



150 N Patrick Blvd., Suite 180      T 262.879.1212  
Brookfield, WI 53045      [TRCcompanies.com](http://TRCcompanies.com)

January 8, 2021

Ms. Me'le'sa Greene  
Wisconsin Department of Natural Resources  
2300 N. Dr. Martin Luther King Jr. Dr.  
Milwaukee, WI 53212

Subject: Phase 4 Management of Contaminated Soil Documentation Report  
Durand Ave. (STH 11), Kentucky St. to Kearney Ave.  
City of Racine, Racine County, Wisconsin  
WisDOT Project ID #2260-07-70  
TRC Project #358418.0000.000

Dear Ms. Greene:

Enclosed is the management of contaminated soil documentation report for the reconstruction of Durand Ave. (STH 11), Kentucky St. to Kearney Ave. in the City of Racine, Racine County. The report documents the handling and landfill disposal of contaminated soil excavated at several locations along the project corridor during installation of new storm sewer, traffic signals, and grading.

If you have questions regarding this project or report, please contact me at 262-901-2126.

Sincerely,

TRC

A handwritten signature in black ink, appearing to read "Bryan Bergmann".

Bryan Bergmann, P.G.  
Project Manager

cc: Andy Malsom – WisDOT (pdf via email)  
Shar TeBeest – WisDOT (pdf via email)  
Dan Haak – TRC



# Management of Contaminated Soil

**Durand Ave. (STH 11),  
Kentucky St. to Kearney Ave.  
Racine, Racine County, WI**

January 2021

A handwritten signature in black ink, appearing to read "Bryan Bergmann".

---

Bryan Bergmann, P.G.  
Project Manager

**WisDOT ID #2260-07-70**

**Prepared For:**

Wisconsin Department of Transportation

**Prepared By:**

TRC  
150 N. Patrick Blvd., Suite 180  
Brookfield, WI 53045

A handwritten signature in blue ink, appearing to read "Daniel Haak".

---

Daniel Haak, P.E.  
TRC Quality Assurance

---

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>III</b>
<b>1.0 INTRODUCTION.....</b>	<b>4</b>
1.1    Background .....	4
1.2    Purpose.....	5
<b>2.0 CONTAMINATION MANAGEMENT.....</b>	<b>5</b>
2.1    Contaminated Soil Management.....	5
2.2    Well Abandonment.....	6
<b>3.0 CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>6</b>

## TABLES

Table 1: Summary of Soil Field-Screening Results

## FIGURES

- Figure 1: Site Location Map
- Figure 2: Project Corridor
- Figure 3: Contaminated Soil Location Station 83+00 to 92+00
- Figure 4: Contaminated Soil Location Station 101+00 to 109+00
- Figure 5: Contaminated Soil Location Station 110+00 to 118+50
- Figure 6: Contaminated Soil Location Station 119+00 to 127+00

## APPENDICES

- Appendix A: Special Provisions, Plans, & WDNR Concurrence Letter
- Appendix B: Waste Profiles & Disposal Documentation
- Appendix C: Photographic Log
- Appendix D: AS-1 Abandonment Information

---

## COMMONLY USED ABBREVIATIONS AND ACRONYM LIST

AST	aboveground storage tank
bgs	below ground surface
BRRTS	Bureau for Remediation and Redevelopment Tracking System
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CTH	County Trunk Highway
CY	cubic yards
DATCP	Department of Agriculture, Trade and Consumer Protection
DRO	diesel range organics
FDM	Facilities Development Manual
EMP	Excavation Management Plan
ERP	Environmental Repair Program
ES	Enforcement Standards
ESA	Environmental Site Assessment
FINDS	Facility Index System/Facility Identification Initiative Program Summary Report
GIS Registry	WDNR Geographic Information System (GIS) Registry of Remediation Sites
GRO	gasoline range organics
HAZWOPER	Code of Federal Registry Chapter 29 (29 CFR) Part 1910.120 Hazardous Waste Operations and Emergency Response
HMA	Hazardous Materials Assessment
IH	Interstate Highway
LQG	large quantity generator
LUST	leaking underground storage tank
NPL	National Priorities List
NR ###	Wisconsin Administrative Code (WAC) Natural Resources (NR) Chapter ###
PAHs	polynuclear aromatic hydrocarbons
PAL	Preventive Action Limits
PCBs	polychlorinated biphenyls
PCE	perchloroethylene/tetrachloroethylene
PID	photoionization detector
PVOCs	petroleum volatile organic compounds
RCLs	Residual Contaminant Levels in NR 720
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
R/W or ROW	right-of-way
sf	square feet
STH	State Trunk Highway
TCE	trichloroethylene
TRIS	Toxic Chemical Release Inventory System
USGS	United States Geological Survey
USH	United States Highway
UST	underground storage tank
VOCs	volatile organic compounds
WDNR	Wisconsin Department of Natural Resources
WisDOT	Wisconsin Department of Transportation
WGNHS	Wisconsin Geological and Natural History Survey
WI ERP	Wisconsin Environmental Repair Program database

---

## Executive Summary

The WisDOT recently completed the reconstruction of Durand Ave. (STH 11), from Kentucky St. to Kearney Ave. in the City of Racine, Racine County (WisDOT ID 2260-07-70). Improvements included new pavement, new sidewalk, street lighting, landscaping, signal replacement, signage, pavement marking, and spot storm sewer improvement.

The WisDOT retained TRC, to field-screen and manage the disposal of contaminated soil during excavations at areas where contamination was previously identified via a Phase 2.5 Investigation. The prime contractor was Zignego Company, Inc. (Zignego). The WisDOT contact was Charles Krummel. The project leader was Josh Skarsten (AECOM). The project manager at Zignego was Jeff Kuhn.

Contaminated soil was managed and disposed at the Republic Services Kestrel Hawk Landfill in Racine, Wisconsin via three waste profiles. In total, 3,102.4 tons of contaminated soil was excavated, hauled, and disposed of either as daily cover (1,265.16 tons), bioremediation (471.21 tons), or direct landfill (1,366.03 tons).

This report includes a summary of the activities (field-screening) that occurred during excavations at multiple locations within the project limits; these locations were previously identified in the Special Provisions for contamination identified during a Phase 2.5 Investigation. An air sparging well, AS-1, was discovered during Phase 4 activities, abandoned by TRC, and is discussed further in Section 2.2.

The WisDOT has fulfilled its commitment to manage contaminated soil during the reconstruction of Durand Ave. (STH 11), from Kentucky St. to Kearney Ave. in accordance with the Special Provisions. TRC recommends that the WisDOT take no further action to investigate or remediate soil impacts that may remain at locations where contaminated soil was encountered.

---

## 1.0 Introduction

### 1.1 Background

The WisDOT recently reconstructed Durand Ave. (STH 11), from Kentucky St. to Kearney Ave. in the City of Racine, Racine County. The project corridor is shown on Figure 1.

In 2017, TRC completed a Phase 2.5 investigation for the project. The results of the Phase 2.5 indicated petroleum-contaminated soil was present at several locations within the project limits. Chlorinated volatile organic compounds (CVOCs) were present at two locations near an active dry cleaner. Contaminated soil excavated for the project would require landfill disposal.

The locations of petroleum-contaminated soil are described below:

- Station 85+40 to 86+50, from reference line to project limits left, from approximately 1 to 8+ feet below grade. Approximately 283 CY (481 tons) of petroleum-contaminated soil will be excavated from this location.
- Station 86+50 to 87+50, from reference line to project limits left, from approximately 8 to 16+ feet below grade. Approximately 0 CY (0 tons) of petroleum-contaminated soil will be excavated from this location.
- Station 86+50 to 87+50, from reference line to project limits right, from approximately 4 to 16+ feet below grade. Approximately 5 CY (9 tons) of petroleum-contaminated soil will be excavated from this location.
- Station 105+00 to 105+80, from project limits left to project limits right, from approximately 1 to 6+ feet below grade. Approximately 411 CY (699 tons) of petroleum-contaminated soil will be excavated from this location.
- Station 113+40 to 114+10, from reference line to 70 feet left of reference line, from approximately 1 to 6+ feet below grade. Approximately 317 CY (539 tons) of petroleum-contaminated soil will be excavated from this location.
- Station 114+00 to 115+00, from reference line to project limits right, from approximately 4 to 8+ feet below grade. Approximately 0 CY (0 tons) of petroleum-contaminated soil will be excavated from this location.

The locations of solid waste (CVOC-contaminated) soils are described below:

- Station 121+50 to 123+10, from reference line to project limits right, from approximately 1 to 8+ feet below grade. Approximately 638 CY (1,085 tons) of solid waste soil will be excavated from this location.
- Station 122+00 to 123+00, from reference line to project limits left, from approximately 1 to 16+ feet below grade. Approximately 16 CY (28 tons) of solid waste soil will be excavated from this location.

Copies of the Special Provisions, Plans, and the WDNR concurrence letter are provided in Appendix A.

---

The WisDOT's prime contractor for the project, Zignego Company, Inc. (Zignego), chose the Republic Services Kestrel Hawk Landfill in Racine, Wisconsin, for disposal of contaminated soil excavated by the project.

Three waste profiles were generated for contaminated soil for the project:

- Waste profile 3063201859 (alternate daily cover) was used for low-level petroleum-contaminated soil.
- Waste profile 3063201603 (bioremediation) was used for petroleum-contaminated soil that could not be classified as alternate daily cover.
- Waste profile 3063202272 (direct landfill) was used for soil contaminated with CVOCs.

Waste profile forms and laboratory reports are provided in Appendix B.

## 1.2 Purpose

The purpose of this report is to document the results of field-screening and contaminated soil management oversight during the reconstruction of Durand Ave. (STH 11), from Kentucky St. to Kearney Ave. Section 2 of this report includes a summary of the activities that occurred at the eight contaminated soil locations identified in the Special Provisions and abandonment of an air sparge well encountered during construction. Section 3 of this report provides conclusions and recommendations regarding the reconstruction project.

## 2.0 Contamination Management

From February to September 2020, TRC periodically made site visits, on an as needed basis, to oversee the handling, management, and disposal of contaminated materials encountered on the project. Details regarding the management of various environmental concerns encountered on the project are discussed below.

### 2.1 Contaminated Soil Management

Special Provisions required field-screening and management of contaminated soil from the areas described in Section 1.1 and shown on Figures 2 through 6.

Contaminated soil was encountered during excavation for signal bases, storm sewer, and general grading including excavation below subgrade (EBS) at various locations throughout the construction corridor, as shown on Figures 2 through 6. Depths of contamination in the various areas ranged from immediately below subgrade to maximum depths of excavations (approximately 16 feet bgs in select areas). Petroleum-contaminated soils that required landfilling were determined by either historical analytical results, obvious petroleum odors, petroleum staining, or elevated PID results. Soil field screening results are summarized in Table 1.

Contaminated soils were disposed at the Republic Services Kestrel Hawk Landfill in Racine, Wisconsin. Low-level petroleum-contaminated soils were disposed as daily cover soil under waste profile 3063201859. In total, 1,265.16 tons of soil was disposed as daily cover. Some limited areas of elevated petroleum-contaminated soils required disposal as bioremediation soil under waste profile 3063201603. In total, 471.21 tons of soil was disposed as bioremediation

---

soil. CVOC-contaminated soils were disposed as direct landfill soil under waste profile 3063202272. In total, 1,366.03 tons of soil was disposed as direct landfill.

A total of 3,102.4 tons of contaminated soils were excavated from the project corridor, loaded into trucks, and hauled to the landfill for disposal. Copies of the landfill tonnage reports are provided in Appendix B. Photographs documenting field activities are included in Appendix C.

## 2.2 Well Abandonment

On May 28, 2020, the project encountered three wells in the ROW near the northeast corner of STH 11 and Lathrop Ave. The wells were determined to be previously associated with the Mobil Oil Service 05-KT5 site (Closed LUST Site, BRRTS No. 03-52-000202) at 3818 Durand Ave.

TRC made a site visit on May 29, 2020, to inspect the wells and determine if abandonment was required. TRC acquired a map of the site depicting the locations and the names of wells located on the property. Two of the wells, MW-7 and MW-1 appeared to have already been abandoned prior to the road construction project. The third well, AS-1, an air sparging well-constructed with a steel casing, was observed to have not been abandoned. TRC measure the depth to water and then abandoned the well with bentonite. Photographs of the wells are included in Appendix C. Site maps for the Mobil Oil Service 05-KT5 site and the abandonment form for AS-1 are provided in Appendix D.

## 3.0 Conclusions and Recommendations

TRC completed observation of the contractor's excavations and the management of contaminated soil at multiple locations for the WisDOT during the reconstruction of Durand Ave. (STH 11), from Kentucky St. to Kearney Ave. in the City of Racine.

Contaminated soil was encountered during installation of signal bases, storm sewer, and general grading including EBS.

Contaminated soil was disposed under the following waste profiles at the Republic Services Kestrel Hawk Landfill in Racine, Wisconsin.

- 3063201859: Daily cover soil – 66 trucks, 1,265.16 tons (initial estimate of 1,238 tons)
- 3063201603: Bioremediation soil – 27 trucks, 471.21 tons (initial estimate of 490 tons)
- 3063202272: Direct landfill soil – 71 trucks, 1,366.03 tons (initial estimate of 1,113 tons)

In total, 3,102.4 tons of contaminated soil (initial estimate of 2,841 tons) was sent for disposal to the Republic Services Kestrel Hawk Landfill in Racine, Wisconsin.

The WisDOT has fulfilled its commitment to manage contaminated soil during the reconstruction of Durand Ave. (STH 11), from Kentucky St. to Kearney Ave. in accordance with the Special Provisions. Additionally, during the Phase 4 activities, an air sparge well (AS-1) was discovered in the ROW near 3818 Durand Ave. and was abandoned. TRC recommends that the WisDOT take no further action to investigate or remediate soil impacts that may remain at locations where contaminated soil was encountered.

**Table 1: Summary of Soil Field-Screening Results**  
**Durand Ave. (STH 11), Racine, Racine County, Wisconsin**  
**WisDOT Project ID #2260-07-70**

DATE	ACTIVITY	STATION	LEFT / RIGHT OF REFERENCE LINE	CONTAMINATION TYPE	DEPTH (ft bgs)	PID (ppm)	SOIL TYPE	SOIL DESCRIPTION
2/18/2020	Electric line	122+15	RT 25	Petroleum	4	<1	Clay	No odor, No staining
		122-15	LT 25	Petroleum	4	<1	Clay	No odor, No staining
		87+05	LT 20	Petroleum	7	2.1	Clay	Petroleum odor, black staining
		87+05	RT 20	Petroleum	7	<1	Clay	No odor, black staining
3/20/2020	Storm	122+60	LT 60	Other VOCs	3	<1	Clay, Silt	No odor, No staining
		122+55	LT 30	Other VOCs	7	<1	Clay, Silt	No odor, No staining
		122+55	LT 20	Other VOCs	5	<1	Clay, Silt, Fine Sand	No odor, No staining
		122+55	LT 10	Other VOCs	7	<1	Clay, Silt, Fine Sand	No odor, No staining
3/23/2020	Storm	113+85	LT 75	Petroleum	5	<1	Clay, Silt, Coarse Gravel	No odor, black and gray staining
		114+00	LT 75	Petroleum	6	<1	Clay, Silt, Coarse Sand, Coarse Gravel	No odor, black staining
		114+10	LT 75	Petroleum	6	<1	Clay, Silt, Coarse Sand, Coarse Gravel	No odor, black and gray staining
		114+25	LT 65	Petroleum	2	<1	Silt, Fine Sand	No odor, black and gray staining
3/24/2020	Storm	113+85	LT 75	Petroleum	4	<1	Clay, Silt	No odor, black staining
		113+75	LT 50	Petroleum	5	<1	Clay, Silt	No odor, black staining
		113+85	LT 85	Petroleum	2	<1	Clay, Silt, Fine Gravel	No odor, black and gray staining
		114+00	LT 85	Petroleum	2	<1	Clay Silt, Fine Sand	Slight Petroleum odor, black and gray staining
		114+30	LT 100	None	4	<1	Clay, Silt	No odor, No staining
		114+35	LT 40	None	3	<1	Clay, Silt, Fine Sand	No odor, No staining
		114+35	LT 40	None	5	<1	Clay, Silt, Fine Sand	No odor, No staining
		114+40	LT 25	None	3	<1	Clay, Silt	No odor, No staining
		114+45	LT 15	None	6	<1	Clay, Silt	No odor, No staining
		114+60	LT 5	None	4	<1	Coarse Gravel, Silt, Coarse Sand	No odor, No staining
3/25/2020	Storm	114+60	LT 5	None	8	<1	Coarse Sand, Silt	No odor, No staining
		113+75	LT 35	Petroleum	2	<1	Coarse Sand, Coarse Gravel	No odor, No staining
		113+60	LT 40	Petroleum	6	<1	Clay, Silt, Coarse Sand, Coarse Gravel	No odor, black staining
		114+45	LT 40	Petroleum	7	<1	Clay, Silt	No odor, black staining
		113+35	LT 50	Petroleum	5	1.1	Clay, Silt, Fine Sand	No odor, black staining
		113+30	LT 50	Petroleum	3	<1	Coarse Sand, Silt, Coarse Gravel	No odor, No staining
		113+35	LT 50	Petroleum	8	2	Clay, Silt, Fine Sand	No odor, black staining
4/6/2020	Grading/Excavating	113+40	LT 25	Petroleum	2	<1	Coarse Sand, Fine Gravel	No odor, No staining
		113+40	LT 15	Petroleum	6	<1	Clay, Silt, Fine Sand	No odor, gray staining
		123+00	LT 40	Other VOCs	2	<1	Fine Sand, Clay, Silt	No odor, No staining
		122+75	LT 20	Other VOCs	2	<1	Fine Sand, Clay, Silt	No odor, No staining
		122+50	LT 20	Other VOCs	2	<1	Clay, Fine Gravel, Silt	No odor, No staining
		122+25	LT 20	Other VOCs	2	<1	Coarse Sand, Coarse Gravel, Silt	No odor, No staining
4/9/2020	Storm	122+00	LT 20	Other VOCs	2	<1	Coarse Gravel, Coarse Sand	No odor, No staining
		87+00	LT 35	None	2	<1	Coarse Sand	No odor, No staining
		86+90	LT 35	None	3	<1	Coarse Sand	No odor, No staining
		86+95	LT 1	None	1	<1	Clay	No odor, no staining
		86+95	LT 4	None	4	<1	Clay	No odor, No staining
		87+23	LT 30	None	1.5	<1	Clay, Fine Sand	No odor, No staining
		114+10	LT 30	Petroleum	2	<1	Clay , Fine Sand	No odor, black staining
	Grading/Excavating	113+85	LT 10	Petroleum	2.5	<1	Silt, Coarse Sand, Coarse Gravel	No odor, black staining
		113+75	LT 15	Petroleum	2.5	<1	Coarse Sand, Silt, Coarse Gravel	No odor, No staining
4/15/2020	Grading/Excavating	105+75	RT 10	Petroleum	2.5	<1	Clay, Fine Sand, Fine Gravel, Coarse Gravel	No odor, No staining
		105+65	RT 10	Petroleum	2.5	<1	Clay, Fine Sand, Fine Gravel, Coarse Gravel	No odor, No staining
		105+50	RT 10	Petroleum	2.5	<1	Clay, Fine Sand, Fine Gravel, Coarse Gravel	No odor, No staining
		105+25	RT 10	Petroleum	2.5	<1	Clay, Fine Sand, Fine Gravel, Coarse Gravel	No odor, No staining
		105+05	RT 10	Petroleum	2.5	<1	Clay, Fine Sand, Fine Gravel, Coarse Gravel	No odor, No staining
		104+98	RT 10	None	2.5	<1	Clay, Fine Sand, Fine Gravel, Coarse Gravel	No odor, No staining
4/24/2020	Grading/Excavating	122+70	LT Reference Line	Other VOCs	1	<1	Coarse Sand, Cobbles	No odor, black staining
		122+50	LT Reference Line	Other VOCs	3	<1	Clay, Silt, Fine Sand	Slight odor, black staining
		122+50	LT Reference Line	Other VOCs	4	<1	Clay, Silt, Coarse Sand, Cobbles	No odor, black staining
		122+45	LT Reference Line	Other VOCs	4	<1	Clay, Silt	No odor, black staining
		113+50	LT Reference Line	Petroleum	4	<1	Fine Sand, Coarse Sand, Cobbles	No odor, No staining
		113+50	LT 20	Petroleum	4	<1	Clay, Fine Sand, Coarse Sand	No odor, black staining

