148	0.000495	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,1,1-Trichloroethane	ND		0.00148	0.000680	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,1,2-Trichloroethane	ND		0.00369	0.00103	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Trichloroethene	ND		0.00148	0.000709	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Trichlorofluoromethane	ND		0.00148	0.000739	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,2,3-Trichloropropane	ND		0.00148	0.000406	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,2,4-Trimethylbenzene	ND		0.00148	0.000739	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
1,3,5-Trimethylbenzene	ND		0.00148	0.000554	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Vinyl chloride	ND		0.00148	0.000813	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
Xylenes, Total	ND		0.00443	0.000909	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1
GRO (C6-C10)	ND		0.296	0.148	mg/Kg	☼	09/11/18 15:00	09/24/18 19:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/11/18 15:00	09/24/18 19:30	1
Dibromofluoromethane (Surr)	99		70 - 130	09/11/18 15:00	09/24/18 19:30	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	09/11/18 15:00	09/24/18 19:30	1
Toluene-d8 (Surr)	105		70 - 130	09/11/18 15:00	09/24/18 19:30	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.0	7.05	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Oil Range Organics C21-C35	7.39	J	20.0	7.05	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Acenaphthene	ND		0.0801	0.0382	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Acenaphthylene	ND		0.0801	0.0347	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Anthracene	ND		0.0801	0.0347	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Benzo[a]anthracene	0.146		0.0801	0.0359	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Benzo[a]pyrene	0.136		0.0801	0.0323	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Benzo[b]fluoranthene	0.214		0.0801	0.0335	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Benzo[g,h,i]perylene	0.111		0.0801	0.0394	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Benzo[k]fluoranthene	0.0774	J	0.0801	0.0323	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Chrysene	0.187		0.0801	0.0442	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Dibenz(a,h)anthracene	ND		0.0801	0.0382	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Fluoranthene	0.334		0.0801	0.0406	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Fluorene	ND		0.0801	0.0347	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Indeno[1,2,3-cd]pyrene	0.121		0.0801	0.0347	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Naphthalene	ND		0.0801	0.0347	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Phenanthrene	0.0940		0.0801	0.0406	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1
Pyrene	0.243		0.0801	0.0406	mg/Kg	☼	09/17/18 14:06	09/20/18 21:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	71		29 - 120	09/17/18 14:06	09/20/18 21:41	1
Nitrobenzene-d5 (Surr)	60		27 - 120	09/17/18 14:06	09/20/18 21:41	1
Terphenyl-d14 (Surr)	83		13 - 120	09/17/18 14:06	09/20/18 21:41	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-5 0-2'

Lab Sample ID: 490-159244-13

Date Collected: 09/11/18 15:00

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.06		2.17	1.30	mg/Kg	☼	09/18/18 17:13	09/19/18 12:36	1
Barium	117		2.17	1.09	mg/Kg	☼	09/18/18 17:13	09/19/18 12:36	1
Cadmium	0.370	J	1.09	0.109	mg/Kg	☼	09/18/18 17:13	09/19/18 12:36	1
Chromium	7.39		1.09	0.978	mg/Kg	☼	09/18/18 17:13	09/19/18 12:36	1
Lead	41.4		1.09	0.543	mg/Kg	☼	09/18/18 17:13	09/19/18 12:36	1
Selenium	ND		2.17	1.20	mg/Kg	☼	09/18/18 17:13	09/19/18 12:36	1
Silver	ND		1.09	0.435	mg/Kg	☼	09/18/18 17:13	09/19/18 12:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.116	0.0348	mg/Kg	☼	09/19/18 11:45	09/22/18 18:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.4		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	83.6		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-5 18-20'

Lab Sample ID: 490-159244-14

Date Collected: 09/11/18 15:07

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00575	J	0.0287	0.00483	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Benzene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Bromobenzene	ND		0.00115	0.000414	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Bromochloromethane	ND		0.00115	0.000316	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Bromodichloromethane	ND		0.00115	0.000316	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Bromoform	ND		0.00115	0.000316	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Bromomethane	ND		0.00115	0.000690	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
2-Butanone (MEK)	ND		0.0287	0.00293	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Carbon disulfide	ND		0.00287	0.00207	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Carbon tetrachloride	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Chlorobenzene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Chlorodibromomethane	ND		0.00115	0.000195	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Chloroethane	ND		0.00287	0.00109	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Chloroform	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Chloromethane	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
2-Chlorotoluene	ND		0.00115	0.000511	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
4-Chlorotoluene	ND		0.00115	0.000483	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
cis-1,2-Dichloroethene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
cis-1,3-Dichloropropene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,2-Dibromo-3-Chloropropane	ND		0.00287	0.000402	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,2-Dibromoethane (EDB)	ND		0.00115	0.000575	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Dibromomethane	ND		0.00115	0.000322	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,2-Dichlorobenzene	ND		0.00115	0.000195	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,3-Dichlorobenzene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,4-Dichlorobenzene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Dichlorodifluoromethane	ND		0.00115	0.000575	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,1-Dichloroethane	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,2-Dichloroethane	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,1-Dichloroethene	ND		0.00115	0.000328	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,2-Dichloropropane	ND		0.00115	0.000540	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,3-Dichloropropane	ND		0.00115	0.000540	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
2,2-Dichloropropane	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,1-Dichloropropene	ND		0.00115	0.000293	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Ethylbenzene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Hexachlorobutadiene	ND		0.00287	0.000655	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
2-Hexanone	ND		0.0287	0.00960	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Isopropylbenzene	ND		0.00115	0.000236	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Methylene Chloride	0.00107	J	0.00575	0.000494	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
4-Methyl-2-pentanone (MIBK)	ND		0.0287	0.00109	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Methyl tert-butyl ether	ND		0.00115	0.000552	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Naphthalene	ND		0.00287	0.000977	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
n-Butylbenzene	ND		0.00115	0.000563	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
N-Propylbenzene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
p-Isopropyltoluene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
sec-Butylbenzene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Styrene	ND		0.00115	0.000632	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
tert-Butylbenzene	ND		0.00115	0.000517	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,1,1,2-Tetrachloroethane	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,1,2,2-Tetrachloroethane	ND		0.00115	0.000575	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-5 18-20'

Lab Sample ID: 490-159244-14

Date Collected: 09/11/18 15:07

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00115	0.000420	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Toluene	0.000468	J	0.00115	0.000425	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
trans-1,2-Dichloroethene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
trans-1,3-Dichloropropene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,2,3-Trichlorobenzene	ND		0.00115	0.000218	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,2,4-Trichlorobenzene	ND		0.00115	0.000385	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,1,1-Trichloroethane	ND		0.00115	0.000529	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,1,2-Trichloroethane	ND		0.00287	0.000805	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Trichloroethene	ND		0.00115	0.000552	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Trichlorofluoromethane	ND		0.00115	0.000575	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,2,3-Trichloropropane	ND		0.00115	0.000316	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,2,4-Trimethylbenzene	ND		0.00115	0.000575	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
1,3,5-Trimethylbenzene	ND		0.00115	0.000431	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Vinyl chloride	ND		0.00115	0.000632	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
Xylenes, Total	ND		0.00345	0.000707	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1
GRO (C6-C10)	ND		0.230	0.115	mg/Kg	☼	09/11/18 15:07	09/23/18 05:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/11/18 15:07	09/23/18 05:17	1
Dibromofluoromethane (Surr)	98		70 - 130	09/11/18 15:07	09/23/18 05:17	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 130	09/11/18 15:07	09/23/18 05:17	1
Toluene-d8 (Surr)	101		70 - 130	09/11/18 15:07	09/23/18 05:17	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		19.6	6.94	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Oil Range Organics C21-C35	ND		19.6	6.94	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Acenaphthene	ND		0.0788	0.0377	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Acenaphthylene	ND		0.0788	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Anthracene	ND		0.0788	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Benzo[a]anthracene	ND		0.0788	0.0353	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Benzo[a]pyrene	ND		0.0788	0.0318	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Benzo[b]fluoranthene	ND		0.0788	0.0329	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Benzo[g,h,i]perylene	ND		0.0788	0.0388	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Benzo[k]fluoranthene	ND		0.0788	0.0318	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Chrysene	ND		0.0788	0.0435	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Dibenz(a,h)anthracene	ND		0.0788	0.0377	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Fluoranthene	ND		0.0788	0.0400	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Fluorene	ND		0.0788	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Indeno[1,2,3-cd]pyrene	ND		0.0788	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Naphthalene	ND		0.0788	0.0341	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Phenanthrene	ND		0.0788	0.0400	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1
Pyrene	ND		0.0788	0.0400	mg/Kg	☼	09/17/18 14:06	09/20/18 22:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	69		29 - 120	09/17/18 14:06	09/20/18 22:04	1
Nitrobenzene-d5 (Surr)	62		27 - 120	09/17/18 14:06	09/20/18 22:04	1
Terphenyl-d14 (Surr)	84		13 - 120	09/17/18 14:06	09/20/18 22:04	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-5 18-20'

Lab Sample ID: 490-159244-14

Date Collected: 09/11/18 15:07

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.7

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	15.8		2.17	1.30	mg/Kg	☼	09/18/18 17:13	09/19/18 12:42	1
Barium	71.3		2.17	1.09	mg/Kg	☼	09/18/18 17:13	09/19/18 12:42	1
Cadmium	0.347	J	1.09	0.109	mg/Kg	☼	09/18/18 17:13	09/19/18 12:42	1
Chromium	11.8		1.09	0.977	mg/Kg	☼	09/18/18 17:13	09/19/18 12:42	1
Lead	106		1.09	0.543	mg/Kg	☼	09/18/18 17:13	09/19/18 12:42	1
Selenium	ND		10.9	5.97	mg/Kg	☼	09/18/18 17:13	09/19/18 19:08	5
Silver	ND		1.09	0.434	mg/Kg	☼	09/18/18 17:13	09/19/18 12:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.117	0.0350	mg/Kg	☼	09/19/18 11:45	09/22/18 18:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.3		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	83.7		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-6 2-4'

Date Collected: 09/12/18 09:03

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-15

Matrix: Solid

Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0307		0.0300	0.00504	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Benzene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Bromobenzene	ND		0.00120	0.000432	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Bromochloromethane	ND		0.00120	0.000330	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Bromodichloromethane	ND		0.00120	0.000330	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Bromoform	ND		0.00120	0.000330	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Bromomethane	ND		0.00120	0.000720	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
2-Butanone (MEK)	0.00313	J	0.0300	0.00306	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Carbon disulfide	ND		0.00300	0.00216	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Carbon tetrachloride	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Chlorobenzene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Chlorodibromomethane	ND		0.00120	0.000204	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Chloroethane	ND		0.00300	0.00114	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Chloroform	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Chloromethane	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
2-Chlorotoluene	ND		0.00120	0.000534	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
4-Chlorotoluene	ND		0.00120	0.000504	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
cis-1,2-Dichloroethene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
cis-1,3-Dichloropropene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,2-Dibromo-3-Chloropropane	ND		0.00300	0.000420	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,2-Dibromoethane (EDB)	ND		0.00120	0.000600	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Dibromomethane	ND		0.00120	0.000336	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,2-Dichlorobenzene	ND		0.00120	0.000204	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,3-Dichlorobenzene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,4-Dichlorobenzene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Dichlorodifluoromethane	ND		0.00120	0.000600	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,1-Dichloroethane	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,2-Dichloroethane	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,1-Dichloroethene	ND		0.00120	0.000342	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,2-Dichloropropane	ND		0.00120	0.000564	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,3-Dichloropropane	ND		0.00120	0.000564	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
2,2-Dichloropropane	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,1-Dichloropropene	ND		0.00120	0.000306	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Ethylbenzene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Hexachlorobutadiene	ND		0.00300	0.000684	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
2-Hexanone	ND		0.0300	0.0100	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Isopropylbenzene	ND		0.00120	0.000246	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Methylene Chloride	0.00330	J	0.00600	0.000516	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
4-Methyl-2-pentanone (MIBK)	ND		0.0300	0.00114	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Methyl tert-butyl ether	ND		0.00120	0.000576	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Naphthalene	ND		0.00300	0.00102	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
n-Butylbenzene	ND		0.00120	0.000588	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
N-Propylbenzene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
p-Isopropyltoluene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
sec-Butylbenzene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Styrene	ND		0.00120	0.000660	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
tert-Butylbenzene	ND		0.00120	0.000540	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,1,1,2-Tetrachloroethane	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,1,2,2-Tetrachloroethane	ND		0.00120	0.000600	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-6 2-4'

Lab Sample ID: 490-159244-15

Date Collected: 09/12/18 09:03

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00120	0.000438	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Toluene	0.000965	J	0.00120	0.000444	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
trans-1,2-Dichloroethene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
trans-1,3-Dichloropropene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,2,3-Trichlorobenzene	ND		0.00120	0.000228	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,2,4-Trichlorobenzene	ND		0.00120	0.000402	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,1,1-Trichloroethane	ND		0.00120	0.000552	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,1,2-Trichloroethane	ND		0.00300	0.000839	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Trichloroethene	ND		0.00120	0.000576	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Trichlorofluoromethane	ND		0.00120	0.000600	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,2,3-Trichloropropane	ND		0.00120	0.000330	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,2,4-Trimethylbenzene	ND		0.00120	0.000600	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
1,3,5-Trimethylbenzene	ND		0.00120	0.000450	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Vinyl chloride	ND		0.00120	0.000660	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
Xylenes, Total	ND		0.00360	0.000738	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1
GRO (C6-C10)	ND		0.240	0.120	mg/Kg	☼	09/12/18 09:03	09/23/18 05:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/12/18 09:03	09/23/18 05:45	1
Dibromofluoromethane (Surr)	95		70 - 130	09/12/18 09:03	09/23/18 05:45	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 130	09/12/18 09:03	09/23/18 05:45	1
Toluene-d8 (Surr)	100		70 - 130	09/12/18 09:03	09/23/18 05:45	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		19.8	6.98	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Oil Range Organics C21-C35	ND		19.8	6.98	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Acenaphthene	ND		0.0793	0.0379	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Acenaphthylene	ND		0.0793	0.0343	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Anthracene	ND		0.0793	0.0343	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Benzo[a]anthracene	ND		0.0793	0.0355	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Benzo[a]pyrene	ND		0.0793	0.0319	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Benzo[b]fluoranthene	ND		0.0793	0.0331	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Benzo[g,h,i]perylene	ND		0.0793	0.0390	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Benzo[k]fluoranthene	ND		0.0793	0.0319	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Chrysene	ND		0.0793	0.0438	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Dibenz(a,h)anthracene	ND		0.0793	0.0379	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Fluoranthene	ND		0.0793	0.0402	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Fluorene	ND		0.0793	0.0343	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Indeno[1,2,3-cd]pyrene	ND		0.0793	0.0343	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Naphthalene	ND		0.0793	0.0343	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Phenanthrene	ND		0.0793	0.0402	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1
Pyrene	ND		0.0793	0.0402	mg/Kg	☼	09/17/18 14:06	09/20/18 22:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	74		29 - 120	09/17/18 14:06	09/20/18 22:26	1
Nitrobenzene-d5 (Surr)	67		27 - 120	09/17/18 14:06	09/20/18 22:26	1
Terphenyl-d14 (Surr)	85		13 - 120	09/17/18 14:06	09/20/18 22:26	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-6 2-4'

Lab Sample ID: 490-159244-15

Date Collected: 09/12/18 09:03

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 84.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.87		2.24	1.34	mg/Kg	☼	09/18/18 17:13	09/19/18 12:47	1
Barium	94.9		2.24	1.12	mg/Kg	☼	09/18/18 17:13	09/19/18 12:47	1
Cadmium	0.202	J	1.12	0.112	mg/Kg	☼	09/18/18 17:13	09/19/18 12:47	1
Chromium	7.44		1.12	1.01	mg/Kg	☼	09/18/18 17:13	09/19/18 12:47	1
Lead	46.3		1.12	0.560	mg/Kg	☼	09/18/18 17:13	09/19/18 12:47	1
Selenium	ND		11.2	6.16	mg/Kg	☼	09/18/18 17:13	09/19/18 19:18	5
Silver	ND		1.12	0.448	mg/Kg	☼	09/18/18 17:13	09/19/18 12:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.116	0.0349	mg/Kg	☼	09/19/18 11:45	09/22/18 18:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.8		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	84.2		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-6 22-24'

Lab Sample ID: 490-159244-16

Date Collected: 09/12/18 09:10

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0217	0.00364	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Benzene	0.000492	J	0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Bromobenzene	ND		0.000867	0.000312	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Bromochloromethane	ND		0.000867	0.000238	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Bromodichloromethane	ND		0.000867	0.000238	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Bromoform	ND		0.000867	0.000238	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Bromomethane	ND		0.000867	0.000520	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
2-Butanone (MEK)	ND		0.0217	0.00221	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Carbon disulfide	ND		0.00217	0.00156	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Carbon tetrachloride	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Chlorobenzene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Chlorodibromomethane	ND		0.000867	0.000147	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Chloroethane	ND		0.00217	0.000824	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Chloroform	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Chloromethane	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
2-Chlorotoluene	ND		0.000867	0.000386	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
4-Chlorotoluene	ND		0.000867	0.000364	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
cis-1,2-Dichloroethene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
cis-1,3-Dichloropropene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,2-Dibromo-3-Chloropropane	ND		0.00217	0.000303	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,2-Dibromoethane (EDB)	ND		0.000867	0.000434	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Dibromomethane	ND		0.000867	0.000243	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,2-Dichlorobenzene	ND		0.000867	0.000147	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,3-Dichlorobenzene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,4-Dichlorobenzene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Dichlorodifluoromethane	ND		0.000867	0.000434	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,1-Dichloroethane	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,2-Dichloroethane	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,1-Dichloroethene	ND		0.000867	0.000247	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,2-Dichloropropane	ND		0.000867	0.000408	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,3-Dichloropropane	ND		0.000867	0.000408	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
2,2-Dichloropropane	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,1-Dichloropropene	ND		0.000867	0.000221	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Ethylbenzene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Hexachlorobutadiene	ND		0.00217	0.000494	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
2-Hexanone	ND		0.0217	0.00724	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Isopropylbenzene	ND		0.000867	0.000178	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Methylene Chloride	0.00173	J	0.00434	0.000373	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
4-Methyl-2-pentanone (MIBK)	ND		0.0217	0.000824	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Methyl tert-butyl ether	ND		0.000867	0.000416	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Naphthalene	ND		0.00217	0.000737	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
n-Butylbenzene	ND		0.000867	0.000425	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
N-Propylbenzene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
p-Isopropyltoluene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
sec-Butylbenzene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Styrene	ND		0.000867	0.000477	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
tert-Butylbenzene	ND		0.000867	0.000390	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,1,1,2-Tetrachloroethane	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,1,2,2-Tetrachloroethane	ND		0.000867	0.000434	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-6 22-24'

Lab Sample ID: 490-159244-16

Date Collected: 09/12/18 09:10

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.000867	0.000316	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Toluene	0.000406	J	0.000867	0.000321	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
trans-1,2-Dichloroethene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
trans-1,3-Dichloropropene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,2,3-Trichlorobenzene	ND		0.000867	0.000165	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,2,4-Trichlorobenzene	ND		0.000867	0.000290	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,1,1-Trichloroethane	ND		0.000867	0.000399	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,1,2-Trichloroethane	ND		0.00217	0.000607	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Trichloroethene	ND		0.000867	0.000416	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Trichlorofluoromethane	ND		0.000867	0.000434	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,2,3-Trichloropropane	ND		0.000867	0.000238	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,2,4-Trimethylbenzene	ND		0.000867	0.000434	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
1,3,5-Trimethylbenzene	ND		0.000867	0.000325	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Vinyl chloride	ND		0.000867	0.000477	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
Xylenes, Total	ND		0.00260	0.000533	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1
GRO (C6-C10)	ND		0.173	0.0867	mg/Kg	☼	09/12/18 09:10	09/23/18 06:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/12/18 09:10	09/23/18 06:13	1
Dibromofluoromethane (Surr)	96		70 - 130	09/12/18 09:10	09/23/18 06:13	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 130	09/12/18 09:10	09/23/18 06:13	1
Toluene-d8 (Surr)	101		70 - 130	09/12/18 09:10	09/23/18 06:13	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		19.5	6.88	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Oil Range Organics C21-C35	ND		19.5	6.88	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Acenaphthene	ND		0.0782	0.0373	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Acenaphthylene	ND		0.0782	0.0338	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Anthracene	ND		0.0782	0.0338	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Benzo[a]anthracene	ND		0.0782	0.0350	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Benzo[a]pyrene	ND		0.0782	0.0315	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Benzo[b]fluoranthene	ND		0.0782	0.0327	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Benzo[g,h,i]perylene	ND		0.0782	0.0385	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Benzo[k]fluoranthene	ND		0.0782	0.0315	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Chrysene	ND		0.0782	0.0432	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Dibenz(a,h)anthracene	ND		0.0782	0.0373	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Fluoranthene	ND		0.0782	0.0397	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Fluorene	ND		0.0782	0.0338	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Indeno[1,2,3-cd]pyrene	ND		0.0782	0.0338	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Naphthalene	ND		0.0782	0.0338	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Phenanthrene	ND		0.0782	0.0397	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1
Pyrene	ND		0.0782	0.0397	mg/Kg	☼	09/17/18 14:06	09/21/18 14:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	63		29 - 120	09/17/18 14:06	09/21/18 14:28	1
Nitrobenzene-d5 (Surr)	65		27 - 120	09/17/18 14:06	09/21/18 14:28	1
Terphenyl-d14 (Surr)	67		13 - 120	09/17/18 14:06	09/21/18 14:28	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-6 22-24'

Lab Sample ID: 490-159244-16

Date Collected: 09/12/18 09:10

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.28		1.99	1.19	mg/Kg	☼	09/18/18 17:13	09/19/18 12:52	1
Barium	54.0		1.99	0.994	mg/Kg	☼	09/18/18 17:13	09/19/18 12:52	1
Cadmium	ND		0.994	0.0994	mg/Kg	☼	09/18/18 17:13	09/19/18 12:52	1
Chromium	10.8		0.994	0.895	mg/Kg	☼	09/18/18 17:13	09/19/18 12:52	1
Lead	36.2		0.994	0.497	mg/Kg	☼	09/18/18 17:13	09/19/18 12:52	1
Selenium	ND		1.99	1.09	mg/Kg	☼	09/18/18 17:13	09/19/18 12:52	1
Silver	ND		0.994	0.398	mg/Kg	☼	09/18/18 17:13	09/19/18 12:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.120	0.0359	mg/Kg	☼	09/19/18 11:45	09/22/18 18:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.2		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	83.8		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7 0-2'

Lab Sample ID: 490-159244-17

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0430		0.0275	0.00463	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Benzene	0.00144		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Bromobenzene	ND		0.00110	0.000397	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Bromochloromethane	ND		0.00110	0.000303	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Bromodichloromethane	ND		0.00110	0.000303	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Bromoform	ND		0.00110	0.000303	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Bromomethane	ND		0.00110	0.000661	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
2-Butanone (MEK)	0.00376	J	0.0275	0.00281	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Carbon disulfide	0.0109		0.00275	0.00198	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Carbon tetrachloride	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Chlorobenzene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Chlorodibromomethane	ND		0.00110	0.000187	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Chloroethane	ND		0.00275	0.00105	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Chloroform	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Chloromethane	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
2-Chlorotoluene	ND		0.00110	0.000490	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
4-Chlorotoluene	ND		0.00110	0.000463	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
cis-1,2-Dichloroethene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
cis-1,3-Dichloropropene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,2-Dibromo-3-Chloropropane	ND		0.00275	0.000386	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,2-Dibromoethane (EDB)	ND		0.00110	0.000551	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Dibromomethane	ND		0.00110	0.000308	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,2-Dichlorobenzene	ND		0.00110	0.000187	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,3-Dichlorobenzene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,4-Dichlorobenzene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Dichlorodifluoromethane	ND		0.00110	0.000551	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,1-Dichloroethane	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,2-Dichloroethane	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,1-Dichloroethene	ND		0.00110	0.000314	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,2-Dichloropropane	ND		0.00110	0.000518	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,3-Dichloropropane	ND		0.00110	0.000518	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
2,2-Dichloropropane	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,1-Dichloropropene	ND		0.00110	0.000281	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Ethylbenzene	0.000938	J	0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Hexachlorobutadiene	ND		0.00275	0.000628	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
2-Hexanone	ND		0.0275	0.00920	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Isopropylbenzene	ND		0.00110	0.000226	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Methylene Chloride	0.000806	J	0.00551	0.000474	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
4-Methyl-2-pentanone (MIBK)	ND		0.0275	0.00105	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Methyl tert-butyl ether	ND		0.00110	0.000529	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Naphthalene	ND		0.00275	0.000936	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
n-Butylbenzene	ND		0.00110	0.000540	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
N-Propylbenzene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
p-Isopropyltoluene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
sec-Butylbenzene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Styrene	ND		0.00110	0.000606	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
tert-Butylbenzene	ND		0.00110	0.000496	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,1,1,2-Tetrachloroethane	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,1,2,2-Tetrachloroethane	ND		0.00110	0.000551	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7 0-2'

Lab Sample ID: 490-159244-17

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00110	0.000402	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Toluene	0.00361		0.00110	0.000408	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
trans-1,2-Dichloroethene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
trans-1,3-Dichloropropene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,2,3-Trichlorobenzene	ND		0.00110	0.000209	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,2,4-Trichlorobenzene	ND		0.00110	0.000369	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,1,1-Trichloroethane	ND		0.00110	0.000507	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,1,2-Trichloroethane	ND		0.00275	0.000771	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Trichloroethene	ND		0.00110	0.000529	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Trichlorofluoromethane	ND		0.00110	0.000551	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,2,3-Trichloropropane	ND		0.00110	0.000303	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,2,4-Trimethylbenzene	0.000665	J	0.00110	0.000551	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
1,3,5-Trimethylbenzene	ND		0.00110	0.000413	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Vinyl chloride	ND		0.00110	0.000606	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
Xylenes, Total	0.00177	J	0.00330	0.000677	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1
GRO (C6-C10)	0.162	J	0.220	0.110	mg/Kg	☼	09/12/18 09:53	09/23/18 06:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/12/18 09:53	09/23/18 06:41	1
Dibromofluoromethane (Surr)	95		70 - 130	09/12/18 09:53	09/23/18 06:41	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 130	09/12/18 09:53	09/23/18 06:41	1
Toluene-d8 (Surr)	102		70 - 130	09/12/18 09:53	09/23/18 06:41	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		18.0	6.38	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Oil Range Organics C21-C35	ND		18.0	6.38	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Acenaphthene	ND		0.0724	0.0346	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Acenaphthylene	ND		0.0724	0.0313	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Anthracene	ND		0.0724	0.0313	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Benzo[a]anthracene	ND		0.0724	0.0324	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Benzo[a]pyrene	ND		0.0724	0.0292	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Benzo[b]fluoranthene	ND		0.0724	0.0303	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Benzo[g,h,i]perylene	ND		0.0724	0.0357	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Benzo[k]fluoranthene	ND		0.0724	0.0292	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Chrysene	ND		0.0724	0.0400	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Dibenz(a,h)anthracene	ND		0.0724	0.0346	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Fluoranthene	ND		0.0724	0.0367	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Fluorene	ND		0.0724	0.0313	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Indeno[1,2,3-cd]pyrene	ND		0.0724	0.0313	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Naphthalene	ND		0.0724	0.0313	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Phenanthrene	ND		0.0724	0.0367	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1
Pyrene	ND		0.0724	0.0367	mg/Kg	☼	09/17/18 14:06	09/20/18 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	67		29 - 120	09/17/18 14:06	09/20/18 23:11	1
Nitrobenzene-d5 (Surr)	56		27 - 120	09/17/18 14:06	09/20/18 23:11	1
Terphenyl-d14 (Surr)	80		13 - 120	09/17/18 14:06	09/20/18 23:11	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7 0-2'

Lab Sample ID: 490-159244-17

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 90.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.99		1.94	1.17	mg/Kg	☼	09/18/18 17:13	09/19/18 12:58	1
Barium	74.8		1.94	0.972	mg/Kg	☼	09/18/18 17:13	09/19/18 12:58	1
Cadmium	0.194	J	0.972	0.0972	mg/Kg	☼	09/18/18 17:13	09/19/18 12:58	1
Chromium	7.58		0.972	0.875	mg/Kg	☼	09/18/18 17:13	09/19/18 12:58	1
Lead	32.9		0.972	0.486	mg/Kg	☼	09/18/18 17:13	09/19/18 12:58	1
Selenium	ND		1.94	1.07	mg/Kg	☼	09/18/18 17:13	09/19/18 12:58	1
Silver	ND		0.972	0.389	mg/Kg	☼	09/18/18 17:13	09/19/18 12:58	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.110	0.0331	mg/Kg	☼	09/19/18 11:45	09/22/18 18:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.8		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	90.2		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7-FD 0-2'

Lab Sample ID: 490-159244-18

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0437		0.0325	0.00545	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Benzene	0.000531	J	0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Bromobenzene	ND		0.00130	0.000468	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Bromochloromethane	ND		0.00130	0.000357	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Bromodichloromethane	ND		0.00130	0.000357	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Bromoform	ND		0.00130	0.000357	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Bromomethane	ND		0.00130	0.000779	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
2-Butanone (MEK)	0.00511	J	0.0325	0.00331	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Carbon disulfide	0.00374		0.00325	0.00234	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Carbon tetrachloride	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Chlorobenzene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Chlorodibromomethane	ND		0.00130	0.000221	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Chloroethane	ND		0.00325	0.00123	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Chloroform	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Chloromethane	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
2-Chlorotoluene	ND		0.00130	0.000578	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
4-Chlorotoluene	ND		0.00130	0.000545	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
cis-1,2-Dichloroethene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
cis-1,3-Dichloropropene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,2-Dibromo-3-Chloropropane	ND		0.00325	0.000455	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,2-Dibromoethane (EDB)	ND		0.00130	0.000649	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Dibromomethane	ND		0.00130	0.000364	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,2-Dichlorobenzene	ND		0.00130	0.000221	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,3-Dichlorobenzene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,4-Dichlorobenzene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Dichlorodifluoromethane	ND		0.00130	0.000649	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,1-Dichloroethane	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,2-Dichloroethane	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,1-Dichloroethene	ND		0.00130	0.000370	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,2-Dichloropropane	ND		0.00130	0.000610	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,3-Dichloropropane	ND		0.00130	0.000610	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
2,2-Dichloropropane	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,1-Dichloropropene	ND		0.00130	0.000331	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Ethylbenzene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Hexachlorobutadiene	ND		0.00325	0.000740	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
2-Hexanone	ND		0.0325	0.0108	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Isopropylbenzene	ND		0.00130	0.000266	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Methylene Chloride	0.00114	J	0.00649	0.000558	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
4-Methyl-2-pentanone (MIBK)	ND		0.0325	0.00123	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Methyl tert-butyl ether	ND		0.00130	0.000623	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Naphthalene	ND		0.00325	0.00110	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
n-Butylbenzene	ND		0.00130	0.000636	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
N-Propylbenzene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
p-Isopropyltoluene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
sec-Butylbenzene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Styrene	ND		0.00130	0.000714	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
tert-Butylbenzene	ND		0.00130	0.000584	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,1,1,2-Tetrachloroethane	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,1,2,2-Tetrachloroethane	ND		0.00130	0.000649	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7-FD 0-2'

Lab Sample ID: 490-159244-18

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00130	0.000474	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Toluene	0.00187		0.00130	0.000480	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
trans-1,2-Dichloroethene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
trans-1,3-Dichloropropene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,2,3-Trichlorobenzene	ND		0.00130	0.000247	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,2,4-Trichlorobenzene	ND		0.00130	0.000435	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,1,1-Trichloroethane	ND		0.00130	0.000597	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,1,2-Trichloroethane	ND		0.00325	0.000909	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Trichloroethene	ND		0.00130	0.000623	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Trichlorofluoromethane	ND		0.00130	0.000649	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,2,3-Trichloropropane	ND		0.00130	0.000357	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,2,4-Trimethylbenzene	ND		0.00130	0.000649	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
1,3,5-Trimethylbenzene	ND		0.00130	0.000487	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Vinyl chloride	ND		0.00130	0.000714	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
Xylenes, Total	ND		0.00390	0.000799	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1
GRO (C6-C10)	ND		0.260	0.130	mg/Kg	☼	09/12/18 09:53	09/24/18 20:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/12/18 09:53	09/24/18 20:00	1
Dibromofluoromethane (Surr)	96		70 - 130	09/12/18 09:53	09/24/18 20:00	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	09/12/18 09:53	09/24/18 20:00	1
Toluene-d8 (Surr)	100		70 - 130	09/12/18 09:53	09/24/18 20:00	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		18.4	6.52	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Oil Range Organics C21-C35	ND		18.4	6.52	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Acenaphthene	ND		0.0740	0.0353	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Acenaphthylene	ND		0.0740	0.0320	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Anthracene	ND		0.0740	0.0320	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Benzo[a]anthracene	ND		0.0740	0.0331	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Benzo[a]pyrene	ND		0.0740	0.0298	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Benzo[b]fluoranthene	ND		0.0740	0.0309	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Benzo[g,h,i]perylene	ND		0.0740	0.0365	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Benzo[k]fluoranthene	ND		0.0740	0.0298	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Chrysene	ND		0.0740	0.0409	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Dibenz(a,h)anthracene	ND		0.0740	0.0353	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Fluoranthene	ND		0.0740	0.0376	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Fluorene	ND		0.0740	0.0320	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Indeno[1,2,3-cd]pyrene	ND		0.0740	0.0320	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Naphthalene	ND		0.0740	0.0320	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Phenanthrene	ND		0.0740	0.0376	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1
Pyrene	ND		0.0740	0.0376	mg/Kg	☼	09/17/18 14:06	09/20/18 23:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	65		29 - 120	09/17/18 14:06	09/20/18 23:34	1
Nitrobenzene-d5 (Surr)	57		27 - 120	09/17/18 14:06	09/20/18 23:34	1
Terphenyl-d14 (Surr)	72		13 - 120	09/17/18 14:06	09/20/18 23:34	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7-FD 0-2'

Lab Sample ID: 490-159244-18

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 90.0

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.97		2.02	1.21	mg/Kg	☼	09/18/18 17:13	09/19/18 13:13	1
Barium	90.2		2.02	1.01	mg/Kg	☼	09/18/18 17:13	09/19/18 13:13	1
Cadmium	0.222	J	1.01	0.101	mg/Kg	☼	09/18/18 17:13	09/19/18 13:13	1
Chromium	9.07		1.01	0.910	mg/Kg	☼	09/18/18 17:13	09/19/18 13:13	1
Lead	45.1		1.01	0.505	mg/Kg	☼	09/18/18 17:13	09/19/18 13:13	1
Selenium	ND		2.02	1.11	mg/Kg	☼	09/18/18 17:13	09/19/18 13:13	1
Silver	ND		1.01	0.404	mg/Kg	☼	09/18/18 17:13	09/19/18 13:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.108	0.0325	mg/Kg	☼	09/19/18 11:45	09/22/18 18:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.0		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	90.0		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7 11-13'

Lab Sample ID: 490-159244-19

Date Collected: 09/12/18 10:05

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0110	J	0.0297	0.00498	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Benzene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Bromobenzene	ND		0.00119	0.000427	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Bromochloromethane	ND		0.00119	0.000326	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Bromodichloromethane	ND		0.00119	0.000326	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Bromoform	ND		0.00119	0.000326	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Bromomethane	ND		0.00119	0.000712	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
2-Butanone (MEK)	ND		0.0297	0.00303	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Carbon disulfide	ND		0.00297	0.00214	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Carbon tetrachloride	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Chlorobenzene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Chlorodibromomethane	ND		0.00119	0.000202	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Chloroethane	ND		0.00297	0.00113	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Chloroform	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Chloromethane	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
2-Chlorotoluene	ND		0.00119	0.000528	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
4-Chlorotoluene	ND		0.00119	0.000498	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
cis-1,2-Dichloroethene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
cis-1,3-Dichloropropene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,2-Dibromo-3-Chloropropane	ND		0.00297	0.000415	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,2-Dibromoethane (EDB)	ND		0.00119	0.000593	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Dibromomethane	ND		0.00119	0.000332	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,2-Dichlorobenzene	ND		0.00119	0.000202	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,3-Dichlorobenzene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,4-Dichlorobenzene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Dichlorodifluoromethane	ND		0.00119	0.000593	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,1-Dichloroethane	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,2-Dichloroethane	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,1-Dichloroethene	ND		0.00119	0.000338	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,2-Dichloropropane	ND		0.00119	0.000558	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,3-Dichloropropane	ND		0.00119	0.000558	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
2,2-Dichloropropane	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,1-Dichloropropene	ND		0.00119	0.000303	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Ethylbenzene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Hexachlorobutadiene	ND		0.00297	0.000676	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
2-Hexanone	ND		0.0297	0.00991	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Isopropylbenzene	ND		0.00119	0.000243	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Methylene Chloride	0.00130	J	0.00593	0.000510	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
4-Methyl-2-pentanone (MIBK)	ND		0.0297	0.00113	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Methyl tert-butyl ether	ND		0.00119	0.000570	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Naphthalene	ND		0.00297	0.00101	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
n-Butylbenzene	ND		0.00119	0.000581	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
N-Propylbenzene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
p-Isopropyltoluene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
sec-Butylbenzene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Styrene	ND		0.00119	0.000653	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
tert-Butylbenzene	ND		0.00119	0.000534	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,1,1,2-Tetrachloroethane	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,1,2,2-Tetrachloroethane	ND		0.00119	0.000593	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7 11-13'

Lab Sample ID: 490-159244-19

Date Collected: 09/12/18 10:05

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00119	0.000433	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Toluene	0.00101	J	0.00119	0.000439	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
trans-1,2-Dichloroethene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
trans-1,3-Dichloropropene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,2,3-Trichlorobenzene	ND		0.00119	0.000225	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,2,4-Trichlorobenzene	ND		0.00119	0.000397	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,1,1-Trichloroethane	ND		0.00119	0.000546	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,1,2-Trichloroethane	ND		0.00297	0.000831	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Trichloroethene	ND		0.00119	0.000570	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Trichlorofluoromethane	ND		0.00119	0.000593	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,2,3-Trichloropropane	ND		0.00119	0.000326	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,2,4-Trimethylbenzene	ND		0.00119	0.000593	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
1,3,5-Trimethylbenzene	ND		0.00119	0.000445	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Vinyl chloride	ND		0.00119	0.000653	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
Xylenes, Total	ND		0.00356	0.000730	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1
GRO (C6-C10)	ND		0.237	0.119	mg/Kg	☼	09/12/18 10:05	09/23/18 07:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/12/18 10:05	09/23/18 07:09	1
Dibromofluoromethane (Surr)	97		70 - 130	09/12/18 10:05	09/23/18 07:09	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130	09/12/18 10:05	09/23/18 07:09	1
Toluene-d8 (Surr)	102		70 - 130	09/12/18 10:05	09/23/18 07:09	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.5	7.26	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Oil Range Organics C21-C35	ND		20.5	7.26	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Acenaphthene	ND		0.0824	0.0394	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Acenaphthylene	ND		0.0824	0.0357	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Anthracene	ND		0.0824	0.0357	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Benzo[a]anthracene	ND		0.0824	0.0369	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Benzo[a]pyrene	ND		0.0824	0.0332	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Benzo[b]fluoranthene	ND		0.0824	0.0345	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Benzo[g,h,i]perylene	ND		0.0824	0.0406	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Benzo[k]fluoranthene	ND		0.0824	0.0332	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Chrysene	ND		0.0824	0.0455	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Dibenz(a,h)anthracene	ND		0.0824	0.0394	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Fluoranthene	ND		0.0824	0.0418	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Fluorene	ND		0.0824	0.0357	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Indeno[1,2,3-cd]pyrene	ND		0.0824	0.0357	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Naphthalene	ND		0.0824	0.0357	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Phenanthrene	ND		0.0824	0.0418	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1
Pyrene	ND		0.0824	0.0418	mg/Kg	☼	09/17/18 14:06	09/21/18 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	61		29 - 120	09/17/18 14:06	09/21/18 14:50	1
Nitrobenzene-d5 (Surr)	63		27 - 120	09/17/18 14:06	09/21/18 14:50	1
Terphenyl-d14 (Surr)	73		13 - 120	09/17/18 14:06	09/21/18 14:50	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7 11-13'

Lab Sample ID: 490-159244-19

Date Collected: 09/12/18 10:05

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.01		2.39	1.43	mg/Kg	☼	09/18/18 17:21	09/21/18 18:44	1
Barium	14.9	F1	2.39	1.19	mg/Kg	☼	09/18/18 17:21	09/21/18 18:44	1
Cadmium	ND		1.19	0.119	mg/Kg	☼	09/18/18 17:21	09/21/18 18:44	1
Chromium	2.55	F1	1.19	1.07	mg/Kg	☼	09/18/18 17:21	09/21/18 18:44	1
Lead	ND		1.19	0.597	mg/Kg	☼	09/18/18 17:21	09/21/18 18:44	1
Selenium	ND	F1	2.39	1.31	mg/Kg	☼	09/18/18 17:21	09/21/18 18:44	1
Silver	ND		1.19	0.477	mg/Kg	☼	09/18/18 17:21	09/21/18 18:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.123	0.0370	mg/Kg	☼	09/19/18 11:45	09/22/18 18:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.4		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	80.6		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-8 7-9'

Date Collected: 09/12/18 10:40

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-20

Matrix: Solid

Percent Solids: 78.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00950	J	0.0368	0.00619	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Benzene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Bromobenzene	ND		0.00147	0.000531	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Bromochloromethane	ND		0.00147	0.000405	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Bromodichloromethane	ND		0.00147	0.000405	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Bromoform	ND		0.00147	0.000405	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Bromomethane	ND		0.00147	0.000884	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
2-Butanone (MEK)	ND		0.0368	0.00376	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Carbon disulfide	ND		0.00368	0.00265	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Carbon tetrachloride	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Chlorobenzene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Chlorodibromomethane	ND		0.00147	0.000251	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Chloroethane	ND		0.00368	0.00140	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Chloroform	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Chloromethane	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
2-Chlorotoluene	ND		0.00147	0.000656	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
4-Chlorotoluene	ND		0.00147	0.000619	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
cis-1,2-Dichloroethene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
cis-1,3-Dichloropropene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,2-Dibromo-3-Chloropropane	ND		0.00368	0.000516	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,2-Dibromoethane (EDB)	ND		0.00147	0.000737	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Dibromomethane	ND		0.00147	0.000413	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,2-Dichlorobenzene	ND		0.00147	0.000251	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,3-Dichlorobenzene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,4-Dichlorobenzene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Dichlorodifluoromethane	ND		0.00147	0.000737	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,1-Dichloroethane	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,2-Dichloroethane	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,1-Dichloroethene	ND		0.00147	0.000420	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,2-Dichloropropane	ND		0.00147	0.000693	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,3-Dichloropropane	ND		0.00147	0.000693	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
2,2-Dichloropropane	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,1-Dichloropropene	ND		0.00147	0.000376	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Ethylbenzene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Hexachlorobutadiene	ND		0.00368	0.000840	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
2-Hexanone	ND		0.0368	0.0123	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Isopropylbenzene	ND		0.00147	0.000302	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Methylene Chloride	0.00413	J	0.00737	0.000634	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
4-Methyl-2-pentanone (MIBK)	ND		0.0368	0.00140	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Methyl tert-butyl ether	ND		0.00147	0.000707	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Naphthalene	ND		0.00368	0.00125	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
n-Butylbenzene	ND		0.00147	0.000722	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
N-Propylbenzene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
p-Isopropyltoluene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
sec-Butylbenzene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Styrene	ND		0.00147	0.000811	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
tert-Butylbenzene	ND		0.00147	0.000663	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,1,1,2-Tetrachloroethane	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,1,2,2-Tetrachloroethane	ND		0.00147	0.000737	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-8 7-9'

Lab Sample ID: 490-159244-20

Date Collected: 09/12/18 10:40

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 78.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00147	0.000538	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Toluene	0.000805	J	0.00147	0.000545	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
trans-1,2-Dichloroethene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
trans-1,3-Dichloropropene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,2,3-Trichlorobenzene	ND		0.00147	0.000280	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,2,4-Trichlorobenzene	ND		0.00147	0.000494	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,1,1-Trichloroethane	ND		0.00147	0.000678	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,1,2-Trichloroethane	ND		0.00368	0.00103	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Trichloroethene	ND		0.00147	0.000707	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Trichlorofluoromethane	ND		0.00147	0.000737	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,2,3-Trichloropropane	ND		0.00147	0.000405	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,2,4-Trimethylbenzene	ND		0.00147	0.000737	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
1,3,5-Trimethylbenzene	ND		0.00147	0.000553	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Vinyl chloride	ND		0.00147	0.000811	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
Xylenes, Total	ND		0.00442	0.000906	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1
GRO (C6-C10)	ND		0.295	0.147	mg/Kg	☼	09/12/18 10:40	09/23/18 07:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/12/18 10:40	09/23/18 07:37	1
Dibromofluoromethane (Surr)	98		70 - 130	09/12/18 10:40	09/23/18 07:37	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130	09/12/18 10:40	09/23/18 07:37	1
Toluene-d8 (Surr)	100		70 - 130	09/12/18 10:40	09/23/18 07:37	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.9	7.39	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Oil Range Organics C21-C35	ND		20.9	7.39	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Acenaphthene	ND		0.0839	0.0401	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Acenaphthylene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Anthracene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Benzo[a]anthracene	ND		0.0839	0.0376	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Benzo[a]pyrene	ND		0.0839	0.0338	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Benzo[b]fluoranthene	ND		0.0839	0.0351	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Benzo[g,h,i]perylene	ND		0.0839	0.0413	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Benzo[k]fluoranthene	ND		0.0839	0.0338	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Chrysene	ND		0.0839	0.0464	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Dibenz(a,h)anthracene	ND		0.0839	0.0401	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Fluoranthene	ND		0.0839	0.0426	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Fluorene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Indeno[1,2,3-cd]pyrene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Naphthalene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Phenanthrene	ND		0.0839	0.0426	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1
Pyrene	ND		0.0839	0.0426	mg/Kg	☼	09/17/18 14:06	09/21/18 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	62		29 - 120	09/17/18 14:06	09/21/18 15:13	1
Nitrobenzene-d5 (Surr)	63		27 - 120	09/17/18 14:06	09/21/18 15:13	1
Terphenyl-d14 (Surr)	67		13 - 120	09/17/18 14:06	09/21/18 15:13	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-8 7-9'

Lab Sample ID: 490-159244-20

Date Collected: 09/12/18 10:40

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 78.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.72		2.31	1.39	mg/Kg	☼	09/18/18 17:21	09/21/18 19:09	1
Barium	118		2.31	1.16	mg/Kg	☼	09/18/18 17:21	09/21/18 19:09	1
Cadmium	0.301	J	1.16	0.116	mg/Kg	☼	09/18/18 17:21	09/21/18 19:09	1
Chromium	10.4		1.16	1.04	mg/Kg	☼	09/18/18 17:21	09/21/18 19:09	1
Lead	ND		1.16	0.578	mg/Kg	☼	09/18/18 17:21	09/21/18 19:09	1
Selenium	ND		2.31	1.27	mg/Kg	☼	09/18/18 17:21	09/21/18 19:09	1
Silver	ND		1.16	0.463	mg/Kg	☼	09/18/18 17:21	09/21/18 19:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.123	0.0368	mg/Kg	☼	09/19/18 11:45	09/22/18 18:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.4		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	78.6		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-8 9-11'

Date Collected: 09/12/18 10:45

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-21

Matrix: Solid

Percent Solids: 79.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0152	J	0.0368	0.00617	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Benzene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Bromobenzene	ND		0.00147	0.000529	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Bromochloromethane	ND		0.00147	0.000404	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Bromodichloromethane	ND		0.00147	0.000404	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Bromoform	ND		0.00147	0.000404	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Bromomethane	ND		0.00147	0.000882	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
2-Butanone (MEK)	ND		0.0368	0.00375	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Carbon disulfide	ND		0.00368	0.00265	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Carbon tetrachloride	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Chlorobenzene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Chlorodibromomethane	ND		0.00147	0.000250	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Chloroethane	ND		0.00368	0.00140	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Chloroform	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Chloromethane	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
2-Chlorotoluene	ND		0.00147	0.000654	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
4-Chlorotoluene	ND		0.00147	0.000617	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
cis-1,2-Dichloroethene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
cis-1,3-Dichloropropene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,2-Dibromo-3-Chloropropane	ND		0.00368	0.000515	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,2-Dibromoethane (EDB)	ND		0.00147	0.000735	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Dibromomethane	ND		0.00147	0.000412	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,2-Dichlorobenzene	ND		0.00147	0.000250	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,3-Dichlorobenzene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,4-Dichlorobenzene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Dichlorodifluoromethane	ND		0.00147	0.000735	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,1-Dichloroethane	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,2-Dichloroethane	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,1-Dichloroethene	ND		0.00147	0.000419	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,2-Dichloropropane	ND		0.00147	0.000691	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,3-Dichloropropane	ND		0.00147	0.000691	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
2,2-Dichloropropane	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,1-Dichloropropene	ND		0.00147	0.000375	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Ethylbenzene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Hexachlorobutadiene	ND		0.00368	0.000838	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
2-Hexanone	ND		0.0368	0.0123	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Isopropylbenzene	ND		0.00147	0.000301	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Methylene Chloride	0.00364	J	0.00735	0.000632	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
4-Methyl-2-pentanone (MIBK)	ND		0.0368	0.00140	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Methyl tert-butyl ether	ND		0.00147	0.000706	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Naphthalene	ND		0.00368	0.00125	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
n-Butylbenzene	ND		0.00147	0.000720	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
N-Propylbenzene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
p-Isopropyltoluene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
sec-Butylbenzene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Styrene	ND		0.00147	0.000809	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
tert-Butylbenzene	ND		0.00147	0.000662	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,1,1,2-Tetrachloroethane	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,1,2,2-Tetrachloroethane	ND		0.00147	0.000735	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-8 9-11'

Lab Sample ID: 490-159244-21

Date Collected: 09/12/18 10:45

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 79.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00147	0.000537	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Toluene	0.00170		0.00147	0.000544	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
trans-1,2-Dichloroethene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
trans-1,3-Dichloropropene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,2,3-Trichlorobenzene	ND		0.00147	0.000279	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,2,4-Trichlorobenzene	ND		0.00147	0.000492	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,1,1-Trichloroethane	ND		0.00147	0.000676	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,1,2-Trichloroethane	ND		0.00368	0.00103	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Trichloroethene	ND		0.00147	0.000706	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Trichlorofluoromethane	ND		0.00147	0.000735	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,2,3-Trichloropropane	ND		0.00147	0.000404	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,2,4-Trimethylbenzene	ND		0.00147	0.000735	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
1,3,5-Trimethylbenzene	ND		0.00147	0.000551	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Vinyl chloride	ND		0.00147	0.000809	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
Xylenes, Total	ND		0.00441	0.000904	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1
GRO (C6-C10)	ND		0.294	0.147	mg/Kg	☼	09/12/18 10:45	09/23/18 08:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	09/12/18 10:45	09/23/18 08:05	1
Dibromofluoromethane (Surr)	96		70 - 130	09/12/18 10:45	09/23/18 08:05	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 130	09/12/18 10:45	09/23/18 08:05	1
Toluene-d8 (Surr)	101		70 - 130	09/12/18 10:45	09/23/18 08:05	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.9	7.39	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Oil Range Organics C21-C35	ND		20.9	7.39	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Acenaphthene	ND		0.0839	0.0401	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Acenaphthylene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Anthracene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Benzo[a]anthracene	ND		0.0839	0.0376	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Benzo[a]pyrene	ND		0.0839	0.0338	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Benzo[b]fluoranthene	ND		0.0839	0.0351	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Benzo[g,h,i]perylene	ND		0.0839	0.0413	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Benzo[k]fluoranthene	ND		0.0839	0.0338	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Chrysene	ND		0.0839	0.0463	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Dibenz(a,h)anthracene	ND		0.0839	0.0401	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Fluoranthene	ND		0.0839	0.0426	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Fluorene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Indeno[1,2,3-cd]pyrene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Naphthalene	ND		0.0839	0.0363	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Phenanthrene	ND		0.0839	0.0426	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1
Pyrene	ND		0.0839	0.0426	mg/Kg	☼	09/17/18 14:06	09/21/18 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	68		29 - 120	09/17/18 14:06	09/21/18 15:36	1
Nitrobenzene-d5 (Surr)	71		27 - 120	09/17/18 14:06	09/21/18 15:36	1
Terphenyl-d14 (Surr)	78		13 - 120	09/17/18 14:06	09/21/18 15:36	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-8 9-11'

Lab Sample ID: 490-159244-21

Date Collected: 09/12/18 10:45

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 79.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.93		2.25	1.35	mg/Kg	☼	09/18/18 17:21	09/21/18 19:14	1
Barium	76.6		2.25	1.13	mg/Kg	☼	09/18/18 17:21	09/21/18 19:14	1
Cadmium	ND		1.13	0.113	mg/Kg	☼	09/18/18 17:21	09/21/18 19:14	1
Chromium	10.3		1.13	1.01	mg/Kg	☼	09/18/18 17:21	09/21/18 19:14	1
Lead	ND		1.13	0.563	mg/Kg	☼	09/18/18 17:21	09/21/18 19:14	1
Selenium	ND		2.25	1.24	mg/Kg	☼	09/18/18 17:21	09/21/18 19:14	1
Silver	ND		1.13	0.450	mg/Kg	☼	09/18/18 17:21	09/21/18 19:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.122	0.0365	mg/Kg	☼	09/19/18 11:45	09/22/18 19:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.7		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	79.3		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-9 7-9'

Lab Sample ID: 490-159244-22

Date Collected: 09/12/18 11:50

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 81.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0100	J	0.0313	0.00525	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Benzene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Bromobenzene	ND		0.00125	0.000450	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Bromochloromethane	ND		0.00125	0.000344	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Bromodichloromethane	ND		0.00125	0.000344	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Bromoform	ND		0.00125	0.000344	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Bromomethane	ND		0.00125	0.000751	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
2-Butanone (MEK)	ND		0.0313	0.00319	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Carbon disulfide	ND		0.00313	0.00225	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Carbon tetrachloride	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Chlorobenzene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Chlorodibromomethane	ND		0.00125	0.000213	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Chloroethane	ND		0.00313	0.00119	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Chloroform	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Chloromethane	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
2-Chlorotoluene	ND		0.00125	0.000557	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
4-Chlorotoluene	ND		0.00125	0.000525	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
cis-1,2-Dichloroethene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
cis-1,3-Dichloropropene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,2-Dibromo-3-Chloropropane	ND		0.00313	0.000438	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,2-Dibromoethane (EDB)	ND		0.00125	0.000625	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Dibromomethane	ND		0.00125	0.000350	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,2-Dichlorobenzene	ND		0.00125	0.000213	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,3-Dichlorobenzene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,4-Dichlorobenzene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Dichlorodifluoromethane	ND		0.00125	0.000625	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,1-Dichloroethane	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,2-Dichloroethane	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,1-Dichloroethene	ND		0.00125	0.000357	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,2-Dichloropropane	ND		0.00125	0.000588	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,3-Dichloropropane	ND		0.00125	0.000588	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
2,2-Dichloropropane	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,1-Dichloropropene	ND		0.00125	0.000319	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Ethylbenzene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Hexachlorobutadiene	ND		0.00313	0.000713	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
2-Hexanone	ND		0.0313	0.0104	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Isopropylbenzene	ND		0.00125	0.000256	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Methylene Chloride	0.00370	J	0.00625	0.000538	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
4-Methyl-2-pentanone (MIBK)	ND		0.0313	0.00119	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Methyl tert-butyl ether	ND		0.00125	0.000600	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Naphthalene	ND		0.00313	0.00106	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
n-Butylbenzene	ND		0.00125	0.000613	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
N-Propylbenzene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
p-Isopropyltoluene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
sec-Butylbenzene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Styrene	ND		0.00125	0.000688	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
tert-Butylbenzene	ND		0.00125	0.000563	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,1,1,2-Tetrachloroethane	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,1,2,2-Tetrachloroethane	ND		0.00125	0.000625	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-9 7-9'

Lab Sample ID: 490-159244-22

Date Collected: 09/12/18 11:50

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 81.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00125	0.000457	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Toluene	0.00140		0.00125	0.000463	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
trans-1,2-Dichloroethene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
trans-1,3-Dichloropropene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,2,3-Trichlorobenzene	ND		0.00125	0.000238	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,2,4-Trichlorobenzene	ND		0.00125	0.000419	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,1,1-Trichloroethane	ND		0.00125	0.000575	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,1,2-Trichloroethane	ND		0.00313	0.000876	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Trichloroethene	ND		0.00125	0.000600	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Trichlorofluoromethane	ND		0.00125	0.000625	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,2,3-Trichloropropane	ND		0.00125	0.000344	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,2,4-Trimethylbenzene	ND		0.00125	0.000625	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
1,3,5-Trimethylbenzene	ND		0.00125	0.000469	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Vinyl chloride	ND		0.00125	0.000688	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
Xylenes, Total	ND		0.00375	0.000769	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1
GRO (C6-C10)	ND		0.250	0.125	mg/Kg	☼	09/12/18 11:50	09/23/18 08:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	09/12/18 11:50	09/23/18 08:34	1
Dibromofluoromethane (Surr)	96		70 - 130	09/12/18 11:50	09/23/18 08:34	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130	09/12/18 11:50	09/23/18 08:34	1
Toluene-d8 (Surr)	100		70 - 130	09/12/18 11:50	09/23/18 08:34	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.4	7.20	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Oil Range Organics C21-C35	ND		20.4	7.20	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Acenaphthene	ND		0.0818	0.0391	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Acenaphthylene	ND		0.0818	0.0354	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Anthracene	ND		0.0818	0.0354	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Benzo[a]anthracene	ND		0.0818	0.0366	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Benzo[a]pyrene	ND		0.0818	0.0330	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Benzo[b]fluoranthene	ND		0.0818	0.0342	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Benzo[g,h,i]perylene	ND		0.0818	0.0403	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Benzo[k]fluoranthene	ND		0.0818	0.0330	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Chrysene	ND		0.0818	0.0452	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Dibenz(a,h)anthracene	ND		0.0818	0.0391	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Fluoranthene	ND		0.0818	0.0415	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Fluorene	ND		0.0818	0.0354	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Indeno[1,2,3-cd]pyrene	ND		0.0818	0.0354	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Naphthalene	ND		0.0818	0.0354	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Phenanthrene	ND		0.0818	0.0415	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1
Pyrene	ND		0.0818	0.0415	mg/Kg	☼	09/17/18 14:06	09/22/18 12:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	72		29 - 120	09/17/18 14:06	09/22/18 12:16	1
Nitrobenzene-d5 (Surr)	71		27 - 120	09/17/18 14:06	09/22/18 12:16	1
Terphenyl-d14 (Surr)	79		13 - 120	09/17/18 14:06	09/22/18 12:16	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-9 7-9'

Lab Sample ID: 490-159244-22

Date Collected: 09/12/18 11:50

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 81.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.38		2.20	1.32	mg/Kg	☼	09/18/18 17:21	09/21/18 19:31	1
Barium	83.6		2.20	1.10	mg/Kg	☼	09/18/18 17:21	09/21/18 19:31	1
Cadmium	ND		1.10	0.110	mg/Kg	☼	09/18/18 17:21	09/21/18 19:31	1
Chromium	16.4		1.10	0.988	mg/Kg	☼	09/18/18 17:21	09/21/18 19:31	1
Lead	ND		1.10	0.549	mg/Kg	☼	09/18/18 17:21	09/21/18 19:31	1
Selenium	ND		2.20	1.21	mg/Kg	☼	09/18/18 17:21	09/21/18 19:31	1
Silver	ND		1.10	0.439	mg/Kg	☼	09/18/18 17:21	09/21/18 19:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.124	0.0371	mg/Kg	☼	09/19/18 11:45	09/22/18 19:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.7		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	81.3		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-9 10-12'

Lab Sample ID: 490-159244-23

Date Collected: 09/12/18 12:00

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00576	J	0.0259	0.00436	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Benzene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Bromobenzene	ND		0.00104	0.000374	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Bromochloromethane	ND		0.00104	0.000285	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Bromodichloromethane	ND		0.00104	0.000285	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Bromoform	ND		0.00104	0.000285	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Bromomethane	ND		0.00104	0.000623	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
2-Butanone (MEK)	ND		0.0259	0.00265	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Carbon disulfide	0.0124		0.00259	0.00187	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Carbon tetrachloride	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Chlorobenzene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Chlorodibromomethane	ND		0.00104	0.000176	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Chloroethane	ND		0.00259	0.000986	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Chloroform	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Chloromethane	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
2-Chlorotoluene	ND		0.00104	0.000462	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
4-Chlorotoluene	ND		0.00104	0.000436	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
cis-1,2-Dichloroethene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
cis-1,3-Dichloropropene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,2-Dibromo-3-Chloropropane	ND		0.00259	0.000363	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,2-Dibromoethane (EDB)	ND		0.00104	0.000519	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Dibromomethane	ND		0.00104	0.000291	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,2-Dichlorobenzene	ND		0.00104	0.000176	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,3-Dichlorobenzene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,4-Dichlorobenzene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Dichlorodifluoromethane	ND		0.00104	0.000519	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,1-Dichloroethane	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,2-Dichloroethane	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,1-Dichloroethene	ND		0.00104	0.000296	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,2-Dichloropropane	ND		0.00104	0.000488	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,3-Dichloropropane	ND		0.00104	0.000488	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
2,2-Dichloropropane	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,1-Dichloropropene	ND		0.00104	0.000265	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Ethylbenzene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Hexachlorobutadiene	ND		0.00259	0.000591	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
2-Hexanone	ND		0.0259	0.00866	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Isopropylbenzene	ND		0.00104	0.000213	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Methylene Chloride	0.00317	J	0.00519	0.000446	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
4-Methyl-2-pentanone (MIBK)	ND		0.0259	0.000986	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Methyl tert-butyl ether	ND		0.00104	0.000498	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Naphthalene	ND		0.00259	0.000882	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
n-Butylbenzene	ND		0.00104	0.000508	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
N-Propylbenzene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
p-Isopropyltoluene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
sec-Butylbenzene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Styrene	ND		0.00104	0.000571	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
tert-Butylbenzene	ND		0.00104	0.000467	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,1,1,2-Tetrachloroethane	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,1,2,2-Tetrachloroethane	ND		0.00104	0.000519	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-9 10-12'

Lab Sample ID: 490-159244-23

Date Collected: 09/12/18 12:00

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00104	0.000379	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Toluene	0.000543	J	0.00104	0.000384	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
trans-1,2-Dichloroethene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
trans-1,3-Dichloropropene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,2,3-Trichlorobenzene	ND		0.00104	0.000197	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,2,4-Trichlorobenzene	ND		0.00104	0.000348	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,1,1-Trichloroethane	ND		0.00104	0.000477	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,1,2-Trichloroethane	ND		0.00259	0.000726	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Trichloroethene	ND		0.00104	0.000498	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Trichlorofluoromethane	ND		0.00104	0.000519	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,2,3-Trichloropropane	ND		0.00104	0.000285	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,2,4-Trimethylbenzene	ND		0.00104	0.000519	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
1,3,5-Trimethylbenzene	ND		0.00104	0.000389	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Vinyl chloride	ND		0.00104	0.000571	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
Xylenes, Total	ND		0.00311	0.000638	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1
GRO (C6-C10)	ND		0.208	0.104	mg/Kg	☼	09/12/18 12:00	09/23/18 09:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	09/12/18 12:00	09/23/18 09:02	1
Dibromofluoromethane (Surr)	97		70 - 130	09/12/18 12:00	09/23/18 09:02	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130	09/12/18 12:00	09/23/18 09:02	1
Toluene-d8 (Surr)	101		70 - 130	09/12/18 12:00	09/23/18 09:02	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		20.8	7.35	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Oil Range Organics C21-C35	ND		20.8	7.35	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Acenaphthene	ND		0.0835	0.0399	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Acenaphthylene	ND		0.0835	0.0361	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Anthracene	ND		0.0835	0.0361	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Benzo[a]anthracene	ND		0.0835	0.0374	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Benzo[a]pyrene	ND		0.0835	0.0336	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Benzo[b]fluoranthene	ND		0.0835	0.0349	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Benzo[g,h,i]perylene	ND		0.0835	0.0411	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Benzo[k]fluoranthene	ND		0.0835	0.0336	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Chrysene	ND		0.0835	0.0461	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Dibenz(a,h)anthracene	ND		0.0835	0.0399	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Fluoranthene	ND		0.0835	0.0424	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Fluorene	ND		0.0835	0.0361	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Indeno[1,2,3-cd]pyrene	ND		0.0835	0.0361	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Naphthalene	ND		0.0835	0.0361	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Phenanthrene	ND		0.0835	0.0424	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1
Pyrene	ND		0.0835	0.0424	mg/Kg	☼	09/17/18 14:06	09/21/18 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	50		29 - 120	09/17/18 14:06	09/21/18 16:00	1
Nitrobenzene-d5 (Surr)	49		27 - 120	09/17/18 14:06	09/21/18 16:00	1
Terphenyl-d14 (Surr)	56		13 - 120	09/17/18 14:06	09/21/18 16:00	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-9 10-12'

Lab Sample ID: 490-159244-23

Date Collected: 09/12/18 12:00

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 79.9

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.5		2.36	1.42	mg/Kg	☼	09/18/18 17:21	09/21/18 19:36	1
Barium	153		2.36	1.18	mg/Kg	☼	09/18/18 17:21	09/21/18 19:36	1
Cadmium	0.283	J	1.18	0.118	mg/Kg	☼	09/18/18 17:21	09/21/18 19:36	1
Chromium	13.9		1.18	1.06	mg/Kg	☼	09/18/18 17:21	09/21/18 19:36	1
Lead	ND		1.18	0.590	mg/Kg	☼	09/18/18 17:21	09/21/18 19:36	1
Selenium	ND		2.36	1.30	mg/Kg	☼	09/18/18 17:21	09/21/18 19:36	1
Silver	ND		1.18	0.472	mg/Kg	☼	09/18/18 17:21	09/21/18 19:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.123	0.0369	mg/Kg	☼	09/19/18 11:45	09/22/18 19:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.1		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	79.9		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-1

Date Collected: 09/11/18 15:45

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-24

Matrix: Solid

Percent Solids: 73.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.345		0.0396	0.00665	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Benzene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Bromobenzene	ND		0.00158	0.000570	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Bromochloromethane	ND		0.00158	0.000436	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Bromodichloromethane	ND		0.00158	0.000436	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Bromoform	ND		0.00158	0.000436	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Bromomethane	ND		0.00158	0.000950	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
2-Butanone (MEK)	0.0230	J	0.0396	0.00404	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Carbon disulfide	ND		0.00396	0.00285	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Carbon tetrachloride	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Chlorobenzene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Chlorodibromomethane	ND		0.00158	0.000269	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Chloroethane	ND		0.00396	0.00150	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Chloroform	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Chloromethane	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
2-Chlorotoluene	ND		0.00158	0.000705	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
4-Chlorotoluene	ND		0.00158	0.000665	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
cis-1,2-Dichloroethene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
cis-1,3-Dichloropropene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,2-Dibromo-3-Chloropropane	ND		0.00396	0.000554	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,2-Dibromoethane (EDB)	ND		0.00158	0.000792	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Dibromomethane	ND		0.00158	0.000443	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,2-Dichlorobenzene	ND		0.00158	0.000269	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,3-Dichlorobenzene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,4-Dichlorobenzene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Dichlorodifluoromethane	ND		0.00158	0.000792	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,1-Dichloroethane	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,2-Dichloroethane	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,1-Dichloroethene	ND		0.00158	0.000451	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,2-Dichloropropane	ND		0.00158	0.000744	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,3-Dichloropropane	ND		0.00158	0.000744	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
2,2-Dichloropropane	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,1-Dichloropropene	ND		0.00158	0.000404	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Ethylbenzene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Hexachlorobutadiene	ND		0.00396	0.000903	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
2-Hexanone	ND		0.0396	0.0132	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Isopropylbenzene	ND		0.00158	0.000325	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Methylene Chloride	0.00164	J	0.00792	0.000681	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
4-Methyl-2-pentanone (MIBK)	ND		0.0396	0.00150	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Methyl tert-butyl ether	ND		0.00158	0.000760	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Naphthalene	ND		0.00396	0.00135	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
n-Butylbenzene	ND		0.00158	0.000776	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
N-Propylbenzene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
p-Isopropyltoluene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
sec-Butylbenzene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Styrene	ND		0.00158	0.000871	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
tert-Butylbenzene	ND		0.00158	0.000713	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,1,1,2-Tetrachloroethane	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,1,2,2-Tetrachloroethane	ND		0.00158	0.000792	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-1

Lab Sample ID: 490-159244-24

Date Collected: 09/11/18 15:45

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 73.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00158	0.000578	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Toluene	0.00133	J	0.00158	0.000586	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
trans-1,2-Dichloroethene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
trans-1,3-Dichloropropene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,2,3-Trichlorobenzene	ND		0.00158	0.000301	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,2,4-Trichlorobenzene	ND		0.00158	0.000531	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,1,1-Trichloroethane	ND		0.00158	0.000729	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,1,2-Trichloroethane	ND		0.00396	0.00111	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Trichloroethene	ND		0.00158	0.000760	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Trichlorofluoromethane	ND		0.00158	0.000792	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,2,3-Trichloropropane	ND		0.00158	0.000436	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,2,4-Trimethylbenzene	ND		0.00158	0.000792	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
1,3,5-Trimethylbenzene	ND		0.00158	0.000594	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Vinyl chloride	ND		0.00158	0.000871	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
Xylenes, Total	ND		0.00475	0.000974	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1
GRO (C6-C10)	0.234	J	0.317	0.158	mg/Kg	☼	09/11/18 15:45	09/23/18 09:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/11/18 15:45	09/23/18 09:30	1
Dibromofluoromethane (Surr)	97		70 - 130	09/11/18 15:45	09/23/18 09:30	1
1,2-Dichloroethane-d4 (Surr)	92		70 - 130	09/11/18 15:45	09/23/18 09:30	1
Toluene-d8 (Surr)	105		70 - 130	09/11/18 15:45	09/23/18 09:30	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	11.2	J	22.3	7.89	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Oil Range Organics C21-C35	13.2	J	22.3	7.89	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Acenaphthene	ND		0.0896	0.0428	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Acenaphthylene	ND		0.0896	0.0388	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Anthracene	ND		0.0896	0.0388	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Benzo[a]anthracene	ND		0.0896	0.0401	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Benzo[a]pyrene	0.0613	J	0.0896	0.0361	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Benzo[b]fluoranthene	0.0951		0.0896	0.0375	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Benzo[g,h,i]perylene	0.0527	J	0.0896	0.0441	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Benzo[k]fluoranthene	ND		0.0896	0.0361	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Chrysene	0.0838	J	0.0896	0.0495	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Dibenz(a,h)anthracene	ND		0.0896	0.0428	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Fluoranthene	0.102		0.0896	0.0455	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Fluorene	ND		0.0896	0.0388	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Indeno[1,2,3-cd]pyrene	0.0535	J	0.0896	0.0388	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Naphthalene	ND		0.0896	0.0388	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Phenanthrene	ND		0.0896	0.0455	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1
Pyrene	0.0948		0.0896	0.0455	mg/Kg	☼	09/17/18 14:06	09/21/18 16:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	57		29 - 120	09/17/18 14:06	09/21/18 16:22	1
Nitrobenzene-d5 (Surr)	56		27 - 120	09/17/18 14:06	09/21/18 16:22	1
Terphenyl-d14 (Surr)	61		13 - 120	09/17/18 14:06	09/21/18 16:22	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-1