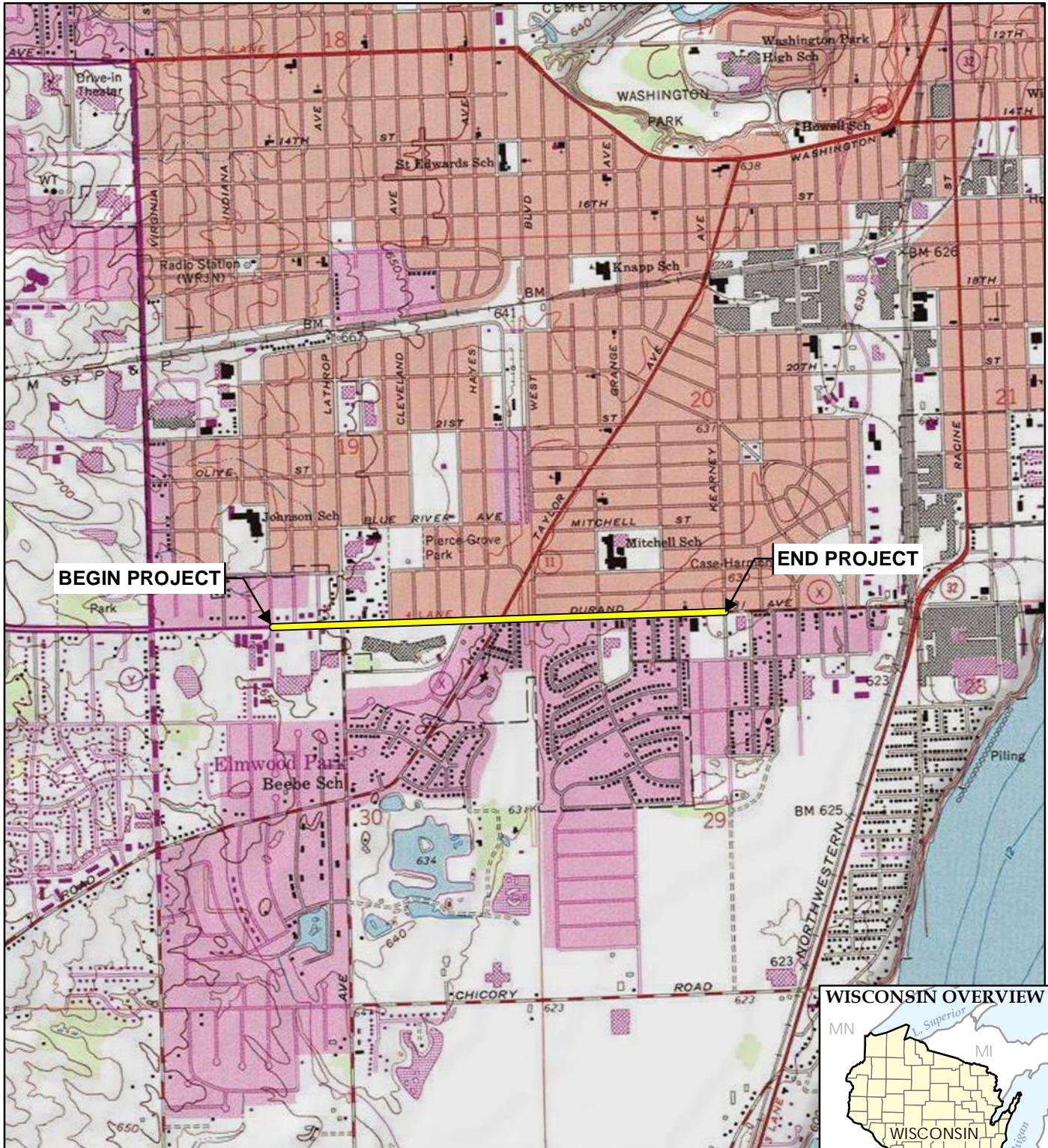
**Table 1: Summary of Soil Field-Screeing Results**  
**Durand Ave. (STH 11), Racine, Racine County, Wisconsin**  
**WisDOT Project ID #2260-07-70**

DATE	ACTIVITY	STATION	LEFT / RIGHT OF REFERENCE LINE	CONTAMINATION TYPE	DEPTH (ft bgs)	PID (ppm)	SOIL TYPE	SOIL DESCRIPTION
4/27/2020	Grading/Excavating	86+50	LT 20	Petroleum	3	6.3	Coarse Sand, Fine Gravel	Petroleum, no staining
		86+30	LT, Project Limit	Petroleum	4	1.2	Fine Sand, Coarse Sand, Fine Gravel	No odor, No staining
		86+20	LT Reference Line	Petroleum	2	<1	Fine Sand, Coarse Sand, Fine Gravel	No odor, No staining
		86+20	LT 20	Petroleum	3	<1	Fine Sand, Coarse Sand, Fine Gravel	No odor, No staining
		86+20	LT Project Limit	Petroleum	4	25.7	Silt, Fine Sand, Coarse Sand	Strong petroleum odors, black staining
		86+15	LT 15	Petroleum	4	<1	Clay, Silt, Coarse Sand	Slight Petroleum odor, black staining
		86+10	LT Reference Line	Petroleum	3	<1	Fine Sand, Coarse Sand, Fine Gravel	No odor, No staining
		86+00	LT 15	Petroleum	4.5	<1	Clay, Silt, Fine Sand	No odor, black staining
		86+00	LT, Project Limit	Petroleum	3	<1	Fine Sand, Coarse Sand, Fine Gravel	No odor, No staining
		85+80	LT 15	Petroleum	3	<1	Fine Sand, Coarse Sand	No odor, No staining
		85+60	LT 15	Petroleum	3	<1	Fine Sand, Coarse Sand, Fine Gravel	No odor, No staining
		85+40	LT Reference Line	Petroleum	4	<1	Silt, Fine Sand, Coarse Sand, Coarse Gravel	No odor, black staining
		85+40	LT Reference Line	Petroleum	4	<1	Fine Sand, Coarse Sand, Fine Gravel, Cobbles	No odor, black staining
		85+40	LT, Project Limit	Petroleum	4	<1	Silt, Fine Sand, Coarse Sand	No odor, No staining
		87+00	LT, Project Limit	Petroleum	2	4.5	Clay	Petroleum, black staining
6/8/2020	Electrical/Monotubes	87+00	LT, Project Limit	Petroleum	6	8.2	Clay	Petroleum, black staining
		87+00	LT, Project Limit	Petroleum	8	1.2	Clay	Petroleum, black staining
		87+00	LT, Project Limit	Petroleum	14	1.1	Clay	Petroleum, black staining
		87+15	LT, Project Limit	Petroleum	4	3.8	Clay	Petroleum, black staining
		87+15	LT, Project Limit	Petroleum	5	2.4	Clay	Petroleum, black staining
6/10/2020	Electrical/Monotubes	122+60	Project Limits Left	Other VOCs	4	<1	Clay, Silt, Fine Sand, Coarse Sand	No odor, No staining
		122+60	Project Limits Left	Other VOCs	6	<1	Clay, Silt, Fine Sand, Coarse Sand	No odor, No staining
		122+60	Project Limits Left	Other VOCs	13	<1	Clay, Silt, Fine Sand	No odor, No staining
		122+75	Project Limits Left	Other VOCs	3	<1	Clay, Silt, Fine Sand, Fine Gravel	No odor, black staining
7/30/2020	Grading/Excavating	105+00	RT 15	Metals	3	<1	Silt, Fine Sand, Coarse Sand, Cobbles	No odor, No staining
		105+20	RT 20	Metals	3	<1	Clay, Silt, Fine Sand	Slight odor, Black staining
		105+50	RT 25	Metals	2.5	<1	Clay, Silt	No odor, No staining
		105+65	RT 25	Metals	3	<1	Silt, Fine Sand, Coarse Sand, Fine Gravel	No odor, No staining
		105+65	RT 5	Metals	3.5	<1	Fine Sand, Coarse Sand, Fine Gravel, Cobbles	No odor, No staining
		105+80	RT 20	Metals	3	<1	Fine Sand, Coarse Sand, Fine Gravel	No odor, No staining
		105+80	RT 5	Metals	4	<1	Silt, Fine Sand, Coarse Sand	No odor, No staining
8/4/2020	Grading/Excavating	123+00	RT 5	Petroleum and other VOCs	2	<1	Silt, Coarse Sand, Fine Gravel	Strong unknown chemical odor, Black staining
		122+85	RT 15	Petroleum and other VOCs	3	<1	Silt, Fine Sand, Fine Gravel, Cobbles	No odor, No staining
		122+75	RT 15	Petroleum and other VOCs	3	<1	Clay, Silt, Coarse Sand, Fine Gravel	Slight unknown chemical odor, Black staining
		122+60	RT 15	Petroleum and other VOCs	3	<1	Clay Silt, Fine Sand, Coarse Gravel	No odor, No staining
		122+50	RT 15	Petroleum and other VOCs	3	<1	Coarse Sand, Fine Gravel, Coarse Gravel, Cobbles	No odor, No staining
8/18/2020	Storm	122+50	RT 20	Other VOCs	4	<1	Clay, Silt, Fine Sand	No odor, No staining
9/24/2020	Grading/Excavating	122+75	LT 15	Other VOCs	3	<1	Clay, Silt	No odor, Gray staining
		122+75	LT 20	Other VOCs	3	<1	Clay, Silt, Fine Sand	No odor, No staining
		122+85	LT 15	Other VOCs	3	<1	Clay, Silt, Fine Sand	No odor, No staining
		123+00	LT 10	Other VOCs	3	<1	Fine Sand, Coarse Sand, Coarse Gravel, Cobbles	No odor, No staining
		13+50 DX	Center	Other VOCs	3.5	<1	Clay, Silt, Fine Sand	No odor, No staining
		13+50 DX	LT 20	Other VOCs	3.5	<1	Clay, Silt, Fine Sand	No odor, No staining
		13+25 DX	LT 20	Other VOCs	2	<1	Silt, Fine Sand	No odor, No staining
		13+25 DX	LT 10	Other VOCs	2.5	<1	Clay, Silt, Fine Sand	No odor, No staining
		13+00 DX	LT 10	Other VOCs	2.5	<1	Clay, Silt, Coarse Sand	No odor, Black staining
		13+00 DX	LT 25	Other VOCs	2.5	8.6	Clay, Silt, Coarse Sand, Coarse Gravel	Strong petroleum odor, Black staining
		12+50 DX	LT 10	Other VOCs	2.5	<1	Silt, Fine Sand, Coarse Sand	No odor, Black staining
		12+50 DX	LT 25	Other VOCs	2.5	<1	Clay, Silt, Coarse Sand, Fine Gravel	No odor, No staining
		12+75 DX	LT 20	Other VOCs	2.5	<1	Clay, Silt, Coarse Sand, Fine Gravel	No odor, No staining

- Notes:
1. bgs = below ground surface
  2. PID = photoionization detector
  3. ppm = parts per million

Created by: E. Maxwell 5/1/2020

Checked by: E. Grzeszczak 7/16/2020, A. Enright 12/29/2020



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.

PROJECT:

WISDOT ID #2260-07-70

DURAND AVE. (STH 11), KENTUCKY ST. TO KEARNEY AVE.  
RACINE, RACINE CO., WISCONSIN

### SITE LOCATION MAP

DRAWN BY:

A. ADAIR

CHECKED BY:

B. BERGMANN

APPROVED BY:

D. HAAK

DATE:

DECEMBER 2020

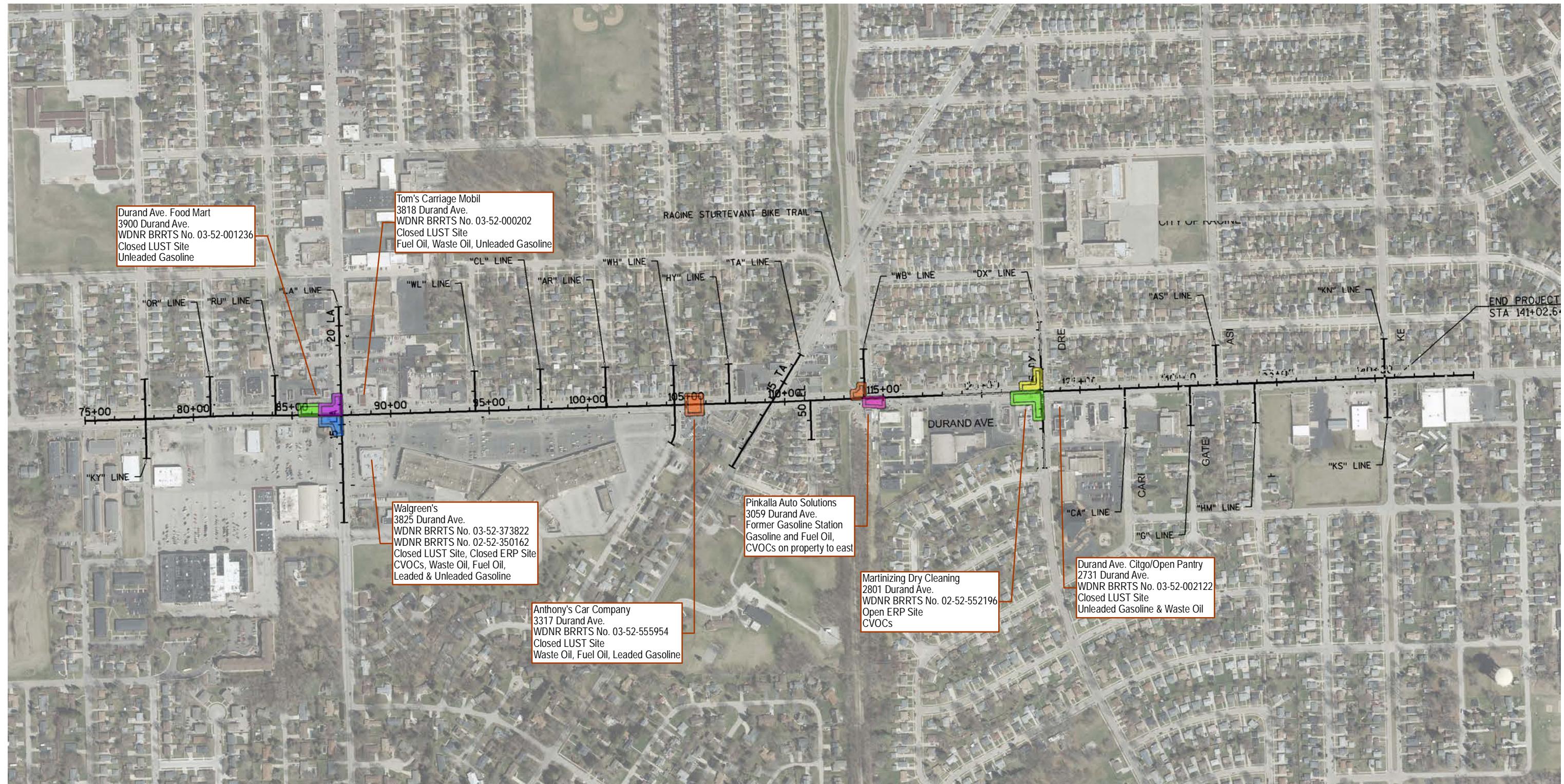
PROJ. NO.:

358418\_001\_SLM.mxd

FILE:

358418\_001\_SLM.mxd

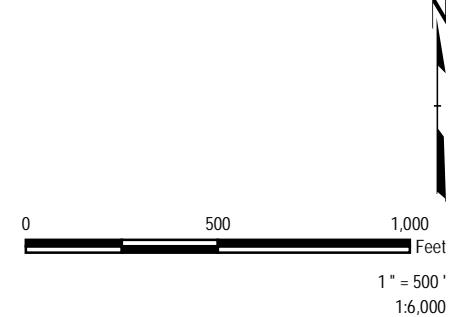
**FIGURE 1**

**LEGEND**

- |  |                               |
|--|-------------------------------|
|  | CONTAMINATED SOIL 1'-16+' BGS |
|  | CONTAMINATED SOIL 1'-6+' BGS  |
|  | CONTAMINATED SOIL 1'-8+' BGS  |
|  | CONTAMINATED SOIL 4'-16+' BGS |
|  | CONTAMINATED SOIL 4'-8' BGS   |
|  | CONTAMINATED SOIL 8'-16+' BGS |

**NOTES**

1. BASE MAP IMAGERY FROM RACINE COUNTY LAND INFORMATION OFFICE, 2015.
2. MAP PROJECTION AND GRID COORDINATES ARE NAD83 STATE PLANE WISCONSIN-SOUTH (US SURVEY FEET).
3. CONSTRUCTION PLANS PROVIDED BY WisDOT, LOCATIONS ARE APPROXIMATE.

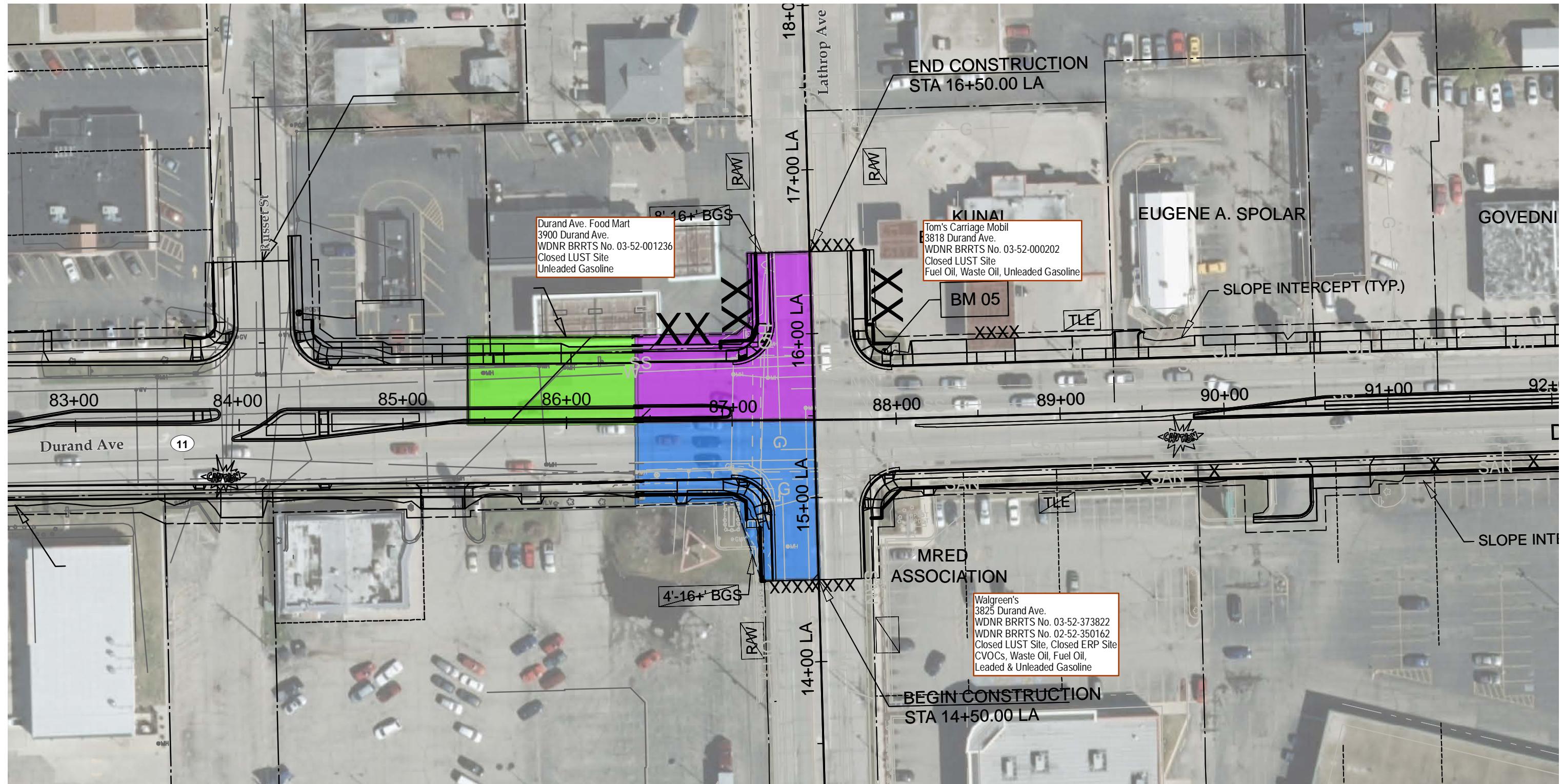


PROJECT: WISDOT ID #2260-07-70 DURAND AVE. (STH 11), KENTUCKY ST. TO KEARNEY AVE. RACINE, RACINE CO., WISCONSIN		
TITLE:		
<b>PROJECT CORRIDOR</b>		
DRAWN BY: A. ADAIR	PROJ NO.: 358418	
CHECKED BY: B. BERGMANN		
APPROVED BY: D. HAAK		
DATE: DECEMBER 2020		

**FIGURE 2**

150 North Patrick Blvd., Suite 180  
Brookfield, WI 53045  
Phone: 262.879.1212  
www.trcsolutions.com

FILE NO.: 358418\_002\_PC.mxd



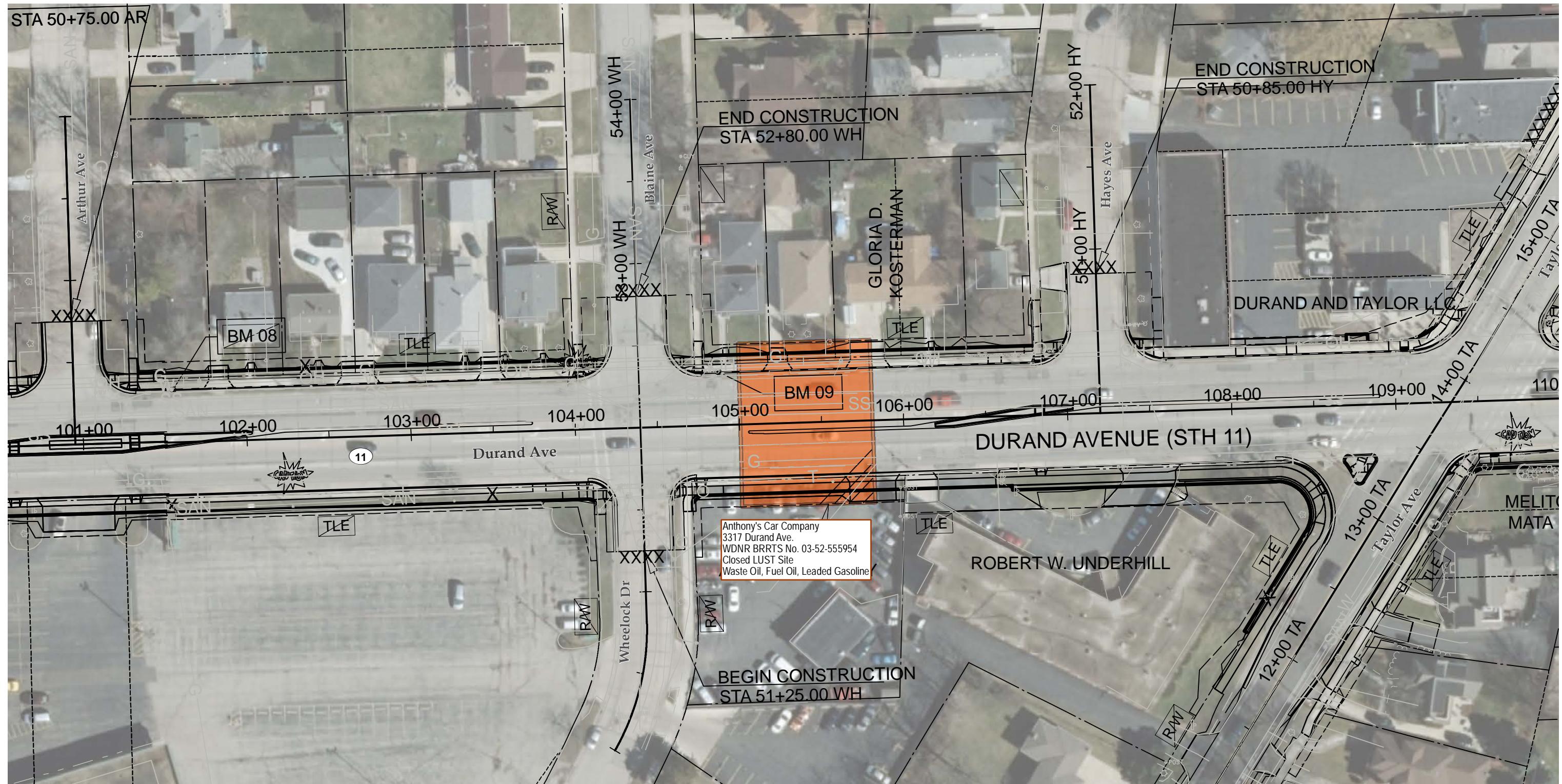
0 60 120  
1" = 60'  
1:720  
Feet

PROJECT: <b>WISDOT ID #2260-07-70</b> <b>DURAND AVE. (STH 11), KENTUCKY ST. TO KEARNEY AVE.</b> <b>RACINE, RACINE CO., WISCONSIN</b>		
TITLE: <b>CONTAMINATED SOIL LOCATION</b> <b>STATION 83+00 TO 92+00</b>		
DRAWN BY: A. ADAIR	PROJ NO.: 358418	
CHECKED BY: B. BERGMANN		
APPROVED BY: D. HAAK		
DATE: DECEMBER 2020		

**FIGURE 3**

150 North Patrick Blvd, Suite 180  
Brookfield, WI 53045  
Phone: 262.879.1212  
www.trcsolutions.com

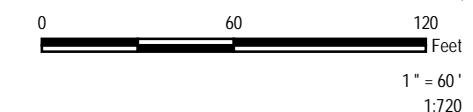
FILE NO.: 358418\_003b CSL.mxd

**LEGEND**

CONTAMINATED SOIL 1'-6+' BGS

**NOTES**

1. BASE MAP IMAGERY FROM RACINE COUNTY LAND INFORMATION OFFICE, 2015.
2. MAP PROJECTION AND GRID COORDINATES ARE NAD83 STATE PLANE WISCONSIN-SOUTH (US SURVEY FEET).
3. CONSTRUCTION PLANS PROVIDED BY WisDOT, LOCATIONS ARE APPROXIMATE.

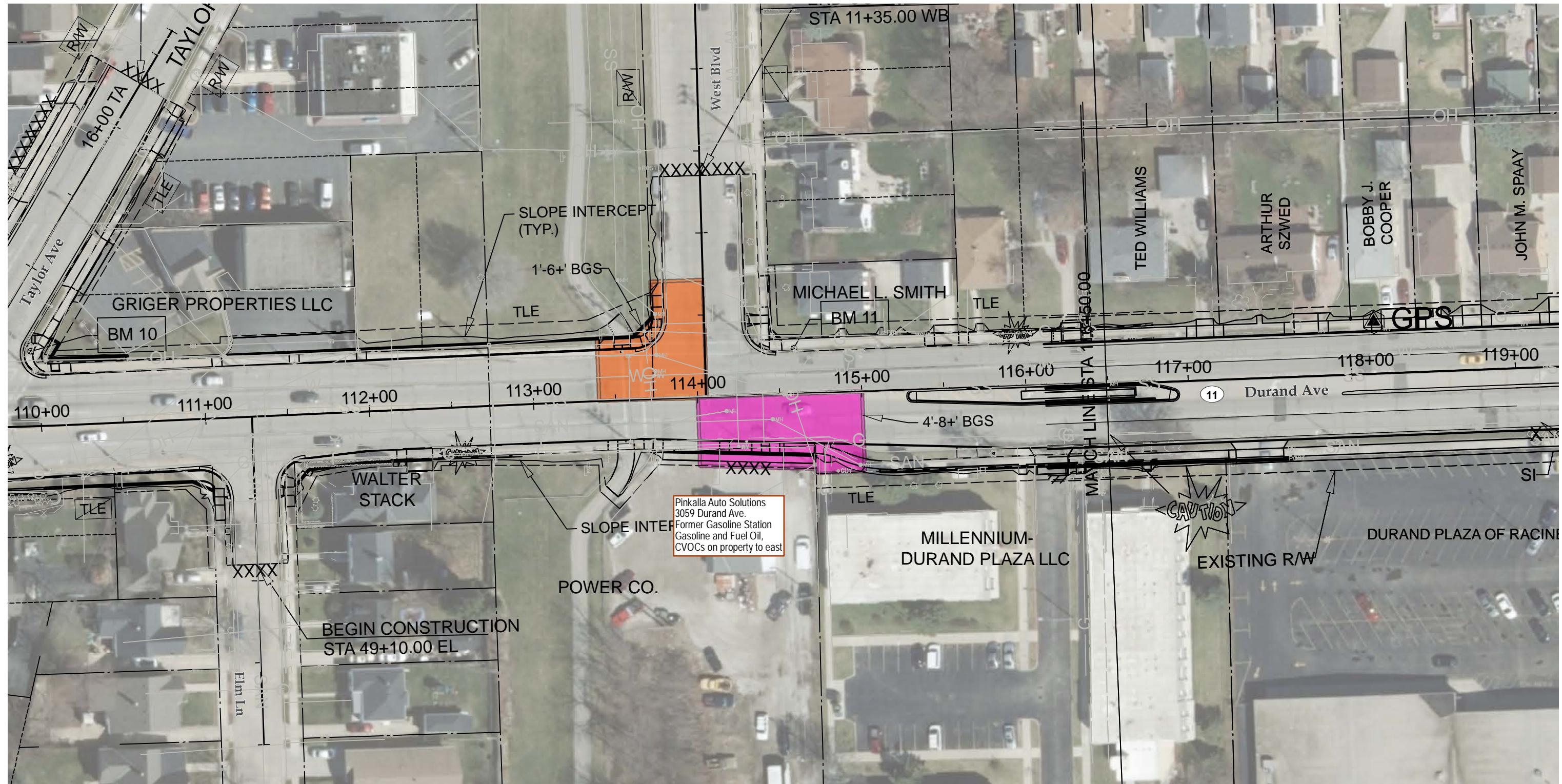


PROJECT: <b>WISDOT ID #2260-07-70</b>	
<b>DURAND AVE. (STH 11), KENTUCKY ST. TO KEARNEY AVE. RACINE, RACINE CO., WISCONSIN</b>	
TITLE: <b>CONTAMINATED SOIL LOCATION STATION 101+00 TO 109+00</b>	
DRAWN BY: A. ADAIR	PROJ NO.: 358418
CHECKED BY: B. BERGMANN	
APPROVED BY: D. HAAK	
DATE: DECEMBER 2020	

**FIGURE 4**

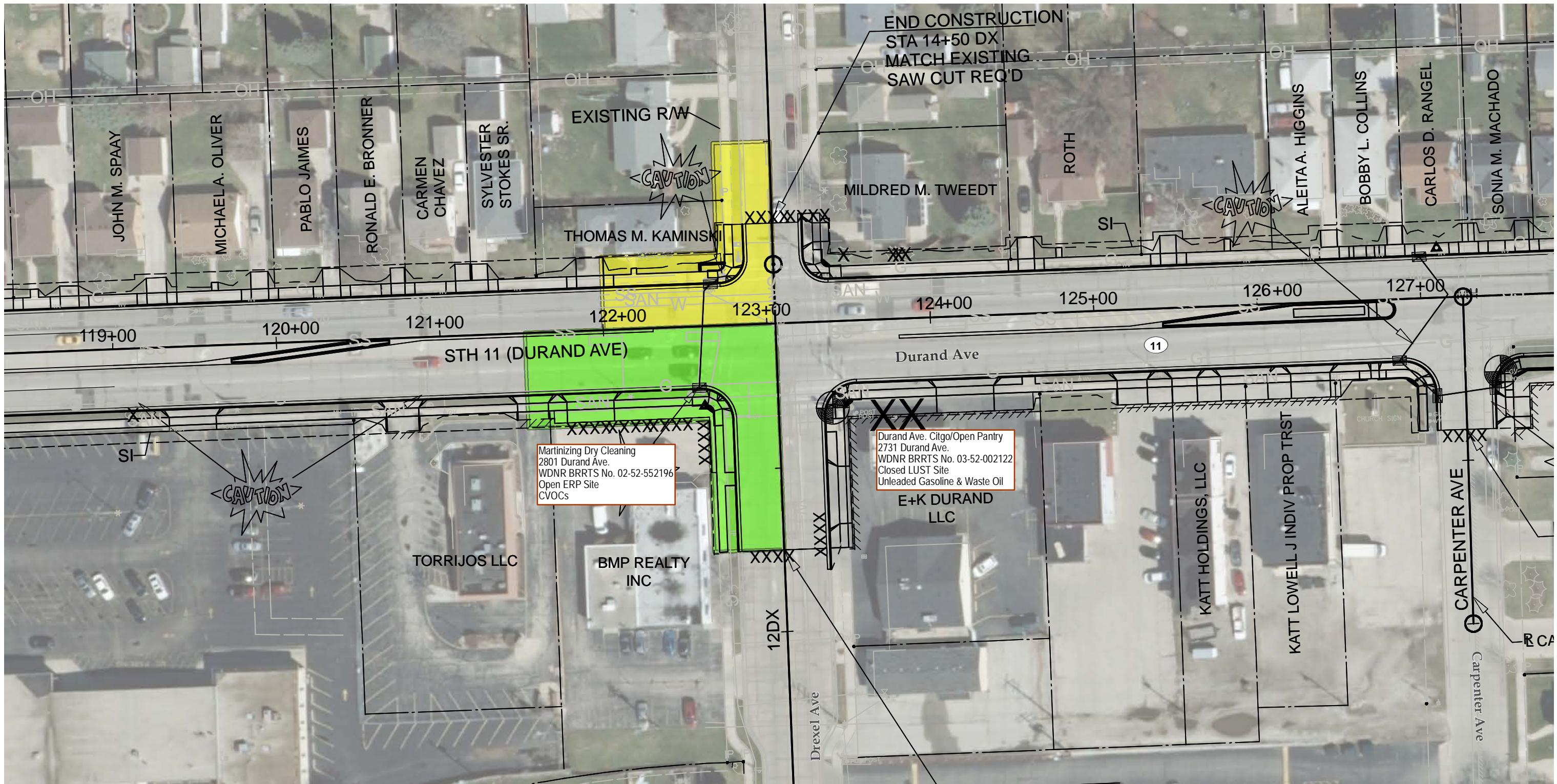
150 North Patrick Blvd, Suite 180  
Brookfield, WI 53045  
Phone: 262.879.1212  
www.trcsolutions.com

FILE NO.: 358418\_003b\_CS1.mxd



0 60 120  
1" = 60'  
1:720





PROJECT: WISDOT ID #2260-07-70  
DURAND AVE. (STH 11), KENTUCKY ST. TO KEARNEY AVE.  
RACINE, RACINE CO., WISCONSIN

TITLE: CONTAMINATED SOIL LOCATION  
STATION 119+00 TO 127+00

DRAWN BY:	A. ADAIR	PROJ NO.:	358418
CHECKED BY:	B. BERGMANN		
APPROVED BY:	D. HAAK		
DATE:	DECEMBER 2020		

**FIGURE 6**

150 North Patrick Blvd, Suite 180  
Brookfield, WI 53045  
Phone: 262.879.1212  
www.trcsolutions.com

FILE NO.: 358418\_003b\_CS1.mxd



---

## **Appendix A: Special Provisions, Plans, & WDNR Concurrence Letter**

# HIGHWAY WORK PROPOSAL

Wisconsin Department of Transportation  
06/2017 s.66.0901(7) Wis. Stats

Proposal Number: **004**

<u>COUNTY</u>	<u>STATE PROJECT</u>	<u>FEDERAL</u>	<u>PROJECT DESCRIPTION</u>	<u>HIGHWAY</u>
Racine	2260-07-70	WISC 2019626	Durand Ave, City Of Racine; Kentucky St To Kearney Ave	STH 011

This proposal, submitted by the undersigned bidder to the Wisconsin Department of Transportation, is in accordance with the advertised request for proposals. The bidder is to furnish and deliver all materials, and to perform all work for the improvement of the designated project in the time specified, in accordance with the appended Proposal Requirements and Conditions.

Proposal Guaranty Required: \$100,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Date: September 10, 2019 Time (Local Time): 9:00 am	Firm Name, Address, City, State, Zip Code
Contract Completion Time November 21, 2020	<b>SAMPLE</b> <b>NOT FOR BIDDING PURPOSES</b>
Assigned Disadvantaged Business Enterprise Goal      18%	This contract is exempt from federal oversight.

This certifies that the undersigned bidder, duly sworn, is an authorized representative of the firm named above; that the bidder has examined and carefully prepared the bid from the plans, Highway Work Proposal, and all addenda, and has checked the same in detail before submitting this proposal or bid; and that the bidder or agents, officer, or employees have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal bid.

**Do not sign, notarize, or submit this Highway Work Proposal when submitting an electronic bid on the Internet.**

Subscribed and sworn to before me this \_\_\_\_\_

(Signature, Notary Public, State of Wisconsin)

(Bidder Signature)

(Print or Type Name, Notary Public, State Wisconsin)

(Print or Type Bidder Name)

(Date Commission Expires)

(Bidder Title)

Notary Seal

Type of Work:	For Department Use Only
Grading, Base, Concrete Pavement, Asphalt Pavement, Storm Sewer, Curb and Gutter, Sidewalk, Concrete Driveway, Fence, Plantings, Street Lighting, Traffic Signals, Sanitary Sewer, Modular Block Wall, Signs, Pavement Markings	
Notice of Award Dated	Date Guaranty Returned

## Special Provisions

### Table of Contents

<b>Article</b>	<b>Description</b>	<b>Page #</b>
1.	General.....	4
2.	Scope of Work.....	4
3.	Prosecution and Progress.....	4
4.	Traffic. ....	6
5.	Municipality Acceptance of Sanitary Sewer and Water Main Construction.....	8
6.	Holiday Work Restrictions.....	8
7.	Utilities.....	8
8.	Information to Bidders, WPDES General Construction Storm Water Discharge Permit. ....	14
9.	Information to Bidders, U.S. Army Corps of Engineers Section 404 Permit.....	15
10.	Erosion Control. ....	15
11.	Notice to Contractor – RYDE (Racine Transit) Coordination.....	15
12.	Notice to Contractor - Sign Removal. ....	16
13.	Health and Safety Requirements for Workers Remediating Petroleum Contamination. ....	16
14.	Coordination with Businesses and Residents.....	16
15.	Public Convenience and Safety. ....	17
16.	Removing Street Light Poles, Item 204.9060.S.01.....	17
17.	Removing Sanitary Sewer Manholes, Item 204.9060.S.02. ....	17
18.	Removing Sanitary Sewer 10-Inch, Item 204.9090.S.01.....	18
19.	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.....	18
20.	Maintaining Drainage. ....	21
21.	QMP Base Aggregate Dense 1 1/4-Inch Compaction, Item 371.1000.S.....	21
22.	Stamping Colored Concrete, Item 405.1000.....	27
23.	Concrete Pavement Joint Layout, Item 415.5110.S.....	28
24.	Adjusting Manhole Covers. ....	29
25.	Furnishing and Planting Plant Materials. ....	29
26.	Landscape Planting Surveillance and Care Cycles.....	32
27.	Field Facilities .....	32
28.	Temporary Pedestrian Surface Asphalt, Item 644.1410.S. ....	33
29.	Temporary Curb Ramp, Item 644.1601.S. ....	33
30.	Temporary Pedestrian Safety Fence, Item 644.1616.S.....	34
31.	Geotextile Type SR.....	35
32.	General Requirements for Electrical Work.....	35
33.	Electrical Service Meter Breaker Pedestal Lathrop Avenue, Item 656.0200.01; Electrical Service Meter Breaker Pedestal Taylor Avenue Item 656.0200.02; Electrical Service Meter Breaker Pedestal Drexel Avenue, Item 656.0200.03; Electrical Service Meter Breaker Pedestal West Lawn Avenue, Item 656.0200.04; Electrical Service Meter Breaker Pedestal Ashland Avenue, Item 656.0200.05. ....	35
34.	Temporary Traffic Signals for Intersections Lathrop Avenue, Item 661.0200.01; Temporary Traffic Signals for Intersections Drexel Avenue, Item 661.0200.02.....	36