Lab Sample ID: 490-159244-24

Date Collected: 09/11/18 15:45

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 73.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.91		2.34	1.40	mg/Kg	☼	09/18/18 17:21	09/21/18 19:41	1
Barium	97.9		2.34	1.17	mg/Kg	☼	09/18/18 17:21	09/21/18 19:41	1
Cadmium	0.421	J	1.17	0.117	mg/Kg	☼	09/18/18 17:21	09/21/18 19:41	1
Chromium	10.6		1.17	1.05	mg/Kg	☼	09/18/18 17:21	09/21/18 19:41	1
Lead	7.32		1.17	0.584	mg/Kg	☼	09/18/18 17:21	09/21/18 19:41	1
Selenium	ND		2.34	1.29	mg/Kg	☼	09/18/18 17:21	09/21/18 19:41	1
Silver	ND		1.17	0.468	mg/Kg	☼	09/18/18 17:21	09/21/18 19:41	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0434	J	0.131	0.0394	mg/Kg	☼	09/19/18 11:45	09/22/18 19:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26.2		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	73.8		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-2

Date Collected: 09/11/18 16:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-25

Matrix: Solid

Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0982		0.0467	0.00784	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Benzene	0.00246		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Bromobenzene	ND		0.00187	0.000672	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Bromochloromethane	ND		0.00187	0.000514	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Bromodichloromethane	ND		0.00187	0.000514	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Bromoform	ND		0.00187	0.000514	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Bromomethane	ND		0.00187	0.00112	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
2-Butanone (MEK)	0.00773	J	0.0467	0.00476	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Carbon disulfide	0.00623		0.00467	0.00336	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Carbon tetrachloride	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Chlorobenzene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Chlorodibromomethane	ND		0.00187	0.000318	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Chloroethane	ND		0.00467	0.00177	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Chloroform	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Chloromethane	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
2-Chlorotoluene	ND		0.00187	0.000831	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
4-Chlorotoluene	ND		0.00187	0.000784	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
cis-1,2-Dichloroethene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
cis-1,3-Dichloropropene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,2-Dibromo-3-Chloropropane	ND		0.00467	0.000654	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,2-Dibromoethane (EDB)	ND		0.00187	0.000934	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Dibromomethane	ND		0.00187	0.000523	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,2-Dichlorobenzene	ND		0.00187	0.000318	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,3-Dichlorobenzene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,4-Dichlorobenzene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Dichlorodifluoromethane	ND		0.00187	0.000934	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,1-Dichloroethane	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,2-Dichloroethane	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,1-Dichloroethene	ND		0.00187	0.000532	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,2-Dichloropropane	ND		0.00187	0.000878	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,3-Dichloropropane	ND		0.00187	0.000878	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
2,2-Dichloropropane	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,1-Dichloropropene	ND		0.00187	0.000476	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Ethylbenzene	0.00208		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Hexachlorobutadiene	ND		0.00467	0.00106	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
2-Hexanone	ND		0.0467	0.0156	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Isopropylbenzene	ND		0.00187	0.000383	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Methylene Chloride	0.00224	J	0.00934	0.000803	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
4-Methyl-2-pentanone (MIBK)	ND		0.0467	0.00177	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Methyl tert-butyl ether	ND		0.00187	0.000897	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Naphthalene	ND		0.00467	0.00159	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
n-Butylbenzene	ND		0.00187	0.000915	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
N-Propylbenzene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
p-Isopropyltoluene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
sec-Butylbenzene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Styrene	ND		0.00187	0.00103	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
tert-Butylbenzene	ND		0.00187	0.000840	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,1,1,2-Tetrachloroethane	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,1,2,2-Tetrachloroethane	ND		0.00187	0.000934	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-2

Lab Sample ID: 490-159244-25

Date Collected: 09/11/18 16:20

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00187	0.000682	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Toluene	0.00713		0.00187	0.000691	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
trans-1,2-Dichloroethene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
trans-1,3-Dichloropropene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,2,3-Trichlorobenzene	ND		0.00187	0.000355	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,2,4-Trichlorobenzene	ND		0.00187	0.000626	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,1,1-Trichloroethane	ND		0.00187	0.000859	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,1,2-Trichloroethane	ND		0.00467	0.00131	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Trichloroethene	ND		0.00187	0.000897	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Trichlorofluoromethane	ND		0.00187	0.000934	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,2,3-Trichloropropane	ND		0.00187	0.000514	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,2,4-Trimethylbenzene	0.00121	J	0.00187	0.000934	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
1,3,5-Trimethylbenzene	ND		0.00187	0.000700	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Vinyl chloride	ND		0.00187	0.00103	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
Xylenes, Total	0.00373	J	0.00560	0.00115	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1
GRO (C6-C10)	0.381		0.374	0.187	mg/Kg	☼	09/11/18 16:20	09/23/18 09:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/11/18 16:20	09/23/18 09:58	1
Dibromofluoromethane (Surr)	96		70 - 130	09/11/18 16:20	09/23/18 09:58	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 130	09/11/18 16:20	09/23/18 09:58	1
Toluene-d8 (Surr)	102		70 - 130	09/11/18 16:20	09/23/18 09:58	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		19.3	6.82	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Oil Range Organics C21-C35	12.3	J	19.3	6.82	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Acenaphthene	ND		0.0774	0.0370	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Acenaphthylene	ND		0.0774	0.0335	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Anthracene	ND		0.0774	0.0335	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Benzo[a]anthracene	ND		0.0774	0.0347	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Benzo[a]pyrene	ND		0.0774	0.0312	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Benzo[b]fluoranthene	ND		0.0774	0.0324	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Benzo[g,h,i]perylene	ND		0.0774	0.0381	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Benzo[k]fluoranthene	ND		0.0774	0.0312	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Chrysene	ND		0.0774	0.0428	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Dibenz(a,h)anthracene	ND		0.0774	0.0370	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Fluoranthene	ND		0.0774	0.0393	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Fluorene	ND		0.0774	0.0335	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Indeno[1,2,3-cd]pyrene	ND		0.0774	0.0335	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Naphthalene	ND		0.0774	0.0335	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Phenanthrene	ND		0.0774	0.0393	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1
Pyrene	ND		0.0774	0.0393	mg/Kg	☼	09/17/18 15:12	09/19/18 15:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	50		29 - 120	09/17/18 15:12	09/19/18 15:07	1
Nitrobenzene-d5 (Surr)	40		27 - 120	09/17/18 15:12	09/19/18 15:07	1
Terphenyl-d14 (Surr)	61		13 - 120	09/17/18 15:12	09/19/18 15:07	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-2

Lab Sample ID: 490-159244-25

Date Collected: 09/11/18 16:20

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 86.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.66		2.15	1.29	mg/Kg	☼	09/18/18 17:21	09/21/18 19:46	1
Barium	99.6		2.15	1.08	mg/Kg	☼	09/18/18 17:21	09/21/18 19:46	1
Cadmium	0.387	J	1.08	0.108	mg/Kg	☼	09/18/18 17:21	09/21/18 19:46	1
Chromium	9.87		1.08	0.968	mg/Kg	☼	09/18/18 17:21	09/21/18 19:46	1
Lead	19.3		1.08	0.538	mg/Kg	☼	09/18/18 17:21	09/21/18 19:46	1
Selenium	ND		2.15	1.18	mg/Kg	☼	09/18/18 17:21	09/21/18 19:46	1
Silver	ND		1.08	0.430	mg/Kg	☼	09/18/18 17:21	09/21/18 19:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.112	0.0337	mg/Kg	☼	09/19/18 15:24	09/22/18 16:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.9		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	86.1		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-2-FD

Date Collected: 09/11/18 16:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-26

Matrix: Solid

Percent Solids: 85.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.147		0.0356	0.00599	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Benzene	0.00143		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Bromobenzene	ND		0.00143	0.000513	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Bromochloromethane	ND		0.00143	0.000392	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Bromodichloromethane	ND		0.00143	0.000392	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Bromoform	ND		0.00143	0.000392	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Bromomethane	ND		0.00143	0.000856	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
2-Butanone (MEK)	0.0114	J	0.0356	0.00364	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Carbon disulfide	0.00335	J	0.00356	0.00257	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Carbon tetrachloride	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Chlorobenzene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Chlorodibromomethane	ND		0.00143	0.000242	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Chloroethane	ND		0.00356	0.00135	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Chloroform	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Chloromethane	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
2-Chlorotoluene	ND		0.00143	0.000635	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
4-Chlorotoluene	ND		0.00143	0.000599	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
cis-1,2-Dichloroethene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
cis-1,3-Dichloropropene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,2-Dibromo-3-Chloropropane	ND		0.00356	0.000499	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,2-Dibromoethane (EDB)	ND		0.00143	0.000713	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Dibromomethane	ND		0.00143	0.000399	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,2-Dichlorobenzene	ND		0.00143	0.000242	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,3-Dichlorobenzene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,4-Dichlorobenzene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Dichlorodifluoromethane	ND		0.00143	0.000713	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,1-Dichloroethane	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,2-Dichloroethane	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,1-Dichloroethene	ND		0.00143	0.000406	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,2-Dichloropropane	ND		0.00143	0.000670	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,3-Dichloropropane	ND		0.00143	0.000670	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
2,2-Dichloropropane	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,1-Dichloropropene	ND		0.00143	0.000364	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Ethylbenzene	0.00121	J	0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Hexachlorobutadiene	ND		0.00356	0.000813	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
2-Hexanone	ND		0.0356	0.0119	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Isopropylbenzene	ND		0.00143	0.000292	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Methylene Chloride	0.00135	J	0.00713	0.000613	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
4-Methyl-2-pentanone (MIBK)	ND		0.0356	0.00135	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Methyl tert-butyl ether	ND		0.00143	0.000684	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Naphthalene	ND		0.00356	0.00121	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
n-Butylbenzene	ND		0.00143	0.000699	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
N-Propylbenzene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
p-Isopropyltoluene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
sec-Butylbenzene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Styrene	ND		0.00143	0.000784	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
tert-Butylbenzene	ND		0.00143	0.000642	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,1,1,2-Tetrachloroethane	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,1,2,2-Tetrachloroethane	ND		0.00143	0.000713	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-2-FD

Lab Sample ID: 490-159244-26

Date Collected: 09/11/18 16:20

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 85.0

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00143	0.000520	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Toluene	0.00409		0.00143	0.000528	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
trans-1,2-Dichloroethene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
trans-1,3-Dichloropropene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,2,3-Trichlorobenzene	ND		0.00143	0.000271	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,2,4-Trichlorobenzene	ND		0.00143	0.000478	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,1,1-Trichloroethane	ND		0.00143	0.000656	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,1,2-Trichloroethane	ND		0.00356	0.000998	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Trichloroethene	ND		0.00143	0.000684	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Trichlorofluoromethane	ND		0.00143	0.000713	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,2,3-Trichloropropane	ND		0.00143	0.000392	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,2,4-Trimethylbenzene	ND		0.00143	0.000713	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
1,3,5-Trimethylbenzene	ND		0.00143	0.000535	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Vinyl chloride	ND		0.00143	0.000784	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
Xylenes, Total	0.00225	J	0.00428	0.000877	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1
GRO (C6-C10)	0.190	J	0.285	0.143	mg/Kg	☼	09/11/18 16:20	09/23/18 10:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/11/18 16:20	09/23/18 10:26	1
Dibromofluoromethane (Surr)	96		70 - 130	09/11/18 16:20	09/23/18 10:26	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 130	09/11/18 16:20	09/23/18 10:26	1
Toluene-d8 (Surr)	102		70 - 130	09/11/18 16:20	09/23/18 10:26	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		19.6	6.92	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Oil Range Organics C21-C35	21.0		19.6	6.92	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Acenaphthene	ND		0.0786	0.0375	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Acenaphthylene	ND		0.0786	0.0340	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Anthracene	ND		0.0786	0.0340	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Benzo[a]anthracene	ND		0.0786	0.0352	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Benzo[a]pyrene	ND		0.0786	0.0317	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Benzo[b]fluoranthene	ND		0.0786	0.0328	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Benzo[g,h,i]perylene	ND		0.0786	0.0387	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Benzo[k]fluoranthene	ND		0.0786	0.0317	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Chrysene	ND		0.0786	0.0434	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Dibenz(a,h)anthracene	ND		0.0786	0.0375	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Fluoranthene	ND		0.0786	0.0399	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Fluorene	ND		0.0786	0.0340	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Indeno[1,2,3-cd]pyrene	ND		0.0786	0.0340	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Naphthalene	ND		0.0786	0.0340	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Phenanthrene	ND		0.0786	0.0399	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1
Pyrene	ND		0.0786	0.0399	mg/Kg	☼	09/17/18 15:12	09/19/18 15:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	63		29 - 120	09/17/18 15:12	09/19/18 15:30	1
Nitrobenzene-d5 (Surr)	50		27 - 120	09/17/18 15:12	09/19/18 15:30	1
Terphenyl-d14 (Surr)	76		13 - 120	09/17/18 15:12	09/19/18 15:30	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-2-FD

Lab Sample ID: 490-159244-26

Date Collected: 09/11/18 16:20

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 85.0

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.2		2.06	1.24	mg/Kg	☼	09/18/18 17:21	09/21/18 19:51	1
Barium	107		2.06	1.03	mg/Kg	☼	09/18/18 17:21	09/21/18 19:51	1
Cadmium	0.330	J	1.03	0.103	mg/Kg	☼	09/18/18 17:21	09/21/18 19:51	1
Chromium	12.1		1.03	0.929	mg/Kg	☼	09/18/18 17:21	09/21/18 19:51	1
Lead	1.75		1.03	0.516	mg/Kg	☼	09/18/18 17:21	09/21/18 19:51	1
Selenium	ND		2.06	1.14	mg/Kg	☼	09/18/18 17:21	09/21/18 19:51	1
Silver	ND		1.03	0.413	mg/Kg	☼	09/18/18 17:21	09/21/18 19:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.116	0.0347	mg/Kg	☼	09/19/18 15:24	09/22/18 16:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.0		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	85.0		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-03
Date Collected: 09/12/18 13:40
Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-27
Matrix: Solid
Percent Solids: 84.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.147		0.0301	0.00505	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Benzene	0.00144		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Bromobenzene	ND		0.00120	0.000433	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Bromochloromethane	ND		0.00120	0.000331	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Bromodichloromethane	ND		0.00120	0.000331	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Bromoform	ND		0.00120	0.000331	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Bromomethane	ND		0.00120	0.000721	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
2-Butanone (MEK)	0.0131	J	0.0301	0.00307	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Carbon disulfide	0.0130		0.00301	0.00216	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Carbon tetrachloride	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Chlorobenzene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Chlorodibromomethane	ND		0.00120	0.000204	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Chloroethane	ND		0.00301	0.00114	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Chloroform	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Chloromethane	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
2-Chlorotoluene	ND		0.00120	0.000535	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
4-Chlorotoluene	ND		0.00120	0.000505	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
cis-1,2-Dichloroethene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
cis-1,3-Dichloropropene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,2-Dibromo-3-Chloropropane	ND		0.00301	0.000421	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,2-Dibromoethane (EDB)	ND		0.00120	0.000601	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Dibromomethane	ND		0.00120	0.000337	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,2-Dichlorobenzene	ND		0.00120	0.000204	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,3-Dichlorobenzene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,4-Dichlorobenzene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Dichlorodifluoromethane	ND		0.00120	0.000601	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,1-Dichloroethane	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,2-Dichloroethane	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,1-Dichloroethene	ND		0.00120	0.000343	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,2-Dichloropropane	ND		0.00120	0.000565	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,3-Dichloropropane	ND		0.00120	0.000565	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
2,2-Dichloropropane	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,1-Dichloropropene	ND		0.00120	0.000307	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Ethylbenzene	0.0614		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Hexachlorobutadiene	ND		0.00301	0.000685	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
2-Hexanone	ND		0.0301	0.0100	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Isopropylbenzene	0.00115	J	0.00120	0.000246	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Methylene Chloride	0.000764	J	0.00601	0.000517	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
4-Methyl-2-pentanone (MIBK)	ND		0.0301	0.00114	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Methyl tert-butyl ether	ND		0.00120	0.000577	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Naphthalene	ND		0.00301	0.00102	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
n-Butylbenzene	ND		0.00120	0.000589	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
N-Propylbenzene	0.000489	J	0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
p-Isopropyltoluene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
sec-Butylbenzene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Styrene	ND		0.00120	0.000661	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
tert-Butylbenzene	ND		0.00120	0.000541	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,1,1,2-Tetrachloroethane	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,1,2,2-Tetrachloroethane	ND		0.00120	0.000601	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-03

Date Collected: 09/12/18 13:40

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-27

Matrix: Solid

Percent Solids: 84.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00120	0.000439	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Toluene	0.00430		0.00120	0.000445	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
trans-1,2-Dichloroethene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
trans-1,3-Dichloropropene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,2,3-Trichlorobenzene	ND		0.00120	0.000228	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,2,4-Trichlorobenzene	ND		0.00120	0.000403	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,1,1-Trichloroethane	ND		0.00120	0.000553	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,1,2-Trichloroethane	ND		0.00301	0.000842	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Trichloroethene	ND		0.00120	0.000577	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Trichlorofluoromethane	ND		0.00120	0.000601	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,2,3-Trichloropropane	ND		0.00120	0.000331	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,2,4-Trimethylbenzene	0.000744	J	0.00120	0.000601	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
1,3,5-Trimethylbenzene	0.000455	J	0.00120	0.000451	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Vinyl chloride	ND		0.00120	0.000661	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1
Xylenes, Total	0.343		0.217	0.0449	mg/Kg	☼	09/12/18 13:40	09/26/18 12:35	1
GRO (C6-C10)	3.41		0.240	0.120	mg/Kg	☼	09/12/18 13:40	09/23/18 10:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/12/18 13:40	09/23/18 10:54	1
4-Bromofluorobenzene (Surr)	97		70 - 130	09/12/18 13:40	09/26/18 12:35	1
Dibromofluoromethane (Surr)	97		70 - 130	09/12/18 13:40	09/23/18 10:54	1
Dibromofluoromethane (Surr)	94		70 - 130	09/12/18 13:40	09/26/18 12:35	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 130	09/12/18 13:40	09/23/18 10:54	1
1,2-Dichloroethane-d4 (Surr)	110		70 - 130	09/12/18 13:40	09/26/18 12:35	1
Toluene-d8 (Surr)	111		70 - 130	09/12/18 13:40	09/23/18 10:54	1
Toluene-d8 (Surr)	98		70 - 130	09/12/18 13:40	09/26/18 12:35	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		19.5	6.89	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Oil Range Organics C21-C35	12.8	J	19.5	6.89	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Acenaphthene	ND		0.0782	0.0374	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Acenaphthylene	ND		0.0782	0.0339	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Anthracene	ND		0.0782	0.0339	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Benzo[a]anthracene	ND		0.0782	0.0350	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Benzo[a]pyrene	ND		0.0782	0.0315	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Benzo[b]fluoranthene	0.0573	J	0.0782	0.0327	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Benzo[g,h,i]perylene	ND		0.0782	0.0385	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Benzo[k]fluoranthene	ND		0.0782	0.0315	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Chrysene	ND		0.0782	0.0432	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Dibenz(a,h)anthracene	ND		0.0782	0.0374	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Fluoranthene	0.0561	J	0.0782	0.0397	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Fluorene	ND		0.0782	0.0339	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Indeno[1,2,3-cd]pyrene	ND		0.0782	0.0339	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Naphthalene	ND		0.0782	0.0339	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Phenanthrene	ND		0.0782	0.0397	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1
Pyrene	0.0486	J	0.0782	0.0397	mg/Kg	☼	09/17/18 15:12	09/19/18 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	52		29 - 120	09/17/18 15:12	09/19/18 15:52	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-03

Date Collected: 09/12/18 13:40

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-27

Matrix: Solid

Percent Solids: 84.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	42		27 - 120	09/17/18 15:12	09/19/18 15:52	1
Terphenyl-d14 (Surr)	66		13 - 120	09/17/18 15:12	09/19/18 15:52	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.98		2.00	1.20	mg/Kg	☼	09/18/18 17:21	09/21/18 19:56	1
Barium	202		2.00	1.00	mg/Kg	☼	09/18/18 17:21	09/21/18 19:56	1
Cadmium	0.440	J	1.00	0.100	mg/Kg	☼	09/18/18 17:21	09/21/18 19:56	1
Chromium	10.7		1.00	0.901	mg/Kg	☼	09/18/18 17:21	09/21/18 19:56	1
Lead	10.6		1.00	0.500	mg/Kg	☼	09/18/18 17:21	09/21/18 19:56	1
Selenium	ND		2.00	1.10	mg/Kg	☼	09/18/18 17:21	09/21/18 19:56	1
Silver	ND		1.00	0.400	mg/Kg	☼	09/18/18 17:21	09/21/18 19:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.116	0.0348	mg/Kg	☼	09/19/18 15:24	09/22/18 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.3		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	84.7		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-04
Date Collected: 09/12/18 14:00
Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-28
Matrix: Solid
Percent Solids: 78.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.272		0.0433	0.00727	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Benzene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Bromobenzene	ND		0.00173	0.000623	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Bromochloromethane	ND		0.00173	0.000476	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Bromodichloromethane	ND		0.00173	0.000476	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Bromoform	ND		0.00173	0.000476	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Bromomethane	ND		0.00173	0.00104	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
2-Butanone (MEK)	0.0183	J	0.0433	0.00441	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Carbon disulfide	ND		0.00433	0.00312	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Carbon tetrachloride	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Chlorobenzene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Chlorodibromomethane	ND		0.00173	0.000294	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Chloroethane	ND		0.00433	0.00164	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Chloroform	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Chloromethane	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
2-Chlorotoluene	ND		0.00173	0.000770	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
4-Chlorotoluene	ND		0.00173	0.000727	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
cis-1,2-Dichloroethene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
cis-1,3-Dichloropropene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,2-Dibromo-3-Chloropropane	ND		0.00433	0.000606	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,2-Dibromoethane (EDB)	ND		0.00173	0.000866	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Dibromomethane	ND		0.00173	0.000485	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,2-Dichlorobenzene	ND		0.00173	0.000294	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,3-Dichlorobenzene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,4-Dichlorobenzene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Dichlorodifluoromethane	ND		0.00173	0.000866	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,1-Dichloroethane	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,2-Dichloroethane	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,1-Dichloroethene	ND		0.00173	0.000493	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,2-Dichloropropane	ND		0.00173	0.000814	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,3-Dichloropropane	ND		0.00173	0.000814	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
2,2-Dichloropropane	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,1-Dichloropropene	ND		0.00173	0.000441	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Ethylbenzene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Hexachlorobutadiene	ND		0.00433	0.000987	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
2-Hexanone	ND		0.0433	0.0145	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Isopropylbenzene	ND		0.00173	0.000355	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Methylene Chloride	0.00114	J	0.00866	0.000744	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
4-Methyl-2-pentanone (MIBK)	ND		0.0433	0.00164	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Methyl tert-butyl ether	ND		0.00173	0.000831	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Naphthalene	ND		0.00433	0.00147	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
n-Butylbenzene	ND		0.00173	0.000848	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
N-Propylbenzene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
p-Isopropyltoluene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
sec-Butylbenzene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Styrene	ND		0.00173	0.000952	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
tert-Butylbenzene	ND		0.00173	0.000779	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,1,1,2-Tetrachloroethane	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,1,2,2-Tetrachloroethane	ND		0.00173	0.000866	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-04

Date Collected: 09/12/18 14:00

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-28

Matrix: Solid

Percent Solids: 78.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00173	0.000632	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Toluene	0.00110	J	0.00173	0.000641	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
trans-1,2-Dichloroethene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
trans-1,3-Dichloropropene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,2,3-Trichlorobenzene	ND		0.00173	0.000329	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,2,4-Trichlorobenzene	ND		0.00173	0.000580	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,1,1-Trichloroethane	ND		0.00173	0.000796	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,1,2-Trichloroethane	ND		0.00433	0.00121	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Trichloroethene	ND		0.00173	0.000831	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Trichlorofluoromethane	ND		0.00173	0.000866	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,2,3-Trichloropropane	ND		0.00173	0.000476	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,2,4-Trimethylbenzene	ND		0.00173	0.000866	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
1,3,5-Trimethylbenzene	ND		0.00173	0.000649	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Vinyl chloride	ND		0.00173	0.000952	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
Xylenes, Total	0.00404	J	0.00519	0.00106	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1
GRO (C6-C10)	ND		0.346	0.173	mg/Kg	☼	09/12/18 14:00	09/24/18 20:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	09/12/18 14:00	09/24/18 20:29	1
Dibromofluoromethane (Surr)	101		70 - 130	09/12/18 14:00	09/24/18 20:29	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	09/12/18 14:00	09/24/18 20:29	1
Toluene-d8 (Surr)	111		70 - 130	09/12/18 14:00	09/24/18 20:29	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	10.4	J	21.1	7.45	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Oil Range Organics C21-C35	32.6		21.1	7.45	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Acenaphthene	ND		0.0847	0.0404	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Acenaphthylene	ND		0.0847	0.0366	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Anthracene	ND		0.0847	0.0366	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Benzo[a]anthracene	0.405		0.0847	0.0379	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Benzo[a]pyrene	0.583		0.0847	0.0341	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Benzo[b]fluoranthene	0.996		0.0847	0.0354	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Benzo[g,h,i]perylene	0.515		0.0847	0.0417	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Benzo[k]fluoranthene	0.336		0.0847	0.0341	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Chrysene	0.628		0.0847	0.0467	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Dibenz(a,h)anthracene	0.123		0.0847	0.0404	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Fluoranthene	0.891		0.0847	0.0430	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Fluorene	ND		0.0847	0.0366	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Indeno[1,2,3-cd]pyrene	0.564		0.0847	0.0366	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Naphthalene	ND		0.0847	0.0366	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Phenanthrene	0.255		0.0847	0.0430	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1
Pyrene	0.778		0.0847	0.0430	mg/Kg	☼	09/17/18 15:12	09/19/18 16:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	53		29 - 120	09/17/18 15:12	09/19/18 16:15	1
Nitrobenzene-d5 (Surr)	43		27 - 120	09/17/18 15:12	09/19/18 16:15	1
Terphenyl-d14 (Surr)	65		13 - 120	09/17/18 15:12	09/19/18 16:15	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-04

Date Collected: 09/12/18 14:00

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-28

Matrix: Solid

Percent Solids: 78.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.38		2.14	1.28	mg/Kg	☼	09/18/18 17:21	09/21/18 20:01	1
Barium	143		2.14	1.07	mg/Kg	☼	09/18/18 17:21	09/21/18 20:01	1
Cadmium	0.363	J	1.07	0.107	mg/Kg	☼	09/18/18 17:21	09/21/18 20:01	1
Chromium	11.6		1.07	0.961	mg/Kg	☼	09/18/18 17:21	09/21/18 20:01	1
Lead	8.97		1.07	0.534	mg/Kg	☼	09/18/18 17:21	09/21/18 20:01	1
Selenium	ND		2.14	1.17	mg/Kg	☼	09/18/18 17:21	09/21/18 20:01	1
Silver	ND		1.07	0.427	mg/Kg	☼	09/18/18 17:21	09/21/18 20:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0580	J	0.128	0.0384	mg/Kg	☼	09/19/18 15:24	09/22/18 16:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.9		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	78.1		0.1	0.1	%	—		09/17/18 13:47	1

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-05
Date Collected: 09/12/18 14:15
Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-29
Matrix: Solid
Percent Solids: 78.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.235		0.0292	0.00491	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Benzene	0.000699	J	0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Bromobenzene	ND		0.00117	0.000420	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Bromochloromethane	ND		0.00117	0.000321	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Bromodichloromethane	ND		0.00117	0.000321	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Bromoform	ND		0.00117	0.000321	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Bromomethane	ND		0.00117	0.000701	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
2-Butanone (MEK)	0.0197	J	0.0292	0.00298	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Carbon disulfide	0.00361		0.00292	0.00210	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Carbon tetrachloride	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Chlorobenzene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Chlorodibromomethane	ND		0.00117	0.000199	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Chloroethane	ND		0.00292	0.00111	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Chloroform	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Chloromethane	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
2-Chlorotoluene	ND		0.00117	0.000520	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
4-Chlorotoluene	ND		0.00117	0.000491	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
cis-1,2-Dichloroethene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
cis-1,3-Dichloropropene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,2-Dibromo-3-Chloropropane	ND		0.00292	0.000409	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,2-Dibromoethane (EDB)	ND		0.00117	0.000584	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Dibromomethane	ND		0.00117	0.000327	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,2-Dichlorobenzene	ND		0.00117	0.000199	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,3-Dichlorobenzene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,4-Dichlorobenzene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Dichlorodifluoromethane	ND		0.00117	0.000584	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,1-Dichloroethane	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,2-Dichloroethane	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,1-Dichloroethene	ND		0.00117	0.000333	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,2-Dichloropropane	ND		0.00117	0.000549	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,3-Dichloropropane	ND		0.00117	0.000549	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
2,2-Dichloropropane	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,1-Dichloropropene	ND		0.00117	0.000298	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Ethylbenzene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Hexachlorobutadiene	ND		0.00292	0.000666	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
2-Hexanone	ND		0.0292	0.00975	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Isopropylbenzene	ND		0.00117	0.000239	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Methylene Chloride	ND		0.00584	0.000502	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
4-Methyl-2-pentanone (MIBK)	ND		0.0292	0.00111	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Methyl tert-butyl ether	ND		0.00117	0.000561	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Naphthalene	ND		0.00292	0.000993	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
n-Butylbenzene	ND		0.00117	0.000572	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
N-Propylbenzene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
p-Isopropyltoluene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
sec-Butylbenzene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Styrene	ND		0.00117	0.000642	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
tert-Butylbenzene	ND		0.00117	0.000526	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,1,1,2-Tetrachloroethane	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,1,2,2-Tetrachloroethane	ND		0.00117	0.000584	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-05

Date Collected: 09/12/18 14:15

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-29

Matrix: Solid

Percent Solids: 78.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.00117	0.000426	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Toluene	0.00168		0.00117	0.000432	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
trans-1,2-Dichloroethene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
trans-1,3-Dichloropropene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,2,3-Trichlorobenzene	ND		0.00117	0.000222	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,2,4-Trichlorobenzene	ND		0.00117	0.000391	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,1,1-Trichloroethane	ND		0.00117	0.000537	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,1,2-Trichloroethane	ND		0.00292	0.000818	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Trichloroethene	ND		0.00117	0.000561	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Trichlorofluoromethane	ND		0.00117	0.000584	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,2,3-Trichloropropane	ND		0.00117	0.000321	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,2,4-Trimethylbenzene	ND		0.00117	0.000584	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
1,3,5-Trimethylbenzene	ND		0.00117	0.000438	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Vinyl chloride	ND		0.00117	0.000642	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
Xylenes, Total	ND		0.00350	0.000718	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1
GRO (C6-C10)	ND		0.234	0.117	mg/Kg	☼	09/12/18 14:15	09/24/18 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	09/12/18 14:15	09/24/18 20:59	1
Dibromofluoromethane (Surr)	97		70 - 130	09/12/18 14:15	09/24/18 20:59	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	09/12/18 14:15	09/24/18 20:59	1
Toluene-d8 (Surr)	112		70 - 130	09/12/18 14:15	09/24/18 20:59	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	10.7	J	21.0	7.42	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Oil Range Organics C21-C35	30.8		21.0	7.42	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Acenaphthene	ND		0.0842	0.0402	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Acenaphthylene	ND		0.0842	0.0365	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Anthracene	ND		0.0842	0.0365	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Benzo[a]anthracene	0.521		0.0842	0.0377	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Benzo[a]pyrene	0.738		0.0842	0.0339	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Benzo[b]fluoranthene	1.22		0.0842	0.0352	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Benzo[g,h,i]perylene	0.652		0.0842	0.0415	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Benzo[k]fluoranthene	0.420		0.0842	0.0339	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Chrysene	0.770		0.0842	0.0465	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Dibenz(a,h)anthracene	0.171		0.0842	0.0402	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Fluoranthene	1.13		0.0842	0.0427	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Fluorene	ND		0.0842	0.0365	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Indeno[1,2,3-cd]pyrene	0.701		0.0842	0.0365	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Naphthalene	ND		0.0842	0.0365	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Phenanthrene	0.298		0.0842	0.0427	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1
Pyrene	1.02		0.0842	0.0427	mg/Kg	☼	09/17/18 15:12	09/19/18 17:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	44		29 - 120	09/17/18 15:12	09/19/18 17:22	1
Nitrobenzene-d5 (Surr)	34		27 - 120	09/17/18 15:12	09/19/18 17:22	1
Terphenyl-d14 (Surr)	55		13 - 120	09/17/18 15:12	09/19/18 17:22	1

TestAmerica Nashville

Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-05

Date Collected: 09/12/18 14:15

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-29

Matrix: Solid

Percent Solids: 78.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.27	1.36	mg/Kg	☼	09/18/18 17:21	09/21/18 20:06	1
Barium	7.18		2.27	1.13	mg/Kg	☼	09/18/18 17:21	09/21/18 20:06	1
Cadmium	ND		1.13	0.113	mg/Kg	☼	09/18/18 17:21	09/21/18 20:06	1
Chromium	4.87		1.13	1.02	mg/Kg	☼	09/18/18 17:21	09/21/18 20:06	1
Lead	2.08		1.13	0.566	mg/Kg	☼	09/18/18 17:21	09/21/18 20:06	1
Selenium	ND		2.27	1.25	mg/Kg	☼	09/18/18 17:21	09/21/18 20:06	1
Silver	ND		1.13	0.453	mg/Kg	☼	09/18/18 17:21	09/21/18 20:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0443	J	0.127	0.0380	mg/Kg	☼	09/19/18 15:24	09/22/18 16:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21.2		0.1	0.1	%	—		09/17/18 13:47	1
Percent Solids	78.8		0.1	0.1	%	—		09/17/18 13:47	1

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-543507/10

Matrix: Water

Analysis Batch: 543507

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.634	J	25.0	2.66	ug/L			09/18/18 14:55	1
Benzene	ND		1.00	0.200	ug/L			09/18/18 14:55	1
Bromobenzene	ND		1.00	0.210	ug/L			09/18/18 14:55	1
Bromochloromethane	ND		1.00	0.150	ug/L			09/18/18 14:55	1
Bromodichloromethane	ND		1.00	0.170	ug/L			09/18/18 14:55	1
Bromoform	ND		1.00	0.290	ug/L			09/18/18 14:55	1
Bromomethane	ND		1.00	0.350	ug/L			09/18/18 14:55	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/18 14:55	1
Carbon disulfide	ND		1.00	0.220	ug/L			09/18/18 14:55	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			09/18/18 14:55	1
Chlorobenzene	ND		1.00	0.180	ug/L			09/18/18 14:55	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			09/18/18 14:55	1
Chloroethane	ND		1.00	0.360	ug/L			09/18/18 14:55	1
Chloroform	ND		1.00	0.230	ug/L			09/18/18 14:55	1
Chloromethane	ND		1.00	0.360	ug/L			09/18/18 14:55	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			09/18/18 14:55	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			09/18/18 14:55	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			09/18/18 14:55	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			09/18/18 14:55	1
Dibromomethane	ND		1.00	0.450	ug/L			09/18/18 14:55	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			09/18/18 14:55	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			09/18/18 14:55	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			09/18/18 14:55	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			09/18/18 14:55	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			09/18/18 14:55	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			09/18/18 14:55	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			09/18/18 14:55	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			09/18/18 14:55	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			09/18/18 14:55	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			09/18/18 14:55	1
Ethylbenzene	ND		1.00	0.190	ug/L			09/18/18 14:55	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			09/18/18 14:55	1
2-Hexanone	ND		10.0	1.28	ug/L			09/18/18 14:55	1
Isopropylbenzene	ND		1.00	0.330	ug/L			09/18/18 14:55	1
Methylene Chloride	ND		5.00	1.00	ug/L			09/18/18 14:55	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			09/18/18 14:55	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			09/18/18 14:55	1
Naphthalene	ND		5.00	0.210	ug/L			09/18/18 14:55	1
n-Butylbenzene	ND		1.00	0.240	ug/L			09/18/18 14:55	1
N-Propylbenzene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
Styrene	ND		1.00	0.280	ug/L			09/18/18 14:55	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			09/18/18 14:55	1

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-543507/10

Matrix: Water

Analysis Batch: 543507

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			09/18/18 14:55	1
Tetrachloroethene	ND		1.00	0.140	ug/L			09/18/18 14:55	1
Toluene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			09/18/18 14:55	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			09/18/18 14:55	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			09/18/18 14:55	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 14:55	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			09/18/18 14:55	1
Trichloroethene	ND		1.00	0.200	ug/L			09/18/18 14:55	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			09/18/18 14:55	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			09/18/18 14:55	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			09/18/18 14:55	1
Vinyl chloride	ND		1.00	0.180	ug/L			09/18/18 14:55	1
Xylenes, Total	ND		3.00	0.580	ug/L			09/18/18 14:55	1
GRO (C6-C10)	ND		400	200	ug/L			09/18/18 14:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130		09/18/18 14:55	1
Dibromofluoromethane (Surr)	112		70 - 130		09/18/18 14:55	1
1,2-Dichloroethane-d4 (Surr)	115		70 - 130		09/18/18 14:55	1
Toluene-d8 (Surr)	99		70 - 130		09/18/18 14:55	1

Lab Sample ID: LCS 490-543507/4

Matrix: Water

Analysis Batch: 543507

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	87.60		ug/L		88	39 - 150
Benzene	20.0	20.86		ug/L		104	70 - 130
Bromobenzene	20.0	19.97		ug/L		100	70 - 130
Bromochloromethane	20.0	22.87		ug/L		114	70 - 130
Bromodichloromethane	20.0	23.13		ug/L		116	70 - 130
Bromoform	20.0	25.12		ug/L		126	70 - 137
Bromomethane	20.0	18.54		ug/L		93	53 - 150
2-Butanone (MEK)	100	100.6		ug/L		101	55 - 143
Carbon disulfide	20.0	19.38		ug/L		97	64 - 135
Carbon tetrachloride	20.0	23.77		ug/L		119	70 - 147
Chlorobenzene	20.0	20.85		ug/L		104	70 - 130
Chlorodibromomethane	20.0	23.17		ug/L		116	70 - 133
Chloroethane	20.0	19.52		ug/L		98	60 - 138
Chloroform	20.0	21.04		ug/L		105	70 - 130
Chloromethane	20.0	20.09		ug/L		100	33 - 150
2-Chlorotoluene	20.0	20.12		ug/L		101	70 - 130
4-Chlorotoluene	20.0	19.99		ug/L		100	70 - 130
cis-1,2-Dichloroethene	20.0	19.37		ug/L		97	70 - 130
cis-1,3-Dichloropropene	20.0	20.73		ug/L		104	70 - 133

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-543507/4

Matrix: Water

Analysis Batch: 543507

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	20.0	25.11		ug/L		126	45 - 138
1,2-Dibromoethane (EDB)	20.0	22.17		ug/L		111	70 - 130
Dibromomethane	20.0	23.43		ug/L		117	70 - 130
1,2-Dichlorobenzene	20.0	21.11		ug/L		106	70 - 130
1,3-Dichlorobenzene	20.0	20.91		ug/L		105	70 - 130
1,4-Dichlorobenzene	20.0	20.68		ug/L		103	70 - 130
Dichlorodifluoromethane	20.0	24.25		ug/L		121	48 - 150
1,1-Dichloroethane	20.0	19.05		ug/L		95	70 - 130
1,2-Dichloroethane	20.0	22.34		ug/L		112	70 - 130
1,1-Dichloroethene	20.0	19.65		ug/L		98	70 - 132
1,2-Dichloropropane	20.0	20.31		ug/L		102	70 - 130
1,3-Dichloropropane	20.0	20.10		ug/L		100	70 - 130
2,2-Dichloropropane	20.0	21.48		ug/L		107	60 - 143
1,1-Dichloropropene	20.0	21.24		ug/L		106	70 - 130
Ethylbenzene	20.0	21.30		ug/L		106	70 - 130
Hexachlorobutadiene	20.0	21.00		ug/L		105	70 - 138
2-Hexanone	100	102.8		ug/L		103	54 - 142
Isopropylbenzene	20.0	22.10		ug/L		111	70 - 131
Methylene Chloride	20.0	20.71		ug/L		104	70 - 130
4-Methyl-2-pentanone (MIBK)	100	102.4		ug/L		102	60 - 137
Methyl tert-butyl ether	20.0	21.36		ug/L		107	70 - 130
Naphthalene	20.0	22.64		ug/L		113	54 - 150
n-Butylbenzene	20.0	21.16		ug/L		106	68 - 137
N-Propylbenzene	20.0	20.77		ug/L		104	70 - 134
p-Isopropyltoluene	20.0	21.64		ug/L		108	66 - 130
sec-Butylbenzene	20.0	20.91		ug/L		105	70 - 135
Styrene	20.0	21.47		ug/L		107	70 - 130
tert-Butylbenzene	20.0	20.98		ug/L		105	70 - 130
1,1,1,2-Tetrachloroethane	20.0	22.23		ug/L		111	70 - 130
1,1,2,2-Tetrachloroethane	20.0	20.66		ug/L		103	69 - 131
Tetrachloroethene	20.0	21.45		ug/L		107	70 - 130
Toluene	20.0	20.65		ug/L		103	70 - 130
trans-1,2-Dichloroethene	20.0	19.95		ug/L		100	70 - 130
trans-1,3-Dichloropropene	20.0	21.62		ug/L		108	63 - 142
1,2,3-Trichlorobenzene	20.0	22.55		ug/L		113	46 - 150
1,2,4-Trichlorobenzene	20.0	21.61		ug/L		108	58 - 147
1,1,1-Trichloroethane	20.0	22.42		ug/L		112	70 - 135
1,1,2-Trichloroethane	20.0	21.38		ug/L		107	70 - 130
Trichloroethene	20.0	22.07		ug/L		110	70 - 130
Trichlorofluoromethane	20.0	23.36		ug/L		117	59 - 150
1,2,3-Trichloropropane	20.0	23.06		ug/L		115	70 - 131
1,2,4-Trimethylbenzene	20.0	20.91		ug/L		105	70 - 130
1,3,5-Trimethylbenzene	20.0	20.01		ug/L		100	70 - 130
Vinyl chloride	20.0	20.56		ug/L		103	57 - 137
Xylenes, Total	40.0	43.15		ug/L		108	70 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-543507/4

Matrix: Water

Analysis Batch: 543507

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	105		70 - 130
1,2-Dichloroethane-d4 (Surr)	110		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCS 490-543507/8

Matrix: Water

Analysis Batch: 543507

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C6-C10)	2000	2232		ug/L		112	66 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130
1,2-Dichloroethane-d4 (Surr)	114		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: LCSD 490-543507/5

Matrix: Water

Analysis Batch: 543507

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	86.78		ug/L		87	39 - 150	1	23
Benzene	20.0	19.93		ug/L		100	70 - 130	5	12
Bromobenzene	20.0	19.01		ug/L		95	70 - 130	5	16
Bromochloromethane	20.0	23.23		ug/L		116	70 - 130	2	16
Bromodichloromethane	20.0	22.14		ug/L		111	70 - 130	4	14
Bromoform	20.0	24.85		ug/L		124	70 - 137	1	14
Bromomethane	20.0	16.30		ug/L		82	53 - 150	13	19
2-Butanone (MEK)	100	100.7		ug/L		101	55 - 143	0	19
Carbon disulfide	20.0	18.91		ug/L		95	64 - 135	2	16
Carbon tetrachloride	20.0	23.52		ug/L		118	70 - 147	1	16
Chlorobenzene	20.0	20.40		ug/L		102	70 - 130	2	12
Chlorodibromomethane	20.0	23.33		ug/L		117	70 - 133	1	13
Chloroethane	20.0	18.87		ug/L		94	60 - 138	3	15
Chloroform	20.0	20.88		ug/L		104	70 - 130	1	14
Chloromethane	20.0	19.43		ug/L		97	33 - 150	3	20
2-Chlorotoluene	20.0	19.15		ug/L		96	70 - 130	5	15
4-Chlorotoluene	20.0	19.20		ug/L		96	70 - 130	4	15
cis-1,2-Dichloroethene	20.0	19.49		ug/L		97	70 - 130	1	15
cis-1,3-Dichloropropene	20.0	20.24		ug/L		101	70 - 133	2	15
1,2-Dibromo-3-Chloropropane	20.0	23.92		ug/L		120	45 - 138	5	19
1,2-Dibromoethane (EDB)	20.0	22.07		ug/L		110	70 - 130	0	13
Dibromomethane	20.0	22.38		ug/L		112	70 - 130	5	14
1,2-Dichlorobenzene	20.0	20.18		ug/L		101	70 - 130	5	12
1,3-Dichlorobenzene	20.0	20.04		ug/L		100	70 - 130	4	13
1,4-Dichlorobenzene	20.0	20.32		ug/L		102	70 - 130	2	12
Dichlorodifluoromethane	20.0	22.87		ug/L		114	48 - 150	6	16

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-543507/5

Matrix: Water

Analysis Batch: 543507

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	20.0	18.07		ug/L		90	70 - 130	5	17
1,2-Dichloroethane	20.0	22.15		ug/L		111	70 - 130	1	13
1,1-Dichloroethene	20.0	18.55		ug/L		93	70 - 132	6	20
1,2-Dichloropropane	20.0	19.69		ug/L		98	70 - 130	3	15
1,3-Dichloropropane	20.0	19.90		ug/L		99	70 - 130	1	12
2,2-Dichloropropane	20.0	21.01		ug/L		105	60 - 143	2	20
1,1-Dichloropropene	20.0	20.36		ug/L		102	70 - 130	4	16
Ethylbenzene	20.0	20.66		ug/L		103	70 - 130	3	12
Hexachlorobutadiene	20.0	20.25		ug/L		101	70 - 138	4	16
2-Hexanone	100	102.3		ug/L		102	54 - 142	0	17
Isopropylbenzene	20.0	21.49		ug/L		107	70 - 131	3	13
Methylene Chloride	20.0	20.67		ug/L		103	70 - 130	0	15
4-Methyl-2-pentanone (MIBK)	100	102.8		ug/L		103	60 - 137	0	21
Methyl tert-butyl ether	20.0	20.62		ug/L		103	70 - 130	4	16
Naphthalene	20.0	21.59		ug/L		108	54 - 150	5	15
n-Butylbenzene	20.0	20.64		ug/L		103	68 - 137	2	14
N-Propylbenzene	20.0	19.74		ug/L		99	70 - 134	5	14
p-Isopropyltoluene	20.0	20.26		ug/L		101	66 - 130	7	13
sec-Butylbenzene	20.0	19.98		ug/L		100	70 - 135	5	14
Styrene	20.0	21.09		ug/L		105	70 - 130	2	12
tert-Butylbenzene	20.0	19.98		ug/L		100	70 - 130	5	14
1,1,1,2-Tetrachloroethane	20.0	21.94		ug/L		110	70 - 130	1	13
1,1,2,2-Tetrachloroethane	20.0	20.11		ug/L		101	69 - 131	3	15
Tetrachloroethene	20.0	21.24		ug/L		106	70 - 130	1	17
Toluene	20.0	20.21		ug/L		101	70 - 130	2	13
trans-1,2-Dichloroethene	20.0	18.94		ug/L		95	70 - 130	5	15
trans-1,3-Dichloropropene	20.0	21.17		ug/L		106	63 - 142	2	13
1,2,3-Trichlorobenzene	20.0	21.54		ug/L		108	46 - 150	5	16
1,2,4-Trichlorobenzene	20.0	20.53		ug/L		103	58 - 147	5	15
1,1,1-Trichloroethane	20.0	21.69		ug/L		108	70 - 135	3	15
1,1,2-Trichloroethane	20.0	20.91		ug/L		105	70 - 130	2	13
Trichloroethene	20.0	21.50		ug/L		108	70 - 130	3	14
Trichlorofluoromethane	20.0	21.64		ug/L		108	59 - 150	8	22
1,2,3-Trichloropropane	20.0	22.12		ug/L		111	70 - 131	4	14
1,2,4-Trimethylbenzene	20.0	19.71		ug/L		99	70 - 130	6	13
1,3,5-Trimethylbenzene	20.0	19.38		ug/L		97	70 - 130	3	14
Vinyl chloride	20.0	19.46		ug/L		97	57 - 137	5	15
Xylenes, Total	40.0	42.28		ug/L		106	70 - 132	2	11

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
Dibromofluoromethane (Surr)	108		70 - 130
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
Toluene-d8 (Surr)	101		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-544809/11

Matrix: Solid

Analysis Batch: 544809

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0500	0.00840	mg/Kg			09/23/18 04:49	1
Benzene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
Bromobenzene	ND		0.00200	0.000720	mg/Kg			09/23/18 04:49	1
Bromochloromethane	ND		0.00200	0.000550	mg/Kg			09/23/18 04:49	1
Bromodichloromethane	ND		0.00200	0.000550	mg/Kg			09/23/18 04:49	1
Bromoform	ND		0.00200	0.000550	mg/Kg			09/23/18 04:49	1
Bromomethane	ND		0.00200	0.00120	mg/Kg			09/23/18 04:49	1
2-Butanone (MEK)	ND		0.0500	0.00510	mg/Kg			09/23/18 04:49	1
Carbon disulfide	ND		0.00500	0.00360	mg/Kg			09/23/18 04:49	1
Carbon tetrachloride	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
Chlorobenzene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
Chlorodibromomethane	ND		0.00200	0.000340	mg/Kg			09/23/18 04:49	1
Chloroethane	ND		0.00500	0.00190	mg/Kg			09/23/18 04:49	1
Chloroform	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
Chloromethane	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
2-Chlorotoluene	ND		0.00200	0.000890	mg/Kg			09/23/18 04:49	1
4-Chlorotoluene	ND		0.00200	0.000840	mg/Kg			09/23/18 04:49	1
cis-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
cis-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
1,2-Dibromo-3-Chloropropane	ND		0.00500	0.000700	mg/Kg			09/23/18 04:49	1
1,2-Dibromoethane (EDB)	ND		0.00200	0.00100	mg/Kg			09/23/18 04:49	1
Dibromomethane	ND		0.00200	0.000560	mg/Kg			09/23/18 04:49	1
1,2-Dichlorobenzene	ND		0.00200	0.000340	mg/Kg			09/23/18 04:49	1
1,3-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
1,4-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
Dichlorodifluoromethane	ND		0.00200	0.00100	mg/Kg			09/23/18 04:49	1
1,1-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
1,2-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
1,1-Dichloroethene	ND		0.00200	0.000570	mg/Kg			09/23/18 04:49	1
1,2-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/23/18 04:49	1
1,3-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/23/18 04:49	1
2,2-Dichloropropane	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
1,1-Dichloropropene	ND		0.00200	0.000510	mg/Kg			09/23/18 04:49	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
Hexachlorobutadiene	ND		0.00500	0.00114	mg/Kg			09/23/18 04:49	1
2-Hexanone	ND		0.0500	0.0167	mg/Kg			09/23/18 04:49	1
Isopropylbenzene	ND		0.00200	0.000410	mg/Kg			09/23/18 04:49	1
Methylene Chloride	ND		0.0100	0.000860	mg/Kg			09/23/18 04:49	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500	0.00190	mg/Kg			09/23/18 04:49	1
Methyl tert-butyl ether	ND		0.00200	0.000960	mg/Kg			09/23/18 04:49	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			09/23/18 04:49	1
n-Butylbenzene	ND		0.00200	0.000980	mg/Kg			09/23/18 04:49	1
N-Propylbenzene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
p-Isopropyltoluene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
sec-Butylbenzene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
Styrene	ND		0.00200	0.00110	mg/Kg			09/23/18 04:49	1
tert-Butylbenzene	ND		0.00200	0.000900	mg/Kg			09/23/18 04:49	1
1,1,1,2-Tetrachloroethane	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-544809/11

Matrix: Solid

Analysis Batch: 544809

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.00200	0.00100	mg/Kg			09/23/18 04:49	1
Tetrachloroethene	ND		0.00200	0.000730	mg/Kg			09/23/18 04:49	1
Toluene	ND		0.00200	0.000740	mg/Kg			09/23/18 04:49	1
trans-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
trans-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
1,2,3-Trichlorobenzene	ND		0.00200	0.000380	mg/Kg			09/23/18 04:49	1
1,2,4-Trichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/23/18 04:49	1
1,1,1-Trichloroethane	ND		0.00200	0.000920	mg/Kg			09/23/18 04:49	1
1,1,2-Trichloroethane	ND		0.00500	0.00140	mg/Kg			09/23/18 04:49	1
Trichloroethene	ND		0.00200	0.000960	mg/Kg			09/23/18 04:49	1
Trichlorofluoromethane	ND		0.00200	0.00100	mg/Kg			09/23/18 04:49	1
1,2,3-Trichloropropane	ND		0.00200	0.000550	mg/Kg			09/23/18 04:49	1
1,2,4-Trimethylbenzene	ND		0.00200	0.00100	mg/Kg			09/23/18 04:49	1
1,3,5-Trimethylbenzene	ND		0.00200	0.000750	mg/Kg			09/23/18 04:49	1
Vinyl chloride	ND		0.00200	0.00110	mg/Kg			09/23/18 04:49	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			09/23/18 04:49	1
GRO (C6-C10)	ND		0.400	0.200	mg/Kg			09/23/18 04:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130		09/23/18 04:49	1
Dibromofluoromethane (Surr)	96		70 - 130		09/23/18 04:49	1
1,2-Dichloroethane-d4 (Surr)	91		70 - 130		09/23/18 04:49	1
Toluene-d8 (Surr)	101		70 - 130		09/23/18 04:49	1

Lab Sample ID: LCS 490-544809/3

Matrix: Solid

Analysis Batch: 544809

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.2524		mg/Kg		101	45 - 145
Benzene	0.0500	0.05061		mg/Kg		101	70 - 130
Bromobenzene	0.0500	0.04690		mg/Kg		94	67 - 130
Bromochloromethane	0.0500	0.05006		mg/Kg		100	70 - 133
Bromodichloromethane	0.0500	0.04869		mg/Kg		97	70 - 130
Bromoform	0.0500	0.04668		mg/Kg		93	59 - 137
Bromomethane	0.0500	0.04543		mg/Kg		91	32 - 150
2-Butanone (MEK)	0.250	0.2517		mg/Kg		101	50 - 149
Carbon disulfide	0.0500	0.05116		mg/Kg		102	66 - 138
Carbon tetrachloride	0.0500	0.04608		mg/Kg		92	70 - 131
Chlorobenzene	0.0500	0.04728		mg/Kg		95	70 - 130
Chlorodibromomethane	0.0500	0.05033		mg/Kg		101	70 - 130
Chloroethane	0.0500	0.04819		mg/Kg		96	37 - 150
Chloroform	0.0500	0.04757		mg/Kg		95	70 - 130
Chloromethane	0.0500	0.04735		mg/Kg		95	53 - 150
2-Chlorotoluene	0.0500	0.04535		mg/Kg		91	70 - 132
4-Chlorotoluene	0.0500	0.04441		mg/Kg		89	67 - 135
cis-1,2-Dichloroethene	0.0500	0.05073		mg/Kg		101	70 - 132
cis-1,3-Dichloropropene	0.0500	0.05066		mg/Kg		101	70 - 130

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-544809/3

Matrix: Solid

Analysis Batch: 544809

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.0500	0.04913		mg/Kg		98	47 - 144
1,2-Dibromoethane (EDB)	0.0500	0.04858		mg/Kg		97	69 - 130
Dibromomethane	0.0500	0.04823		mg/Kg		96	70 - 130
1,2-Dichlorobenzene	0.0500	0.04516		mg/Kg		90	70 - 134
1,3-Dichlorobenzene	0.0500	0.04434		mg/Kg		89	69 - 137
1,4-Dichlorobenzene	0.0500	0.04341		mg/Kg		87	66 - 134
Dichlorodifluoromethane	0.0500	0.03919		mg/Kg		78	32 - 150
1,1-Dichloroethane	0.0500	0.05152		mg/Kg		103	70 - 130
1,2-Dichloroethane	0.0500	0.04437		mg/Kg		89	65 - 134
1,1-Dichloroethene	0.0500	0.04947		mg/Kg		99	70 - 131
1,2-Dichloropropane	0.0500	0.05277		mg/Kg		106	70 - 130
1,3-Dichloropropane	0.0500	0.05120		mg/Kg		102	70 - 130
2,2-Dichloropropane	0.0500	0.04510		mg/Kg		90	57 - 150
1,1-Dichloropropene	0.0500	0.04871		mg/Kg		97	70 - 130
Ethylbenzene	0.0500	0.04664		mg/Kg		93	70 - 130
Hexachlorobutadiene	0.0500	0.04201		mg/Kg		84	64 - 137
2-Hexanone	0.250	0.2634		mg/Kg		105	47 - 148
Isopropylbenzene	0.0500	0.04649		mg/Kg		93	70 - 130
Methylene Chloride	0.0500	0.04828		mg/Kg		97	69 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2667		mg/Kg		107	48 - 150
Methyl tert-butyl ether	0.0500	0.05126		mg/Kg		103	54 - 145
Naphthalene	0.0500	0.04432		mg/Kg		89	55 - 149
n-Butylbenzene	0.0500	0.04513		mg/Kg		90	57 - 150
N-Propylbenzene	0.0500	0.04641		mg/Kg		93	62 - 150
p-Isopropyltoluene	0.0500	0.04592		mg/Kg		92	66 - 147
sec-Butylbenzene	0.0500	0.04685		mg/Kg		94	68 - 147
Styrene	0.0500	0.04815		mg/Kg		96	70 - 131
tert-Butylbenzene	0.0500	0.04649		mg/Kg		93	70 - 138
1,1,1,2-Tetrachloroethane	0.0500	0.04792		mg/Kg		96	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.05189		mg/Kg		104	61 - 134
Tetrachloroethene	0.0500	0.04476		mg/Kg		90	70 - 130
Toluene	0.0500	0.04876		mg/Kg		98	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05044		mg/Kg		101	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05027		mg/Kg		101	67 - 130
1,2,3-Trichlorobenzene	0.0500	0.04234		mg/Kg		85	57 - 146
1,2,4-Trichlorobenzene	0.0500	0.04142		mg/Kg		83	47 - 150
1,1,1-Trichloroethane	0.0500	0.04487		mg/Kg		90	70 - 130
1,1,2-Trichloroethane	0.0500	0.05778		mg/Kg		116	70 - 130
Trichloroethene	0.0500	0.04703		mg/Kg		94	70 - 130
Trichlorofluoromethane	0.0500	0.03932		mg/Kg		79	53 - 150
1,2,3-Trichloropropane	0.0500	0.05304		mg/Kg		106	60 - 139
1,2,4-Trimethylbenzene	0.0500	0.04532		mg/Kg		91	70 - 140
1,3,5-Trimethylbenzene	0.0500	0.04557		mg/Kg		91	69 - 141
Vinyl chloride	0.0500	0.04964		mg/Kg		99	63 - 150
Xylenes, Total	0.100	0.09287		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-544809/3

Matrix: Solid

Analysis Batch: 544809

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	97		70 - 130
1,2-Dichloroethane-d4 (Surr)	91		70 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCS 490-544809/7

Matrix: Solid

Analysis Batch: 544809

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C6-C10)	4.00	4.546		mg/Kg		114	65 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	94		70 - 130
1,2-Dichloroethane-d4 (Surr)	91		70 - 130
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: LCSD 490-544809/4

Matrix: Solid

Analysis Batch: 544809

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.2277		mg/Kg		91	45 - 145	10	38
Benzene	0.0500	0.05363		mg/Kg		107	70 - 130	6	37
Bromobenzene	0.0500	0.05102		mg/Kg		102	67 - 130	8	40
Bromochloromethane	0.0500	0.05212		mg/Kg		104	70 - 133	4	15
Bromodichloromethane	0.0500	0.05090		mg/Kg		102	70 - 130	4	20
Bromoform	0.0500	0.04927		mg/Kg		99	59 - 137	5	17
Bromomethane	0.0500	0.04619		mg/Kg		92	32 - 150	2	45
2-Butanone (MEK)	0.250	0.2584		mg/Kg		103	50 - 149	3	39
Carbon disulfide	0.0500	0.05217		mg/Kg		104	66 - 138	2	41
Carbon tetrachloride	0.0500	0.04825		mg/Kg		96	70 - 131	5	41
Chlorobenzene	0.0500	0.05027		mg/Kg		101	70 - 130	6	40
Chlorodibromomethane	0.0500	0.05279		mg/Kg		106	70 - 130	5	14
Chloroethane	0.0500	0.04796		mg/Kg		96	37 - 150	0	50
Chloroform	0.0500	0.04994		mg/Kg		100	70 - 130	5	15
Chloromethane	0.0500	0.04878		mg/Kg		98	53 - 150	3	47
2-Chlorotoluene	0.0500	0.04960		mg/Kg		99	70 - 132	9	41
4-Chlorotoluene	0.0500	0.04844		mg/Kg		97	67 - 135	9	41
cis-1,2-Dichloroethene	0.0500	0.05249		mg/Kg		105	70 - 132	3	18
cis-1,3-Dichloropropene	0.0500	0.05341		mg/Kg		107	70 - 130	5	42
1,2-Dibromo-3-Chloropropane	0.0500	0.05267		mg/Kg		105	47 - 144	7	38
1,2-Dibromoethane (EDB)	0.0500	0.05057		mg/Kg		101	69 - 130	4	17
Dibromomethane	0.0500	0.04960		mg/Kg		99	70 - 130	3	19
1,2-Dichlorobenzene	0.0500	0.05043		mg/Kg		101	70 - 134	11	40
1,3-Dichlorobenzene	0.0500	0.04862		mg/Kg		97	69 - 137	9	41
1,4-Dichlorobenzene	0.0500	0.04856		mg/Kg		97	66 - 134	11	41
Dichlorodifluoromethane	0.0500	0.04233		mg/Kg		85	32 - 150	8	50

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-544809/4

Matrix: Solid

Analysis Batch: 544809

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	0.0500	0.05312		mg/Kg		106	70 - 130	3	42
1,2-Dichloroethane	0.0500	0.04687		mg/Kg		94	65 - 134	5	16
1,1-Dichloroethene	0.0500	0.05142		mg/Kg		103	70 - 131	4	43
1,2-Dichloropropane	0.0500	0.05478		mg/Kg		110	70 - 130	4	15
1,3-Dichloropropane	0.0500	0.05319		mg/Kg		106	70 - 130	4	15
2,2-Dichloropropane	0.0500	0.04623		mg/Kg		92	57 - 150	2	42
1,1-Dichloropropene	0.0500	0.05070		mg/Kg		101	70 - 130	4	41
Ethylbenzene	0.0500	0.05053		mg/Kg		101	70 - 130	8	38
Hexachlorobutadiene	0.0500	0.04659		mg/Kg		93	64 - 137	10	44
2-Hexanone	0.250	0.2767		mg/Kg		111	47 - 148	5	38
Isopropylbenzene	0.0500	0.05059		mg/Kg		101	70 - 130	8	39
Methylene Chloride	0.0500	0.04950		mg/Kg		99	69 - 130	2	19
4-Methyl-2-pentanone (MIBK)	0.250	0.2769		mg/Kg		111	48 - 150	4	41
Methyl tert-butyl ether	0.0500	0.05281		mg/Kg		106	54 - 145	3	36
Naphthalene	0.0500	0.04830		mg/Kg		97	55 - 149	9	37
n-Butylbenzene	0.0500	0.05146		mg/Kg		103	57 - 150	13	39
N-Propylbenzene	0.0500	0.05081		mg/Kg		102	62 - 150	9	38
p-Isopropyltoluene	0.0500	0.05079		mg/Kg		102	66 - 147	10	38
sec-Butylbenzene	0.0500	0.05144		mg/Kg		103	68 - 147	9	38
Styrene	0.0500	0.05232		mg/Kg		105	70 - 131	8	40
tert-Butylbenzene	0.0500	0.05131		mg/Kg		103	70 - 138	10	38
1,1,1,2-Tetrachloroethane	0.0500	0.05179		mg/Kg		104	70 - 130	8	41
1,1,2,2-Tetrachloroethane	0.0500	0.05444		mg/Kg		109	61 - 134	5	16
Tetrachloroethene	0.0500	0.04873		mg/Kg		97	70 - 130	8	41
Toluene	0.0500	0.05159		mg/Kg		103	70 - 130	6	40
trans-1,2-Dichloroethene	0.0500	0.05268		mg/Kg		105	70 - 130	4	41
trans-1,3-Dichloropropene	0.0500	0.05277		mg/Kg		106	67 - 130	5	41
1,2,3-Trichlorobenzene	0.0500	0.04693		mg/Kg		94	57 - 146	10	42
1,2,4-Trichlorobenzene	0.0500	0.04564		mg/Kg		91	47 - 150	10	43
1,1,1-Trichloroethane	0.0500	0.04712		mg/Kg		94	70 - 130	5	41
1,1,2-Trichloroethane	0.0500	0.05857		mg/Kg		117	70 - 130	1	17
Trichloroethene	0.0500	0.05021		mg/Kg		100	70 - 130	7	41
Trichlorofluoromethane	0.0500	0.04174		mg/Kg		83	53 - 150	6	49
1,2,3-Trichloropropane	0.0500	0.05303		mg/Kg		106	60 - 139	0	16
1,2,4-Trimethylbenzene	0.0500	0.04970		mg/Kg		99	70 - 140	9	38
1,3,5-Trimethylbenzene	0.0500	0.05014		mg/Kg		100	69 - 141	10	38
Vinyl chloride	0.0500	0.05120		mg/Kg		102	63 - 150	3	46
Xylenes, Total	0.100	0.09990		mg/Kg		100	70 - 130	7	38

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	89		70 - 130
Toluene-d8 (Surr)	101		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-544809/8

Matrix: Solid

Analysis Batch: 544809

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C6-C10)	4.00	4.165		mg/Kg		104	65 - 137	9	50
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	98		70 - 130						
Dibromofluoromethane (Surr)	96		70 - 130						
1,2-Dichloroethane-d4 (Surr)	90		70 - 130						
Toluene-d8 (Surr)	103		70 - 130						

Lab Sample ID: MB 490-544990/10

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		0.0500	0.00840	mg/Kg			09/24/18 15:01	1
Benzene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
Bromobenzene	ND		0.00200	0.000720	mg/Kg			09/24/18 15:01	1
Bromochloromethane	ND		0.00200	0.000550	mg/Kg			09/24/18 15:01	1
Bromodichloromethane	ND		0.00200	0.000550	mg/Kg			09/24/18 15:01	1
Bromoform	ND		0.00200	0.000550	mg/Kg			09/24/18 15:01	1
Bromomethane	ND		0.00200	0.00120	mg/Kg			09/24/18 15:01	1
2-Butanone (MEK)	ND		0.0500	0.00510	mg/Kg			09/24/18 15:01	1
Carbon disulfide	ND		0.00500	0.00360	mg/Kg			09/24/18 15:01	1
Carbon tetrachloride	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
Chlorobenzene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
Chlorodibromomethane	ND		0.00200	0.000340	mg/Kg			09/24/18 15:01	1
Chloroethane	ND		0.00500	0.00190	mg/Kg			09/24/18 15:01	1
Chloroform	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
Chloromethane	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
2-Chlorotoluene	ND		0.00200	0.000890	mg/Kg			09/24/18 15:01	1
4-Chlorotoluene	ND		0.00200	0.000840	mg/Kg			09/24/18 15:01	1
cis-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
cis-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
1,2-Dibromo-3-Chloropropane	ND		0.00500	0.000700	mg/Kg			09/24/18 15:01	1
1,2-Dibromoethane (EDB)	ND		0.00200	0.00100	mg/Kg			09/24/18 15:01	1
Dibromomethane	ND		0.00200	0.000560	mg/Kg			09/24/18 15:01	1
1,2-Dichlorobenzene	ND		0.00200	0.000340	mg/Kg			09/24/18 15:01	1
1,3-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
1,4-Dichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
Dichlorodifluoromethane	ND		0.00200	0.00100	mg/Kg			09/24/18 15:01	1
1,1-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
1,2-Dichloroethane	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
1,1-Dichloroethene	ND		0.00200	0.000570	mg/Kg			09/24/18 15:01	1
1,2-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/24/18 15:01	1
1,3-Dichloropropane	ND		0.00200	0.000940	mg/Kg			09/24/18 15:01	1
2,2-Dichloropropane	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
1,1-Dichloropropene	ND		0.00200	0.000510	mg/Kg			09/24/18 15:01	1
Ethylbenzene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
Hexachlorobutadiene	ND		0.00500	0.00114	mg/Kg			09/24/18 15:01	1