35.	Section 671 Intelligent Transportation Systems–Conduit.....	36
36.	Fiber Optic Splice Enclosure.....	37
37.	Install Fiber Optic Cable Outdoor Plant 48-CT, Item 678.0096.....	37
38.	Performance Engineered Mixture (PEM) Testing.....	37
39.	Optimized Aggregate Gradation Incentive, Item 715.0710.....	38
40.	Flexural Strength for Concrete Mix Design.....	40
41.	Colored Concrete Crosswalk, Item SPV.0035.01.....	41
42.	Topsoil Special, Item SPV.0035.02.....	42
43.	Inlet Covers Type DW, Item SPV.0060.01.....	42
44.	Section Corner Monuments Special, Item SPV.0060.02.....	43
45.	Utility Line Opening (ULO), Item SPV.0060.03.....	43
46.	6-Count Fiber Optic Connector 200-FT, Item SPV.0060.04.....	44
47.	Removing Lighting Control Cabinets, Item SPV.0060.05.....	45
48.	Storm Sewer Tap, Item SPV.0060.06.....	45
49.	Reconstructing Sanitary Sewer Manholes, Item SPV.0060.07.....	46
50.	Sanitary Sewer Manhole Covers Type J, Item SPV.0060.08.....	47
51.	Moving Existing Bus Stop Shelter, Item SPV.0060.09.....	47
52.	Traffic Signal Controller and Cabinet, Item SPV.0060.10.....	48
53.	Luminaires Utility LED 139 Watts, Item SPV.0060.11.....	56
54.	Luminaires Utility LED 66 Watts, Item SPV.0060.12.....	56
55.	Install Existing Unit Duct Into New Pull Box, Item SPV.0060.13.....	57
56.	Constructing Sanitary Sewer Manholes 4-FT, Item SPV.0060.14.....	57
57.	Removing Existing Bus Stop Shelter, SPV.0060.15.....	60
58.	Concrete Raised Median 24-Inch, SPV.0090.01.....	60
59.	Abandoning Sanitary Sewer 18-Inch, Item SPV.0090.02.....	62
60.	Sanitary Sewer PVC SDR 35 8-Inch, Item SPV.0090.03; Sanitary Sewer PVC PS-46 18-Inch, Item SPV.0090.04.....	63
61.	Marking Contrast Epoxy 4-inch, Item SPV.0090.05.....	65
62.	Marking Contrast Epoxy 8-inch, Item SPV.0090.06.....	66
63.	Remove Traffic Signals Lathrop Avenue, Item SPV.0105.01; Remove Traffic Signals Taylor Avenue, Item SPV.0105.02; Remove Traffic Signals Drexel Avenue, Item SPV.0105.03.....	66
64.	Transporting Traffic Signal and Intersection Lighting Materials Lathrop Avenue, Item SPV.0105.04; Transporting Traffic Signal and Intersection Lighting Materials Taylor Avenue, Item SPV.0105.05; Transporting Traffic Signal and Intersection Lighting Materials Drexel Avenue, Item SPV.0105.06.....	67
65.	Video Detection System Lathrop Avenue, Item SPV.0105.07; Video Detection System Taylor Avenue, Item SPV.0105.08; Video Detection System Drexel Avenue, Item SPV.0105.09.....	68
66.	Microwave Based Traffic Sensor Lathrop Avenue, Item SPV.0105.10; Microwave Based Traffic Sensor Taylor Avenue, Item SPV.0105.11; Microwave Based Traffic Sensor Drexel Avenue, Item SPV.0105.12.....	71
67.	Remove Loop Detector Wire and Lead-in Cable Lathrop Avenue, Item SPV.0105.13; Remove Loop Detector Wire and Lead-in Cable Taylor Avenue, Item SPV.0105.14; Remove Loop Detector Wire and Lead-in Cable Drexel Avenue, Item SPV.0105.15.....	74

68.	Audible Pedestrian Signal System Lathrop Avenue, Item SPV.0105.16; Audible Pedestrian Signal System Taylor Avenue, Item SPV.0105.17; Audible Pedestrian Signal System Drexel Avenue, Item SPV.0105.18.....	74
69.	Removing Business Sign 4125 Durand Avenue, Item SPV.0105.19; Removing Business Sign 4006 Durand Avenue, Item SPV.0105.20; Removing Business Sign 3317 Durand Avenue, Item SPV.0105.21.....	78
70.	Water for Seeded Areas, Item SPV.0120.01.....	79
71.	Wall Modular Block Gravity Landscape Wall A, Item SPV.0165.01; Wall Modular Block Gravity Landscape Wall B, Item SPV.0165.02.....	79
72.	Concrete Sidewalk Thickened Edge, Item SPV.0165.03.....	84
73.	Remove and Replace Brick Pavers, Item SPV.0165.04.....	84
74.	Shredded Hardwood Bark Mulch, Item SPV.0180.01.....	85
75.	Management of Solid Waste, Item SPV.0195.01. ....	86

## **18. Removing Sanitary Sewer 10-Inch, Item 204.9090.S.01.**

### **A Description**

This special provision describes removing 10-Inch sanitary sewer according to the pertinent provisions of standard spec 204 and as hereinafter provided.

### **B (Vacant)**

### **C (Vacant)**

### **D Measurement**

The department will measure Removing Sanitary Sewer 10-Inch in length by the linear foot, acceptably completed.

### **E Payment**

*Add the following to standard spec 204.5:*

ITEM NUMBER	DESCRIPTION	UNIT
204.9090.S.01	Removing Sanitary Sewer 10-Inch	LF
stp-204-025 (20150630)		

## **19. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.**

### **A Description**

#### **A.1 General**

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a DNR approved bioremediation facility. The closest DNR approved bioremediation facilities are:

Republic Services Kestrel Hawk Landfill  
1989 Oakes Rd.  
Racine, WI 53406  
(262) 884-7081

Waste Management Pheasant Run RDF Landfill  
10712 South 124th Street  
Bristol, WI 53104  
(800) 963-4776

Advanced Disposal Emerald Park Landfill  
W124S10629 South 124th Street  
Muskego, WI 53150  
(414) 529-1360

Perform this work according to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

#### **A.2 Notice to the Contractor – Contaminated Soil Location(s)**

The department completed testing for soil and groundwater contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following location(s) as shown on the plans:

1. Station 85+40 to 86+50 from reference line to project limits left, from approximately 1 to 8+ feet below grade. Soil excavated from this area will require off-site bioremediation. The estimated volume of contaminated soil to be excavated at this location is 283 cubic yards (approximately 481 tons using a conversion factor of 1.7 tons per cubic yard).

2. Station 86+50 to 87+50 from reference line to project limits left, from approximately 8 to 16+ feet below grade. Soil excavated from this area will require off-site bioremediation. The estimated volume of contaminated soil to be excavated at this location is 0 cubic yards (approximately 0 tons using a conversion factor of 1.7 tons per cubic yard).
3. Station 86+50 to 87+50 from reference line to project limits right, from approximately 4 to 16+ feet below grade. Soil excavated from this area will require off-site bioremediation. The estimated volume of contaminated soil to be excavated at this location is 5 cubic yards (approximately 9 tons using a conversion factor of 1.7 tons per cubic yard).
4. Station 105+00 to 105+80 from project limits left to project limits right, from approximately 1 to 6+ feet below grade. Soil excavated from this area will require off-site bioremediation. The estimated volume of contaminated soil to be excavated at this location is 411 cubic yards (approximately 699 tons using a conversion factor of 1.7 tons per cubic yard).
5. Station 113+40 to 114+10 from reference line to 70 feet left of reference line, from approximately 1 to 6+ feet below grade. Soil excavated from this area will require off-site bioremediation. The estimated volume of contaminated soil to be excavated at this location is 317 cubic yards (approximately 539 tons using a conversion factor of 1.7 tons per cubic yard).
6. Station 114+00 to 115+00 from reference line to project limits right, from approximately 4 to 8+ feet below grade. Soil excavated from this area will require off-site bioremediation. The estimated volume of contaminated soil to be excavated at this location is 0 cubic yards (approximately 0 tons using a conversion factor of 1.7 tons per cubic yard).

If contaminated soils are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer.

For further information regarding previous investigation and remediation activities at these sites contact:

Name:	Andrew Malsom
Address:	141 NW Barstow Street
	PO Box 798
	Waukesha, WI 53187-0798
Phone:	(262) 548-6705
Fax:	(262) 548-6891
E-mail:	<a href="mailto:andrew.malsom@dot.wi.gov">andrew.malsom@dot.wi.gov</a>

### A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant:	TRC Environmental Corporation
Address:	150 N. Patrick Blvd., Ste. 180, Brookfield, WI 53045
Contact:	Bryan Bergmann
Phone:	(262) 901-2126 office, (262) 227-9210 cell
Fax:	(262) 879-1220
E-mail:	<a href="mailto:bbergmann@trcsolutions.com">bbergmann@trcsolutions.com</a>

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
2. Identifying contaminated soils to be hauled to the bioremediation facility;
3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed.

Identify the DNR approved bioremediation facility that will be used for disposal of contaminated soils and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

#### **A.4 Health and Safety Requirements**

*Add the following to standard spec 107.1:*

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

#### **B (Vacant)**

#### **C Construction**

*Add the following to standard spec 205.3:*

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

Directly load and haul soils designated by the environmental consultant for offsite bioremediation to the DNR approved bioremediation facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site bioremediation so as not to contain free liquids.

#### **D Measurement**

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil, accepted by the bioremediation facility as documented by weight tickets generated by the bioremediation facility.

#### **E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils prior to transport, if necessary.

stp-205-003 (20150630)

## **C Construction**

Install mulch according to standard spec 632.3.9 to depth indicated in plans.

Do not use any weed barrier fabric in mulch areas.

Do not damage plants, structures, and/or other materials already in place, when placing the mulch.

## **D Measurement**

The department will measure Shredded Hardwood Bark Mulch by the square yard, acceptably completed.

## **E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.01	Shredded Hardwood Bark Mulch	SY

Payment is full compensation for furnishing and installing all materials.

## **75. Management of Solid Waste, Item SPV.0195.01.**

### **A General**

#### **A.1 Description**

This work will conform with the requirements of standard spec 205 of the Standard Specifications; to pertinent parts of the Wisconsin Administrative Code, Chapters NR 700-736 Environmental Investigation and Remediation of Environmental Contamination; Wisconsin Administration Code, Chapters NR 500-538, Solid Waste; and as shown on the plans and as supplemented herein.

Soil containing chlorinated solvents will be encountered within the construction limits. The solid waste may contain NR 500 non-exempt industrial wastes including soil mixed with foundry sand. Impacted waste material excavated during construction which cannot in the opinion of the environmental consultant be managed as common excavation or as petroleum-contaminated soil will be managed as solid waste.

This work consists of excavating, segregating, temporary stockpiling, loading, hauling, and disposing of solid waste material at a WDNR-approved disposal facility. The nearest WDNR-approved disposal facilities are:

Republic Services Kestrel Hawk Landfill  
1989 Oakes Rd.  
Racine, WI 53406  
(262) 884-7081

Waste Management Pheasant Run RDF Landfill  
10712 South 124th Street  
Bristol, WI 53104  
(800) 963-4776

Advanced Disposal Emerald Park Landfill  
W124S10629 South 124th Street  
Muskego, WI 53150  
(414) 529-1360

Provide information to the environmental consultant and engineer that indicates the WDNR-approved disposal facility that the contractor will use.

#### **A.2 Notice to the Contractor-Solid Waste Locations**

The department and others completed hazardous materials assessment for locations within this project where excavation is required. Investigation for soil contamination was conducted at several locations. Results indicate that solid waste (soil contaminated with chlorinated solvents) is present at the following locations as shown on the plans:

1. Station 121+50 to 123+10, from reference line to project limits right, from approximately 1 to 8+ feet bgs. Approximately 638 cubic yards (approximately 1085 tons at an estimated 1.7 tons per cubic yard) of solid waste soil will be excavated from this area.
2. Station 122+00 to 123+00, from reference line to project limits left, from approximately 1 to 16+ feet bgs. Soil at this location contains foundry sand. Approximately 16 cubic yards (approximately 28 tons at an estimated 1.7 tons per cubic yard) of non-exempt solid waste will be excavated from this area.

Directly load solid waste soil excavated by the project at the above location into truck that will transport the material to a WDNR-licensed landfill facility for landfill disposal.

If obviously contaminated soils or signs of NR 500 non-exempt solid waste and hazardous materials are unexpectedly encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Examples of these unexpected conditions may include, but are not limited to, buried containers or tanks, noxious odors and fumes, stained soils, sheen on ground water, other industrial wastes, and significant volumes of municipal or domestic garbage.

No active groundwater monitoring wells were observed within the construction limits. If active groundwater monitoring wells are encountered during construction, notify engineer and protect them to maintain their integrity. The environmental consultant will determine if monitoring wells need to be maintained. For monitoring wells that do need to be maintained, adjust the wells that do not conflict with structures or curb and gutter to be flush with the final grade. For wells that conflict with the previously mentioned items or if monitoring wells are not required to be maintained, they will be abandoned by others.

If dewatering is required at the above location, conduct the dewatering according to Section C below.

### A.3 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated waste. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding previous investigation and remediation activities in these areas contact:

Name: Andrew Malsom  
Address: 141 NW Barstow Street, Waukesha, WI 53187-0798  
Phone: (262) 548-6705  
Fax: (262) 548-6891  
E-mail: [andrew.malsom@dot.state.wi.us](mailto:andrew.malsom@dot.state.wi.us)

### A.4 Coordination

Coordinate work under this contract with the environment consultant:

Consultant: TRC Environmental Corporation  
Address: 150 N. Patrick Blvd. Ste. 180, Brookfield, WI 53045  
Contact: Bryan Bergmann  
Phone: (262) 901-2126  
Fax: (262) 879-1220  
E-mail: [bbergmann@trcsolutions.com](mailto:bbergmann@trcsolutions.com)

The role of the environmental consultant will be limited to:

- (5) Determining the location and limits of solid waste to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
- (6) Identifying soils to be hauled to the landfill facility;
- (7) Documenting that activities associated with management of solid waste are in conformance with the solid waste management methods for this project as specified herein; and
- (8) Obtaining the necessary approvals for disposal of solid waste from the landfill facility.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the area of solid waste fill described in A.2 to the environmental consultant. Identify the WDNR licensed landfill facility that will be used for disposal of solid waste and provide this information to the environmental

consultant no later than 30 calendar days prior to commencement of excavation in the impacted area or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals from the landfill facility for disposal of the solid waste.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation in the impacted area. Notify the environmental consultant at least three calendar days prior to commencement of excavation in the impacted area. Perform excavation in the impacted area on a continuous basis until excavation work is completed. Do not transport soil containing solid waste offsite without prior approval from the environmental consultant.

#### **A.5 Health and Safety Requirements**

*Supplement standard spec 107.1 with the following:*

During excavation activities, expect to encounter historic fill contaminated with industrial waste (foundry sand) and associated regulated metals and organic compounds. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each impacted area as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

#### **B (Vacant)**

#### **C Construction**

*Supplement standard spec 205.3 with the following:*

Control operations in the impacted area to minimize the quantity of soil excavated.

The environmental consultant will periodically monitor soil excavated from the area identified in A.2 above. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

Directly load and haul solid waste soil designated by the environmental consultant for offsite disposal to the WDNR approved landfill facility. Use loading and hauling practices that are appropriate to prevent any spills or releases of the material. Prior to transport, sufficiently dewater soils designated for off-site disposal so as not to contain free liquids.

Verify that the vehicles used to transport material are licensed for such activity according to applicable state and federal regulations. Obtain the necessary disposal facility approvals and WDNR approvals for disposal. Do not transport regulated solid waste off-site without obtaining the approval of the environmental consultant and engineer and notifying the disposal facility.

During excavations in the areas of known contamination, larger chunks of clean concrete (approximately 2 cubic feet), asphalt and bricks shall be segregated from the fill, to the extent practical and managed as common excavation. Under NR 500.08 this material is exempt from licensing and requirements of Wisconsin Administrative Code NR 500-538 of the solid waste regulations and will be reused as designated by the engineer as fill on the project, or it will be disposed of off-site at the contractor's disposal site(s).

If dewatering is required in areas of known contamination, water generated from dewatering activities may contain petroleum compounds and/or metals. Such water may require analytical testing, and with approval of the City of Racine Wastewater Utility be discharged to the sanitary sewer as follows:

1. Meet all applicable requirements of the City of Racine Wastewater Utility including the control of suspended solids. Perform all necessary monitoring to document compliance with the City of Racine Wastewater Utility requirements. Furnish, install, operate, maintain, disassemble, and remove treatment equipment necessary to comply with the City of Racine Wastewater Utility requirements.
2. Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities.

Notify the engineer of any dewatering activities and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statutes, judiciary decisions, and regulations of the State of Wisconsin.

Costs associated with excavation dewatering in contaminated areas are considered incidental to this pay item. The Wisconsin Department of Transportation will be the generator of regulated solid waste from this construction project.

#### **D Measurement**

The department will measure Management of Solid Waste by the ton of waste, accepted by the disposal facility and as documented by weight tickets.

#### **E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0195.01	Management of Solid Waste	TON

Payment is full compensation for excavating, segregating, loading, hauling, and landfill disposal of solid waste; obtaining solid waste collection and transportation service operating licenses; assisting in the collection of soil samples for field evaluation; dewatering of soils prior to transport, if necessary.

WKE

SEPTEMBER 2019

PROJECT ID:  
WITH: N/A

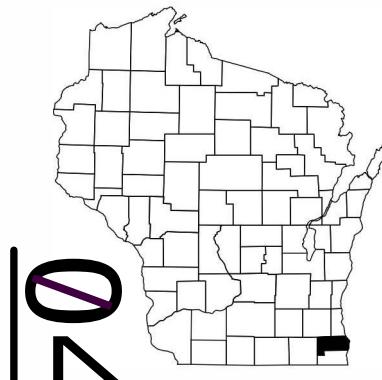
2260-07-70

COUNTY:  
RACINE

## ORDER OF SHEETS

- Section No. 1 Title
- Section No. 2 Typical Sections and Details
- Section No. 3 Estimate of Quantities
- Section No. 3 Miscellaneous Quantities
- Section No. 4 Right of Way Plat
- Section No. 5 Plan and Profile
- Section No. 6 Standard Detail Drawings
- Section No. 7 Sign Plates
- ~~Section No. 8 Structure Plans~~
- Section No. 9 Computer Earthwork Data
- Section No. 9 Cross Sections

TOTAL SHEETS = 712



N

04

## DESIGN DESIGNATION

A.A.D.T.	= 15.100 - 23.300
A.A.D.T.	= 18.100 - 28.200
D.H.V.	= 10.8%
D.D.	= 58 - 42
T.	= 5.4%
DESIGN SPEED	= 35 MPH
ESALS	= 4,540,600

## CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	/ / / /
PROPERTY LINE	— — —
LOT LINE	— — —
LIMITED HIGHWAY EASEMENT	— — —
EXISTING RIGHT OF WAY	— — —
PROPOSED OR NEW R/W LINE	— — —
SLOPE INTERCEPT	— — —
REFERENCE LINE	— — —
EXISTING CULVERT	— — —
PROPOSED CULVERT (Box or Pipe)	— — —
COMBUSTIBLE FLUIDS	— CAUTION —
MARSH AREA	— — —
WOODED OR SHRUB AREA	— — —
GRADE LINE	GRADE LINE
ORIGINAL GROUND	ORIGINAL GROUND
MARSH OR ROCK PROFILE (To be noted as such)	ROCK
SPECIAL DITCH	LABEL
GRADE ELEVATION	95.36
CULVERT (Profile View)	○ □
UTILITIES	E
ELECTRIC	FO
FIBER OPTIC	G
GAS	SAN
SANITARY SEWER	SS
STORM SEWER	T
TELEPHONE	W
WATER	—
UTILITY PEDESTAL	—
POWER POLE	—
TELEPHONE POLE	—

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

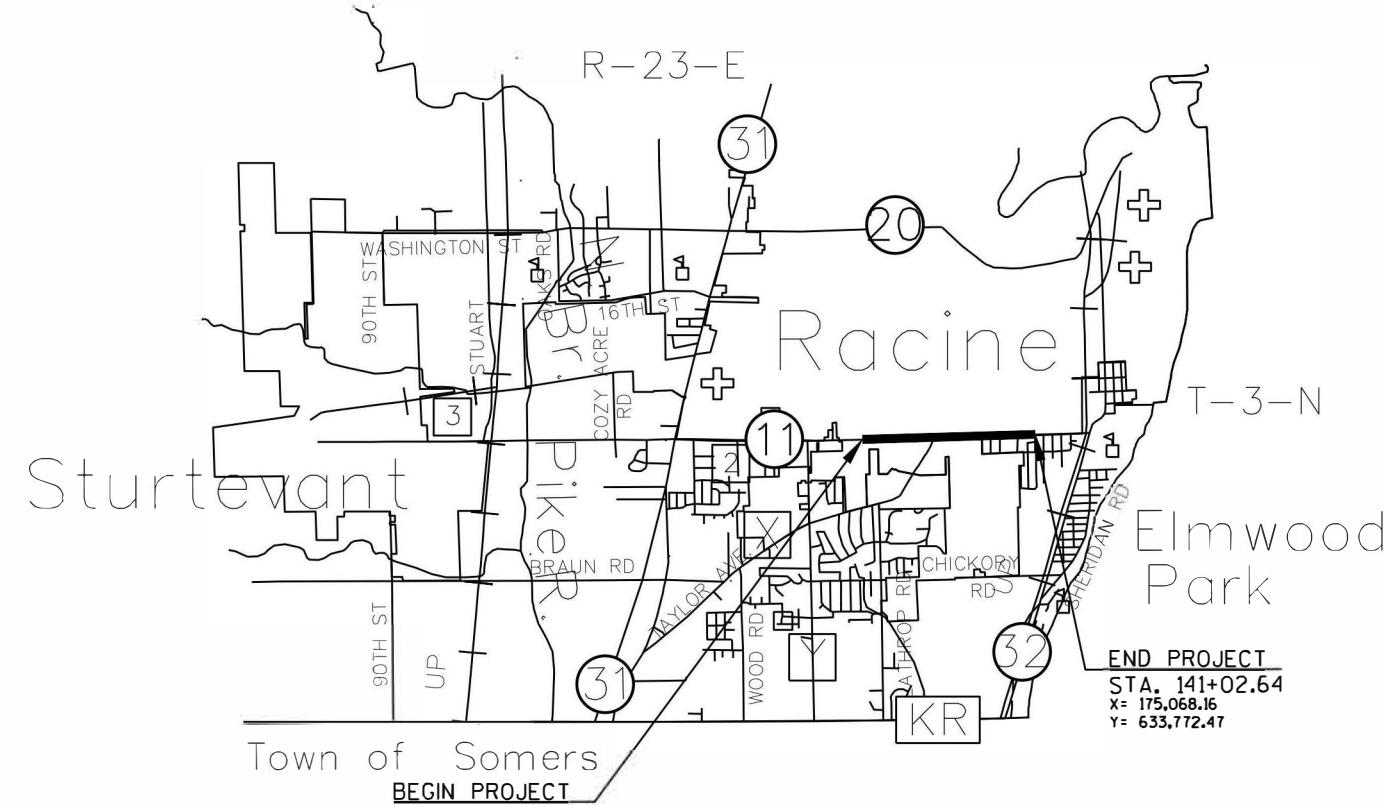
PLAN OF PROPOSED IMPROVEMENT

# DURAND AVENUE, CITY OF RACINE

(KENTUCKY STREET TO KEARNEY AVENUE)

STH 11  
RACINE COUNTY

STATE PROJECT NUMBER
2260-07-70



SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 1.211 MI.