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-544990/10

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		0.0500	0.0167	mg/Kg			09/24/18 15:01	1
Isopropylbenzene	ND		0.00200	0.000410	mg/Kg			09/24/18 15:01	1
Methylene Chloride	ND		0.0100	0.000860	mg/Kg			09/24/18 15:01	1
4-Methyl-2-pentanone (MIBK)	ND		0.0500	0.00190	mg/Kg			09/24/18 15:01	1
Methyl tert-butyl ether	ND		0.00200	0.000960	mg/Kg			09/24/18 15:01	1
Naphthalene	ND		0.00500	0.00170	mg/Kg			09/24/18 15:01	1
n-Butylbenzene	ND		0.00200	0.000980	mg/Kg			09/24/18 15:01	1
N-Propylbenzene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
p-Isopropyltoluene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
sec-Butylbenzene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
Styrene	ND		0.00200	0.00110	mg/Kg			09/24/18 15:01	1
tert-Butylbenzene	ND		0.00200	0.000900	mg/Kg			09/24/18 15:01	1
1,1,1,2-Tetrachloroethane	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
1,1,2,2-Tetrachloroethane	ND		0.00200	0.00100	mg/Kg			09/24/18 15:01	1
Tetrachloroethene	ND		0.00200	0.000730	mg/Kg			09/24/18 15:01	1
Toluene	ND		0.00200	0.000740	mg/Kg			09/24/18 15:01	1
trans-1,2-Dichloroethene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
trans-1,3-Dichloropropene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
1,2,3-Trichlorobenzene	ND		0.00200	0.000380	mg/Kg			09/24/18 15:01	1
1,2,4-Trichlorobenzene	ND		0.00200	0.000670	mg/Kg			09/24/18 15:01	1
1,1,1-Trichloroethane	ND		0.00200	0.000920	mg/Kg			09/24/18 15:01	1
1,1,2-Trichloroethane	ND		0.00500	0.00140	mg/Kg			09/24/18 15:01	1
Trichloroethene	ND		0.00200	0.000960	mg/Kg			09/24/18 15:01	1
Trichlorofluoromethane	ND		0.00200	0.00100	mg/Kg			09/24/18 15:01	1
1,2,3-Trichloropropane	ND		0.00200	0.000550	mg/Kg			09/24/18 15:01	1
1,2,4-Trimethylbenzene	ND		0.00200	0.00100	mg/Kg			09/24/18 15:01	1
1,3,5-Trimethylbenzene	ND		0.00200	0.000750	mg/Kg			09/24/18 15:01	1
Vinyl chloride	ND		0.00200	0.00110	mg/Kg			09/24/18 15:01	1
Xylenes, Total	ND		0.00600	0.00123	mg/Kg			09/24/18 15:01	1
GRO (C6-C10)	ND		0.400	0.200	mg/Kg			09/24/18 15:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130		09/24/18 15:01	1
Dibromofluoromethane (Surr)	96		70 - 130		09/24/18 15:01	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		09/24/18 15:01	1
Toluene-d8 (Surr)	106		70 - 130		09/24/18 15:01	1

Lab Sample ID: LCS 490-544990/3

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.250	0.1750		mg/Kg		70	45 - 145
Benzene	0.0500	0.04978		mg/Kg		100	70 - 130
Bromobenzene	0.0500	0.05146		mg/Kg		103	67 - 130
Bromochloromethane	0.0500	0.04898		mg/Kg		98	70 - 133
Bromodichloromethane	0.0500	0.04820		mg/Kg		96	70 - 130
Bromoform	0.0500	0.06272		mg/Kg		125	59 - 137

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-544990/3

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	0.0500	0.03607		mg/Kg		72	32 - 150
2-Butanone (MEK)	0.250	0.2440		mg/Kg		98	50 - 149
Carbon disulfide	0.0500	0.04805		mg/Kg		96	66 - 138
Carbon tetrachloride	0.0500	0.05195		mg/Kg		104	70 - 131
Chlorobenzene	0.0500	0.05528		mg/Kg		111	70 - 130
Chlorodibromomethane	0.0500	0.05550		mg/Kg		111	70 - 130
Chloroethane	0.0500	0.04519		mg/Kg		90	37 - 150
Chloroform	0.0500	0.05022		mg/Kg		100	70 - 130
Chloromethane	0.0500	0.03284		mg/Kg		66	53 - 150
2-Chlorotoluene	0.0500	0.05204		mg/Kg		104	70 - 132
4-Chlorotoluene	0.0500	0.05235		mg/Kg		105	67 - 135
cis-1,2-Dichloroethene	0.0500	0.04989		mg/Kg		100	70 - 132
cis-1,3-Dichloropropene	0.0500	0.05625		mg/Kg		113	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.05643		mg/Kg		113	47 - 144
1,2-Dibromoethane (EDB)	0.0500	0.05142		mg/Kg		103	69 - 130
Dibromomethane	0.0500	0.04791		mg/Kg		96	70 - 130
1,2-Dichlorobenzene	0.0500	0.05300		mg/Kg		106	70 - 134
1,3-Dichlorobenzene	0.0500	0.05245		mg/Kg		105	69 - 137
1,4-Dichlorobenzene	0.0500	0.05278		mg/Kg		106	66 - 134
Dichlorodifluoromethane	0.0500	0.04345		mg/Kg		87	32 - 150
1,1-Dichloroethane	0.0500	0.04904		mg/Kg		98	70 - 130
1,2-Dichloroethane	0.0500	0.04986		mg/Kg		100	65 - 134
1,1-Dichloroethene	0.0500	0.04699		mg/Kg		94	70 - 131
1,2-Dichloropropane	0.0500	0.04990		mg/Kg		100	70 - 130
1,3-Dichloropropane	0.0500	0.04988		mg/Kg		100	70 - 130
2,2-Dichloropropane	0.0500	0.05351		mg/Kg		107	57 - 150
1,1-Dichloropropene	0.0500	0.05166		mg/Kg		103	70 - 130
Ethylbenzene	0.0500	0.05343		mg/Kg		107	70 - 130
Hexachlorobutadiene	0.0500	0.05647		mg/Kg		113	64 - 137
2-Hexanone	0.250	0.2829		mg/Kg		113	47 - 148
Isopropylbenzene	0.0500	0.05457		mg/Kg		109	70 - 130
Methylene Chloride	0.0500	0.04770		mg/Kg		95	69 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.3028		mg/Kg		121	48 - 150
Methyl tert-butyl ether	0.0500	0.04802		mg/Kg		96	54 - 145
Naphthalene	0.0500	0.05687		mg/Kg		114	55 - 149
n-Butylbenzene	0.0500	0.05533		mg/Kg		111	57 - 150
N-Propylbenzene	0.0500	0.05163		mg/Kg		103	62 - 150
p-Isopropyltoluene	0.0500	0.05492		mg/Kg		110	66 - 147
sec-Butylbenzene	0.0500	0.05304		mg/Kg		106	68 - 147
Styrene	0.0500	0.05561		mg/Kg		111	70 - 131
tert-Butylbenzene	0.0500	0.05433		mg/Kg		109	70 - 138
1,1,1,2-Tetrachloroethane	0.0500	0.05778		mg/Kg		116	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.05349		mg/Kg		107	61 - 134
Tetrachloroethene	0.0500	0.05545		mg/Kg		111	70 - 130
Toluene	0.0500	0.05115		mg/Kg		102	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04898		mg/Kg		98	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05435		mg/Kg		109	67 - 130
1,2,3-Trichlorobenzene	0.0500	0.05680		mg/Kg		114	57 - 146

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-544990/3

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	0.0500	0.05829		mg/Kg		117	47 - 150
1,1,1-Trichloroethane	0.0500	0.04970		mg/Kg		99	70 - 130
1,1,2-Trichloroethane	0.0500	0.04830		mg/Kg		97	70 - 130
Trichloroethene	0.0500	0.04952		mg/Kg		99	70 - 130
Trichlorofluoromethane	0.0500	0.04757		mg/Kg		95	53 - 150
1,2,3-Trichloropropane	0.0500	0.05245		mg/Kg		105	60 - 139
1,2,4-Trimethylbenzene	0.0500	0.05191		mg/Kg		104	70 - 140
1,3,5-Trimethylbenzene	0.0500	0.05273		mg/Kg		105	69 - 141
Vinyl chloride	0.0500	0.04171		mg/Kg		83	63 - 150
Xylenes, Total	0.100	0.1059		mg/Kg		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	95		70 - 130
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCS 490-544990/7

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C6-C10)	4.00	4.177		mg/Kg		104	65 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	94		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
Toluene-d8 (Surr)	104		70 - 130

Lab Sample ID: LCSD 490-544990/4

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.250	0.1665		mg/Kg		67	45 - 145	5	38
Benzene	0.0500	0.04975		mg/Kg		100	70 - 130	0	37
Bromobenzene	0.0500	0.05185		mg/Kg		104	67 - 130	1	40
Bromochloromethane	0.0500	0.04852		mg/Kg		97	70 - 133	1	15
Bromodichloromethane	0.0500	0.04858		mg/Kg		97	70 - 130	1	20
Bromoform	0.0500	0.06100		mg/Kg		122	59 - 137	3	17
Bromomethane	0.0500	0.03602		mg/Kg		72	32 - 150	0	45
2-Butanone (MEK)	0.250	0.2483		mg/Kg		99	50 - 149	2	39
Carbon disulfide	0.0500	0.05047		mg/Kg		101	66 - 138	5	41
Carbon tetrachloride	0.0500	0.05226		mg/Kg		105	70 - 131	1	41
Chlorobenzene	0.0500	0.05431		mg/Kg		109	70 - 130	2	40
Chlorodibromomethane	0.0500	0.05633		mg/Kg		113	70 - 130	1	14
Chloroethane	0.0500	0.04337		mg/Kg		87	37 - 150	4	50

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-544990/4

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform	0.0500	0.05054		mg/Kg		101	70 - 130	1	15
Chloromethane	0.0500	0.03220		mg/Kg		64	53 - 150	2	47
2-Chlorotoluene	0.0500	0.05190		mg/Kg		104	70 - 132	0	41
4-Chlorotoluene	0.0500	0.05238		mg/Kg		105	67 - 135	0	41
cis-1,2-Dichloroethene	0.0500	0.05057		mg/Kg		101	70 - 132	1	18
cis-1,3-Dichloropropene	0.0500	0.05591		mg/Kg		112	70 - 130	1	42
1,2-Dibromo-3-Chloropropane	0.0500	0.05515		mg/Kg		110	47 - 144	2	38
1,2-Dibromoethane (EDB)	0.0500	0.05052		mg/Kg		101	69 - 130	2	17
Dibromomethane	0.0500	0.04773		mg/Kg		95	70 - 130	0	19
1,2-Dichlorobenzene	0.0500	0.05276		mg/Kg		106	70 - 134	0	40
1,3-Dichlorobenzene	0.0500	0.05201		mg/Kg		104	69 - 137	1	41
1,4-Dichlorobenzene	0.0500	0.05284		mg/Kg		106	66 - 134	0	41
Dichlorodifluoromethane	0.0500	0.04309		mg/Kg		86	32 - 150	1	50
1,1-Dichloroethane	0.0500	0.05002		mg/Kg		100	70 - 130	2	42
1,2-Dichloroethane	0.0500	0.04921		mg/Kg		98	65 - 134	1	16
1,1-Dichloroethene	0.0500	0.04786		mg/Kg		96	70 - 131	2	43
1,2-Dichloropropane	0.0500	0.05000		mg/Kg		100	70 - 130	0	15
1,3-Dichloropropane	0.0500	0.05000		mg/Kg		100	70 - 130	0	15
2,2-Dichloropropane	0.0500	0.05384		mg/Kg		108	57 - 150	1	42
1,1-Dichloropropene	0.0500	0.05161		mg/Kg		103	70 - 130	0	41
Ethylbenzene	0.0500	0.05313		mg/Kg		106	70 - 130	1	38
Hexachlorobutadiene	0.0500	0.05544		mg/Kg		111	64 - 137	2	44
2-Hexanone	0.250	0.2785		mg/Kg		111	47 - 148	2	38
Isopropylbenzene	0.0500	0.05450		mg/Kg		109	70 - 130	0	39
Methylene Chloride	0.0500	0.04821		mg/Kg		96	69 - 130	1	19
4-Methyl-2-pentanone (MIBK)	0.250	0.2909		mg/Kg		116	48 - 150	4	41
Methyl tert-butyl ether	0.0500	0.04441		mg/Kg		89	54 - 145	8	36
Naphthalene	0.0500	0.05522		mg/Kg		110	55 - 149	3	37
n-Butylbenzene	0.0500	0.05442		mg/Kg		109	57 - 150	2	39
N-Propylbenzene	0.0500	0.05165		mg/Kg		103	62 - 150	0	38
p-Isopropyltoluene	0.0500	0.05510		mg/Kg		110	66 - 147	0	38
sec-Butylbenzene	0.0500	0.05321		mg/Kg		106	68 - 147	0	38
Styrene	0.0500	0.05485		mg/Kg		110	70 - 131	1	40
tert-Butylbenzene	0.0500	0.05382		mg/Kg		108	70 - 138	1	38
1,1,1,2-Tetrachloroethane	0.0500	0.05771		mg/Kg		115	70 - 130	0	41
1,1,2,2-Tetrachloroethane	0.0500	0.05326		mg/Kg		107	61 - 134	0	16
Tetrachloroethene	0.0500	0.05602		mg/Kg		112	70 - 130	1	41
Toluene	0.0500	0.05008		mg/Kg		100	70 - 130	2	40
trans-1,2-Dichloroethene	0.0500	0.05220		mg/Kg		104	70 - 130	6	41
trans-1,3-Dichloropropene	0.0500	0.05405		mg/Kg		108	67 - 130	1	41
1,2,3-Trichlorobenzene	0.0500	0.05474		mg/Kg		109	57 - 146	4	42
1,2,4-Trichlorobenzene	0.0500	0.05541		mg/Kg		111	47 - 150	5	43
1,1,1-Trichloroethane	0.0500	0.05091		mg/Kg		102	70 - 130	2	41
1,1,2-Trichloroethane	0.0500	0.04785		mg/Kg		96	70 - 130	1	17
Trichloroethene	0.0500	0.04903		mg/Kg		98	70 - 130	1	41
Trichlorofluoromethane	0.0500	0.04697		mg/Kg		94	53 - 150	1	49
1,2,3-Trichloropropane	0.0500	0.05326		mg/Kg		107	60 - 139	2	16
1,2,4-Trimethylbenzene	0.0500	0.05257		mg/Kg		105	70 - 140	1	38

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-544990/4

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trimethylbenzene	0.0500	0.05261		mg/Kg		105	69 - 141	0	38
Vinyl chloride	0.0500	0.04151		mg/Kg		83	63 - 150	0	46
Xylenes, Total	0.100	0.1049		mg/Kg		105	70 - 130	1	38

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	93		70 - 130
Toluene-d8 (Surr)	101		70 - 130

Lab Sample ID: LCSD 490-544990/8

Matrix: Solid

Analysis Batch: 544990

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C6-C10)	4.00	4.337		mg/Kg		108	65 - 137	4	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	94		70 - 130
1,2-Dichloroethane-d4 (Surr)	96		70 - 130
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: MB 490-545407/10

Matrix: Solid

Analysis Batch: 545407

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		2.50	2.00	mg/Kg			09/26/18 08:06	1
Benzene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
Bromobenzene	ND		0.100	0.0360	mg/Kg			09/26/18 08:06	1
Bromochloromethane	ND		0.100	0.0280	mg/Kg			09/26/18 08:06	1
Bromodichloromethane	ND		0.100	0.0280	mg/Kg			09/26/18 08:06	1
Bromoform	ND		0.100	0.0280	mg/Kg			09/26/18 08:06	1
Bromomethane	ND		0.100	0.0600	mg/Kg			09/26/18 08:06	1
2-Butanone (MEK)	ND		2.50	0.260	mg/Kg			09/26/18 08:06	1
Carbon disulfide	ND		0.250	0.180	mg/Kg			09/26/18 08:06	1
Carbon tetrachloride	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
Chlorobenzene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
Chlorodibromomethane	ND		0.100	0.0170	mg/Kg			09/26/18 08:06	1
Chloroethane	ND		0.250	0.0950	mg/Kg			09/26/18 08:06	1
Chloroform	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
Chloromethane	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
2-Chlorotoluene	ND		0.100	0.0460	mg/Kg			09/26/18 08:06	1
4-Chlorotoluene	ND		0.100	0.0420	mg/Kg			09/26/18 08:06	1
cis-1,2-Dichloroethene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
cis-1,3-Dichloropropene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
1,2-Dibromo-3-Chloropropane	ND		0.250	0.0350	mg/Kg			09/26/18 08:06	1

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-545407/10

Matrix: Solid

Analysis Batch: 545407

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		0.100	0.0500	mg/Kg			09/26/18 08:06	1
Dibromomethane	ND		0.100	0.0280	mg/Kg			09/26/18 08:06	1
1,2-Dichlorobenzene	ND		0.100	0.0170	mg/Kg			09/26/18 08:06	1
1,3-Dichlorobenzene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
1,4-Dichlorobenzene	ND		0.100	0.0470	mg/Kg			09/26/18 08:06	1
Dichlorodifluoromethane	ND		0.100	0.0500	mg/Kg			09/26/18 08:06	1
1,1-Dichloroethane	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
1,2-Dichloroethane	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
1,1-Dichloroethene	ND		0.100	0.0290	mg/Kg			09/26/18 08:06	1
1,2-Dichloropropane	ND		0.100	0.0470	mg/Kg			09/26/18 08:06	1
1,3-Dichloropropane	ND		0.100	0.0470	mg/Kg			09/26/18 08:06	1
2,2-Dichloropropane	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
1,1-Dichloropropene	ND		0.100	0.0260	mg/Kg			09/26/18 08:06	1
Ethylbenzene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
Hexachlorobutadiene	ND		0.250	0.0550	mg/Kg			09/26/18 08:06	1
2-Hexanone	ND		2.50	0.840	mg/Kg			09/26/18 08:06	1
Isopropylbenzene	ND		0.100	0.0210	mg/Kg			09/26/18 08:06	1
Methylene Chloride	ND		0.500	0.0500	mg/Kg			09/26/18 08:06	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.850	mg/Kg			09/26/18 08:06	1
Methyl tert-butyl ether	ND		0.100	0.0500	mg/Kg			09/26/18 08:06	1
Naphthalene	ND		0.250	0.0850	mg/Kg			09/26/18 08:06	1
n-Butylbenzene	ND		0.100	0.0500	mg/Kg			09/26/18 08:06	1
N-Propylbenzene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
p-Isopropyltoluene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
sec-Butylbenzene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
Styrene	ND		0.100	0.0550	mg/Kg			09/26/18 08:06	1
tert-Butylbenzene	ND		0.100	0.0500	mg/Kg			09/26/18 08:06	1
1,1,1,2-Tetrachloroethane	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
1,1,2,2-Tetrachloroethane	ND		0.100	0.0500	mg/Kg			09/26/18 08:06	1
Tetrachloroethene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
Toluene	ND		0.100	0.0370	mg/Kg			09/26/18 08:06	1
trans-1,2-Dichloroethene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
trans-1,3-Dichloropropene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
1,2,3-Trichlorobenzene	ND		0.100	0.0190	mg/Kg			09/26/18 08:06	1
1,2,4-Trichlorobenzene	ND		0.100	0.0340	mg/Kg			09/26/18 08:06	1
1,1,1-Trichloroethane	ND		0.100	0.0460	mg/Kg			09/26/18 08:06	1
1,1,2-Trichloroethane	ND		0.250	0.0700	mg/Kg			09/26/18 08:06	1
Trichloroethene	ND		0.100	0.0500	mg/Kg			09/26/18 08:06	1
Trichlorofluoromethane	ND		0.100	0.0500	mg/Kg			09/26/18 08:06	1
1,2,3-Trichloropropane	ND		0.100	0.0280	mg/Kg			09/26/18 08:06	1
1,2,4-Trimethylbenzene	ND		0.100	0.0500	mg/Kg			09/26/18 08:06	1
1,3,5-Trimethylbenzene	ND		0.100	0.0380	mg/Kg			09/26/18 08:06	1
Vinyl chloride	ND		0.100	0.0550	mg/Kg			09/26/18 08:06	1
Xylenes, Total	ND		0.300	0.0620	mg/Kg			09/26/18 08:06	1
GRO (C6-C10)	ND		20.0	10.0	mg/Kg			09/26/18 08:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130		09/26/18 08:06	1

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-545407/10

Matrix: Solid

Analysis Batch: 545407

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	94		70 - 130		09/26/18 08:06	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 130		09/26/18 08:06	1
Toluene-d8 (Surr)	97		70 - 130		09/26/18 08:06	1

Lab Sample ID: LCS 490-545407/3

Matrix: Solid

Analysis Batch: 545407

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	12.5	9.730		mg/Kg		78	45 - 145
Benzene	2.50	2.399		mg/Kg		96	70 - 130
Bromobenzene	2.50	2.190		mg/Kg		88	67 - 130
Bromochloromethane	2.50	2.188		mg/Kg		88	70 - 133
Bromodichloromethane	2.50	2.162		mg/Kg		86	70 - 130
Bromoform	2.50	2.701		mg/Kg		108	59 - 137
Bromomethane	2.50	1.545		mg/Kg		62	32 - 150
2-Butanone (MEK)	12.5	11.86		mg/Kg		95	50 - 149
Carbon disulfide	2.50	2.858		mg/Kg		114	66 - 138
Carbon tetrachloride	2.50	2.406		mg/Kg		96	70 - 131
Chlorobenzene	2.50	2.210		mg/Kg		88	70 - 130
Chlorodibromomethane	2.50	2.399		mg/Kg		96	70 - 130
Chloroethane	2.50	1.825		mg/Kg		73	37 - 150
Chloroform	2.50	2.405		mg/Kg		96	70 - 130
Chloromethane	2.50	2.039		mg/Kg		82	53 - 150
2-Chlorotoluene	2.50	2.203		mg/Kg		88	70 - 132
4-Chlorotoluene	2.50	2.102		mg/Kg		84	67 - 135
cis-1,2-Dichloroethene	2.50	2.310		mg/Kg		92	70 - 132
cis-1,3-Dichloropropene	2.50	2.357		mg/Kg		94	70 - 130
1,2-Dibromo-3-Chloropropane	2.50	2.644		mg/Kg		106	47 - 144
1,2-Dibromoethane (EDB)	2.50	2.395		mg/Kg		96	69 - 130
Dibromomethane	2.50	2.139		mg/Kg		86	70 - 130
1,2-Dichlorobenzene	2.50	2.007		mg/Kg		80	70 - 134
1,3-Dichlorobenzene	2.50	1.983		mg/Kg		79	69 - 137
1,4-Dichlorobenzene	2.50	1.955		mg/Kg		78	66 - 134
Dichlorodifluoromethane	2.50	2.123		mg/Kg		85	32 - 150
1,1-Dichloroethane	2.50	2.829		mg/Kg		113	70 - 130
1,2-Dichloroethane	2.50	2.584		mg/Kg		103	65 - 134
1,1-Dichloroethene	2.50	2.674		mg/Kg		107	70 - 131
1,2-Dichloropropane	2.50	2.344		mg/Kg		94	70 - 130
1,3-Dichloropropane	2.50	2.283		mg/Kg		91	70 - 130
2,2-Dichloropropane	2.50	2.589		mg/Kg		104	57 - 150
1,1-Dichloropropene	2.50	2.421		mg/Kg		97	70 - 130
Ethylbenzene	2.50	2.254		mg/Kg		90	70 - 130
Hexachlorobutadiene	2.50	2.400		mg/Kg		96	64 - 137
2-Hexanone	12.5	13.74		mg/Kg		110	47 - 148
Isopropylbenzene	2.50	2.266		mg/Kg		91	70 - 130
Methylene Chloride	2.50	2.788		mg/Kg		112	69 - 130
4-Methyl-2-pentanone (MIBK)	12.5	14.91		mg/Kg		119	48 - 150

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-545407/3

Matrix: Solid

Analysis Batch: 545407

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	2.50	3.165		mg/Kg		127	54 - 145
Naphthalene	2.50	2.264		mg/Kg		91	55 - 149
n-Butylbenzene	2.50	2.150		mg/Kg		86	57 - 150
N-Propylbenzene	2.50	2.239		mg/Kg		90	62 - 150
p-Isopropyltoluene	2.50	2.222		mg/Kg		89	66 - 147
sec-Butylbenzene	2.50	2.293		mg/Kg		92	68 - 147
Styrene	2.50	2.150		mg/Kg		86	70 - 131
tert-Butylbenzene	2.50	2.365		mg/Kg		95	70 - 138
1,1,1,2-Tetrachloroethane	2.50	2.492		mg/Kg		100	70 - 130
1,1,2,2-Tetrachloroethane	2.50	2.536		mg/Kg		101	61 - 134
Tetrachloroethene	2.50	2.410		mg/Kg		96	70 - 130
Toluene	2.50	2.212		mg/Kg		88	70 - 130
trans-1,2-Dichloroethene	2.50	3.310	*	mg/Kg		132	70 - 130
trans-1,3-Dichloropropene	2.50	2.289		mg/Kg		92	67 - 130
1,2,3-Trichlorobenzene	2.50	2.051		mg/Kg		82	57 - 146
1,2,4-Trichlorobenzene	2.50	1.931		mg/Kg		77	47 - 150
1,1,1-Trichloroethane	2.50	2.459		mg/Kg		98	70 - 130
1,1,2-Trichloroethane	2.50	2.288		mg/Kg		92	70 - 130
Trichloroethene	2.50	2.233		mg/Kg		89	70 - 130
Trichlorofluoromethane	2.50	2.206		mg/Kg		88	53 - 150
1,2,3-Trichloropropane	2.50	2.583		mg/Kg		103	60 - 139
1,2,4-Trimethylbenzene	2.50	2.139		mg/Kg		86	70 - 140
1,3,5-Trimethylbenzene	2.50	2.186		mg/Kg		87	69 - 141
Vinyl chloride	2.50	2.112		mg/Kg		84	63 - 150
Xylenes, Total	5.00	4.270		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCS 490-545407/7

Matrix: Solid

Analysis Batch: 545407

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
GRO (C6-C10)	200	233.2		mg/Kg		117	65 - 137

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	93		70 - 130
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
Toluene-d8 (Surr)	98		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-545407/4

Matrix: Solid

Analysis Batch: 545407

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	12.5	11.79		mg/Kg		94	45 - 145	19	38
Benzene	2.50	2.269		mg/Kg		91	70 - 130	6	37
Bromobenzene	2.50	1.999		mg/Kg		80	67 - 130	9	40
Bromochloromethane	2.50	2.143		mg/Kg		86	70 - 133	2	15
Bromodichloromethane	2.50	2.193		mg/Kg		88	70 - 130	1	20
Bromoform	2.50	2.519		mg/Kg		101	59 - 137	7	17
Bromomethane	2.50	1.617		mg/Kg		65	32 - 150	5	45
2-Butanone (MEK)	12.5	12.05		mg/Kg		96	50 - 149	2	39
Carbon disulfide	2.50	2.687		mg/Kg		107	66 - 138	6	41
Carbon tetrachloride	2.50	2.316		mg/Kg		93	70 - 131	4	41
Chlorobenzene	2.50	1.992		mg/Kg		80	70 - 130	10	40
Chlorodibromomethane	2.50	2.364		mg/Kg		95	70 - 130	1	14
Chloroethane	2.50	2.735		mg/Kg		109	37 - 150	40	50
Chloroform	2.50	2.470		mg/Kg		99	70 - 130	3	15
Chloromethane	2.50	2.207		mg/Kg		88	53 - 150	8	47
2-Chlorotoluene	2.50	1.780		mg/Kg		71	70 - 132	21	41
4-Chlorotoluene	2.50	1.674		mg/Kg		67	67 - 135	23	41
cis-1,2-Dichloroethene	2.50	2.306		mg/Kg		92	70 - 132	0	18
cis-1,3-Dichloropropene	2.50	2.195		mg/Kg		88	70 - 130	7	42
1,2-Dibromo-3-Chloropropane	2.50	2.586		mg/Kg		103	47 - 144	2	38
1,2-Dibromoethane (EDB)	2.50	2.399		mg/Kg		96	69 - 130	0	17
Dibromomethane	2.50	2.220		mg/Kg		89	70 - 130	4	19
1,2-Dichlorobenzene	2.50	1.729	*	mg/Kg		69	70 - 134	15	40
1,3-Dichlorobenzene	2.50	1.689	*	mg/Kg		68	69 - 137	16	41
1,4-Dichlorobenzene	2.50	1.615	*	mg/Kg		65	66 - 134	19	41
Dichlorodifluoromethane	2.50	2.168		mg/Kg		87	32 - 150	2	50
1,1-Dichloroethane	2.50	2.698		mg/Kg		108	70 - 130	5	42
1,2-Dichloroethane	2.50	2.586		mg/Kg		103	65 - 134	0	16
1,1-Dichloroethene	2.50	2.638		mg/Kg		106	70 - 131	1	43
1,2-Dichloropropane	2.50	2.330		mg/Kg		93	70 - 130	1	15
1,3-Dichloropropane	2.50	2.248		mg/Kg		90	70 - 130	2	15
2,2-Dichloropropane	2.50	2.543		mg/Kg		102	57 - 150	2	42
1,1-Dichloropropene	2.50	2.347		mg/Kg		94	70 - 130	3	41
Ethylbenzene	2.50	1.960		mg/Kg		78	70 - 130	14	38
Hexachlorobutadiene	2.50	1.924		mg/Kg		77	64 - 137	22	44
2-Hexanone	12.5	13.28		mg/Kg		106	47 - 148	3	38
Isopropylbenzene	2.50	1.966		mg/Kg		79	70 - 130	14	39
Methylene Chloride	2.50	2.771		mg/Kg		111	69 - 130	1	19
4-Methyl-2-pentanone (MIBK)	12.5	14.16		mg/Kg		113	48 - 150	5	41
Methyl tert-butyl ether	2.50	3.197		mg/Kg		128	54 - 145	1	36
Naphthalene	2.50	2.062		mg/Kg		82	55 - 149	9	37
n-Butylbenzene	2.50	1.725		mg/Kg		69	57 - 150	22	39
N-Propylbenzene	2.50	1.883		mg/Kg		75	62 - 150	17	38
p-Isopropyltoluene	2.50	1.822		mg/Kg		73	66 - 147	20	38
sec-Butylbenzene	2.50	1.892		mg/Kg		76	68 - 147	19	38
Styrene	2.50	1.873		mg/Kg		75	70 - 131	14	40
tert-Butylbenzene	2.50	1.977		mg/Kg		79	70 - 138	18	38
1,1,1,2-Tetrachloroethane	2.50	2.246		mg/Kg		90	70 - 130	10	41

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-545407/4

Matrix: Solid

Analysis Batch: 545407

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	2.50	2.393		mg/Kg		96	61 - 134	6	16
Tetrachloroethene	2.50	2.233		mg/Kg		89	70 - 130	8	41
Toluene	2.50	2.089		mg/Kg		84	70 - 130	6	40
trans-1,2-Dichloroethene	2.50	2.925		mg/Kg		117	70 - 130	12	41
trans-1,3-Dichloropropene	2.50	2.215		mg/Kg		89	67 - 130	3	41
1,2,3-Trichlorobenzene	2.50	1.752		mg/Kg		70	57 - 146	16	42
1,2,4-Trichlorobenzene	2.50	1.646		mg/Kg		66	47 - 150	16	43
1,1,1-Trichloroethane	2.50	2.412		mg/Kg		96	70 - 130	2	41
1,1,2-Trichloroethane	2.50	2.358		mg/Kg		94	70 - 130	3	17
Trichloroethene	2.50	2.090		mg/Kg		84	70 - 130	7	41
Trichlorofluoromethane	2.50	2.593		mg/Kg		104	53 - 150	16	49
1,2,3-Trichloropropane	2.50	2.616		mg/Kg		105	60 - 139	1	16
1,2,4-Trimethylbenzene	2.50	1.763		mg/Kg		71	70 - 140	19	38
1,3,5-Trimethylbenzene	2.50	1.915		mg/Kg		77	69 - 141	13	38
Vinyl chloride	2.50	2.195		mg/Kg		88	63 - 150	4	46
Xylenes, Total	5.00	3.773		mg/Kg		75	70 - 130	12	38

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 490-545407/8

Matrix: Solid

Analysis Batch: 545407

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
GRO (C6-C10)	200	218.9		mg/Kg		109	65 - 137	6	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
Dibromofluoromethane (Surr)	91		70 - 130
1,2-Dichloroethane-d4 (Surr)	103		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-543333/1-A

Matrix: Solid

Analysis Batch: 544084

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 543333

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		16.7	5.90	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Oil Range Organics C21-C35	ND		16.7	5.90	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Acenaphthene	ND		0.0670	0.0320	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Acenaphthylene	ND		0.0670	0.0290	mg/Kg		09/17/18 14:05	09/20/18 16:46	1

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-543333/1-A

Matrix: Solid

Analysis Batch: 544084

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 543333

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.0670	0.0290	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Benzo[a]anthracene	ND		0.0670	0.0300	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Benzo[a]pyrene	ND		0.0670	0.0270	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Benzo[b]fluoranthene	ND		0.0670	0.0280	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Benzo[g,h,i]perylene	ND		0.0670	0.0330	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Benzo[k]fluoranthene	ND		0.0670	0.0270	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Chrysene	ND		0.0670	0.0370	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Dibenz(a,h)anthracene	ND		0.0670	0.0320	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Fluoranthene	ND		0.0670	0.0340	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Fluorene	ND		0.0670	0.0290	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0290	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Naphthalene	ND		0.0670	0.0290	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Phenanthrene	ND		0.0670	0.0340	mg/Kg		09/17/18 14:05	09/20/18 16:46	1
Pyrene	ND		0.0670	0.0340	mg/Kg		09/17/18 14:05	09/20/18 16:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	77		29 - 120	09/17/18 14:05	09/20/18 16:46	1
Nitrobenzene-d5 (Surr)	67		27 - 120	09/17/18 14:05	09/20/18 16:46	1
Terphenyl-d14 (Surr)	88		13 - 120	09/17/18 14:05	09/20/18 16:46	1

Lab Sample ID: LCS 490-543333/2-A

Matrix: Solid

Analysis Batch: 544084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 543333

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics C10-C21	66.7	46.63		mg/Kg		70	25 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	75		29 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120
Terphenyl-d14 (Surr)	84		13 - 120

Lab Sample ID: LCS 490-543333/3-A

Matrix: Solid

Analysis Batch: 544084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 543333

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1.67	1.211		mg/Kg		73	36 - 120
Acenaphthylene	1.67	1.300		mg/Kg		78	38 - 120
Anthracene	1.67	1.257		mg/Kg		75	46 - 124
Benzo[a]anthracene	1.67	1.245		mg/Kg		75	45 - 120
Benzo[a]pyrene	1.67	1.145		mg/Kg		69	45 - 120
Benzo[b]fluoranthene	1.67	1.142		mg/Kg		69	42 - 120
Benzo[g,h,i]perylene	1.67	1.116		mg/Kg		67	38 - 120
Benzo[k]fluoranthene	1.67	1.186		mg/Kg		71	42 - 120
Chrysene	1.67	1.320		mg/Kg		79	43 - 120
Dibenz(a,h)anthracene	1.67	1.177		mg/Kg		71	32 - 128
Fluoranthene	1.67	1.337		mg/Kg		80	46 - 120

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-543333/3-A

Matrix: Solid

Analysis Batch: 544084

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 543333

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	1.67	1.271		mg/Kg		76	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.145		mg/Kg		69	41 - 121
Naphthalene	1.67	1.049		mg/Kg		63	32 - 120
Phenanthrene	1.67	1.248		mg/Kg		75	45 - 120
Pyrene	1.67	1.250		mg/Kg		75	43 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	62		29 - 120
Nitrobenzene-d5 (Surr)	48		27 - 120
Terphenyl-d14 (Surr)	66		13 - 120

Lab Sample ID: 490-159244-7 MS

Matrix: Solid

Analysis Batch: 544084

Client Sample ID: SB-2 0-2'

Prep Type: Total/NA

Prep Batch: 543333

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics C10-C21	ND		84.6	49.58		mg/Kg	☼	59	10 - 175

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl (Surr)	60		29 - 120
Nitrobenzene-d5 (Surr)	45		27 - 120
Terphenyl-d14 (Surr)	66		13 - 120

Lab Sample ID: 490-159244-7 MSD

Matrix: Solid

Analysis Batch: 544084

Client Sample ID: SB-2 0-2'

Prep Type: Total/NA

Prep Batch: 543333

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics C10-C21	ND		83.1	56.11		mg/Kg	☼	68	10 - 175	12	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	66		29 - 120
Nitrobenzene-d5 (Surr)	58		27 - 120
Terphenyl-d14 (Surr)	73		13 - 120

Lab Sample ID: MB 490-543351/1-A

Matrix: Solid

Analysis Batch: 543785

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 543351

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		16.7	5.90	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Oil Range Organics C21-C35	ND		16.7	5.90	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Acenaphthene	ND		0.0670	0.0320	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Acenaphthylene	ND		0.0670	0.0290	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Anthracene	ND		0.0670	0.0290	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Benzo[a]anthracene	ND		0.0670	0.0300	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Benzo[a]pyrene	ND		0.0670	0.0270	mg/Kg		09/17/18 15:12	09/19/18 14:01	1

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-543351/1-A

Matrix: Solid

Analysis Batch: 543785

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 543351

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		0.0670	0.0280	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Benzo[g,h,i]perylene	ND		0.0670	0.0330	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Benzo[k]fluoranthene	ND		0.0670	0.0270	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Chrysene	ND		0.0670	0.0370	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Dibenz(a,h)anthracene	ND		0.0670	0.0320	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Fluoranthene	ND		0.0670	0.0340	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Fluorene	ND		0.0670	0.0290	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Indeno[1,2,3-cd]pyrene	ND		0.0670	0.0290	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Naphthalene	ND		0.0670	0.0290	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Phenanthrene	ND		0.0670	0.0340	mg/Kg		09/17/18 15:12	09/19/18 14:01	1
Pyrene	ND		0.0670	0.0340	mg/Kg		09/17/18 15:12	09/19/18 14:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	62		29 - 120	09/17/18 15:12	09/19/18 14:01	1
Nitrobenzene-d5 (Surr)	52		27 - 120	09/17/18 15:12	09/19/18 14:01	1
Terphenyl-d14 (Surr)	78		13 - 120	09/17/18 15:12	09/19/18 14:01	1

Lab Sample ID: LCS 490-543351/2-A

Matrix: Solid

Analysis Batch: 543785

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 543351

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics C10-C21	66.7	40.78		mg/Kg		61	25 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	61		29 - 120
Nitrobenzene-d5 (Surr)	50		27 - 120
Terphenyl-d14 (Surr)	82		13 - 120

Lab Sample ID: LCS 490-543351/3-A

Matrix: Solid

Analysis Batch: 543785

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 543351

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1.67	0.9846		mg/Kg		59	36 - 120
Acenaphthylene	1.67	1.069		mg/Kg		64	38 - 120
Anthracene	1.67	1.273		mg/Kg		76	46 - 124
Benzo[a]anthracene	1.67	1.348		mg/Kg		81	45 - 120
Benzo[a]pyrene	1.67	1.530		mg/Kg		92	45 - 120
Benzo[b]fluoranthene	1.67	1.532		mg/Kg		92	42 - 120
Benzo[g,h,i]perylene	1.67	1.465		mg/Kg		88	38 - 120
Benzo[k]fluoranthene	1.67	1.570		mg/Kg		94	42 - 120
Chrysene	1.67	1.436		mg/Kg		86	43 - 120
Dibenz(a,h)anthracene	1.67	1.569		mg/Kg		94	32 - 128
Fluoranthene	1.67	1.362		mg/Kg		82	46 - 120
Fluorene	1.67	1.189		mg/Kg		71	42 - 120
Indeno[1,2,3-cd]pyrene	1.67	1.464		mg/Kg		88	41 - 121
Naphthalene	1.67	0.7321		mg/Kg		44	32 - 120

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-543351/3-A

Matrix: Solid

Analysis Batch: 543785

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 543351

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenanthrene	1.67	1.275		mg/Kg		77	45 - 120
Pyrene	1.67	1.394		mg/Kg		84	43 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	44		29 - 120
Nitrobenzene-d5 (Surr)	34		27 - 120
Terphenyl-d14 (Surr)	74		13 - 120

Lab Sample ID: 490-159244-28 MS

Matrix: Solid

Analysis Batch: 543785

Client Sample ID: SS-04

Prep Type: Total/NA

Prep Batch: 543351

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics C10-C21	10.4	J	85.3	65.45		mg/Kg	☼	65	10 - 175

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl (Surr)	61		29 - 120
Nitrobenzene-d5 (Surr)	51		27 - 120
Terphenyl-d14 (Surr)	72		13 - 120

Lab Sample ID: 490-159244-28 MSD

Matrix: Solid

Analysis Batch: 543785

Client Sample ID: SS-04

Prep Type: Total/NA

Prep Batch: 543351

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics C10-C21	10.4	J	84.5	49.81		mg/Kg	☼	47	10 - 175	27	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	49		29 - 120
Nitrobenzene-d5 (Surr)	40		27 - 120
Terphenyl-d14 (Surr)	61		13 - 120

Lab Sample ID: MB 490-543591/1-A

Matrix: Water

Analysis Batch: 543785

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 543591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics C10-C21	ND		500	139	ug/L		09/18/18 13:56	09/19/18 17:44	1
Oil Range Organics C21-C35	ND		500	139	ug/L		09/18/18 13:56	09/19/18 17:44	1
Acenaphthene	ND		2.00	0.526	ug/L		09/18/18 13:56	09/19/18 17:44	1
Acenaphthylene	ND		2.00	0.451	ug/L		09/18/18 13:56	09/19/18 17:44	1
Anthracene	ND		2.00	0.477	ug/L		09/18/18 13:56	09/19/18 17:44	1
Benzo[a]anthracene	ND		2.00	0.483	ug/L		09/18/18 13:56	09/19/18 17:44	1
Benzo[a]pyrene	ND		2.00	0.414	ug/L		09/18/18 13:56	09/19/18 17:44	1
Benzo[b]fluoranthene	ND		2.00	0.258	ug/L		09/18/18 13:56	09/19/18 17:44	1
Benzo[g,h,i]perylene	ND		2.00	0.369	ug/L		09/18/18 13:56	09/19/18 17:44	1
Benzo[k]fluoranthene	ND		2.00	0.618	ug/L		09/18/18 13:56	09/19/18 17:44	1

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-543591/1-A

Matrix: Water

Analysis Batch: 543785

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 543591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		2.00	0.464	ug/L		09/18/18 13:56	09/19/18 17:44	1
Dibenz(a,h)anthracene	ND		2.00	0.441	ug/L		09/18/18 13:56	09/19/18 17:44	1
Fluoranthene	ND		2.00	0.449	ug/L		09/18/18 13:56	09/19/18 17:44	1
Fluorene	ND		2.00	0.492	ug/L		09/18/18 13:56	09/19/18 17:44	1
Indeno[1,2,3-cd]pyrene	ND		2.00	0.385	ug/L		09/18/18 13:56	09/19/18 17:44	1
Naphthalene	ND		2.00	0.629	ug/L		09/18/18 13:56	09/19/18 17:44	1
Phenanthrene	ND		2.00	0.451	ug/L		09/18/18 13:56	09/19/18 17:44	1
Pyrene	ND		2.00	0.396	ug/L		09/18/18 13:56	09/19/18 17:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	49		29 - 120				09/18/18 13:56	09/19/18 17:44	1
Nitrobenzene-d5 (Surr)	42		27 - 120				09/18/18 13:56	09/19/18 17:44	1
Terphenyl-d14 (Surr)	76		13 - 120				09/18/18 13:56	09/19/18 17:44	1

Lab Sample ID: LCS 490-543591/14-A

Matrix: Water

Analysis Batch: 543785

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 543591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	50.0	41.85		ug/L		84	36 - 129
Acenaphthylene	50.0	44.27		ug/L		89	36 - 120
Anthracene	50.0	44.68		ug/L		89	42 - 130
Benzo[a]anthracene	50.0	47.33		ug/L		95	41 - 131
Benzo[a]pyrene	50.0	53.27		ug/L		107	45 - 131
Benzo[b]fluoranthene	50.0	54.66		ug/L		109	43 - 132
Benzo[g,h,i]perylene	50.0	53.61		ug/L		107	38 - 138
Benzo[k]fluoranthene	50.0	53.26		ug/L		107	44 - 129
Chrysene	50.0	48.85		ug/L		98	39 - 130
Dibenz(a,h)anthracene	50.0	55.98		ug/L		112	43 - 140
Fluoranthene	50.0	46.87		ug/L		94	31 - 132
Fluorene	50.0	44.16		ug/L		88	37 - 130
Indeno[1,2,3-cd]pyrene	50.0	53.17		ug/L		106	40 - 136
Naphthalene	50.0	34.32		ug/L		69	32 - 120
Phenanthrene	50.0	44.24		ug/L		88	39 - 126
Pyrene	50.0	49.65		ug/L		99	37 - 129
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2-Fluorobiphenyl (Surr)	65		29 - 120				
Nitrobenzene-d5 (Surr)	55		27 - 120				
Terphenyl-d14 (Surr)	88		13 - 120				

Lab Sample ID: LCS 490-543591/2-A

Matrix: Water

Analysis Batch: 543785

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 543591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics C10-C21	2000	1169		ug/L		58	31 - 115

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-543591/2-A
Matrix: Water
Analysis Batch: 543785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543591

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	56		29 - 120
Nitrobenzene-d5 (Surr)	46		27 - 120
Terphenyl-d14 (Surr)	83		13 - 120

Lab Sample ID: LCSD 490-543591/3-A
Matrix: Water
Analysis Batch: 543785

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 543591

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics C10-C21	2000	1206		ug/L		60	31 - 115	3	50
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
2-Fluorobiphenyl (Surr)	57		29 - 120						
Nitrobenzene-d5 (Surr)	48		27 - 120						
Terphenyl-d14 (Surr)	87		13 - 120						

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 490-543642/1-A
Matrix: Solid
Analysis Batch: 543916

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543642

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.67	1.00	mg/Kg		09/18/18 17:13	09/19/18 10:11	1
Barium	ND		1.67	0.833	mg/Kg		09/18/18 17:13	09/19/18 10:11	1
Cadmium	ND		0.833	0.0833	mg/Kg		09/18/18 17:13	09/19/18 10:11	1
Chromium	ND		0.833	0.750	mg/Kg		09/18/18 17:13	09/19/18 10:11	1
Lead	ND		0.833	0.417	mg/Kg		09/18/18 17:13	09/19/18 10:11	1
Selenium	ND		1.67	0.917	mg/Kg		09/18/18 17:13	09/19/18 10:11	1
Silver	ND		0.833	0.333	mg/Kg		09/18/18 17:13	09/19/18 10:11	1

Lab Sample ID: LCS 490-543642/2-A
Matrix: Solid
Analysis Batch: 543916

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543642

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	16.9	16.97		mg/Kg		100	80 - 120
Barium	16.9	16.93		mg/Kg		100	80 - 120
Cadmium	16.9	17.19		mg/Kg		101	80 - 120
Chromium	16.9	17.14		mg/Kg		101	80 - 120
Lead	16.9	17.36		mg/Kg		102	80 - 120
Selenium	16.9	15.69		mg/Kg		93	80 - 120
Silver	16.9	15.68		mg/Kg		92	80 - 120

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 490-543643/1-A

Matrix: Solid

Analysis Batch: 544695

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 543643

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.85	1.11	mg/Kg		09/18/18 17:21	09/21/18 18:29	1
Barium	ND		1.85	0.926	mg/Kg		09/18/18 17:21	09/21/18 18:29	1
Cadmium	ND		0.926	0.0926	mg/Kg		09/18/18 17:21	09/21/18 18:29	1
Chromium	ND		0.926	0.833	mg/Kg		09/18/18 17:21	09/21/18 18:29	1
Lead	ND		0.926	0.463	mg/Kg		09/18/18 17:21	09/21/18 18:29	1
Selenium	ND		1.85	1.02	mg/Kg		09/18/18 17:21	09/21/18 18:29	1
Silver	ND		0.926	0.370	mg/Kg		09/18/18 17:21	09/21/18 18:29	1

Lab Sample ID: LCS 490-543643/2-A

Matrix: Solid

Analysis Batch: 544695

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 543643

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	18.9	19.30		mg/Kg		102	80 - 120
Barium	18.9	21.40		mg/Kg		113	80 - 120
Cadmium	18.9	18.89		mg/Kg		100	80 - 120
Chromium	18.9	18.74		mg/Kg		99	80 - 120
Lead	18.9	19.79		mg/Kg		105	80 - 120
Selenium	18.9	18.49		mg/Kg		98	80 - 120
Silver	18.9	16.87		mg/Kg		89	80 - 120

Lab Sample ID: 490-159244-19 MS

Matrix: Solid

Analysis Batch: 544695

Client Sample ID: SB-7 11-13'

Prep Type: Total/NA

Prep Batch: 543643

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	5.01		23.0	27.58		mg/Kg	☼	98	75 - 125
Barium	14.9	F1	23.0	102.7	F1	mg/Kg	☼	382	75 - 125
Cadmium	ND		23.0	22.04		mg/Kg	☼	96	75 - 125
Chromium	2.55	F1	23.0	33.12	F1	mg/Kg	☼	133	75 - 125
Lead	ND		23.0	19.60		mg/Kg	☼	85	75 - 125
Selenium	ND	F1	23.0	17.17		mg/Kg	☼	75	75 - 125
Silver	ND		23.0	19.58		mg/Kg	☼	85	75 - 125

Lab Sample ID: 490-159244-19 MSD

Matrix: Solid

Analysis Batch: 544695

Client Sample ID: SB-7 11-13'

Prep Type: Total/NA

Prep Batch: 543643

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	5.01		22.2	25.38		mg/Kg	☼	92	75 - 125	8	20
Barium	14.9	F1	22.2	111.9	F1	mg/Kg	☼	437	75 - 125	9	20
Cadmium	ND		22.2	21.12		mg/Kg	☼	95	75 - 125	4	20
Chromium	2.55	F1	22.2	34.31	F1	mg/Kg	☼	143	75 - 125	4	20
Lead	ND		22.2	18.00		mg/Kg	☼	81	75 - 125	9	20
Selenium	ND	F1	22.2	15.89	F1	mg/Kg	☼	72	75 - 125	8	20
Silver	ND		22.2	18.86		mg/Kg	☼	85	75 - 125	4	20

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-543559/1-A
Matrix: Water
Analysis Batch: 544895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.00200	0.000400	mg/L		09/18/18 12:36	09/20/18 14:56	1
Barium	0.0007350	J	0.00200	0.000100	mg/L		09/18/18 12:36	09/20/18 14:56	1
Cadmium	ND		0.00100	0.000100	mg/L		09/18/18 12:36	09/20/18 14:56	1
Chromium	0.0005780	J ^	0.00200	0.000500	mg/L		09/18/18 12:36	09/20/18 14:56	1
Lead	ND		0.00200	0.000100	mg/L		09/18/18 12:36	09/20/18 14:56	1
Selenium	ND		0.00200	0.000300	mg/L		09/18/18 12:36	09/20/18 14:56	1
Silver	ND		0.00200	0.000800	mg/L		09/18/18 12:36	09/20/18 14:56	1

Lab Sample ID: LCS 490-543559/2-A
Matrix: Water
Analysis Batch: 544895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.1065		mg/L		107	80 - 120
Barium	0.100	0.1068		mg/L		107	80 - 120
Cadmium	0.100	0.1044		mg/L		104	80 - 120
Chromium	0.100	0.1092	^	mg/L		109	80 - 120
Lead	0.100	0.1018		mg/L		102	80 - 120
Selenium	0.100	0.1005		mg/L		101	80 - 120
Silver	0.100	0.1072		mg/L		107	80 - 120

Lab Sample ID: LCSD 490-543559/3-A
Matrix: Water
Analysis Batch: 544895

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 543559

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.100	0.1013		mg/L		101	80 - 120	5	20
Barium	0.100	0.09617		mg/L		96	80 - 120	10	20
Cadmium	0.100	0.09837		mg/L		98	80 - 120	6	20
Chromium	0.100	0.09948	^	mg/L		99	80 - 120	9	20
Lead	0.100	0.09673		mg/L		97	80 - 120	5	20
Selenium	0.100	0.09739		mg/L		97	80 - 120	3	20
Silver	0.100	0.1017		mg/L		102	80 - 120	5	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 490-543469/1-A
Matrix: Water
Analysis Batch: 544793

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543469

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.000200	0.000100	mg/L		09/18/18 10:17	09/21/18 19:27	1

Lab Sample ID: LCS 490-543469/2-A
Matrix: Water
Analysis Batch: 544793

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543469

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00100	0.001064		mg/L		106	80 - 120

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Lab Sample ID: LCSD 490-543469/3-A
Matrix: Water
Analysis Batch: 544793

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 543469

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00100	0.001099		mg/L		110	80 - 120	3	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 490-543838/1-A
Matrix: Solid
Analysis Batch: 544883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543838

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0985	0.0296	mg/Kg		09/19/18 11:45	09/22/18 17:43	1

Lab Sample ID: LCS 490-543838/2-A
Matrix: Solid
Analysis Batch: 544883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.162	0.1511		mg/Kg		93	80 - 120

Lab Sample ID: 490-159244-5 MS
Matrix: Solid
Analysis Batch: 544883

Client Sample ID: SB-1 3-5'
Prep Type: Total/NA
Prep Batch: 543838

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.213	0.2365		mg/Kg	✱	111	80 - 120

Lab Sample ID: 490-159244-5 MSD
Matrix: Solid
Analysis Batch: 544883

Client Sample ID: SB-1 3-5'
Prep Type: Total/NA
Prep Batch: 543838

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.210	0.2363		mg/Kg	✱	112	80 - 120	0	20

Lab Sample ID: MB 490-543955/1-A
Matrix: Solid
Analysis Batch: 544883

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543955

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0988	0.0297	mg/Kg		09/19/18 15:24	09/22/18 16:15	1

Lab Sample ID: LCS 490-543955/2-A
Matrix: Solid
Analysis Batch: 544883

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543955

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.163	0.1602		mg/Kg		98	80 - 120

Lab Sample ID: 490-159244-25 MS
Matrix: Solid
Analysis Batch: 544883

Client Sample ID: SS-2
Prep Type: Total/NA
Prep Batch: 543955

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.192	0.2068		mg/Kg	✱	108	80 - 120

TestAmerica Nashville

QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Lab Sample ID: 490-159244-25 MSD

Matrix: Solid

Analysis Batch: 544883

Client Sample ID: SS-2

Prep Type: Total/NA

Prep Batch: 543955

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.193	0.2077		mg/Kg	☼	107	80 - 120	0	20

Method: Moisture - Percent Moisture

Lab Sample ID: 490-159244-9 DU

Matrix: Solid

Analysis Batch: 543320

Client Sample ID: SB-3 0-2'

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	15.3		15.1		%		2	20
Percent Solids	84.7		84.9		%		0.3	20

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

GC/MS VOA

Prep Batch: 543402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-27	SS-03	Total/NA	Solid	5035	

Analysis Batch: 543507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-1	GW-3	Total/NA	Water	8260B	
490-159244-2	GW-3-FD	Total/NA	Water	8260B	
490-159244-3	RB	Total/NA	Water	8260B	
490-159244-4	FB	Total/NA	Water	8260B	
MB 490-543507/10	Method Blank	Total/NA	Water	8260B	
LCS 490-543507/4	Lab Control Sample	Total/NA	Water	8260B	
LCS 490-543507/8	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-543507/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Prep Batch: 543514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	5035	
490-159244-6	SB-1 17-19'	Total/NA	Solid	5035	
490-159244-7	SB-2 0-2'	Total/NA	Solid	5035	
490-159244-8	SB-2 11-13'	Total/NA	Solid	5035	
490-159244-9	SB-3 0-2'	Total/NA	Solid	5035	
490-159244-10	SB-3 21-23'	Total/NA	Solid	5035	
490-159244-11	SB-4 5-7'	Total/NA	Solid	5035	
490-159244-12	SB-4 9-11'	Total/NA	Solid	5035	
490-159244-13	SB-5 0-2'	Total/NA	Solid	5035	
490-159244-14	SB-5 18-20'	Total/NA	Solid	5035	
490-159244-15	SB-6 2-4'	Total/NA	Solid	5035	
490-159244-16	SB-6 22-24'	Total/NA	Solid	5035	
490-159244-17	SB-7 0-2'	Total/NA	Solid	5035	
490-159244-18	SB-7-FD 0-2'	Total/NA	Solid	5035	
490-159244-19	SB-7 11-13'	Total/NA	Solid	5035	
490-159244-20	SB-8 7-9'	Total/NA	Solid	5035	
490-159244-21	SB-8 9-11'	Total/NA	Solid	5035	
490-159244-22	SB-9 7-9'	Total/NA	Solid	5035	
490-159244-23	SB-9 10-12'	Total/NA	Solid	5035	
490-159244-24	SS-1	Total/NA	Solid	5035	
490-159244-25	SS-2	Total/NA	Solid	5035	
490-159244-26	SS-2-FD	Total/NA	Solid	5035	
490-159244-27	SS-03	Total/NA	Solid	5035	
490-159244-28	SS-04	Total/NA	Solid	5035	
490-159244-29	SS-05	Total/NA	Solid	5035	

Analysis Batch: 544809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-14	SB-5 18-20'	Total/NA	Solid	8260B	543514
490-159244-15	SB-6 2-4'	Total/NA	Solid	8260B	543514
490-159244-16	SB-6 22-24'	Total/NA	Solid	8260B	543514
490-159244-17	SB-7 0-2'	Total/NA	Solid	8260B	543514
490-159244-19	SB-7 11-13'	Total/NA	Solid	8260B	543514
490-159244-20	SB-8 7-9'	Total/NA	Solid	8260B	543514
490-159244-21	SB-8 9-11'	Total/NA	Solid	8260B	543514
490-159244-22	SB-9 7-9'	Total/NA	Solid	8260B	543514

TestAmerica Nashville

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

GC/MS VOA (Continued)

Analysis Batch: 544809 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-23	SB-9 10-12'	Total/NA	Solid	8260B	543514
490-159244-24	SS-1	Total/NA	Solid	8260B	543514
490-159244-25	SS-2	Total/NA	Solid	8260B	543514
490-159244-26	SS-2-FD	Total/NA	Solid	8260B	543514
490-159244-27	SS-03	Total/NA	Solid	8260B	543514
MB 490-544809/11	Method Blank	Total/NA	Solid	8260B	
LCS 490-544809/3	Lab Control Sample	Total/NA	Solid	8260B	
LCS 490-544809/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-544809/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 490-544809/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 544990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	8260B	543514
490-159244-6	SB-1 17-19'	Total/NA	Solid	8260B	543514
490-159244-7	SB-2 0-2'	Total/NA	Solid	8260B	543514
490-159244-8	SB-2 11-13'	Total/NA	Solid	8260B	543514
490-159244-9	SB-3 0-2'	Total/NA	Solid	8260B	543514
490-159244-10	SB-3 21-23'	Total/NA	Solid	8260B	543514
490-159244-11	SB-4 5-7'	Total/NA	Solid	8260B	543514
490-159244-12	SB-4 9-11'	Total/NA	Solid	8260B	543514
490-159244-13	SB-5 0-2'	Total/NA	Solid	8260B	543514
490-159244-18	SB-7-FD 0-2'	Total/NA	Solid	8260B	543514
490-159244-28	SS-04	Total/NA	Solid	8260B	543514
490-159244-29	SS-05	Total/NA	Solid	8260B	543514
MB 490-544990/10	Method Blank	Total/NA	Solid	8260B	
LCS 490-544990/3	Lab Control Sample	Total/NA	Solid	8260B	
LCS 490-544990/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-544990/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 490-544990/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 545407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-27	SS-03	Total/NA	Solid	8260B	543402
MB 490-545407/10	Method Blank	Total/NA	Solid	8260B	
LCS 490-545407/3	Lab Control Sample	Total/NA	Solid	8260B	
LCS 490-545407/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 490-545407/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 490-545407/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 543333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	3550C	
490-159244-6	SB-1 17-19'	Total/NA	Solid	3550C	
490-159244-7	SB-2 0-2'	Total/NA	Solid	3550C	
490-159244-8	SB-2 11-13'	Total/NA	Solid	3550C	
490-159244-9	SB-3 0-2'	Total/NA	Solid	3550C	
490-159244-10	SB-3 21-23'	Total/NA	Solid	3550C	

TestAmerica Nashville

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

GC/MS Semi VOA (Continued)

Prep Batch: 543333 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-11	SB-4 5-7'	Total/NA	Solid	3550C	
490-159244-12	SB-4 9-11'	Total/NA	Solid	3550C	
490-159244-13	SB-5 0-2'	Total/NA	Solid	3550C	
490-159244-14	SB-5 18-20'	Total/NA	Solid	3550C	
490-159244-15	SB-6 2-4'	Total/NA	Solid	3550C	
490-159244-16	SB-6 22-24'	Total/NA	Solid	3550C	
490-159244-17	SB-7 0-2'	Total/NA	Solid	3550C	
490-159244-18	SB-7-FD 0-2'	Total/NA	Solid	3550C	
490-159244-19	SB-7 11-13'	Total/NA	Solid	3550C	
490-159244-20	SB-8 7-9'	Total/NA	Solid	3550C	
490-159244-21	SB-8 9-11'	Total/NA	Solid	3550C	
490-159244-22	SB-9 7-9'	Total/NA	Solid	3550C	
490-159244-23	SB-9 10-12'	Total/NA	Solid	3550C	
490-159244-24	SS-1	Total/NA	Solid	3550C	
MB 490-543333/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-543333/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCS 490-543333/3-A	Lab Control Sample	Total/NA	Solid	3550C	
490-159244-7 MS	SB-2 0-2'	Total/NA	Solid	3550C	
490-159244-7 MSD	SB-2 0-2'	Total/NA	Solid	3550C	

Prep Batch: 543351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-25	SS-2	Total/NA	Solid	3550C	
490-159244-26	SS-2-FD	Total/NA	Solid	3550C	
490-159244-27	SS-03	Total/NA	Solid	3550C	
490-159244-28	SS-04	Total/NA	Solid	3550C	
490-159244-29	SS-05	Total/NA	Solid	3550C	
MB 490-543351/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 490-543351/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCS 490-543351/3-A	Lab Control Sample	Total/NA	Solid	3550C	
490-159244-28 MS	SS-04	Total/NA	Solid	3550C	
490-159244-28 MSD	SS-04	Total/NA	Solid	3550C	

Prep Batch: 543591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-1	GW-3	Total/NA	Water	3510C	
490-159244-2	GW-3-FD	Total/NA	Water	3510C	
490-159244-3	RB	Total/NA	Water	3510C	
490-159244-4	FB	Total/NA	Water	3510C	
MB 490-543591/1-A	Method Blank	Total/NA	Water	3510C	
LCS 490-543591/14-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 490-543591/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 490-543591/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 543785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-1	GW-3	Total/NA	Water	8270C	543591
490-159244-2	GW-3-FD	Total/NA	Water	8270C	543591
490-159244-3	RB	Total/NA	Water	8270C	543591
490-159244-4	FB	Total/NA	Water	8270C	543591
490-159244-25	SS-2	Total/NA	Solid	8270C	543351

TestAmerica Nashville

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

GC/MS Semi VOA (Continued)

Analysis Batch: 543785 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-26	SS-2-FD	Total/NA	Solid	8270C	543351
490-159244-27	SS-03	Total/NA	Solid	8270C	543351
490-159244-28	SS-04	Total/NA	Solid	8270C	543351
490-159244-29	SS-05	Total/NA	Solid	8270C	543351
MB 490-543351/1-A	Method Blank	Total/NA	Solid	8270C	543351
MB 490-543591/1-A	Method Blank	Total/NA	Water	8270C	543591
LCS 490-543351/2-A	Lab Control Sample	Total/NA	Solid	8270C	543351
LCS 490-543351/3-A	Lab Control Sample	Total/NA	Solid	8270C	543351
LCS 490-543591/14-A	Lab Control Sample	Total/NA	Water	8270C	543591
LCS 490-543591/2-A	Lab Control Sample	Total/NA	Water	8270C	543591
LCSD 490-543591/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	543591
490-159244-28 MS	SS-04	Total/NA	Solid	8270C	543351
490-159244-28 MSD	SS-04	Total/NA	Solid	8270C	543351

Analysis Batch: 544084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	8270C	543333
490-159244-6	SB-1 17-19'	Total/NA	Solid	8270C	543333
490-159244-7	SB-2 0-2'	Total/NA	Solid	8270C	543333
490-159244-8	SB-2 11-13'	Total/NA	Solid	8270C	543333
490-159244-9	SB-3 0-2'	Total/NA	Solid	8270C	543333
490-159244-10	SB-3 21-23'	Total/NA	Solid	8270C	543333
490-159244-11	SB-4 5-7'	Total/NA	Solid	8270C	543333
490-159244-12	SB-4 9-11'	Total/NA	Solid	8270C	543333
490-159244-13	SB-5 0-2'	Total/NA	Solid	8270C	543333
490-159244-14	SB-5 18-20'	Total/NA	Solid	8270C	543333
490-159244-15	SB-6 2-4'	Total/NA	Solid	8270C	543333
490-159244-17	SB-7 0-2'	Total/NA	Solid	8270C	543333
490-159244-18	SB-7-FD 0-2'	Total/NA	Solid	8270C	543333
MB 490-543333/1-A	Method Blank	Total/NA	Solid	8270C	543333
LCS 490-543333/2-A	Lab Control Sample	Total/NA	Solid	8270C	543333
LCS 490-543333/3-A	Lab Control Sample	Total/NA	Solid	8270C	543333
490-159244-7 MS	SB-2 0-2'	Total/NA	Solid	8270C	543333
490-159244-7 MSD	SB-2 0-2'	Total/NA	Solid	8270C	543333

Analysis Batch: 544392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-16	SB-6 22-24'	Total/NA	Solid	8270C	543333
490-159244-19	SB-7 11-13'	Total/NA	Solid	8270C	543333
490-159244-20	SB-8 7-9'	Total/NA	Solid	8270C	543333
490-159244-21	SB-8 9-11'	Total/NA	Solid	8270C	543333
490-159244-23	SB-9 10-12'	Total/NA	Solid	8270C	543333
490-159244-24	SS-1	Total/NA	Solid	8270C	543333

Analysis Batch: 544697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-22	SB-9 7-9'	Total/NA	Solid	8270C	543333

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Metals

Prep Batch: 543469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-1	GW-3	Total/NA	Water	7470A	
490-159244-2	GW-3-FD	Total/NA	Water	7470A	
490-159244-3	RB	Total/NA	Water	7470A	
490-159244-4	FB	Total/NA	Water	7470A	
MB 490-543469/1-A	Method Blank	Total/NA	Water	7470A	
LCS 490-543469/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 490-543469/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Prep Batch: 543559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-1	GW-3	Total/NA	Water	3010A	
490-159244-2	GW-3-FD	Total/NA	Water	3010A	
490-159244-3	RB	Total/NA	Water	3010A	
490-159244-4	FB	Total/NA	Water	3010A	
MB 490-543559/1-A	Method Blank	Total/NA	Water	3010A	
LCS 490-543559/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-543559/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	

Prep Batch: 543642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	3051A	
490-159244-6	SB-1 17-19'	Total/NA	Solid	3051A	
490-159244-7	SB-2 0-2'	Total/NA	Solid	3051A	
490-159244-8	SB-2 11-13'	Total/NA	Solid	3051A	
490-159244-9	SB-3 0-2'	Total/NA	Solid	3051A	
490-159244-10	SB-3 21-23'	Total/NA	Solid	3051A	
490-159244-11	SB-4 5-7'	Total/NA	Solid	3051A	
490-159244-12	SB-4 9-11'	Total/NA	Solid	3051A	
490-159244-13	SB-5 0-2'	Total/NA	Solid	3051A	
490-159244-14	SB-5 18-20'	Total/NA	Solid	3051A	
490-159244-15	SB-6 2-4'	Total/NA	Solid	3051A	
490-159244-16	SB-6 22-24'	Total/NA	Solid	3051A	
490-159244-17	SB-7 0-2'	Total/NA	Solid	3051A	
490-159244-18	SB-7-FD 0-2'	Total/NA	Solid	3051A	
MB 490-543642/1-A	Method Blank	Total/NA	Solid	3051A	
LCS 490-543642/2-A	Lab Control Sample	Total/NA	Solid	3051A	

Prep Batch: 543643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-19	SB-7 11-13'	Total/NA	Solid	3051A	
490-159244-20	SB-8 7-9'	Total/NA	Solid	3051A	
490-159244-21	SB-8 9-11'	Total/NA	Solid	3051A	
490-159244-22	SB-9 7-9'	Total/NA	Solid	3051A	
490-159244-23	SB-9 10-12'	Total/NA	Solid	3051A	
490-159244-24	SS-1	Total/NA	Solid	3051A	
490-159244-25	SS-2	Total/NA	Solid	3051A	
490-159244-26	SS-2-FD	Total/NA	Solid	3051A	
490-159244-27	SS-03	Total/NA	Solid	3051A	
490-159244-28	SS-04	Total/NA	Solid	3051A	
490-159244-29	SS-05	Total/NA	Solid	3051A	
MB 490-543643/1-A	Method Blank	Total/NA	Solid	3051A	

TestAmerica Nashville

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Metals (Continued)

Prep Batch: 543643 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-543643/2-A	Lab Control Sample	Total/NA	Solid	3051A	
490-159244-19 MS	SB-7 11-13'	Total/NA	Solid	3051A	
490-159244-19 MSD	SB-7 11-13'	Total/NA	Solid	3051A	

Prep Batch: 543838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	7471B	
490-159244-6	SB-1 17-19'	Total/NA	Solid	7471B	
490-159244-7	SB-2 0-2'	Total/NA	Solid	7471B	
490-159244-8	SB-2 11-13'	Total/NA	Solid	7471B	
490-159244-9	SB-3 0-2'	Total/NA	Solid	7471B	
490-159244-10	SB-3 21-23'	Total/NA	Solid	7471B	
490-159244-11	SB-4 5-7'	Total/NA	Solid	7471B	
490-159244-12	SB-4 9-11'	Total/NA	Solid	7471B	
490-159244-13	SB-5 0-2'	Total/NA	Solid	7471B	
490-159244-14	SB-5 18-20'	Total/NA	Solid	7471B	
490-159244-15	SB-6 2-4'	Total/NA	Solid	7471B	
490-159244-16	SB-6 22-24'	Total/NA	Solid	7471B	
490-159244-17	SB-7 0-2'	Total/NA	Solid	7471B	
490-159244-18	SB-7-FD 0-2'	Total/NA	Solid	7471B	
490-159244-19	SB-7 11-13'	Total/NA	Solid	7471B	
490-159244-20	SB-8 7-9'	Total/NA	Solid	7471B	
490-159244-21	SB-8 9-11'	Total/NA	Solid	7471B	
490-159244-22	SB-9 7-9'	Total/NA	Solid	7471B	
490-159244-23	SB-9 10-12'	Total/NA	Solid	7471B	
490-159244-24	SS-1	Total/NA	Solid	7471B	
MB 490-543838/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 490-543838/2-A	Lab Control Sample	Total/NA	Solid	7471B	
490-159244-5 MS	SB-1 3-5'	Total/NA	Solid	7471B	
490-159244-5 MSD	SB-1 3-5'	Total/NA	Solid	7471B	

Analysis Batch: 543916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	6010C	543642
490-159244-6	SB-1 17-19'	Total/NA	Solid	6010C	543642
490-159244-7	SB-2 0-2'	Total/NA	Solid	6010C	543642
490-159244-8	SB-2 11-13'	Total/NA	Solid	6010C	543642
490-159244-9	SB-3 0-2'	Total/NA	Solid	6010C	543642
490-159244-10	SB-3 21-23'	Total/NA	Solid	6010C	543642
490-159244-11	SB-4 5-7'	Total/NA	Solid	6010C	543642
490-159244-12	SB-4 9-11'	Total/NA	Solid	6010C	543642
490-159244-13	SB-5 0-2'	Total/NA	Solid	6010C	543642
490-159244-14	SB-5 18-20'	Total/NA	Solid	6010C	543642
490-159244-15	SB-6 2-4'	Total/NA	Solid	6010C	543642
490-159244-16	SB-6 22-24'	Total/NA	Solid	6010C	543642
490-159244-17	SB-7 0-2'	Total/NA	Solid	6010C	543642
490-159244-18	SB-7-FD 0-2'	Total/NA	Solid	6010C	543642
MB 490-543642/1-A	Method Blank	Total/NA	Solid	6010C	543642
LCS 490-543642/2-A	Lab Control Sample	Total/NA	Solid	6010C	543642