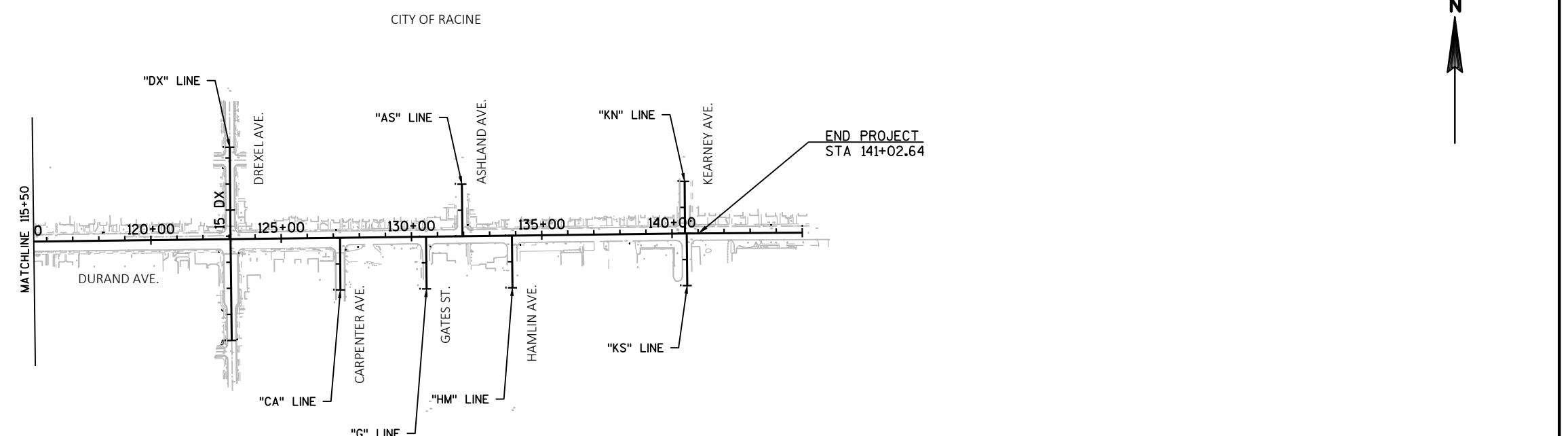
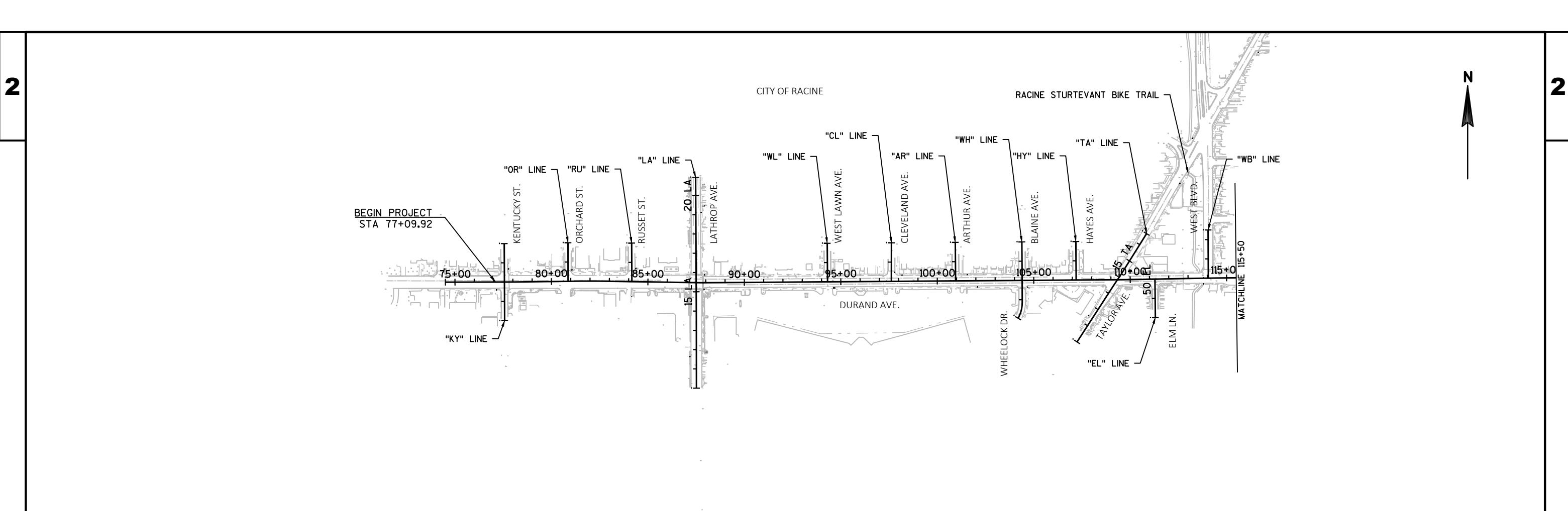
HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, RACINE COUNTY, NAD83 (2007). IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

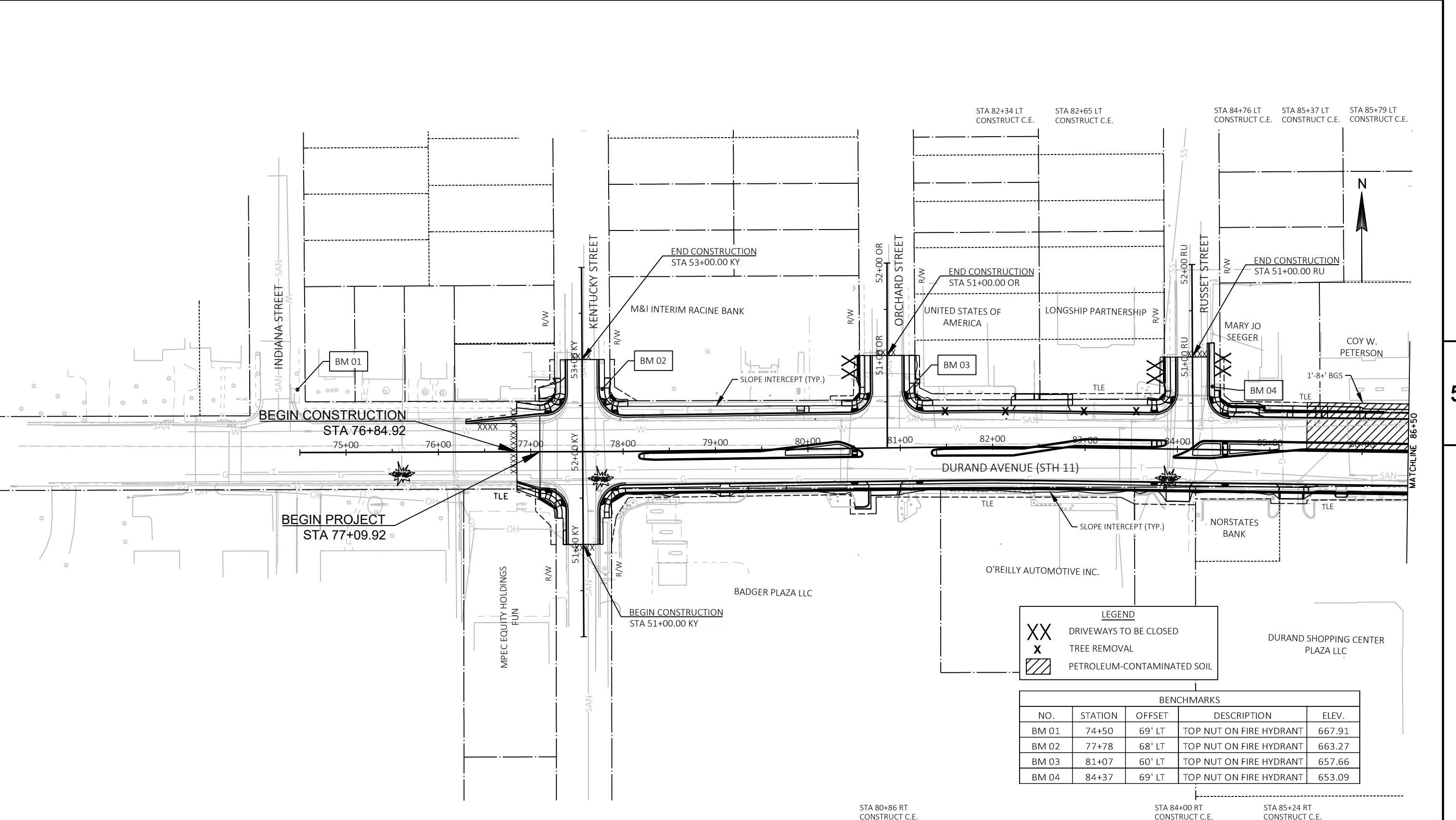
ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 NAVD88 (2007).

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2260-07-70	WISC 2019626	1

ACCEPTED FOR		
CITY of RACINE		
5-1-18 John C. Romy (Date) City Engineer (Signature & Title of Official)		
ORIGINAL PLANS PREPARED BY:		
 <b>STRAND ASSOCIATES*</b> 126 N. JEFFERSON STREET, STE 350 MILWAUKEE, WISCONSIN 53202 (414) 271-0771		
 WISCONSIN BHUPENDRA B. BISTA E - 34675 NEW BERLIN WI PROFESSIONAL ENGINEER Blueprint 5/1/2018		

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	STRAND ASSOCIATES, INC.
Designer	STRAND ASSOCIATES, INC.
Project Manager	ROBERT BELLIN
Regional Examiner	
Regional Supervisor	BENEDICT ERUCHALU
APPROVED FOR THE DEPARTMENT	
DATE: 5/1/2018 Roberto Bellin (Signature)	





PROJECT NO: 2260-07-70

HWY: STH 11

COUNTY: RACINE

PLAN: DURAND AVENUE

SHEET

E

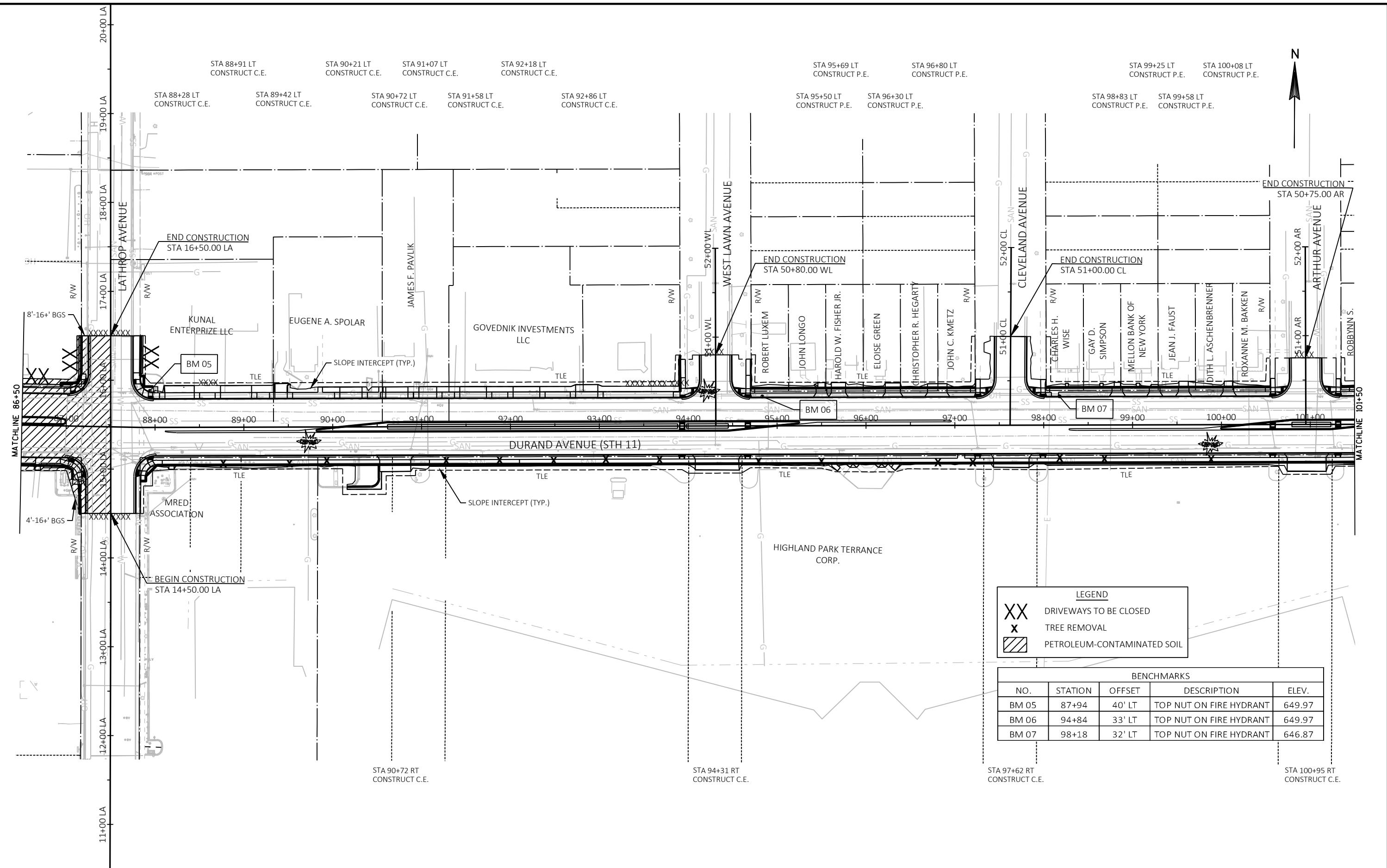
FILE NAME : S:\MIL\1000--1099\1092\003\ACAD\CIVIL 3D\SHEETSPLAN\050101\_PP.DWG  
LAYOUT NAME - 050101\_pp

PLOT DATE : 4/18/2018 2:56 PM

PLOT BY : NOTSON, FRIC

PLOT SCALE : #####

1



PROJECT NO: 2260-07-70

HWY: STH 1

COUNTY: RACIN

PLAN: DURAND AVENUE

SHEET

E

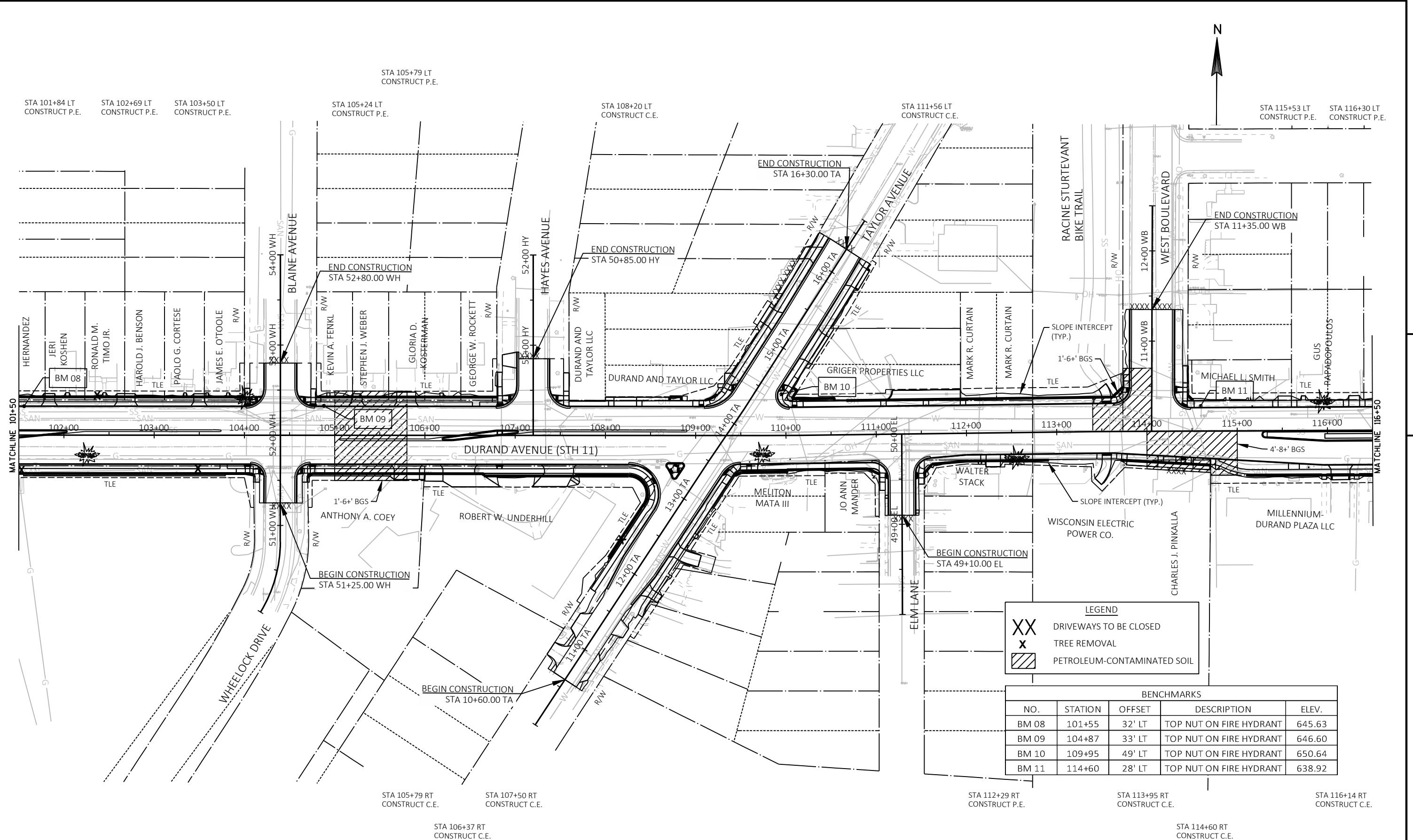
FILE NAME : S:\MIL\1000~1099\1092\003\ACAD\CIVIL 3D\SHEETSPLAN\050101\_PP.DWG  
LAYOUT NAME - 050103\_pp