TestAmerica Nashville

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Metals (Continued)

Prep Batch: 543955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-25	SS-2	Total/NA	Solid	7471B	
490-159244-26	SS-2-FD	Total/NA	Solid	7471B	
490-159244-27	SS-03	Total/NA	Solid	7471B	
490-159244-28	SS-04	Total/NA	Solid	7471B	
490-159244-29	SS-05	Total/NA	Solid	7471B	
MB 490-543955/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 490-543955/2-A	Lab Control Sample	Total/NA	Solid	7471B	
490-159244-25 MS	SS-2	Total/NA	Solid	7471B	
490-159244-25 MSD	SS-2	Total/NA	Solid	7471B	

Analysis Batch: 544088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	6010C	543642
490-159244-7	SB-2 0-2'	Total/NA	Solid	6010C	543642
490-159244-8	SB-2 11-13'	Total/NA	Solid	6010C	543642
490-159244-9	SB-3 0-2'	Total/NA	Solid	6010C	543642
490-159244-10	SB-3 21-23'	Total/NA	Solid	6010C	543642
490-159244-12	SB-4 9-11'	Total/NA	Solid	6010C	543642
490-159244-14	SB-5 18-20'	Total/NA	Solid	6010C	543642
490-159244-15	SB-6 2-4'	Total/NA	Solid	6010C	543642

Analysis Batch: 544695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-19	SB-7 11-13'	Total/NA	Solid	6010C	543643
490-159244-20	SB-8 7-9'	Total/NA	Solid	6010C	543643
490-159244-21	SB-8 9-11'	Total/NA	Solid	6010C	543643
490-159244-22	SB-9 7-9'	Total/NA	Solid	6010C	543643
490-159244-23	SB-9 10-12'	Total/NA	Solid	6010C	543643
490-159244-24	SS-1	Total/NA	Solid	6010C	543643
490-159244-25	SS-2	Total/NA	Solid	6010C	543643
490-159244-26	SS-2-FD	Total/NA	Solid	6010C	543643
490-159244-27	SS-03	Total/NA	Solid	6010C	543643
490-159244-28	SS-04	Total/NA	Solid	6010C	543643
490-159244-29	SS-05	Total/NA	Solid	6010C	543643
MB 490-543643/1-A	Method Blank	Total/NA	Solid	6010C	543643
LCS 490-543643/2-A	Lab Control Sample	Total/NA	Solid	6010C	543643
490-159244-19 MS	SB-7 11-13'	Total/NA	Solid	6010C	543643
490-159244-19 MSD	SB-7 11-13'	Total/NA	Solid	6010C	543643

Analysis Batch: 544793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-1	GW-3	Total/NA	Water	7470A	543469
490-159244-2	GW-3-FD	Total/NA	Water	7470A	543469
490-159244-3	RB	Total/NA	Water	7470A	543469
490-159244-4	FB	Total/NA	Water	7470A	543469
MB 490-543469/1-A	Method Blank	Total/NA	Water	7470A	543469
LCS 490-543469/2-A	Lab Control Sample	Total/NA	Water	7470A	543469
LCSD 490-543469/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	543469

TestAmerica Nashville

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Metals (Continued)

Analysis Batch: 544883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	7471B	543838
490-159244-6	SB-1 17-19'	Total/NA	Solid	7471B	543838
490-159244-7	SB-2 0-2'	Total/NA	Solid	7471B	543838
490-159244-8	SB-2 11-13'	Total/NA	Solid	7471B	543838
490-159244-9	SB-3 0-2'	Total/NA	Solid	7471B	543838
490-159244-10	SB-3 21-23'	Total/NA	Solid	7471B	543838
490-159244-11	SB-4 5-7'	Total/NA	Solid	7471B	543838
490-159244-12	SB-4 9-11'	Total/NA	Solid	7471B	543838
490-159244-13	SB-5 0-2'	Total/NA	Solid	7471B	543838
490-159244-14	SB-5 18-20'	Total/NA	Solid	7471B	543838
490-159244-15	SB-6 2-4'	Total/NA	Solid	7471B	543838
490-159244-16	SB-6 22-24'	Total/NA	Solid	7471B	543838
490-159244-17	SB-7 0-2'	Total/NA	Solid	7471B	543838
490-159244-18	SB-7-FD 0-2'	Total/NA	Solid	7471B	543838
490-159244-19	SB-7 11-13'	Total/NA	Solid	7471B	543838
490-159244-20	SB-8 7-9'	Total/NA	Solid	7471B	543838
490-159244-21	SB-8 9-11'	Total/NA	Solid	7471B	543838
490-159244-22	SB-9 7-9'	Total/NA	Solid	7471B	543838
490-159244-23	SB-9 10-12'	Total/NA	Solid	7471B	543838
490-159244-24	SS-1	Total/NA	Solid	7471B	543838
490-159244-25	SS-2	Total/NA	Solid	7471B	543955
490-159244-26	SS-2-FD	Total/NA	Solid	7471B	543955
490-159244-27	SS-03	Total/NA	Solid	7471B	543955
490-159244-28	SS-04	Total/NA	Solid	7471B	543955
490-159244-29	SS-05	Total/NA	Solid	7471B	543955
MB 490-543838/1-A	Method Blank	Total/NA	Solid	7471B	543838
MB 490-543955/1-A	Method Blank	Total/NA	Solid	7471B	543955
LCS 490-543838/2-A	Lab Control Sample	Total/NA	Solid	7471B	543838
LCS 490-543955/2-A	Lab Control Sample	Total/NA	Solid	7471B	543955
490-159244-5 MS	SB-1 3-5'	Total/NA	Solid	7471B	543838
490-159244-5 MSD	SB-1 3-5'	Total/NA	Solid	7471B	543838
490-159244-25 MS	SS-2	Total/NA	Solid	7471B	543955
490-159244-25 MSD	SS-2	Total/NA	Solid	7471B	543955

Analysis Batch: 544895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-1	GW-3	Total/NA	Water	6020A	543559
490-159244-2	GW-3-FD	Total/NA	Water	6020A	543559
490-159244-3	RB	Total/NA	Water	6020A	543559
490-159244-4	FB	Total/NA	Water	6020A	543559
MB 490-543559/1-A	Method Blank	Total/NA	Water	6020A	543559
LCS 490-543559/2-A	Lab Control Sample	Total/NA	Water	6020A	543559
LCSD 490-543559/3-A	Lab Control Sample Dup	Total/NA	Water	6020A	543559

General Chemistry

Analysis Batch: 543320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-5	SB-1 3-5'	Total/NA	Solid	Moisture	
490-159244-6	SB-1 17-19'	Total/NA	Solid	Moisture	

TestAmerica Nashville

QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

General Chemistry (Continued)

Analysis Batch: 543320 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-159244-7	SB-2 0-2'	Total/NA	Solid	Moisture	
490-159244-8	SB-2 11-13'	Total/NA	Solid	Moisture	
490-159244-9	SB-3 0-2'	Total/NA	Solid	Moisture	
490-159244-10	SB-3 21-23'	Total/NA	Solid	Moisture	
490-159244-11	SB-4 5-7'	Total/NA	Solid	Moisture	
490-159244-12	SB-4 9-11'	Total/NA	Solid	Moisture	
490-159244-13	SB-5 0-2'	Total/NA	Solid	Moisture	
490-159244-14	SB-5 18-20'	Total/NA	Solid	Moisture	
490-159244-15	SB-6 2-4'	Total/NA	Solid	Moisture	
490-159244-16	SB-6 22-24'	Total/NA	Solid	Moisture	
490-159244-17	SB-7 0-2'	Total/NA	Solid	Moisture	
490-159244-18	SB-7-FD 0-2'	Total/NA	Solid	Moisture	
490-159244-19	SB-7 11-13'	Total/NA	Solid	Moisture	
490-159244-20	SB-8 7-9'	Total/NA	Solid	Moisture	
490-159244-21	SB-8 9-11'	Total/NA	Solid	Moisture	
490-159244-22	SB-9 7-9'	Total/NA	Solid	Moisture	
490-159244-23	SB-9 10-12'	Total/NA	Solid	Moisture	
490-159244-24	SS-1	Total/NA	Solid	Moisture	
490-159244-25	SS-2	Total/NA	Solid	Moisture	
490-159244-26	SS-2-FD	Total/NA	Solid	Moisture	
490-159244-27	SS-03	Total/NA	Solid	Moisture	
490-159244-28	SS-04	Total/NA	Solid	Moisture	
490-159244-29	SS-05	Total/NA	Solid	Moisture	
490-159244-9 DU	SB-3 0-2'	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: GW-3

Date Collected: 09/12/18 14:24

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	543507	09/18/18 19:00	P1B	TAL NSH
Total/NA	Prep	3510C			910.4 mL	1 mL	543591	09/18/18 13:56	KWS	TAL NSH
Total/NA	Analysis	8270C		1	500 uL	1.0 mL	543785	09/19/18 19:14	NMB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	543559	09/18/18 12:36	WJE	TAL NSH
Total/NA	Analysis	6020A		1			544895	09/20/18 15:39	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	543469	09/18/18 10:17	CSL	TAL NSH
Total/NA	Analysis	7470A		1			544793	09/21/18 20:03	CSL	TAL NSH

Client Sample ID: GW-3-FD

Date Collected: 09/12/18 14:24

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	543507	09/18/18 19:27	P1B	TAL NSH
Total/NA	Prep	3510C			966.1 mL	1 mL	543591	09/18/18 13:56	KWS	TAL NSH
Total/NA	Analysis	8270C		1	500 uL	1.0 mL	543785	09/19/18 19:36	NMB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	543559	09/18/18 12:36	WJE	TAL NSH
Total/NA	Analysis	6020A		1			544895	09/20/18 15:43	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	543469	09/18/18 10:17	CSL	TAL NSH
Total/NA	Analysis	7470A		1			544793	09/21/18 20:06	CSL	TAL NSH

Client Sample ID: RB

Date Collected: 09/12/18 13:34

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	543507	09/18/18 18:33	P1B	TAL NSH
Total/NA	Prep	3510C			935.1 mL	1 mL	543591	09/18/18 13:56	KWS	TAL NSH
Total/NA	Analysis	8270C		1	500 uL	1.0 mL	543785	09/19/18 19:58	NMB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	543559	09/18/18 12:36	WJE	TAL NSH
Total/NA	Analysis	6020A		1			544895	09/20/18 15:46	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	543469	09/18/18 10:17	CSL	TAL NSH
Total/NA	Analysis	7470A		1			544793	09/21/18 20:08	CSL	TAL NSH

Client Sample ID: FB

Date Collected: 09/12/18 15:12

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	543507	09/18/18 18:05	P1B	TAL NSH
Total/NA	Prep	3510C			932.6 mL	1 mL	543591	09/18/18 13:56	KWS	TAL NSH
Total/NA	Analysis	8270C		1	500 uL	1.0 mL	543785	09/19/18 20:21	NMB	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: FB

Date Collected: 09/12/18 15:12

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	543559	09/18/18 12:36	WJE	TAL NSH
Total/NA	Analysis	6020A		1			544895	09/20/18 15:49	BLG	TAL NSH
Total/NA	Prep	7470A			30 mL	30 mL	543469	09/18/18 10:17	CSL	TAL NSH
Total/NA	Analysis	7470A		1			544793	09/21/18 20:11	CSL	TAL NSH

Client Sample ID: SB-1 3-5'

Date Collected: 09/11/18 09:32

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-1 3-5'

Date Collected: 09/11/18 09:32

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-5

Matrix: Solid

Percent Solids: 77.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.31 g	5.0 mL	543514	09/11/18 09:32	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 15:31	S1S	TAL NSH
Total/NA	Prep	3550C			30.24 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 17:54	NMB	TAL NSH
Total/NA	Prep	3051A			.53 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 11:44	RDH	TAL NSH
Total/NA	Prep	3051A			.53 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		5			544088	09/19/18 16:21	LDC	TAL NSH
Total/NA	Prep	7471B			0.599 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 17:54	CSL	TAL NSH

Client Sample ID: SB-1 17-19'

Date Collected: 09/11/18 09:45

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-1 17-19'

Date Collected: 09/11/18 09:45

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-6

Matrix: Solid

Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.59 g	5.0 mL	543514	09/11/18 09:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 16:01	S1S	TAL NSH
Total/NA	Prep	3550C			30.34 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-1 17-19'

Lab Sample ID: 490-159244-6

Date Collected: 09/11/18 09:45

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1			544084	09/20/18 18:17	NMB	TAL NSH
Total/NA	Prep	3051A			.56 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 11:49	RDH	TAL NSH
Total/NA	Prep	7471B			0.603 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:08	CSL	TAL NSH

Client Sample ID: SB-2 0-2'

Lab Sample ID: 490-159244-7

Date Collected: 09/11/18 11:37

Matrix: Solid

Date Received: 09/14/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-2 0-2'

Lab Sample ID: 490-159244-7

Date Collected: 09/11/18 11:37

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.75 g	5.0 mL	543514	09/11/18 11:37	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 16:31	S1S	TAL NSH
Total/NA	Prep	3550C			30.57 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 18:40	NMB	TAL NSH
Total/NA	Prep	3051A			.53 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 11:54	RDH	TAL NSH
Total/NA	Prep	3051A			.53 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		5			544088	09/19/18 16:27	LDC	TAL NSH
Total/NA	Prep	7471B			0.610 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:11	CSL	TAL NSH

Client Sample ID: SB-2 11-13'

Lab Sample ID: 490-159244-8

Date Collected: 09/11/18 11:55

Matrix: Solid

Date Received: 09/14/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-2 11-13'

Lab Sample ID: 490-159244-8

Date Collected: 09/11/18 11:55

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.43 g	5.0 mL	543514	09/11/18 11:55	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 17:01	S1S	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.26 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 19:48	NMB	TAL NSH
Total/NA	Prep	3051A			.55 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 12:10	RDH	TAL NSH
Total/NA	Prep	3051A			.55 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		5			544088	09/19/18 16:32	LDC	TAL NSH
Total/NA	Prep	7471B			0.595 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:13	CSL	TAL NSH

Client Sample ID: SB-3 0-2'

Lab Sample ID: 490-159244-9

Date Collected: 09/11/18 13:10

Matrix: Solid

Date Received: 09/14/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-3 0-2'

Lab Sample ID: 490-159244-9

Date Collected: 09/11/18 13:10

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.19 g	5.0 mL	543514	09/11/18 13:10	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 17:31	S1S	TAL NSH
Total/NA	Prep	3550C			30.59 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 20:11	NMB	TAL NSH
Total/NA	Prep	3051A			.52 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 12:16	RDH	TAL NSH
Total/NA	Prep	3051A			.52 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		5			544088	09/19/18 16:37	LDC	TAL NSH
Total/NA	Prep	7471B			0.598 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:16	CSL	TAL NSH

Client Sample ID: SB-3 21-23'

Lab Sample ID: 490-159244-10

Date Collected: 09/11/18 13:20

Matrix: Solid

Date Received: 09/14/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-3 21-23'

Lab Sample ID: 490-159244-10

Date Collected: 09/11/18 13:20

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.67 g	5.0 mL	543514	09/11/18 13:20	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 18:01	S1S	TAL NSH
Total/NA	Prep	3550C			30.98 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-3 21-23'

Date Collected: 09/11/18 13:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-10

Matrix: Solid

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1			544084	09/20/18 20:33	NMB	TAL NSH
Total/NA	Prep	3051A			.59 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 12:21	RDH	TAL NSH
Total/NA	Prep	3051A			.59 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		5			544088	09/19/18 16:43	LDC	TAL NSH
Total/NA	Prep	7471B			0.602 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:19	CSL	TAL NSH

Client Sample ID: SB-4 5-7'

Date Collected: 09/11/18 14:14

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-4 5-7'

Date Collected: 09/11/18 14:14

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-11

Matrix: Solid

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13.55 g	5.0 mL	543514	09/11/18 14:14	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 18:30	S1S	TAL NSH
Total/NA	Prep	3550C			30.06 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 20:56	NMB	TAL NSH
Total/NA	Prep	3051A			.56 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 12:26	RDH	TAL NSH
Total/NA	Prep	7471B			0.600 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:27	CSL	TAL NSH

Client Sample ID: SB-4 9-11'

Date Collected: 09/11/18 14:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-4 9-11'

Date Collected: 09/11/18 14:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-12

Matrix: Solid

Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.45 g	5.0 mL	543514	09/11/18 14:20	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 19:00	S1S	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.17 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 21:19	NMB	TAL NSH
Total/NA	Prep	3051A			.54 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 12:31	RDH	TAL NSH
Total/NA	Prep	3051A			.54 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		5			544088	09/19/18 18:52	LDC	TAL NSH
Total/NA	Prep	7471B			0.599 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:30	CSL	TAL NSH

Client Sample ID: SB-5 0-2'

Lab Sample ID: 490-159244-13

Date Collected: 09/11/18 15:00

Matrix: Solid

Date Received: 09/14/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-5 0-2'

Lab Sample ID: 490-159244-13

Date Collected: 09/11/18 15:00

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.09 g	5.0 mL	543514	09/11/18 15:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 19:30	S1S	TAL NSH
Total/NA	Prep	3550C			30.01 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 21:41	NMB	TAL NSH
Total/NA	Prep	3051A			.55 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 12:36	RDH	TAL NSH
Total/NA	Prep	7471B			0.619 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:33	CSL	TAL NSH

Client Sample ID: SB-5 18-20'

Lab Sample ID: 490-159244-14

Date Collected: 09/11/18 15:07

Matrix: Solid

Date Received: 09/14/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-5 18-20'

Lab Sample ID: 490-159244-14

Date Collected: 09/11/18 15:07

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.39 g	5.0 mL	543514	09/11/18 15:07	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 05:17	S1S	TAL NSH
Total/NA	Prep	3550C			30.45 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 22:04	NMB	TAL NSH
Total/NA	Prep	3051A			.55 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-5 18-20'

Date Collected: 09/11/18 15:07

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-14

Matrix: Solid

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1			543916	09/19/18 12:42	RDH	TAL NSH
Total/NA	Prep	3051A			.55 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		5			544088	09/19/18 19:08	LDC	TAL NSH
Total/NA	Prep	7471B			0.615 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:35	CSL	TAL NSH

Client Sample ID: SB-6 2-4'

Date Collected: 09/12/18 09:03

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-6 2-4'

Date Collected: 09/12/18 09:03

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-15

Matrix: Solid

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.9 g	5.0 mL	543514	09/12/18 09:03	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 05:45	S1S	TAL NSH
Total/NA	Prep	3550C			30.11 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 22:26	NMB	TAL NSH
Total/NA	Prep	3051A			.53 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 12:47	RDH	TAL NSH
Total/NA	Prep	3051A			.53 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		5			544088	09/19/18 19:18	LDC	TAL NSH
Total/NA	Prep	7471B			0.612 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:38	CSL	TAL NSH

Client Sample ID: SB-6 22-24'

Date Collected: 09/12/18 09:10

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-6 22-24'

Date Collected: 09/12/18 09:10

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-16

Matrix: Solid

Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			13.76 g	5.0 mL	543514	09/12/18 09:10	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 06:13	S1S	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			30.68 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544392	09/21/18 14:28	NMB	TAL NSH
Total/NA	Prep	3051A			.60 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 12:52	RDH	TAL NSH
Total/NA	Prep	7471B			0.599 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:41	CSL	TAL NSH

Client Sample ID: SB-7 0-2'

Lab Sample ID: 490-159244-17

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-7 0-2'

Lab Sample ID: 490-159244-17

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.06 g	5.0 mL	543514	09/12/18 09:53	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 06:41	S1S	TAL NSH
Total/NA	Prep	3550C			30.76 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 23:11	NMB	TAL NSH
Total/NA	Prep	3051A			.57 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 12:58	RDH	TAL NSH
Total/NA	Prep	7471B			0.603 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:44	CSL	TAL NSH

Client Sample ID: SB-7-FD 0-2'

Lab Sample ID: 490-159244-18

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-7-FD 0-2'

Lab Sample ID: 490-159244-18

Date Collected: 09/12/18 09:53

Matrix: Solid

Date Received: 09/14/18 10:20

Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.56 g	5.0 mL	543514	09/12/18 09:53	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 20:00	S1S	TAL NSH
Total/NA	Prep	3550C			30.19 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544084	09/20/18 23:34	NMB	TAL NSH
Total/NA	Prep	3051A			.55 g	100 mL	543642	09/18/18 17:13	CAP	TAL NSH
Total/NA	Analysis	6010C		1			543916	09/19/18 13:13	RDH	TAL NSH
Total/NA	Prep	7471B			0.615 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-7-FD 0-2'

Date Collected: 09/12/18 09:53

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-18

Matrix: Solid

Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1			544883	09/22/18 18:47	CSL	TAL NSH

Client Sample ID: SB-7 11-13'

Date Collected: 09/12/18 10:05

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-7 11-13'

Date Collected: 09/12/18 10:05

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-19

Matrix: Solid

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.46 g	5.0 mL	543514	09/12/18 10:05	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 07:09	S1S	TAL NSH
Total/NA	Prep	3550C			30.26 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544392	09/21/18 14:50	NMB	TAL NSH
Total/NA	Prep	3051A			.52 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 18:44	RDH	TAL NSH
Total/NA	Prep	7471B			0.604 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:49	CSL	TAL NSH

Client Sample ID: SB-8 7-9'

Date Collected: 09/12/18 10:40

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-8 7-9'

Date Collected: 09/12/18 10:40

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-20

Matrix: Solid

Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.63 g	5.0 mL	543514	09/12/18 10:40	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 07:37	S1S	TAL NSH
Total/NA	Prep	3550C			30.46 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544392	09/21/18 15:13	NMB	TAL NSH
Total/NA	Prep	3051A			.55 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 19:09	RDH	TAL NSH
Total/NA	Prep	7471B			0.622 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 18:52	CSL	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-8 9-11'

Date Collected: 09/12/18 10:45

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-8 9-11'

Date Collected: 09/12/18 10:45

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-21

Matrix: Solid

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.58 g	5.0 mL	543514	09/12/18 10:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 08:05	S1S	TAL NSH
Total/NA	Prep	3550C			30.21 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544392	09/21/18 15:36	NMB	TAL NSH
Total/NA	Prep	3051A			.56 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 19:14	RDH	TAL NSH
Total/NA	Prep	7471B			0.622 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 19:00	CSL	TAL NSH

Client Sample ID: SB-9 7-9'

Date Collected: 09/12/18 11:50

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-9 7-9'

Date Collected: 09/12/18 11:50

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-22

Matrix: Solid

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.83 g	5.0 mL	543514	09/12/18 11:50	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 08:34	S1S	TAL NSH
Total/NA	Prep	3550C			30.21 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544697	09/22/18 12:16	NMB	TAL NSH
Total/NA	Prep	3051A			.56 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 19:31	RDH	TAL NSH
Total/NA	Prep	7471B			0.597 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 19:03	CSL	TAL NSH

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SB-9 10-12'

Date Collected: 09/12/18 12:00

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SB-9 10-12'

Date Collected: 09/12/18 12:00

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-23

Matrix: Solid

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			12.06 g	5.0 mL	543514	09/12/18 12:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 09:02	S1S	TAL NSH
Total/NA	Prep	3550C			30.13 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544392	09/21/18 16:00	NMB	TAL NSH
Total/NA	Prep	3051A			.53 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 19:36	RDH	TAL NSH
Total/NA	Prep	7471B			0.610 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 19:06	CSL	TAL NSH

Client Sample ID: SS-1

Date Collected: 09/11/18 15:45

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SS-1

Date Collected: 09/11/18 15:45

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-24

Matrix: Solid

Percent Solids: 73.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.56 g	5.0 mL	543514	09/11/18 15:45	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 09:30	S1S	TAL NSH
Total/NA	Prep	3550C			30.41 g	1.00 mL	543333	09/17/18 14:06	MBV	TAL NSH
Total/NA	Analysis	8270C		1			544392	09/21/18 16:22	NMB	TAL NSH
Total/NA	Prep	3051A			.58 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 19:41	RDH	TAL NSH
Total/NA	Prep	7471B			0.620 g	100 mL	543838	09/19/18 11:45	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 19:09	CSL	TAL NSH

Client Sample ID: SS-2

Date Collected: 09/11/18 16:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-2

Date Collected: 09/11/18 16:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-25

Matrix: Solid

Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.22 g	5.0 mL	543514	09/11/18 16:20	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 09:58	S1S	TAL NSH
Total/NA	Prep	3550C			30.16 g	1.00 mL	543351	09/17/18 15:12	MBV	TAL NSH
Total/NA	Analysis	8270C		1			543785	09/19/18 15:07	NMB	TAL NSH
Total/NA	Prep	3051A			.54 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 19:46	RDH	TAL NSH
Total/NA	Prep	7471B			0.620 g	100 mL	543955	09/19/18 15:24	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 16:21	CSL	TAL NSH

Client Sample ID: SS-2-FD

Date Collected: 09/11/18 16:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SS-2-FD

Date Collected: 09/11/18 16:20

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-26

Matrix: Solid

Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			8.25 g	5.0 mL	543514	09/11/18 16:20	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 10:26	S1S	TAL NSH
Total/NA	Prep	3550C			30.09 g	1.00 mL	543351	09/17/18 15:12	MBV	TAL NSH
Total/NA	Analysis	8270C		1			543785	09/19/18 15:30	NMB	TAL NSH
Total/NA	Prep	3051A			.57 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 19:51	RDH	TAL NSH
Total/NA	Prep	7471B			0.611 g	100 mL	543955	09/19/18 15:24	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 16:34	CSL	TAL NSH

Client Sample ID: SS-03

Date Collected: 09/12/18 13:40

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-03

Date Collected: 09/12/18 13:40

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-27

Matrix: Solid

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			9.82 g	5.0 mL	543514	09/12/18 13:40	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544809	09/23/18 10:54	S1S	TAL NSH
Total/NA	Prep	5035			10.85 g	5.0 mL	543402	09/12/18 13:40	DHC	TAL NSH
Total/NA	Analysis	8260B		1	0.1 mL	5 mL	545407	09/26/18 12:35	EML	TAL NSH
Total/NA	Prep	3550C			30.34 g	1.00 mL	543351	09/17/18 15:12	MBV	TAL NSH
Total/NA	Analysis	8270C		1			543785	09/19/18 15:52	NMB	TAL NSH
Total/NA	Prep	3051A			.59 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 19:56	RDH	TAL NSH
Total/NA	Prep	7471B			0.611 g	100 mL	543955	09/19/18 15:24	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 16:37	CSL	TAL NSH

Client Sample ID: SS-04

Date Collected: 09/12/18 14:00

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-28

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

Client Sample ID: SS-04

Date Collected: 09/12/18 14:00

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-28

Matrix: Solid

Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.4 g	5.0 mL	543514	09/12/18 14:00	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 20:29	S1S	TAL NSH
Total/NA	Prep	3550C			30.42 g	1.00 mL	543351	09/17/18 15:12	MBV	TAL NSH
Total/NA	Analysis	8270C		1			543785	09/19/18 16:15	NMB	TAL NSH
Total/NA	Prep	3051A			.60 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 20:01	RDH	TAL NSH
Total/NA	Prep	7471B			0.601 g	100 mL	543955	09/19/18 15:24	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 16:40	CSL	TAL NSH

Client Sample ID: SS-05

Date Collected: 09/12/18 14:15

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-29

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			543320	09/17/18 13:47	BAA	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Client Sample ID: SS-05

Date Collected: 09/12/18 14:15

Date Received: 09/14/18 10:20

Lab Sample ID: 490-159244-29

Matrix: Solid

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			10.86 g	5.0 mL	543514	09/12/18 14:15	DHC	TAL NSH
Total/NA	Analysis	8260B		1	5 g	5 mL	544990	09/24/18 20:59	S1S	TAL NSH
Total/NA	Prep	3550C			30.27 g	1.00 mL	543351	09/17/18 15:12	MBV	TAL NSH
Total/NA	Analysis	8270C		1			543785	09/19/18 17:22	NMB	TAL NSH
Total/NA	Prep	3051A			.56 g	100 mL	543643	09/18/18 17:21	CAP	TAL NSH
Total/NA	Analysis	6010C		1			544695	09/21/18 20:06	RDH	TAL NSH
Total/NA	Prep	7471B			0.601 g	100 mL	543955	09/19/18 15:24	CSL	TAL NSH
Total/NA	Analysis	7471B		1			544883	09/22/18 16:48	CSL	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010C	Metals (ICP)	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH
7470A	Mercury (CVAA)	SW846	TAL NSH
7471B	Mercury (CVAA)	SW846	TAL NSH
Moisture	Percent Moisture	EPA	TAL NSH
3010A	Preparation, Total Metals	SW846	TAL NSH
3051A	Preparation, Metals, Microwave Assisted	SW846	TAL NSH
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL NSH
3550C	Ultrasonic Extraction	SW846	TAL NSH
5030B	Purge and Trap	SW846	TAL NSH
5035	Closed System Purge and Trap	SW846	TAL NSH
7470A	Preparation, Mercury	SW846	TAL NSH
7471B	Preparation, Mercury	SW846	TAL NSH

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Tetra Tech EM Inc.
Project/Site: Former Auto Zone

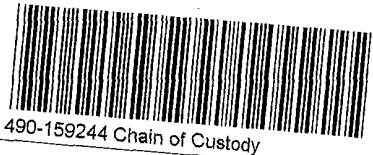
TestAmerica Job ID: 490-159244-1
SDG: Dellwood, MO

Laboratory: TestAmerica Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-19
California	State Program	9	2938	10-31-18
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-18
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-18
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-18
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-19
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-18
Mississippi	State Program	4	N/A	06-30-19
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-18
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-19
North Carolina (WW/SW)	State Program	4	387	12-31-18
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-18
South Carolina	State Program	4	84009 (001)	02-28-19
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	12-01-19
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

COOLER RECEIPT FORM



Cooler Received/Opened On 09-14-2018 @ 10:20

Time Samples Removed From Cooler 17:10 Time Samples Placed In Storage 17:40 (2 Hour Window)

1. Tracking # 8867 (last 4 digits, FedEx) Courier: FedEx
IR Gun ID 14740456 pH Strip Lot N/A Chlorine Strip Lot N/A 040518K 1009142018

2. Temperature of rep. sample or temp blank when opened: 31.6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) KA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA



14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # KA

I certify that I unloaded the cooler and answered questions 7-14 (initial) KA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) KA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) KA

I certify that I attached a label with the unique LIMS number to each container (initial) KA

21. Were there Non-Conformance Issues at login? YES...NO... Was a NCM generated? YES...NO...# KA

COOLER RECEIPT FORM

Cooler Received/Opened On 09-14-2018 @ 10:20

Time Samples Removed From Cooler 17:10 Time Samples Placed In Storage 17:40 (2 Hour Window)

1. Tracking # 8890 (last 4 digits, FedEx) Courier: FedEx
IR Gun ID 14740456 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 4.4 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA YES

If yes, how many and where: 1 (front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA YES

6. Were custody papers inside cooler? YES...NO...NA YES

I certify that I opened the cooler and answered questions 1-6 (initial) KD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA YES

Were these signed and dated correctly? YES...NO...NA YES

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA YES

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA YES

12. Did all container labels and tags agree with custody papers? YES...NO...NA YES

13a. Were VOA vials received? YES...NO...NA YES

b. Was there any observable headspace present in any VOA vial? YES...NO...NA YES



Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA NO If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) KD

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA YES

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA YES

16. Was residual chlorine present? YES...NO...NA YES

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) KD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA YES

18. Did you sign the custody papers in the appropriate place? YES...NO...NA YES

19. Were correct containers used for the analysis requested? YES...NO...NA YES

20. Was sufficient amount of sample sent in each container? YES...NO...NA YES

I certify that I entered this project into LIMS and answered questions 17-20 (initial) KD

I certify that I attached a label with the unique LIMS number to each container (initial) KD

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES...NO...NA NO

COOLER RECEIPT FORM

Cooler Received/Opened On 9/14/2018 @ 1020

Time Samples Removed From Cooler 17:10 Time Samples Placed In Storage 17:40 (2 Hour Window)

1. Tracking # 8878 (last 4 digits, FedEx) Courier: FedEx
IR Gun ID 17610176 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 4.6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES NO...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES NO...NO...NA

6. Were custody papers inside cooler? YES NO...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) 2.2

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA



Larger than this.

14. Was there a Trip Blank in this cooler? YES NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) KD

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) KD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) KD

I certify that I attached a label with the unique LIMS number to each container (initial) KD

21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO..#

COOLER RECEIPT FORM

Cooler Received/Opened On 9/14/2018 @ 1020

Time Samples Removed From Cooler 17:10 Time Samples Placed In Storage 17:40 (2 Hour Window)

1. Tracking # 2889 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 17960357 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 5.8 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?

YES NO...NA

4. Were custody seals on outside of cooler?

YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly?

YES...NO...NA

6. Were custody papers inside cooler?

YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) GH

7. Were custody seals on containers:

YES

NO

and Intact

YES...NO...NA

Were these signed and dated correctly?

YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process:

Ice

Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)?

YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)?

YES...NO...NA

12. Did all container labels and tags agree with custody papers?

YES...NO...NA

13a. Were VOA vials received?

YES...NO...NA

b. Was there any observable headspace present in any VOA vial?

YES...NO...NA



Larger than this.

14. Was there a Trip Blank in this cooler?

YES...NO...NA

If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (initial) KD

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?

YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used

YES...NO...NA

16. Was residual chlorine present?

YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) KD

17. Were custody papers properly filled out (ink, signed, etc)?

YES...NO...NA

18. Did you sign the custody papers in the appropriate place?

YES...NO...NA

19. Were correct containers used for the analysis requested?

YES...NO...NA

20. Was sufficient amount of sample sent in each container?

YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) KD

I certify that I attached a label with the unique LIMS number to each container (initial) KD

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

9/28/2018

DOC No. _____

12

Chain of Custody Record

Client Information Client Contact: Ms. Emily Fisher Company: Tetra Tech EM Inc. Address: 415 Oak Street City: Kansas City State, Zip: MO, 64106 Phone: 816-412-1755 Email: emily.fisher@tetratech.com Project Name: Tetra Tech - KG, MO Site:		Lab PMT: Cisneros, Roxanne E-Mail: foxanne.cisneros@testamerica.com Carrier Tracking No(s): 8867 9879 8891, 9880 COC No: 490-88425-25620.3 Page: Page 3 of 4 Job #:	
Due Date Requested: TAT Requested (days): Standard PO #: Purchase Order Requested WO #:		Analysis Requested 6020A, 7470A 8260B - 8260 Std VOC + GRO 8270C - MO DRO/RO + PAH 8260B - 8260 Std VOC + GRO 6010C, 7471B, 8270C, Moisture	
Sample Identification Sample ID: SB-6 2-41 SB-6 2-24 SB-7 6-2 SB-7 0-2 SB-7 11-13 SB-8 7-9 SB-8 9-11 SB-9 7-9 SB-9 10-12 SS-1 SS-2		Sample Date: 9-12-18 Sample Time: 0903 Sample Type: (C=Comp, G=grab) Matrix: (W=Water, S=solid, O=on-site, B=lab) Preservation Code:	
Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Total Number of Containers		Special Instructions/Note:	
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		Preservation Codes: M - Hexane N - None O - AshNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - BH 4-5 Z - other (specify)	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Special Instructions/QC Requirements:			
Empty Kit Relinquished by: Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]		Date: Date/Time: 9-13-18 1600 Date/Time: [Blank] Date/Time: [Blank]	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)	
Custody Seal No.: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 36, 4.4, 4.6, 5.8	

Page 157 of 157

Tetra Tech, Inc.
DATA VALIDATION REPORT
LEVEL II

Site: Former Auto Zone Site

Laboratory: TestAmerica Laboratories (Nashville, Tennessee)

Data Reviewer: Harry Ellis, Tetra Tech, Inc. (Tetra Tech)

Review Date: October 10, 2018

Sample Delivery Group (SDG): J159244

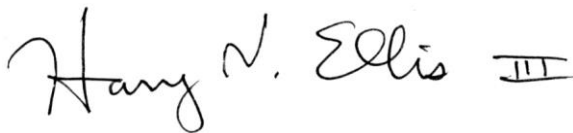
Sample Numbers: SB-1 3-5', SB-1 17-19', SB-2 0-2', SB-2 11-13', SB-3 0-2', SB-3 21-23', SB-4 5-7', SB-4 9-11', SB-5 0-2', SB-5 18-20', SB-6 2-4', SB-6 22-24', SB-7 0-2', SB-7-FD 0-2', SB-7 11-13', SB-8 7-9', SB-8 9-11', SB-9 7-9', SB-9 10-12', SS-1, SS-2, SS-2-FD, SS-03, SS-04, SS-05, GW-3, GW-3-FD, RB, and FB

Matrix / Number of Samples: Twenty-three Soil Samples, one Water Sample, Three Field Duplicates and Two Blank Samples

The data were qualified according to the U.S. Environmental Protection Agency (EPA) Region 7 documents entitled "Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review", dated January 2017, and "Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review", also dated January 2017. In addition, the Tetra Tech document "Review of Data Packages from Subcontracted Laboratories" (February 2002) was used along with other criteria specified in the applicable methods.

The review was intended to identify problems and quality control (QC) deficiencies that were readily apparent from the summary data package. The following sections discuss any problems or deficiencies that were found, and data qualifications applied because of non-compliant QC. The data review was limited to the available field and laboratory QC information submitted with the project-specific data package.

I, Harry Ellis, certify that all data validation criteria outlined in the above-referenced documents were assessed, and any qualifications made to the data accorded with those documents.



10 October 2018

Certified by Harry Ellis, Chemist

Date

DATA VALIDATION QUALIFIERS

- U** — The analyte was not detected above the reported sample quantitation limit.
- J** — The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ** — The analyte was not detected above the reported sample quantitation limit, which is estimated.
- R** — The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. Presence or absence of the analyte cannot be verified.

DATA ASSESSMENT

Sample delivery group (SDG) J159244 included twenty-three (23) environmental soil samples, one (1) environmental groundwater sample, and five (4) quality control (QC) samples (two soil field duplicates, one groundwater field duplicate, one rinsate blank and one field blank). Samples were analyzed for volatile organic compounds (VOC) by EPA SW-846 Method 8260B, polynuclear aromatic hydrocarbons (PAH) by EPA SW-846 Method 8270C, total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), diesel range organics (DRO), and oil range organics (ORO) by EPA SW-846 Methods 8260B and 8270C, and metals by EPA SW-846 Methods 6020A, 7470A, and 7471B. The following summarizes the data validation that was performed.

VOLATILE ORGANIC COMPOUND ANALYSES

I. Holding Time and Chain of Custody (COC) Requirements

The samples were received by the laboratory and analyzed within the established holding time of 14 days from sample collection to analysis. No data were qualified.

II. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Due to insufficient sample volume, no MS/MSD analyses were performed on these samples. Duplicate LCS analyses provided adequate data on precision and accuracy, so no qualifications were applied for this data gap.

III. Blanks

The aqueous laboratory (method) blank yielded a low concentration of the common laboratory contaminant acetone. The similar concentrations in the aqueous samples were qualified as artifacts and flagged “U”. The soil laboratory blanks yielded no detectable analytes, so no further qualifications were applied.

After those qualifications, the rinsate and field blanks yielded low concentrations of chloromethane (methyl chloride). The only other detection of that analyte, in sample GW-3, was qualified as a handling artifact and flagged “U”.

IV. Laboratory Control Sample (LCS)

Almost all percent recoveries from the duplicate LCS analyses and all relative percent differences (RPD) were within established control limits. The only exceptions were the dichlorobenzene isomers in one pair of soil LCS. The LCSD recoveries of these analytes were slightly below the acceptable range. However, the LCS recoveries and the average recoveries were within the acceptable range. Therefore no qualifications were applied.

V. Surrogates

All surrogate recoveries were within their QC limits. No qualifications were applied.

VI. Comments

Some detected concentrations were less than their reporting limits (“RL”). These low-concentration results were qualified as estimated (flagged “J”).

Most field duplicate results were reasonably similar. However, in both soil field duplicate pairs the solvents carbon disulfide and toluene yielded excessive differences. Due to these uncertainties as to the true concentrations of these analytes at those location, the concentrations for carbon disulfide and toluene in both soil field duplicate pairs were qualified as estimated and flagged “J”.

VII. Overall Assessment of Data

Overall data quality is acceptable, with no major qualifications applied. All data are usable as qualified for their intended purposes.

POLYNUCLEAR AROMATIC HYDROCARBON ANALYSES

I. Holding Time and Chain of Custody (COC) Requirements

The samples were received by the laboratory and analyzed within the established holding time of 14 days from sample collection to extraction and 40 days to analysis. No data were qualified.

II. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Due to insufficient sample volume, no MS/MSD analyses were performed. The TPH MS/MSD analyses, which use the same analytical method, yielded acceptable results. No qualifications were applied for these data gaps.

III. Blanks

The laboratory (method) blank and the field blanks yielded no detectable PAH, so no qualifications were applied.

IV. Laboratory Control Sample (LCS)

All percent recoveries from the LCS analyses were within established control limits. No qualifications were applied.

V. Surrogates

All surrogate recoveries were within QC limits. The exception was one (of three) surrogates in sample GW5. No qualifications were applied.

VI. Comments

Some detected concentrations were less than their RLs. These low-concentration results were qualified as estimated (flagged “J”).

Field duplicate results were similar, so no qualifications were applied.

VII. Overall Assessment of Data

Overall data quality is acceptable, with no significant applied. All data are usable as reported for their intended purposes.

TOTAL PETROLEUM HYDROCARBON ANALYSES

I. Holding Time and Chain of Custody (COC) Requirements

The samples were received by the laboratory and analyzed within the established holding times. No data were qualified.

II. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

All MS/MSD results were within limits. No qualifications were applied.

III. Blanks

The laboratory (method) blanks and field blanks yielded no detectable concentrations of TPH, so no qualifications were applied.

IV. Laboratory Control Sample (LCS)

All percent recoveries from the LCS analyses were within established control limits. No qualifications were applied.

V. Surrogates

All surrogate recoveries were within QC limits. No qualifications were applied.

VI. Comments

Some detected concentrations were less than their RLs. These low-concentration results were qualified as estimated (flagged "J").

Field duplicate results were quite similar, so no qualifications were applied.

VII. Overall Assessment of Data

Overall data quality is acceptable, with few qualifications applied. All data are usable as qualified for their intended purposes.

METALS ANALYSES

I. Holding Time and Chain of Custody (COC) Requirements

The samples were received by the laboratory and analyzed within the established holding time of 6 months from sample collection to analysis. No data were qualified.

II. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

In the MS/MSD analyses performed on sample SB-7 11-13', barium and chromium yielded recoveries above acceptance limits and selenium recoveries below limits. The barium and chromium results may be due to sample heterogeneity or to matrix interference, while the selenium results are due to matrix interference. Due to these irregularities, the results for barium, chromium, and selenium in that sample were qualified as estimated and flagged "J" or "UJ", as appropriate. All other MS/MSD results were within acceptable ranges so no further qualifications were applied.

III. Blanks

The aqueous laboratory blank yielded low concentrations of barium and chromium. The similar concentrations of these metals in the field blanks were qualified as laboratory artifacts and flagged "U". The groundwater concentrations of barium and chromium were considerably higher than the blank, so no further qualifications were applied. With these qualifications applied, all field and laboratory blank results were nondetected, so no further qualifications were applied.

IV. Laboratory Control Sample (LCS)

All percent recoveries from the LCS analyses were within established control limits. No qualifications were applied.

V. Comments

Some detected concentrations (including all for silver) were less than their RLs. These low-concentration results were qualified as estimated (flagged "J").

Almost all field duplicate results were quite similar. The exception was lead in the pair from SS-2, with a more than 10-fold difference in concentrations. Due to this uncertainty in the true concentration of lead at that location, the lead concentrations in both portions of that sample were qualified as estimated and flagged "J".

VI. Overall Assessment of Data

Overall data quality is acceptable, with no major qualifications applied. All data are usable as qualified for their intended purposes.

APPENDIX F

SUMMARY OF ANALYTICAL RESULTS

TABLE F-1

SUMMARY OF ANALYTICAL RESULTS FROM SURFACE SOIL SAMPLES
FORMER AUTOZONE, DELLWOOD, MISSOURI

Analyte	Sample Number						Lowest Default Target Level¹	RBTL Residential²	RBTL Non-Residential³	USGS Surface Soil Concentrations Range⁴
	SS-1	SS-2	SS-2-FD	SS-3	SS-4	SS-5				
DETECTED VOLATILE ORGANIC COMPOUNDS (mg/kg)										
Acetone	0.345	0.0982	0.147	0.147	0.272	0.235	4.20	61,500	807,000	NA
Benzene	ND	0.00246	0.00143	0.00144	ND	0.000699 J	0.0561	177	763	NA
Carbon disulfide	ND	0.00623	0.00335 J	0.0130	ND	0.00361	6.26	7,290	95,600	NA
Ethylbenzene	ND	0.00208	0.00121 J	0.0614	ND	ND	39.9	7,450	97,500	NA
Isopropylbenzene	ND	ND	ND	0.00115 J	ND	ND	10.5	6,940	91,100	NA
Methylene chloride	0.00164 J	0.00224 J	0.00135 J	0.000764 J	0.00114 J	ND	0.0176	842	3,700	NA
Methyl ethyl ketone (2-Butanone)	0.0230 J	0.00773 J	0.0114 J	0.0131 J	0.0183 J	0.0197 J	7.30	44,200	579,000	NA
n-Propylbenzene	ND	ND	ND	0.000489 J	ND	ND	13.0	2,730	35,900	NA
Toluene	0.00133 J	0.00713	0.00409	0.00430	0.00110 J	0.00168	29.8	6,210	81,100	NA
1,2,4-Trimethylbenzene	ND	0.00121 J	ND	0.000744 J	ND	ND	3.93	749	10,100	NA
1,3,5-Trimethylbenzene	ND	ND	ND	0.000455 J	ND	ND	0.882	749	10,100	NA
Xylenes, Total	ND	0.00373 J	0.00225 J	0.343	0.00404 J	ND	24.7	7,830	104,000	NA
DETECTED TOTAL PETROLEUM HYDROCARBONS (mg/kg)										
TPH-ORO	13.2 J	12.3 J	21.0	12.8 J	32.6	30.8	124,000	124,000	1,250,000	NA
TPH-GRO	0.234 J	0.381	0.190 J	3.41	ND	ND	385	354,000	4,650,000	NA
TPH-DRO	11.2 J	ND	ND	ND	10.4 J	10.7 J	4,150	140,000	1,410,000	NA
DETECTED POLYCYCLIC AROMATIC HYDROCARBONS (mg/kg)										
Benzo[a]anthracene	ND	ND	ND	ND	0.405	0.521	6.12	6.20	21.1	NA
Benzo[a]pyrene	0.0613 J	ND	ND	ND	0.583	0.738	0.620	0.620	2.11	NA
Benzo[b]fluoranthene	0.0951	ND	ND	0.0573 J	0.996	1.22	6.19	6.20	21.1	NA
Benzo[g,h,i]perylene	0.0527 J	ND	ND	ND	0.515	0.652	1,720	1,720	16,500	NA
Benzo[k]fluoranthene	ND	ND	ND	ND	0.336	0.420	62	62	211	NA
Chrysene	0.0838 J	ND	ND	ND	0.628	0.770	599	608	2,040	NA
Dibenz(a,h)anthracene	ND	ND	ND	ND	0.123	0.171	0.620	0.620	2.11	NA
Fluoranthene	0.102	ND	ND	0.0561 J	0.891	1.13	2,280	2,280	21,900	NA
Indeno[1,2,3-cd]pyrene	0.0535 J	ND	ND	ND	0.564	0.701	3.77	3.77	12.8	NA
Phenanthrene	ND	ND	ND	ND	0.255	0.298	158	2,250	28,200	NA
Pyrene	0.0948	ND	ND	0.0486 J	0.778	1.02	1,500	1,710	16,400	NA
DETECTED METALS (mg/kg)										
Arsenic	8.91	7.66	10.2	5.98	6.38	ND	3.89	3.89	15.9	4.091 - 17.435
Barium	97.9	99.6	107	202	143	7.18	2,043	15,000	181,000	NA
Cadmium	0.421 J	0.387 J	0.330 J	0.440 J	0.363 J	ND	9.31	16.8	74.8	NA
Chromium	10.6	9.87	12.1	10.7	11.6	4.87	74,600	74,600	472,000	NA
Lead	7.32	19.3	1.75	10.6	8.97	2.08	3.74	260	660	15.241 - 118.770
Mercury	0.0434 J	ND	ND	ND	0.0580 J	0.0443 J	2.19	46.3	630	0.010 - 0.060

Notes:

Only select analytes are listed in this table. A full analytical report is in Appendix E.

Bold font indicates concentration above reporting limit.

Blue fill indicates concentration above Default Target Level.

Green fill indicates concentration above Residential RBTL

¹ Missouri Department of Natural Resources, Missouri Risk-Based Corrective Action, Lowest Default Target Level

² Missouri Risk-Based Corrective Action Tier 1 RBTL for residential land use, soil type 3, surficial soil ingestion, inhalation (vapor emissions and particulates), and dermal contact.

³ Missouri Risk-Based Corrective Action Tier 1 RBTL for non-residential land use, soil type 3, surficial soil ingestion, inhalation (vapor emissions and particulates), and dermal contact.

⁴ U.S. Geological Survey, Average concentrations of elements in St. Louis County, Missouri

J	Result is less than the reporting limit but greater than or equal to the method detection limit.	TPH-GRO	Total petroleum hydrocarbons - gasoline range organics
mg/kg	Milligrams per kilogram	TPH-ORO	Total petroleum hydrocarbons - oil range organics
NA	Not available	USGS	United States Geological Survey
ND	Not detected		
NE	Not established		
RBTL	Risk-based target level		
SS	Surface soil		
TPH-DRO	Total petroleum hydrocarbons - diesel range organics		

TABLE F-2

SUMMARY OF ANALYTICAL RESULTS FROM SUBSURFACE SOIL SAMPLES
FORMER AUTOZONE, DELLWOOD, MISSOURI

Analyte	Sample Number (Depth, ft bgs)																			Lowest Default Target Level¹	RBTL Residential²	RBTL Non- Residential³	USGS Surface Soil Concentrations Range⁴
	SB-1 (3-5)	SB-1 (17-19)	SB-2 (0-2)	SB-2 (11-13)	SB-3 (0-2)	SB-3 (21-23)	SB-4 (5-7)	SB-4 (9-11)	SB-5 (0-2)	SB-5 (18-20)	SB-6 (2-4)	SB-6 (22-24)	SB-7 (0-2)	SB-7 (0-2)-FD	SB-7 (11-13)	SB-8 (7-9)	SB-8 (9-11)	SB-9 (7-9)	SB-9 (10-12)				
DETECTED VOLATILE ORGANIC COMPOUNDS (mg/kg)																							
Acetone	0.0174 J	ND	0.119	ND	0.0278 J	0.0391	ND	ND	0.116	0.00575 J	0.0307	ND	0.0430	0.0437	0.0110 J	0.00950 J	0.0152 J	0.0100 J	0.00576 J	4.20	14,300	115,000	NA
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000492 J	0.00144	0.000531 J	ND	ND	ND	ND	ND	0.0561	1.43	7.51	NA
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	0.00505	ND	ND	ND	0.0109	0.00374	ND	ND	ND	ND	0.0124	6.26	21.4	172	NA
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000938 J	ND	ND	ND	ND	ND	ND	39.9	646	5,200	NA
Methylene chloride	ND	ND	0.000932 J	ND	ND	ND	ND	0.00258 J	ND	0.00107 J	0.00330 J	0.00173 J	0.000806 J	0.00114 J	0.00130 J	0.00413 J	0.00364 J	0.00370 J	0.00317 J	0.0176	14.7	77	NA
Methyl ethyl ketone (2-Butanone)	0.00355 J	ND	0.00813 J	ND	0.00550 J	0.00565 J	ND	ND	0.00662 J	ND	0.00313 J	ND	0.00376 J	0.00511 J	ND	ND	ND	ND	ND	7.30	25,200	203,000	NA
Toluene	0.000743 J	ND	ND	0.000970 J	0.00124 J	ND	0.000896 J	0.000694 J	0.000777 J	0.000468 J	0.000965 J	0.000406 J	0.00361	0.00187	0.00101 J	0.000805 J	0.00170	0.00140	0.000543 J	29.8	1,720	13,800	NA
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000665 J	ND	ND	ND	ND	ND	ND	3.93	46.4	373	NA
Xylenes, Total	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00177 J	ND	ND	ND	ND	ND	ND	24.7	82.5	663	NA
DETECTED TOTAL PETROLEUM HYDROCARBONS (mg/kg)																							
TPH-ORO	ND	ND	ND	ND	ND	ND	ND	ND	7.39 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	124,000	NE	NE	NA
TPH-GRO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.162 J	ND	ND	ND	ND	ND	ND	385	1,200	9,620	NA
TPH-DRO	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,150	13,500	109,000	NA
DETECTED POLYCYCLIC AROMATIC HYDROCARBONS (mg/kg)																							
Benzo[a]anthracene	ND	ND	0.0523 J	ND	ND	ND	ND	ND	0.146	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.12	440,000	2,310,000	NA
Benzo[a]pyrene	ND	ND	0.0511 J	ND	ND	ND	ND	ND	0.136	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.620	178,000	933,000	NA
Benzo[b]fluoranthene	ND	ND	0.0759 J	ND	ND	ND	ND	ND	0.214	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.19	173,000	909,000	NA
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND	ND	ND	0.111	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,720	155,000,000	1,240,000,000	NA
Benzo[k]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	0.0774 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	62	3,800,000	19,000,000	NA
Chrysene	ND	ND	0.0677 J	ND	ND	ND	ND	ND	0.187	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	599	595,000	3,120,000	NA
Fluoranthene	ND	ND	0.122	ND	ND	ND	ND	ND	0.334	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,280	23,800,000	191,000,000	NA
Indeno[1,2,3-cd]pyrene	ND	ND	0.0435 J	ND	ND	ND	ND	ND	0.121	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.77	9,630,000	50,500,000	NA
Phenanthrene	ND	ND	0.0731 J	ND	ND	ND	ND	ND	0.0940	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	158	313,000	2,520,000	NA
Pyrene	ND	ND	0.0957	ND	ND	ND	ND	ND	0.243	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,500	24,500,000	197,000,000	NA
DETECTED METALS (mg/kg)																							
Arsenic	8.54	5.08	10.3	4.90	5.54	6.24	4.57	5.72	5.06	15.8	8.87	3.28	3.99	4.97	5.01	7.72	4.93	3.38	10.5	3.89	NE	NE	4.091 - 17.435
Barium	168	86.0	188	78.9	73.7	117	68.0	85.0	117	71.3	94.9	54.0	74.8	90.2	14.9 F1	118	76.6	83.6	153	2,040	NE	NE	NA
Cadmium	0.584 J	0.245 J	0.264 J	0.293 J	0.182 J	0.515 J	0.177 J	0.227 J	0.370 J	0.347 J	0.202 J	ND	0.194 J	0.222 J	ND	0.301 J	ND	ND	0.283 J	9.31	NE	NE	NA
Chromium	9.87	9.09	11.9	9.89	7.81	12.6	9.72	13.6	7.39	11.8	7.44	10.8	7.58	9.07	2.55 F1	10.4	10.3	16.4	13.9	74,600	NE	NE	NA
Lead	51.3	35.2	62.2	38.0	39.9	70.6	33.9	46.2	41.4	106	46.3	36.2	32.9	45.1	ND	ND	ND	ND	ND	3.74	260	660	15.241 - 118.770
Mercury	ND	ND	0.0676 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.19	7.11	57	0.010 - 0.060

Notes:

Only select analytes are listed in this table. A full analytical report is in Appendix E.

Bold font indicates concentration above reporting limit.

Blue fill indicates concentration above Default Target Level.

¹ Missouri Department of Natural Resources, Missouri Risk-Based Corrective Action, Lowest Default Target Level

² Missouri Risk-Based Corrective Action Tier 1 RBTL for residential land use, soil type 3, subsurface soil indoor inhalation of vapor emissions

³ Missouri Risk-Based Corrective Action Tier 1 RBTL for non-residential land use, soil type 3, subsurface soil indoor inhalation of vapor emissions

⁴ U.S. Geological Survey, Average concentrations of elements in St. Louis County, Missouri

- ft bgs
- Feet below ground surface
- F1
- MS and/or MSD Recovery is outside acceptance limits.
- FD
- Field duplicate
- J
- Result is less than the reporting limit but greater than or equal to the method detection limit.
- mg/kg
- Milligrams per kilogram
- NA
- Not analyzed
- ND
- Not detected
- NE
- Not established
- RBTL
- Risk-based target level
- SB
- Soil boring
- TPH-DRO
- Total petroleum hydrocarbons - diesel range organics
- TPH-GRO
- Total petroleum hydrocarbons - gasoline range organics
- TPH-ORO
- Total petroleum hydrocarbons - oil range organics
- USGS
- United States Geological Survey

TABLE F-3

**SUMMARY OF ANALYTICAL RESULTS FROM GROUNDWATER SAMPLES
FORMER AUTOZONE, DELLWOOD, MISSOURI**

Analyte	Sample Location (Sample Number)				Lowest Default Target Level ¹	RBTL Residential ²	RBTL Non-Residential ³
	SB-3 (GW-3)	SB-3 (GW-3-FD)	Rinsate Blank (RB)	Field Blank (FB)			
DETECTED VOLATILE ORGANIC COMPOUNDS (µg/L)							
Acetone	7.25 J B	7.32 J B	16.2 J B	15.1 J B	2,970	101,000,000	814,000,000
Chloromethane	0.784 J	ND	0.817 J	1.97	18.3	1,570	8,230
Trichlorofluoromethane	ND	ND	0.259 J	ND	698	14,400	116,000
DETECTED METALS (µg/L)							
Arsenic	0.00215	0.00102 J	ND	ND	10	NE	NE
Barium	0.0552 B	0.0409 B	0.000249 J B	ND	2,000	NE	NE
Chromium	0.00910 B	0.00580 B	0.000720 J B	0.000725 J B	100	NE	NE
Lead	0.00407	0.00181 J	ND	ND	15	NE	NE
Selenium	0.00233	0.00250	ND	ND	50	NE	NE

Notes:

Only select analytes are listed in this table. A full analytical report is in Appendix E.

Bold font indicates concentration above reporting limit.

¹ Missouri Department of Natural Resources, Missouri Risk-Based Corrective Action, Lowest Default Target Level

² Missouri Risk-Based Corrective Action Tier 1 RBTL for residential land use, soil type 3, groundwater indoor inhalation of vapor emissions

³ Missouri Risk-Based Corrective Action Tier 1 RBTL for non-residential land use, soil type 3, groundwater indoor inhalation of vapor emissions

B Compound was also reported in a blank sample.

FD Field duplicate

GW Groundwater

J Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

ND Not detected

NE Not established

RBTL Risk-based target level

SB Soil boring

µg/L Micrograms per liter

ATTACHMENT 1

FORMER AUTOZONE PROPERTY PROFILE PHASE II FORM



United States
ENVIRONMENTAL PROTECTION AGENCY
Washington, DC 20460

Form Approved
OMB Number No. 2050-0192
Expires 07-31-2012

PROPERTY PROFILE FORM—Brownfields

Public reporting burden for this collection of information is estimated to average 1.50 hours per response, including the time for reviewing instructions, searching data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate, or any other aspect of this collection of information, including suggestions for reducing this burden, to the Environmental Protection Agency, Office of Environmental Information, Code 2822T, Washington, DC 20460 and to the Paperwork Reduction Project, Office of Management and Budget, Washington, DC 20503. DO NOT RETURN your form to either of these addresses. Send your completed form to the address provided by the issuing office.

PART I- PROPERTY INFORMATION

COOPERATIVE AGREEMENT RECIPIENT INFORMATION

1. Cooperative Agreement Recipient Name (State/Tribe for Section 128(a) Cooperative Agreements; requestor/contractor for TBAs):

City of Dellwood

2. Cooperative Agreement Number (contract number for TBAs):

3. What type of cooperative agreement funding is being used for this property?

☐ Assessment

☐ Section 128(a) – State and Tribal Response

☐ Revolving Loan Fund

☒ TBA (EPA Regions Only)

☐ Cleanup

4. For Assessment, Cleanup, and Revolving Loan Fund cooperative agreements, what type of funding is being used at this property?

☐ Hazardous Substance

☐ Petroleum

☒ Both

5a. Indicate if this form is the initial or Updated Form:

☒ Initial Form

☐ Updated Form

5b. If "Updated Form," what's the ACRES Property ID?

PROPERTY BACKGROUND INFORMATION

6. Property Name: Former AutoZone

7a. Street Address: 9947 and 9901 West Florissant Avenue

7b. City: Dellwood

7c. County: St. Louis

7d. State: MO

7e. Zip code: 63136

8. Size (in acres): 1.96

9. Parcel Number(s): 11G110942

STATE & TRIBAL BROWNFIELDS/VOLUNTARY RESPONSE PROGRAM INFORMATION

10. State & Tribal Program Enrollment (If the property is not enrolled in a state program, check Property Not Enrolled check box):

Date of Enrollment:

ID Number (if applicable):

☒ Property Not Enrolled in a State or Tribal Program

PROPERTY GEOGRAPHIC INFORMATION (EPA Brownfields Program, or its contractors, will provide complete latitude/longitude information if cooperative agreement recipients are unable)

11a. Latitude

(use 00.000000 decimal degree format):

38.74737

11b. Longitude

(use -000.000000 decimal degree format):

-90.280151

11c. Horizontal Collection Method:

Global Positioning Method- Unspecified Parameters

11d. Source Map Scale Number (Only if a map/photo was used):

11e. Reference Point (e.g., Center of Facility or Station):

Center of a Facility or Station

11f. Horizontal Reference Datum (Choose one):

☐ NAD27-North American Datum of 1927

☐ WGS84-World Geodetic System of 1984

☒ NAD83-North American Datum of 1983

PART II- ENVIRONMENTAL ACTIVITIES

ENVIRONMENTAL ASSESSMENT INFORMATION (mandatory for Assessment Cooperative Agreements, State & Tribal Property-Specific Assessments, and TBAs; as available for Cleanup and RLF cooperative agreement recipients; CA = Cooperative Agreement)

Table A – Environmental Assessment Activity (If there are multiple assessments, please use a separate line for each assessment)

Environmental Assessment Detail			Source of Funding (enter one source of funding per line; do not include funding received prior to the award of this)					Name of Entity Providing Funds	Amount of Funding Expended on this Activity
Activity	Start Date	Completion Date	This US EPA CA	Other Federal	State/Tribal (exclude §128(a) funds)	Local Gov't	Private/ Other		
Phase I	6/20/2018	7/10/2018	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US EPA	\$5,000.00
Phase II	8/1/2018	11/1/2018	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US EPA	\$28,749.78
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

12. Indicate whether cleanup is required: ☐ Yes ☒ No ☐ Unknown

CONTAMINANTS & MEDIA AFFECTED INFORMATION (mandatory for all cooperative agreement types)

Table B - Contaminants and Media Affected (check all that apply):

Contaminants			
Class of Contaminant	REC*	Found	Cleaned Up
Petroleum/Petroleum Products	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controlled Substances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asbestos	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PCBs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOCs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lead	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Metals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PAHs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other Contaminants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Contaminants	<input type="checkbox"/>		
Unknown			

Media		
Media	Affected	Cleaned Up
Soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air	<input type="checkbox"/>	<input type="checkbox"/>
Surface Water	<input type="checkbox"/>	<input type="checkbox"/>
Ground Water	<input type="checkbox"/>	<input type="checkbox"/>
Building Materials	<input type="checkbox"/>	<input type="checkbox"/>
Sediments	<input type="checkbox"/>	<input type="checkbox"/>
No Media Affected	<input type="checkbox"/>	
Unknown	<input type="checkbox"/>	

*REC = Recognized Environmental Conditions ☐

ENVIRONMENTAL CLEANUP INFORMATION (mandatory for Cleanup and RLF

Cooperative Agreements and State & Tribal Property-Specific Cleanups; as available for Assessment Cooperative Agreements and TBAs)

13. Cleanup Activity Start Date: _____ 14. Cleanup Activity Completion Date: _____ 15. Acres Cleaned Up: _____

16. Date No Further Action/Cleanup Completion Document Issued

(If the property was not enrolled in a state or tribal program, leave blank):

Date: _____

17. Number of Cleanup Jobs Leveraged: _____

18. If EPA Brownfields funding was used, indicate the type and amount (If any non-EPA funding was used, fill out Table C):

Type Amount
☐ Cleanup Cooperative Agreement _____

Type Amount
☐ RLF Subgrant _____

☐ RLF Loan _____
 Date RLF Loan Signed _____

☐ Section 128(a) State/Tribal Cooperative Agreement _____

Table C - Environmental Cleanup Leveraged Funding Detail

Source of Funding (enter one source of funding per line; do not include funding received prior to the award of this EPA Cooperative Agreement)				Name of Entity Providing Funds	Amount of Funding Expended on this Activity
Other Federal	State/Tribal (exclude §128(a) funds)	Local Gov't	Private/ Other		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

PART II- ENVIRONMENTAL ACTIVITIES (continued)

INSTITUTIONAL & ENGINEERING CONTROLS INFORMATION (mandatory for all cooperative agreement types)

19a. Indicate whether Institutional Controls are required: ☐ Yes ☐ No ☒ Unknown

19b. If Institutional Controls were required, indicate the category (check all that apply):

- ☐ Proprietary Controls (e.g., easements, covenants) ☐ Governmental Controls (e.g., zoning, building codes)
- ☐ Informational Devices (e.g., state registries, deed notices) ☐ Enforcement/Permit Tools (e.g., permits, consent decrees)

Additional Institutional Controls Information:

Subject property currently consists of a vacant lot (9947 West Florissant Avenue) which was once an AutoZone parts store and an operating restaurant called New York Grill (9901 West Florissant Avenue) and associated outbuilding.

Address of Data Source (URL if available): _____

19c. Indicate whether Institutional Controls in place: ☐ Yes ☒ No Date: _____

20a. Indicate whether Engineering Controls are required: ☐ Yes ☐ No ☒ Unknown

20b. If Engineering Controls were required, indicate the category (check all that apply):

- ☐ Cover Technologies (e.g., Capping) ☐ Immobilization Process (e.g., Encapsulation, In-Situ Solidification) ☐ Engineered Barriers (e.g., Slurry Walls, Sheet)
- ☐ Security (e.g., Guard, Fences) ☐ Other _____

Additional Engineering Controls Information:

Address of Data Source (URL if available): _____

20c. Indicate whether Engineering Controls in place: ☐ Yes ☒ No Date: _____

REDEVELOPMENT AND OTHER LEVERAGED ACCOMPLISHMENTS (Mandatory for Assessment, Cleanup and RLF Cooperative Agreements; as available for State and Tribal Property Specific Activities and TBAs)

21. Redevelopment Start Date: _____ 22. Redevelopment Completion Date: _____

Table D- Redevelopment Leveraged Funding Detail

Source of Funding (enter one source of funding per line; do not include funding received prior to the award of this EPA Cooperative Agreement)				Name of Entity Providing Funds	Amount of Funding Expended on this Activity
Other Federal	State/Tribal	Local Gov't	Private/ Other		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

23. Number of Redevelopment Jobs Leveraged: _____

24. Future Use and Estimated Acreage (check all that apply; For properties with multi-story buildings only, please indicate also the square footage for each type of reuse (e.g. a three story building with first floor commercial and remaining floors residential).

- ☐ Multi-story building
- ☐ Greenspace _____ acres _____ sq. ft. ☐ Commercial _____ acres _____ sq. ft.
- ☐ Industrial _____ acres _____ sq. ft. ☒ Residential 1.96 acres _____ sq. ft.

25. Actual Acreage(s) and Type(s) of Greenspace Created: _____ senior living facility

PART II- ENVIRONMENTAL ACTIVITIES (continued)

ANECDOTAL PROPERTY INFORMATION (as available for all cooperative agreement types)

26. Property Highlights:

The site is 1.96-acres and currently consists of a vacant lot and partial concrete parking area (former AutoZone) and an operating restaurant (New York Grill) with an outbuilding and asphalt parking area. Plans for the site include the restaurant and outbuilding being demolished and the property redeveloped into a senior living center. Improvements at the AutoZone were destroyed by fire in 2014. Possible fill and grading associated with the fire pose a REC, and a VEC is posed to the site based on possible presence of soil and groundwater contamination associated with the fire at the former AutoZone. Historical documents revealed that the New York Grill was built in 1978. LBP and ACBM were likely used in construction of the restaurant. During the Phase II TBA, soil sampling results detected PAHs and RCRA metals above MDNR Default Target Levels. In addition, Benzo[a]pyrene was detected above the residential RBTL in one surface soil sample.

PROPERTY PHOTOGRAPH INFORMATION

27. Indicate whether photographs are available: ☒ Yes ☐ No 28. Indicate whether video is available: ☐ Yes ☒ No

PART III- ADDITIONAL PROPERTY INFORMATION

PROPERTY HISTORY INFORMATION

29. Property Description / History / Past Ownership:

Historical documentation identifies the site as an AutoZone parts store from 2001 to 2014. The building burned in 2014. New York Grill is still in operation.

30. Predominant Past Use(s) (check all that apply; For properties with multi-story buildings only, please indicate also the square footage for each type of reuse (e.g. a three story building with first floor commercial and remaining floors residential):

☐ Multi-story building

☐ Greenspace _____ acres _____ sq. ft. ☒ Commercial 1.96 acres _____ sq. ft.

☐ Residential _____ acres _____ sq. ft. ☐ Industrial _____ acres _____ sq. ft.

OWNERSHIP & SUPERFUND LIABILITY (Mandatory for Cleanup and RLF Cooperative Agreements)

31a. Ownership Entity:

☐ Government (Tribal, State, Local) ☒ Private

32a. During the life of the cooperative agreement, did ownership change?

☐ Yes ☒ No

31b. Current Owner:

New York Grill

32b. If "yes," did Superfund federal landowner liability protections factor into the ownership change?

☐ Yes ☐ No ☐ Unknown

PART IV- APPROVALS

33. Cooperative Agreement Recipient Project Manager

Name (please print): _____

Signature _____

Date: _____

34. US EPA Regional Representative

Name (please print): _____

Signature _____

Date: _____