PLOT DATE : 4/13/2018 2:07 PM

PLOT BY : SUNDERLAND, ANN

PLOT SCALE : #####

Page 1



PROJECT NO: 2260-07-70

HWY: STH 11

COUNTY: RACINE

PLAN: DURAND AVENUE

SHEET

F

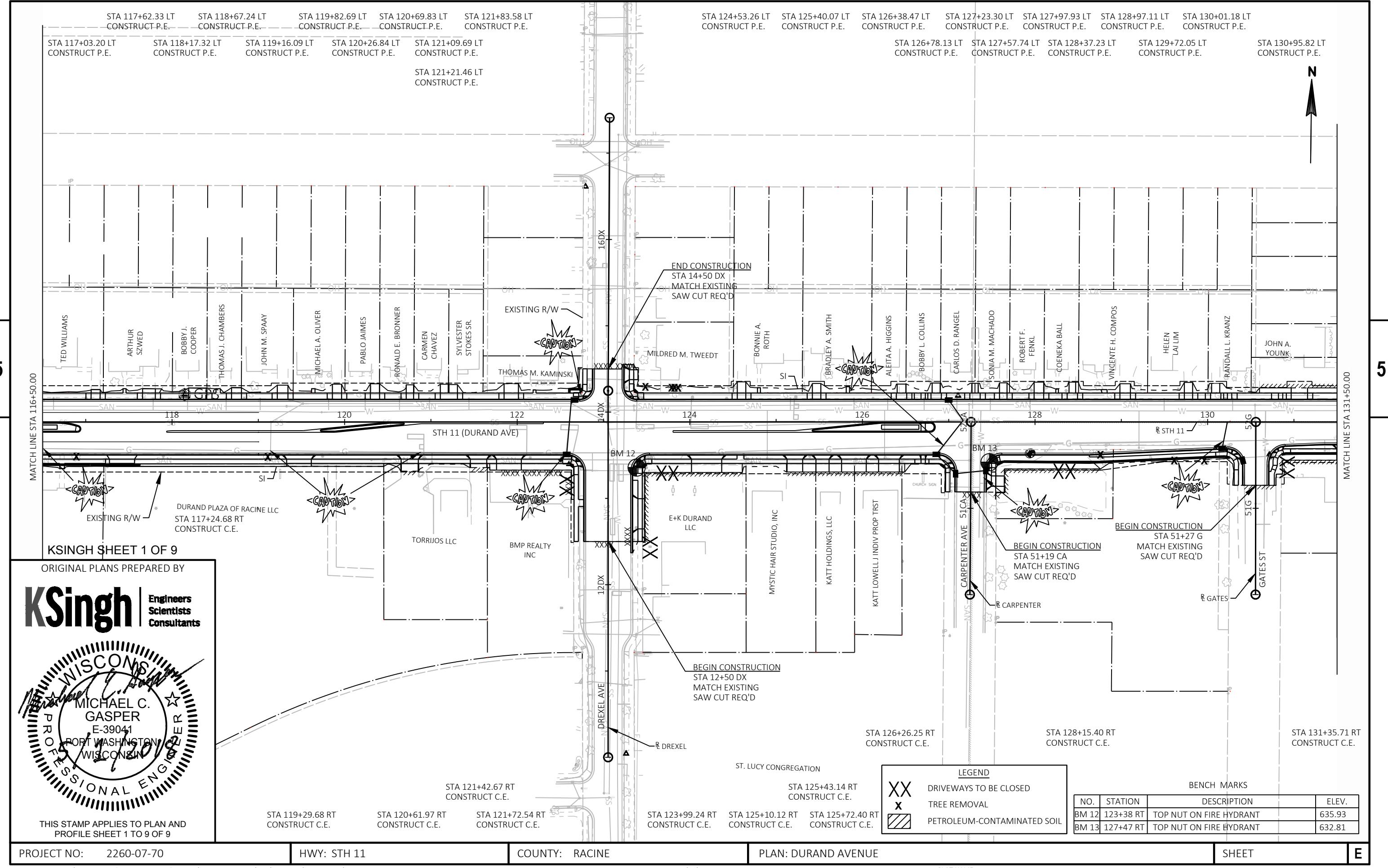
FILE NAME : S:\MIL\1000-1099\1092\003\ACAD\CIVIL 3D\SHEETSPLAN\050101\_PP.DWG  
LAYOUT NAME - 050105\_pp

PILOT DATE : 4/23/2018 1:44 PM

PLOT BY : NOTSON, P.

PLOT SCALE : #####

1



PROJECT NO: 2260-07-70

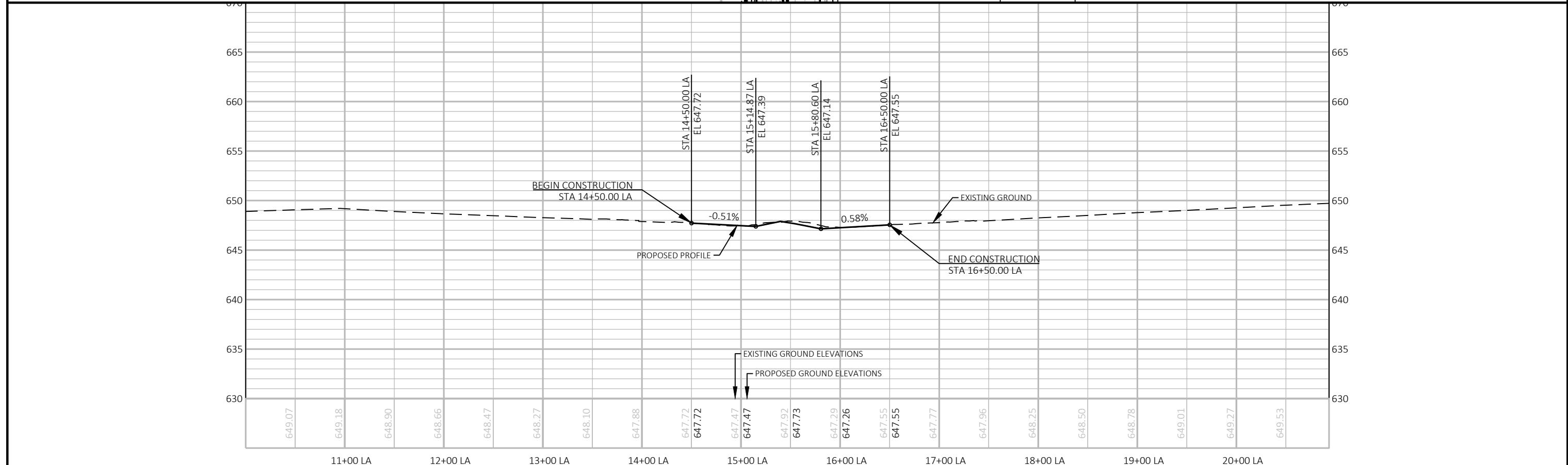
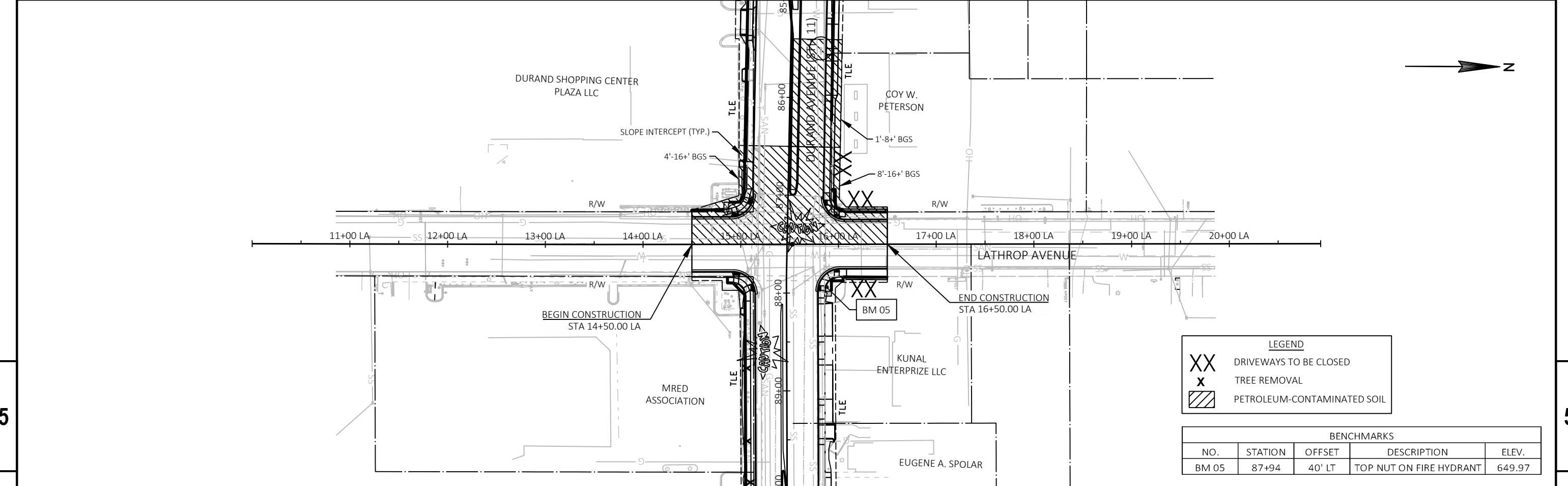
HWY: STH 11

COUNTY: RACINE

## PLAN: DURAND AVENUE

SHEET

E



PROJECT NO: 2260-07-70

HWY: STH 11

COUNTY: RACINE

PLAN AND PROFILE: LATHROP AVENUE

SHEET

**E**

EARTHWORK SUMMARY

CATEGORY	STAGE	LOCATION	STA TO STA		( C ) CUT CY	( E ) EBS EXCAVATION CY	( 2 ) 205.0100 EXCAVATION COMMON CY	( S ) SALVAGED/ UNUSABLE MATERIAL CY	( 4 ) AVAILABLE MATERIAL CY	( 5 ) 0% REDUCED EBS IN FILL CY	( 6 ) 110.0% EXPANDED EBS BACKFILL CY	( 7 ) 100.0% UNDISTRIBUTED 311.0110* BREAKER RUN TON***	( 8 ) ** 120.00% EXPANDED FILL CY	( 9 ) MASS ORDINATE EXCESS ( SHORTAGE ) CY	( 10 ) 208.01 BORROW CY	
			STA	TO STA												
0010	1	STH 11 (STAGE 1)	77+10	- 141+03	26,464	1,323	27,787	7,369	19,095	--	1,455	34	2,620	40	19,055	--
		KENTUCKY STREET (STAGE 1)	52+65 KY	- 53+00 KY	85	8	93	34	51	--	9	0	16	0	51	--
		ORCHARD STREET	50+61 OR	- 51+00 OR	93	9	102	41	52	--	10	0	18	0	52	--
		RUSSET STREET	50+58 RU	- 51+00 RU	117	12	129	41	76	--	13	0	24	0	76	--
		LATHROP AVENUE (STAGE 1)	16+02 LA	- 16+50 LA	132	13	145	85	47	--	14	0	26	0	47	--
		WEST LAWN AVENUE	50+52 WL	- 50+80 WL	71	7	78	27	44	--	8	0	14	0	44	--
		CLEVELAND AVENUE	50+52 CL	- 51+00 CL	103	10	113	27	76	--	11	0	20	--	76	--
		ARTHUR AVENUE	50+52 AR	- 50+75 AR	56	6	62	22	34	--	7	0	12	--	34	--
		WHEELOCK DRIVE (STAGE 1)	52+52 WH	- 52+80 WH	53	5	58	16	37	--	6	0	10	1	37	--
		HAYES AVENUE	50+55 HY	- 50+85 HY	75	8	83	29	46	--	9	0	16	0	46	--
		TAYLOR AVENUE (STAGE 1)	14+30 TA	- 16+30 TA	591	59	650	305	286	--	65	3	117	4	282	--
		WEST BOULEVARD	10+44 WB	- 11+35 WB	208	21	229	119	88	--	23	5	42	6	82	--
		DREXEL AVENUE	14+30 DX	- 14+50 DX	51	5	56	24	27	--	6	0	10	0	27	--
		ASHLAND AVENUE	51+41 AS	- 50+72 AS	73	7	80	38	35	--	8	1	14	1	34	--
		KEARNEY AVENUE	50+46 KN	- 50+63 KN	48	5	53	10	38	--	6	1	10	1	37	--
		SUB-TOTAL STAGE 1			28,222	1,498	29,720	8,189	20,033	--	1,648	45	2,969	54	19,979	--
2		STH 11 (STAGE 2)	77+10	- 119+00	25,735	1,287	27,022	7,369	18,366	--	1,416	0	2,548	--	18,366	--
		KENTUCKY STREET (STAGE 2)	51+00 KY	- 51+36 KY	74	7	81	35	39	--	8	0	14	0	38	--
		LATHROP AVENUE (STAGE 2)	14+50 LA	- 14+92 LA	119	12	131	85	34	--	13	1	24	1	32	--
		WHEELOCK DRIVE (STAGE 2)	51+25 WH	- 51+53 WH	71	7	78	32	39	--	8	0	14	--	39	--
		TAYLOR AVENUE (STAGE 2)	10+60 TA	- 13+47 TA	1,281	128	1,409	428	853	--	141	1	253	2	852	--
		ELM LANE	49+10 EL	- 49+56 EL	52	5	57	45	8	--	6	4	10	4	3	--
		DREXEL AVENUE	12+50 DX	- 13+31 DX	308	31	339	134	174	--	34	1	61	1	173	--
		CARPENTER AVENUE	51+19 CA	- 51+42 CA	55	6	61	22	33	--	7	1	12	2	31	--
		GATES AVENUE	51+27 G	- 51+51 G	49	5	54	19	30	--	6	1	10	1	29	--
		HAMLIN AVENUE	51+30 HM	- 51+54 HM	58	6	64	25	33	--	7	2	12	3	30	--
		KEARNEY AVENUE	51+38 KS	- 51+49 KS	10	1	11	22	(12)	--	1	0	2	--	(12)	--
		SUB-TOTAL STAGE 2			27,811	1,495	29,306	8,215	19,596	--	1,645	12	2,960	15	19,581	--
		GRAND TOTAL			56,033	2,993	59,026	16,404	39,629	--	3,292	58	5,929	69	39,560	--

TOTAL (PAY ITEMS)

59,026

5,929

NOTES

\* ADDITIONAL QUANTITIES LISTED ELSEWHERE  
\*\*\* CY TO TON CONVERSION FACTOR = 1.80 TON/CY

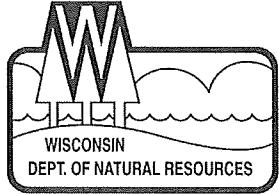
- 1) UNDISTRIBUTED EBS EXCAVATION ( E ) = 5% OF CUT ( C ) ON STH 11, 10% OF CUT ( C ) ON SIDE STREETS
- 2) EXCAVATION COMMON IS THE SUM OF THE CUT ( C ) AND EBS EXCAVATION ( E ).
- 3) EBS EXCAVATION ( E ) TO BE BACKFILLED WITH BREAKER RUN.
- 4) AVAILABLE MATERIAL = CUT ( C ) - ( S ).
- 5) SOILS REMOVED AS EBS MUST BE WASTED OFFSITE AND NOT REUSED AS FILL.
- 6) EXPANDED EBS BACKFILL THIS IS TO BE FILLED WITH BREAKER RUN. EBS EXPANSION FACTOR 1.10.
- 7) UNDISTRIBUTED QUANTITY OF BREAKER RUN USED TO FILL EBS.
- 8) EXPANDED FILL = (UNEXPANDED FILL \* 120% FILL FACTOR).
- 9) MASS ORDINATE =AVAILABLE MATERIAL ( 5 ) - EXPANDED FILL ( 8 ) = BORROW AND SELECT BORROW OR WASTE
- 10) BORROW = MASS ORDINATE (SHORTAGE) (9) - SELECT BORROW

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL

205.0501.S					
CATEGORY	STATION	TO	STATION	LOCATION	TON
0010	85+40	-	86+50	LT	481
	86+50	-	87+50	LT	0
	86+50	-	87+50	RT	9
	105+00	-	105+80	LT/RT	699
	113+40	-	114+10	LT	539
	114+00	-	115+00	RT	0
	TOTAL				1,728

FINISHING ROADWAY

CATEGORY	PROJECT	EACH
0010	2260-07-70	1
	TOTAL	1



October 20, 2017

Mr. Bryan Bergmann, P. G.  
TRC, Inc.  
150 North Patrick Blvd., Suite 180  
Brookfield, WI 53045

Subject: DNR Concurrence for Excavation Management Plan  
STH 11 (Durand Avenue), from Kentucky Street to Kearney Avenue  
City of Racine, Racine County, Wisconsin  
Bioremediation and Landfill Disposal  
WisDOT Construction Project ID No. 2260-07-00

Dear Mr. Bergmann:

The Wisconsin Department of Natural Resources (DNR) reviewed the Excavation Management Plan for the Subject reconstruction project. The DNR understands that the work is to reconstruct STH 11 (Durand Ave.), from Kentucky Street to Kearney Avenue, in the City of Racine, Racine County. Improvements include new sidewalk, street lighting, landscaping, signal replacement, signage, pavement marking, and spot storm sewer. This Concurrence letter provides approval for offsite bioremediation and landfill disposal of petroleum and chlorinated solvents contaminated soil to a DNR-licensed landfill facility.

**Bioremediation**

Laboratory analytical testing of soil provided in the Phase 2.5 Investigation Report identified petroleum contaminated soil within the project limits where concentrations exceeded the respective NR 720 Residual Contaminant Levels (RCLs). Analytical testing of the soil identified gasoline range organics (GRO) at a concentration ranging from 350 milligrams per kilogram (mg/kg) to 2,000 mg/kg, lead at 77 mg/kg, benzene at 610 micrograms per kilogram ( $\mu$ g/kg), naphthalene from 150  $\mu$ g/kg to 55,000  $\mu$ g/kg, 1,2,4 trimethylbenzene from 62  $\mu$ g/kg to 2,600  $\mu$ g/kg, 1,3,5 trimethylbenzene from 25  $\mu$ g/kg to 1,000  $\mu$ g/kg, and xylenes from 32  $\mu$ g/kg to 2,500  $\mu$ g/kg. The DNR concurs that these soils be appropriately field screened, segregated and managed, and transported to a DNR-licensed solid waste landfill for bioremediation. The specific landfill bioremediation areas are:

1. Station 85+40 to 86+50 from reference line to project limits left, from approximately 1 feet to 8 feet below grade, estimated 283 cubic yards or 481 tons.
2. Station 86+50 to 87+50 from reference line to project limits left, approximately 8 feet to 16 feet below grade, estimated 0 cubic yards or 0 tons.
3. Station 86+50 to 87+50 from reference line to project limits right, from approximately 4 feet to 16 feet below grade, estimated 5 cubic yards or 9 tons.
4. Station 105+00 to 105+80 from project limits left to project limits right, from approximately 1 feet to 6 feet below grade, estimated 411 cubic yards or 699 tons.
5. Station 113+40 to 114+10 from reference line to 70 feet left of reference line, from approximately 1 feet to 6 feet below grade, estimated 317 cubic yards or 539 tons.

6. Station 114+00 to 115+00 from reference line to project limits right, from approximately 4 feet to 8 feet below grade, estimated 0 cubic feet or 0 tons.

### Landfill

Soil samples provided in the Phase 2.5 Investigation Report identified arsenic contaminated soil at one location within the project at a concentration that exceeds the respective Wis. Admin. § NR 720 RCLs. Contaminant impacts also include tetrachloroethene at a concentration of 5,400 µg/kg and trichloroethene at concentrations from 55 µg/kg to 1,100 µg/kg. The DNR concurs that these soils be appropriately field screened, segregated, managed, and transported to a DNR-licensed facility for landfill disposal. The specific landfill remediation areas are:

1. Station 121+50 to 123+10 from reference line to project limits right, from approximately 1 feet to 8 feet below grade, estimated 638 cubic yards or 1,085 tons.
2. Station 122+00 to 123+10 from reference line to project limits left, from approximately 1 feet to 16 feet below grade, estimated 16 cubic yards or 28 tons.

### Contamination Beyond Project Limits

Due to the proximity of known contaminants outside the project limits, a "Notice to Contractor – Contamination Beyond Construction Limits" will be included with the project proposal to make contractors aware that an area beyond the project may contain chlorinated solvents. The contractor should control construction activities in this area to ensure that excavations do not extend beyond the proposed limits. If work does advance into these areas, the DNR concurs that work shall be temporarily stopped while the engineer is notified. The impacted soil area is:

1. Station 13+50 LA to 14+50 LA from reference line LA to 50 feet right of reference line, 3825 Durand Ave.

### Other Conditions

The Phase 2.5 investigation suggests that contaminated groundwater may be present within the project limits. If groundwater handling or dewatering is necessary during the project, the work shall be temporarily stopped while the engineer is notified and provides a recommendation. All groundwater shall be evaluated for petroleum and metal compounds, and appropriately disposed to a sanitary sewer with prior approval from City of Racine Wastewater Utility. No accumulated groundwater from dewatering may be returned to the project.

If contaminated soil or waste material is encountered here or elsewhere during the project, work shall be temporarily stopped while the engineer is notified. The DNR also recommends that all construction activities proceed using environmentally sound practices, including proper management and handling of drums and containers, dust suppression, recycling, proper waste disposal, storm water management, and erosion control.

If the project changes from what is currently proposed, or if other environmental issues arise, please contact me at 414-263-8586, or send e-mail to Eileen.Maxwell@Wisconsin.gov for additional review and concurrence. Thank you.

Sincerely,



Eileen Maxwell,  
Hydrogeologist  
Remediation & Redevelopment

cc: Andrew Malsom – WisDOT, Pamela Mylotta – DNR, Michele Norman – DNR, Mike Thompson – DNR,  
Craig Webster– DNR.  
SER File



---

## Appendix B: Waste Profiles & Disposal Documentation



# Special Waste Profile

Disposal Facility: 3063 Kestrel Hawk WI

Waste Profile #:

Sales Rep #:

## I. Generator Information

Generator Name: Wisconsin DOT (WisDOT ID 2260-07-70)

Generator Site Address: STH 11 (Durand Ave.), Kentucky St. to Kearney Ave.

City: Racine County: Racine State: Wisconsin Zip: 53405

State ID/Reg No: State Approval/Waste Code: NAICS #:

Generator Mailing Address  (if different) 141 NW Barstow

City: Waukesha County: Waukesha State: Wisconsin Zip: 53187

Generator Contact Name: Andrew Malsom Email: Andrew.Malsom@dot.wi.gov

Phone Number: 262-548-6705 Ext: Fax Number:

## II. Billing Information

Bill To: Zignego Company, Inc. Contact Name: Jeff Kuhn

Billing Address: W226 N2940 Duplainville Rd. Email: jkuhn@zignego.com

City: Waukesha State: Wisconsin Zip: 53186 Phone: 920-621-8538

## III. Waste Stream Information

Name of Waste: Petroleum contaminated soil (daily cover)

Process Generating Waste: Excavation for road construction near gasoline station. Source is leaded and unleaded gasoline, fuel oil, waste oil

Type of Waste: Pollution Control Waste Physical State: Solid Method of Shipment: Other

Estimated Volume: 1,238 Volume Type: Tons

Frequency: One-time Event (single project) Disposal Consideration: Landfill

## IV. Representative Sample Certification

 No Sample Taken Sample Taken Type of Sample Grab SampleIs the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent?  Yes  No

Sample Date: May 3, 2017

Sample ID Numbers or SDS:

GP-11 (2'-4'), GP-11 (6'-8'), GP-14 (2'-4'), GP-14 (6'-8'),  
GP-25 (2'-4'), GP-25 (6'-8'), GP-43 (2'-4'), GP-43 (6'-8')

Remember to attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.



# Special Waste Profile

## V. Physical Characteristics of Waste

Characteristic Components (must equal 100%):

1. Soil	100
2.	
3.	
4.	
5.	

% By Weight (out of 100% - ranges acceptable):

100

Color: Odor (describe): Does Waste Contain Free Liquids? % Solids: pH: Flash Point:  
brown none  Yes  No 100 ~7 >176 °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

## RCRA Regulatory Questions

1. Does this waste or generating process contain regulated concentrations of the following Pesticides and/ or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?  Yes  No
2. Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm) [reference 40 CFR 261.23(a)(5)?]  Yes  No
3. Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?  Yes  No
4. Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?  Yes  No
5. Has this waste been delisted under 40 CFR 260.20 and 260.22? If yes, attach the final decision to delist the waste as published in the Federal Register.  Yes  No
6. Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations? If Yes, identify the applicable waste code and specify if the waste is hazardous as defined by Federal, State or both?
7. Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCCD), or any other dioxin as defined in 40 CFR 261.31?  Yes  No
8. Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?  Yes  No
9. Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?  Yes  No
10. Is this a solid waste that is not a hazardous waste in accordance with 40 CFR 261.4(b)? If yes, please provide the corresponding regulatory citation.  Yes  No

## Republic Services Waste Handling Questions

1. Does this waste generate heat or react when contacted with water/moisture?  Yes  No
2. Does the waste contain sulfur or sulfur by-products?  Yes  No
3. Is this waste generated at a State or Federal Superfund cleanup site subject to regulation under CERCLA?  Yes  No
- 4a. Is this waste from a TSD facility, TSD-like facility or consolidator (i.e. multiple wastes/multiple generators)?  Yes  No
- 4b. If yes to the above question, please provide clarification.

# Special Waste Profile



## VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I understand that attaching an electronic signature, I am signing this document, consent to complete this transaction and receive all related communication electronically, and agree this document will be binding as though I had physically signed it. A printout of this document may be accepted with the same authority as the original.

If electronic signature is preferred, please submit completed (unsigned) form to your Special Waste Coordinator or Special Waste Sales Executive to initiate signature process.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services.

Andrew Malsom

Environmental Engineer

Wisconsin DOT

Authorized Representative Name  
(Printed)

Title  
(Printed)

Company Name



A handwritten signature in black ink, appearing to read "Andrew Malsom". Below the signature, the text "Representative Signature" is printed in a small, sans-serif font.

February 3, 2020

Date

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-127505-1

Client Project/Site: STH 11 Kentucky to Kearney - 275788

For:

TRC Environmental Corporation.

150 N. Patrick Blvd.

Suite 180

Brookfield, Wisconsin 53045

Attn: Mr. Bryan Bergmann

Sandie Fredrick

Authorized for release by:

5/17/2017 6:05:10 PM

Sandie Fredrick, Project Manager II

(920)261-1660

[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://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
Case Narrative .....	3
Detection Summary .....	4
Method Summary .....	8
Sample Summary .....	9
Client Sample Results .....	10
Subcontract Data .....	35
Definitions .....	36
QC Association .....	37
Surrogate Summary .....	44
QC Sample Results .....	47
Chronicle .....	59
Certification Summary .....	71
Chain of Custody .....	72
Receipt Checklists .....	80

# Case Narrative

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Job ID: 500-127505-1

### Laboratory: TestAmerica Chicago

#### Narrative

#### Job Narrative 500-127505-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 5/3/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3° C and 3.9° C.

#### GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for the soil preparation batch 384046 recovered outside control limits for 12 analytes. These analytes were biased high in the preparation batch LCS, but were within limits in the analytical batch LCS; therefore, the data has been reported.

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

#### GC/MS Semi VOA

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

#### GC VOA

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

#### GC Semi VOA

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

#### Metals

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

#### General Chemistry

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

#### Subcontract non-Sister

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

#### Organic Prep

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

#### VOA Prep

Method(s) WI GRO: Methanol was added to achieve a 1:1 ratio. GP-01 (6-8) (500-127505-2), GP-02 (2-4) (500-127505-3), GP-02 (6-8) (500-127505-4), GP-02 (14-16) (500-127505-5), GP-06 (2-4) (500-127505-13), GP-06 (6-8) (500-127505-14) and GP-07 (2-4) (500-127505-15)

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

#### Subcontract Work

Method % Chlorine: This method was subcontracted to SF/Eurofins Analytical Laboratories. The subcontract laboratory certification is different from that of the facility issuing the final report.

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

### **Client Sample ID: GP-01 (0-2)**

### **Lab Sample ID: 500-127505-1**

No Detections.

### **Client Sample ID: GP-01 (6-8)**

### **Lab Sample ID: 500-127505-2**

No Detections.

### **Client Sample ID: GP-02 (2-4)**

### **Lab Sample ID: 500-127505-3**

No Detections.

### **Client Sample ID: GP-02 (6-8)**

### **Lab Sample ID: 500-127505-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2500		330	160	ug/Kg	1	⊗	WDNR	Total/NA

### **Client Sample ID: GP-02 (14-16)**

### **Lab Sample ID: 500-127505-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	270	J	280	130	ug/Kg	1	⊗	WDNR	Total/NA

### **Client Sample ID: GP-03 (2-4)**

### **Lab Sample ID: 500-127505-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	37		0.58	0.27	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-03 (6-8)**

### **Lab Sample ID: 500-127505-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.9		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-04 (2-4)**

### **Lab Sample ID: 500-127505-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.4		0.50	0.23	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-04 (6-8)**

### **Lab Sample ID: 500-127505-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	540		66	24	ug/Kg	50	⊗	8260B	Total/NA
Lead	11		0.53	0.24	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-05 (2-4)**

### **Lab Sample ID: 500-127505-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	20		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-05 (6-8)**

### **Lab Sample ID: 500-127505-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.6		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-05 (6-8) (Continued)

## Lab Sample ID: 500-127505-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.014	J	0.050	0.0075	mg/L	1		6010B	TCLP
Nickel	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Flashpoint	>176		40.0	40.0	Degrees F	1		1010	Total/NA
Sulfide	6.7	J	9.8	4.6	mg/Kg	1		9034	Total/NA
pH	9.0		0.2	0.2	SU	1		9045C	Total/NA
Paint Filter	PASS				No Unit	1		9095A	Total/NA
Specific Gravity	3.1404				NONE	1		SM 2710F	Total/NA

## Client Sample ID: GP-05 (14-16)

## Lab Sample ID: 500-127505-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.50	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-06 (2-4)

## Lab Sample ID: 500-127505-13

No Detections.

## Client Sample ID: GP-06 (6-8)

## Lab Sample ID: 500-127505-14

No Detections.

## Client Sample ID: GP-07 (2-4)

## Lab Sample ID: 500-127505-15

No Detections.

## Client Sample ID: GP-07 (6-8)

## Lab Sample ID: 500-127505-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
VI Diesel Range Organics (C10-C28)	2.2	J	4.5	1.8	mg/Kg	1	⊗	WI-DRO	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0027	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Flashpoint	>176		40.0	40.0	Degrees F	1		1010	Total/NA
Sulfide	8.8	J	10	4.7	mg/Kg	1		9034	Total/NA
pH	9.1		0.2	0.2	SU	1		9045C	Total/NA
Paint Filter	PASS				No Unit	1		9095A	Total/NA
Specific Gravity	2.1987				NONE	1		SM 2710F	Total/NA

## Client Sample ID: GP-07 (14-16)

## Lab Sample ID: 500-127505-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	270	J	280	130	ug/Kg	1	⊗	WDNR	Total/NA
1,3,5-Trimethylbenzene	23	J	28	17	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	38	J	84	34	ug/Kg	1	⊗	WDNR	Total/NA

## Client Sample ID: GP-08 (2-4)

## Lab Sample ID: 500-127505-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.9		0.51	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-08 (6-8)

## Lab Sample ID: 500-127505-19

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-08 (6-8) (Continued)

## Lab Sample ID: 500-127505-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.3		0.53	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-09 (2-4)

## Lab Sample ID: 500-127505-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	36		30	21	ug/Kg	1	⊗	WDNR	Total/NA
Lead	13		0.54	0.25	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-09 (6-8)

## Lab Sample ID: 500-127505-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	20	J	29	17	ug/Kg	1	⊗	WDNR	Total/NA
Lead	8.0		0.55	0.25	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-10 (2-4)

## Lab Sample ID: 500-127505-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.56	0.26	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-10 (6-8)

## Lab Sample ID: 500-127505-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.9		0.53	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-11 (2-4)

## Lab Sample ID: 500-127505-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	60		28	22	ug/Kg	1	⊗	WDNR	Total/NA
1,2,4-Trimethylbenzene	31		28	17	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	110		85	34	ug/Kg	1	⊗	WDNR	Total/NA
Lead	63		0.49	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-11 (6-8)

## Lab Sample ID: 500-127505-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
WI Diesel Range Organics (C10-C28)	4.9		4.4	1.8	mg/Kg	1	⊗	WI-DRO	Total/NA
Lead	11		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.15	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0040	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Copper	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.034	J	0.050	0.0075	mg/L	1		6010B	TCLP
Nickel	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.030	J	0.10	0.020	mg/L	1		6010B	TCLP
Flashpoint	>176		40.0	40.0	Degrees F	1		1010	Total/NA
Sulfide	6.2	J	9.7	4.6	mg/Kg	1		9034	Total/NA
pH	8.8		0.2	0.2	SU	1		9045C	Total/NA
Paint Filter	PASS				No Unit	1		9095A	Total/NA
Specific Gravity	1.1838				NONE	1		SM 2710F	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-127505-26**

No Detections.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
WI-GRO	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL CHI
9014	Cyanide	SW846	TAL CHI
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL CHI
9045C	pH	SW846	TAL CHI
9095A	Paint Filter	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL NSH
Moisture	Percent Moisture	EPA	TAL CHI
SM 2710F	Specific Gravity, Density	SM	TAL CHI
% Chlorine	General Sub Contract Method	NONE	SFAL

**Protocol References:**

EPA = US Environmental Protection Agency

NONE = NONE

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

**Laboratory References:**

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Sample Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
500-127505-1	GP-01 (0-2)	Solid	05/01/17 08:35	05/03/17 09:00	1
500-127505-2	GP-01 (6-8)	Solid	05/01/17 08:45	05/03/17 09:00	2
500-127505-3	GP-02 (2-4)	Solid	05/01/17 09:15	05/03/17 09:00	3
500-127505-4	GP-02 (6-8)	Solid	05/01/17 09:25	05/03/17 09:00	4
500-127505-5	GP-02 (14-16)	Solid	05/01/17 09:30	05/03/17 09:00	5
500-127505-6	GP-03 (2-4)	Solid	05/01/17 10:10	05/03/17 09:00	6
500-127505-7	GP-03 (6-8)	Solid	05/01/17 10:15	05/03/17 09:00	7
500-127505-8	GP-04 (2-4)	Solid	05/01/17 10:35	05/03/17 09:00	8
500-127505-9	GP-04 (6-8)	Solid	05/01/17 10:40	05/03/17 09:00	9
500-127505-10	GP-05 (2-4)	Solid	05/01/17 11:00	05/03/17 09:00	10
500-127505-11	GP-05 (6-8)	Solid	05/01/17 11:10	05/03/17 09:00	11
500-127505-12	GP-05 (14-16)	Solid	05/01/17 11:20	05/03/17 09:00	12
500-127505-13	GP-06 (2-4)	Solid	05/01/17 12:00	05/03/17 09:00	13
500-127505-14	GP-06 (6-8)	Solid	05/01/17 12:05	05/03/17 09:00	14
500-127505-15	GP-07 (2-4)	Solid	05/01/17 12:30	05/03/17 09:00	15
500-127505-16	GP-07 (6-8)	Solid	05/01/17 12:35	05/03/17 09:00	16
500-127505-17	GP-07 (14-16)	Solid	05/01/17 12:50	05/03/17 09:00	1
500-127505-18	GP-08 (2-4)	Solid	05/01/17 13:45	05/03/17 09:00	2
500-127505-19	GP-08 (6-8)	Solid	05/01/17 13:50	05/03/17 09:00	3
500-127505-20	GP-09 (2-4)	Solid	05/01/17 14:20	05/03/17 09:00	4
500-127505-21	GP-09 (6-8)	Solid	05/01/17 14:25	05/03/17 09:00	5
500-127505-22	GP-10 (2-4)	Solid	05/01/17 14:35	05/03/17 09:00	6
500-127505-23	GP-10 (6-8)	Solid	05/01/17 14:40	05/03/17 09:00	7
500-127505-24	GP-11 (2-4)	Solid	05/01/17 15:00	05/03/17 09:00	8
500-127505-25	GP-11 (6-8)	Solid	05/01/17 15:05	05/03/17 09:00	9
500-127505-26	Trip Blank	Solid	05/01/17 00:00	05/03/17 09:00	10

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-01 (0-2)

Date Collected: 05/01/17 08:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-1

Matrix: Solid

Percent Solids: 80.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		27	20	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Ethylbenzene	<21		27	21	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Methyl tert-butyl ether	<13		27	13	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Naphthalene	<130		270	130	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Toluene	<19		27	19	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
1,2,4-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Xylenes, Total	<33		82	33	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
<b>Surrogate</b>									
a,a,a-Trifluorotoluene	87			80 - 120					
							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
							05/05/17 15:52	05/09/17 23:35	1

## Client Sample ID: GP-01 (6-8)

Date Collected: 05/01/17 08:45

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-2

Matrix: Solid

Percent Solids: 85.1

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Ethylbenzene	<22		29	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Naphthalene	<140		290	140	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Toluene	<20		29	20	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Xylenes, Total	<35		87	35	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	88			80 - 120			05/05/17 15:52	05/10/17 00:02	1

## Client Sample ID: GP-02 (2-4)

Date Collected: 05/01/17 09:15

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-3

Matrix: Solid

Percent Solids: 83.1

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		30	21	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Ethylbenzene	<23		30	23	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Naphthalene	<140		300	140	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Toluene	<20		30	20	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Xylenes, Total	<36		89	36	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91			80 - 120			05/05/17 15:52	05/10/17 00:28	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-02 (6-8)**

Date Collected: 05/01/17 09:25

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-4**

Matrix: Solid

Percent Solids: 78.1

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<24		33	24	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
Ethylbenzene	<25		33	25	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
Methyl tert-butyl ether	<16		33	16	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
<b>Naphthalene</b>	<b>2500</b>		330	160	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
Toluene	<23		33	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
1,2,4-Trimethylbenzene	<20		33	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
1,3,5-Trimethylbenzene	<20		33	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
Xylenes, Total	<40		100	40	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	89			80 - 120			05/05/17 15:52	05/10/17 00:55	1

**Client Sample ID: GP-02 (14-16)**

Date Collected: 05/01/17 09:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-5**

Matrix: Solid

Percent Solids: 86.8

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
<b>Naphthalene</b>	<b>270 J</b>		280	130	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
Xylenes, Total	<34		84	34	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	92			80 - 120			05/05/17 15:52	05/10/17 08:30	1

**Client Sample ID: GP-03 (2-4)**

Date Collected: 05/01/17 10:10

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-6**

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<34		74	34	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1,1-Trichloroethane	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1,2,2-Tetrachloroethane	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1,2-Trichloroethane	<26		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1-Dichloroethane	<30 *		74	30	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1-Dichloroethene	<29 *		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1-Dichloropropene	<22		74	22	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2,3-Trichlorobenzene	<34		74	34	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2,3-Trichloropropane	<30		74	30	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2,4-Trichlorobenzene	<25		74	25	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2,4-Trimethylbenzene	<26		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2-Dibromo-3-Chloropropane	<150		370	150	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2-Dibromoethane	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2-Dichlorobenzene	<25		74	25	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-03 (2-4)**

**Date Collected: 05/01/17 10:10**

**Date Received: 05/03/17 09:00**

**Lab Sample ID: 500-127505-6**

**Matrix: Solid**

**Percent Solids: 81.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2-Dichloropropane	<32		74	32	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,3,5-Trimethylbenzene	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,3-Dichlorobenzene	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,3-Dichloropropane	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,4-Dichlorobenzene	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
2,2-Dichloropropane	<33		74	33	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
2-Chlorotoluene	<23		74	23	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
4-Chlorotoluene	<26		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Benzene	<11		18	11	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromobenzene	<26		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromochloromethane	<32 *		74	32	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromodichloromethane	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromoform	<36		74	36	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromomethane	<59		150	59	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Carbon tetrachloride	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Chlorobenzene	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Chloroethane	<37		74	37	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Chloroform	<27 *		150	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Chloromethane	<24		74	24	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
cis-1,2-Dichloroethene	<30 *		74	30	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
cis-1,3-Dichloropropene	<31		74	31	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Dibromochloromethane	<36		74	36	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Dibromomethane	<20		74	20	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Dichlorodifluoromethane	<50		150	50	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Hexachlorobutadiene	<33		74	33	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Isopropyl ether	<20		74	20	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Isopropylbenzene	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Methyl tert-butyl ether	<29 *		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Methylene Chloride	<120 *		370	120	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Naphthalene	<25 *		74	25	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
n-Butylbenzene	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
N-Propylbenzene	<30		74	30	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
p-Isopropyltoluene	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
sec-Butylbenzene	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Styrene	<28 *		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
tert-Butylbenzene	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Tetrachloroethene	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Toluene	<11		18	11	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
trans-1,2-Dichloroethene	<26 *		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
trans-1,3-Dichloropropene	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Trichloroethene	<12		37	12	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Trichlorofluoromethane	<32 *		74	32	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Vinyl chloride	<19 *		37	19	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Xylenes, Total	<16		37	16	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126	05/01/17 10:10	05/15/17 12:30	50
4-Bromofluorobenzene (Surr)	89		72 - 124	05/01/17 10:10	05/15/17 12:30	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-03 (2-4)**

Date Collected: 05/01/17 10:10

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-6**

Matrix: Solid

Percent Solids: 81.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	101		75 - 120	05/01/17 10:10	05/15/17 12:30	50
Toluene-d8 (Surr)	94		75 - 120	05/01/17 10:10	05/15/17 12:30	50

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37		0.58	0.27	mg/Kg	✉	05/05/17 15:07	05/11/17 21:48	1

**Client Sample ID: GP-03 (6-8)**

Date Collected: 05/01/17 10:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-7**

Matrix: Solid

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		65	30	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,1,1-Trichloroethane	<25		65	25	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,1,2,2-Tetrachloroethane	<26		65	26	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,1,2-Trichloroethane	<23		65	23	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,1-Dichloroethane	<27 *		65	27	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,1-Dichloroethene	<26 *		65	26	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,1-Dichloropropene	<20		65	20	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,2,3-Trichlorobenzene	<30		65	30	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,2,3-Trichloropropane	<27		65	27	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,2,4-Trichlorobenzene	<22		65	22	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,2,4-Trimethylbenzene	<23		65	23	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,2-Dibromoethane	<25		65	25	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,2-Dichlorobenzene	<22		65	22	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,2-Dichloroethane	<26		65	26	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,2-Dichloropropene	<28		65	28	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,3,5-Trimethylbenzene	<25		65	25	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,3-Dichlorobenzene	<26		65	26	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,3-Dichloropropane	<24		65	24	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
1,4-Dichlorobenzene	<24		65	24	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
2,2-Dichloropropane	<29		65	29	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
2-Chlorotoluene	<21		65	21	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
4-Chlorotoluene	<23		65	23	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Benzene	<9.6		16	9.6	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Bromobenzene	<23		65	23	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Bromochloromethane	<28 *		65	28	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Bromodichloromethane	<24		65	24	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Bromoform	<32		65	32	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Bromomethane	<52		130	52	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Carbon tetrachloride	<25		65	25	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Chlorobenzene	<25		65	25	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Chloroethane	<33		65	33	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Chloroform	<24 *		130	24	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
Chloromethane	<21		65	21	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
cis-1,2-Dichloroethene	<27 *		65	27	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50
cis-1,3-Dichloropropene	<27		65	27	ug/Kg	✉	05/01/17 10:15	05/15/17 12:59	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-03 (6-8)**

Date Collected: 05/01/17 10:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-7**

Matrix: Solid

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	<32		65	32	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Dibromomethane	<18		65	18	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Dichlorodifluoromethane	<44		130	44	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Ethylbenzene	<12		16	12	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Hexachlorobutadiene	<29		65	29	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Isopropyl ether	<18		65	18	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Isopropylbenzene	<25		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Methyl tert-butyl ether	<26 *		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Methylene Chloride	<110 *		330	110	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Naphthalene	<22 *		65	22	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
n-Butylbenzene	<25		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
N-Propylbenzene	<27		65	27	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
p-Isopropyltoluene	<24		65	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
sec-Butylbenzene	<26		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Styrene	<25 *		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
tert-Butylbenzene	<26		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Tetrachloroethene	<24		65	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Toluene	<9.6		16	9.6	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
trans-1,2-Dichloroethene	<23 *		65	23	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
trans-1,3-Dichloropropene	<24		65	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Trichloroethene	<11		33	11	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Trichlorofluoromethane	<28 *		65	28	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Vinyl chloride	<17 *		33	17	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Xylenes, Total	<14		33	14	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126	05/01/17 10:15	05/15/17 12:59	50
4-Bromofluorobenzene (Surr)	91		72 - 124	05/01/17 10:15	05/15/17 12:59	50
Dibromofluoromethane	100		75 - 120	05/01/17 10:15	05/15/17 12:59	50
Toluene-d8 (Surr)	94		75 - 120	05/01/17 10:15	05/15/17 12:59	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.9		0.52	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 21:52	1

**Client Sample ID: GP-04 (2-4)**

Date Collected: 05/01/17 10:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-8**

Matrix: Solid

Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<28		61	28	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1,1-Trichloroethane	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1,2,2-Tetrachloroethane	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1,2-Trichloroethane	<21		61	21	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1-Dichloroethane	<25 *		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1-Dichloroethene	<24 *		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1-Dichloropropene	<18		61	18	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2,3-Trichlorobenzene	<28		61	28	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2,3-Trichloropropane	<25		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-04 (2-4)**

**Date Collected: 05/01/17 10:35**

**Date Received: 05/03/17 09:00**

**Lab Sample ID: 500-127505-8**

**Matrix: Solid**

**Percent Solids: 89.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<21		61	21	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2,4-Trimethylbenzene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dibromo-3-Chloropropane	<120		300	120	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dibromoethane	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dichlorobenzene	<20		61	20	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dichloroethane	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dichloropropane	<26		61	26	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,3,5-Trimethylbenzene	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,3-Dichlorobenzene	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,3-Dichloropropane	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,4-Dichlorobenzene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
2,2-Dichloropropane	<27		61	27	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
2-Chlorotoluene	<19		61	19	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
4-Chlorotoluene	<21		61	21	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Benzene	<8.9		15	8.9	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromobenzene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromochloromethane	<26 *		61	26	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromodichloromethane	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromoform	<29		61	29	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromomethane	<48		120	48	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Carbon tetrachloride	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Chlorobenzene	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Chloroethane	<31		61	31	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Chloroform	<22 *		120	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Chloromethane	<19		61	19	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
cis-1,2-Dichloroethene	<25 *		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
cis-1,3-Dichloropropene	<25		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Dibromochloromethane	<30		61	30	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Dibromomethane	<16		61	16	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Dichlorodifluoromethane	<41		120	41	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Ethylbenzene	<11		15	11	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Hexachlorobutadiene	<27		61	27	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Isopropyl ether	<17		61	17	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Isopropylbenzene	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Methyl tert-butyl ether	<24 *		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Methylene Chloride	<99 *		300	99	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Naphthalene	<20 *		61	20	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
n-Butylbenzene	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
N-Propylbenzene	<25		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
p-Isopropyltoluene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
sec-Butylbenzene	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Styrene	<23 *		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
tert-Butylbenzene	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Tetrachloroethene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Toluene	<8.9		15	8.9	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
trans-1,2-Dichloroethene	<21 *		61	21	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
trans-1,3-Dichloropropene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Trichloroethene	<10		30	10	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Trichlorofluoromethane	<26 *		61	26	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-04 (2-4)**

Date Collected: 05/01/17 10:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-8**

Matrix: Solid

Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<16	*	30	16	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Xylenes, Total	<13		30	13	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	98		75 - 126				05/01/17 10:35	05/15/17 13:28	50
4-Bromofluorobenzene (Surr)	92		72 - 124				05/01/17 10:35	05/15/17 13:28	50
Dibromofluoromethane	99		75 - 120				05/01/17 10:35	05/15/17 13:28	50
Toluene-d8 (Surr)	94		75 - 120				05/01/17 10:35	05/15/17 13:28	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.4		0.50	0.23	mg/Kg	⊗	05/05/17 15:07	05/11/17 21:56	1

**Client Sample ID: GP-04 (6-8)**

Date Collected: 05/01/17 10:40

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-9**

Matrix: Solid

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		66	30	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1,1-Trichloroethane	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1,2,2-Tetrachloroethane	<26		66	26	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1,2-Trichloroethane	<23		66	23	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1-Dichloroethane	<27	*	66	27	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1-Dichloroethene	<26	*	66	26	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1-Dichloropropene	<20		66	20	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2,3-Trichlorobenzene	<30		66	30	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2,3-Trichloropropane	<27		66	27	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2,4-Trichlorobenzene	<22		66	22	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2,4-Trimethylbenzene	<23		66	23	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dibromoethane	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dichlorobenzene	<22		66	22	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dichloroethane	<26		66	26	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dichloropropane	<28		66	28	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,3-Dichlorobenzene	<26		66	26	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,3-Dichloropropane	<24		66	24	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,4-Dichlorobenzene	<24		66	24	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
2,2-Dichloropropane	<29		66	29	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
2-Chlorotoluene	<21		66	21	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
4-Chlorotoluene	<23		66	23	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Benzene	<9.6		16	9.6	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromobenzene	<23		66	23	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromochloromethane	<28	*	66	28	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromodichloromethane	<24		66	24	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromoform	<32		66	32	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromomethane	<52		130	52	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Carbon tetrachloride	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Chlorobenzene	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-04 (6-8)**

Date Collected: 05/01/17 10:40

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-9**

Matrix: Solid

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<33		66	33	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Chloroform	<24 *		130	24	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Chloromethane	<21		66	21	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
cis-1,2-Dichloroethene	<27 *		66	27	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
cis-1,3-Dichloropropene	<27		66	27	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Dibromochloromethane	<32		66	32	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Dibromomethane	<18		66	18	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Dichlorodifluoromethane	<44		130	44	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Ethylbenzene	<12		16	12	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Hexachlorobutadiene	<29		66	29	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Isopropyl ether	<18		66	18	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Isopropylbenzene	<25		66	25	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Methyl tert-butyl ether	<26 *		66	26	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Methylene Chloride	<110 *		330	110	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Naphthalene	<22 *		66	22	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
n-Butylbenzene	<25		66	25	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
N-Propylbenzene	<27		66	27	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
p-Isopropyltoluene	<24		66	24	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
sec-Butylbenzene	<26		66	26	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Styrene	<25 *		66	25	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
tert-Butylbenzene	<26		66	26	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
<b>Tetrachloroethene</b>	<b>540</b>		66	24	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Toluene	<9.6		16	9.6	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
trans-1,2-Dichloroethene	<23 *		66	23	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
trans-1,3-Dichloropropene	<24		66	24	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Trichloroethene	<11		33	11	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Trichlorofluoromethane	<28 *		66	28	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Vinyl chloride	<17 *		33	17	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Xylenes, Total	<14		33	14	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100			75 - 126			05/01/17 10:40	05/15/17 13:58	50
4-Bromofluorobenzene (Surr)	93			72 - 124			05/01/17 10:40	05/15/17 13:58	50
Dibromofluoromethane	102			75 - 120			05/01/17 10:40	05/15/17 13:58	50
Toluene-d8 (Surr)	94			75 - 120			05/01/17 10:40	05/15/17 13:58	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.53	0.24	mg/Kg	⌚	05/05/17 15:07	05/11/17 22:01	1

**Client Sample ID: GP-05 (2-4)**

Date Collected: 05/01/17 11:00

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-10**

Matrix: Solid

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		71	33	ug/Kg	⌚	05/01/17 11:00	05/15/17 14:27	50
1,1,1-Trichloroethane	<27		71	27	ug/Kg	⌚	05/01/17 11:00	05/15/17 14:27	50
1,1,2,2-Tetrachloroethane	<28		71	28	ug/Kg	⌚	05/01/17 11:00	05/15/17 14:27	50
1,1,2-Trichloroethane	<25		71	25	ug/Kg	⌚	05/01/17 11:00	05/15/17 14:27	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-05 (2-4)**

**Date Collected: 05/01/17 11:00**

**Date Received: 05/03/17 09:00**

**Lab Sample ID: 500-127505-10**

**Matrix: Solid**

**Percent Solids: 82.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<29 *		71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,1-Dichloroethene	<28 *		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,1-Dichloropropene	<21		71	21	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2,3-Trichlorobenzene	<33		71	33	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2,3-Trichloropropane	<29		71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2,4-Trichlorobenzene	<24		71	24	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2,4-Trimethylbenzene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dibromoethane	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dichlorobenzene	<24		71	24	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dichloroethane	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dichloropropane	<30		71	30	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,3,5-Trimethylbenzene	<27		71	27	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,3-Dichlorobenzene	<29		71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,3-Dichloropropane	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,4-Dichlorobenzene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
2,2-Dichloropropane	<32		71	32	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
2-Chlorotoluene	<22		71	22	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
4-Chlorotoluene	<25		71	25	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Benzene	<10		18	10	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromobenzene	<25		71	25	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromochloromethane	<30 *		71	30	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromodichloromethane	<27		71	27	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromoform	<34		71	34	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromomethane	<57		140	57	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Carbon tetrachloride	<27		71	27	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Chlorobenzene	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Chloroethane	<36		71	36	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Chloroform	<26 *		140	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Chloromethane	<23		71	23	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
cis-1,2-Dichloroethene	<29 *		71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
cis-1,3-Dichloropropene	<30		71	30	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Dibromochloromethane	<35		71	35	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Dibromomethane	<19		71	19	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Dichlorodifluoromethane	<48		140	48	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Hexachlorobutadiene	<32		71	32	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Isopropyl ether	<20		71	20	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Isopropylbenzene	<27		71	27	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Methyl tert-butyl ether	<28 *		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Methylene Chloride	<120 *		360	120	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Naphthalene	<24 *		71	24	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
n-Butylbenzene	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
N-Propylbenzene	<29		71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
p-Isopropyltoluene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
sec-Butylbenzene	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Styrene	<28 *		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
tert-Butylbenzene	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Tetrachloroethene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-05 (2-4)**

Date Collected: 05/01/17 11:00

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-10**

Matrix: Solid

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<10		18	10	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
trans-1,2-Dichloroethene	<25 *		71	25	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
trans-1,3-Dichloropropene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Trichloroethene	<12		36	12	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Trichlorofluoromethane	<30 *		71	30	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Vinyl chloride	<19 *		36	19	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Xylenes, Total	<16		36	16	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	98			75 - 126			05/01/17 11:00	05/15/17 14:27	50
4-Bromofluorobenzene (Surr)	90			72 - 124			05/01/17 11:00	05/15/17 14:27	50
Dibromofluoromethane	100			75 - 120			05/01/17 11:00	05/15/17 14:27	50
Toluene-d8 (Surr)	94			75 - 120			05/01/17 11:00	05/15/17 14:27	50

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20		0.52	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:05	1

## **Client Sample ID: GP-05 (6-8)**

## **Lab Sample ID: 500-127505-11**

Matrix: Solid

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		66	31	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1,1-Trichloroethane	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1,2,2-Tetrachloroethane	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1,2-Trichloroethane	<23		66	23	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1-Dichloroethane	<27 *		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1-Dichloroethene	<26 *		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1-Dichloropropene	<20		66	20	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2,3-Trichlorobenzene	<30		66	30	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2,3-Trichloropropane	<27		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2,4-Trichlorobenzene	<23		66	23	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dibromoethane	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dichlorobenzene	<22		66	22	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dichloroethane	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dichloropropane	<28		66	28	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,3-Dichlorobenzene	<27		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,3-Dichloropropane	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,4-Dichlorobenzene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
2,2-Dichloropropane	<29		66	29	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
2-Chlorotoluene	<21		66	21	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
4-Chlorotoluene	<23		66	23	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Benzene	<9.7		17	9.7	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Bromobenzene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Bromochloromethane	<28 *		66	28	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-05 (6-8)**

Date Collected: 05/01/17 11:10

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-11**

Matrix: Solid

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Bromoform	<32		66	32	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Bromomethane	<53		130	53	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Carbon tetrachloride	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Chlorobenzene	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Chloroethane	<33		66	33	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Chloroform	<25 *		130	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Chloromethane	<21		66	21	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
cis-1,2-Dichloroethene	<27 *		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
cis-1,3-Dichloropropene	<28		66	28	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Dibromochloromethane	<32		66	32	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Dibromomethane	<18		66	18	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Dichlorodifluoromethane	<45		130	45	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Ethylbenzene	<12		17	12	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Hexachlorobutadiene	<30		66	30	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Isopropyl ether	<18		66	18	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Isopropylbenzene	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Methyl tert-butyl ether	<26 *		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Methylene Chloride	<110 *		330	110	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Naphthalene	<22 *		66	22	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
n-Butylbenzene	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
N-Propylbenzene	<27		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
p-Isopropyltoluene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
sec-Butylbenzene	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Styrene	<26 *		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
tert-Butylbenzene	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Tetrachloroethene	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Toluene	<9.7		17	9.7	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
trans-1,2-Dichloroethene	<23 *		66	23	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
trans-1,3-Dichloropropene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Trichloroethene	<11		33	11	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Trichlorofluoromethane	<28 *		66	28	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Vinyl chloride	<17 *		33	17	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Xylenes, Total	<15		33	15	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126	05/01/17 11:10	05/15/17 14:56	50
4-Bromofluorobenzene (Surr)	92		72 - 124	05/01/17 11:10	05/15/17 14:56	50
Dibromofluoromethane	99		75 - 120	05/01/17 11:10	05/15/17 14:56	50
Toluene-d8 (Surr)	95		75 - 120	05/01/17 11:10	05/15/17 14:56	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Benzene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Chlorobenzene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Chloroform	<0.020		0.040	0.020	mg/L			05/09/17 00:42	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/09/17 00:42	20

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-05 (6-8)

Date Collected: 05/01/17 11:10

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-11

Matrix: Solid

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Trichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Vinyl chloride	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					05/09/17 00:42	20
4-Bromofluorobenzene (Surr)	110		72 - 124					05/09/17 00:42	20
Dibromofluoromethane	89		75 - 120					05/09/17 00:42	20
Toluene-d8 (Surr)	101		75 - 120					05/09/17 00:42	20

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L			05/08/17 07:42	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L			05/08/17 07:42	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L			05/08/17 07:42	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L			05/08/17 07:42	1
2-Methylphenol	<0.020		0.020	0.020	mg/L			05/08/17 07:42	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L			05/08/17 07:42	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L			05/08/17 07:42	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L			05/08/17 07:42	1
Hexachloroethane	<0.050		0.050	0.050	mg/L			05/08/17 07:42	1
Nitrobenzene	<0.010		0.010	0.010	mg/L			05/08/17 07:42	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L			05/08/17 07:42	1
Pyridine	<0.20		0.20	0.20	mg/L			05/08/17 07:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	90		40 - 145					05/08/17 07:42	1
2-Fluorobiphenyl	86		34 - 110					05/08/17 07:42	1
2-Fluorophenol (Surr)	59		27 - 110					05/08/17 07:42	1
Nitrobenzene-d5 (Surr)	95		36 - 120					05/08/17 07:42	1
Phenol-d5 (Surr)	42		20 - 100					05/08/17 07:42	1
Terphenyl-d14 (Surr)	104		40 - 145					05/08/17 07:42	1

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<660		2000	660	ug/Kg	⌚	05/01/17 11:10	05/07/17 21:31	50

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.6		19	6.6	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1221	<8.2		19	8.2	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1232	<8.1		19	8.1	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1242	<6.1		19	6.1	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1248	<7.3		19	7.3	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1254	<4.0		19	4.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1260	<9.1		19	9.1	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	61		49 - 129					05/09/17 16:38	1
DCB Decachlorobiphenyl	62		37 - 121					05/09/17 16:38	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-05 (6-8)

Date Collected: 05/01/17 11:10

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-11

Matrix: Solid

Percent Solids: 86.3

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.8		4.6	1.8	mg/Kg	⊗	05/04/17 11:15	05/05/17 15:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Nonane	69		44 - 148				05/04/17 11:15	05/05/17 15:38	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.6		0.52	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:09	1

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Barium	0.34 J		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 21:40	1
Cadmium	0.0020 J		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 21:40	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Copper	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Lead	0.014 J		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 21:40	1
Nickel	0.014 J		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 21:40	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Zinc	<0.020		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 21:40	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:12	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		40.0	40.0	Degrees F			05/11/17 16:20	1
Cyanide, Total	<0.15		0.45	0.15	mg/Kg		05/10/17 12:50	05/10/17 15:36	1
Sulfide	6.7 J		9.8	4.6	mg/Kg		05/15/17 17:36	05/15/17 21:48	1
pH	9.0		0.2	0.2	SU			05/09/17 16:02	1
Paint Filter	PASS				No Unit			05/11/17 22:39	1
Specific Gravity	3.1404				NONE			05/12/17 22:07	1

## Client Sample ID: GP-05 (14-16)

Date Collected: 05/01/17 11:20

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-12

Matrix: Solid

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		64	30	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1,2,2-Tetrachloroethane	<26		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1,2-Trichloroethane	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1-Dichloroethane	<26 *		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1-Dichloroethene	<25 *		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1-Dichloropropene	<19		64	19	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2,3-Trichloropropane	<27		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-05 (14-16)**

**Date Collected: 05/01/17 11:20**

**Date Received: 05/03/17 09:00**

**Lab Sample ID: 500-127505-12**

**Matrix: Solid**

**Percent Solids: 87.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dibromoethane	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dichloroethane	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dichloropropane	<27		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,3-Dichlorobenzene	<26		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,3-Dichloropropane	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
2,2-Dichloropropane	<28		64	28	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
2-Chlorotoluene	<20		64	20	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
4-Chlorotoluene	<22		64	22	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Benzene	<9.4		16	9.4	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromobenzene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromochloromethane	<27 *		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromodichloromethane	<24		64	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromoform	<31		64	31	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromomethane	<51		130	51	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Carbon tetrachloride	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Chlorobenzene	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Chloroethane	<32		64	32	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Chloroform	<24 *		130	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Chloromethane	<21		64	21	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
cis-1,2-Dichloroethene	<26 *		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
cis-1,3-Dichloropropene	<27		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Dibromochloromethane	<31		64	31	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Dibromomethane	<17		64	17	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Dichlorodifluoromethane	<43		130	43	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Ethylbenzene	<12		16	12	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Hexachlorobutadiene	<29		64	29	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Isopropyl ether	<18		64	18	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Isopropylbenzene	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Methyl tert-butyl ether	<25 *		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Methylene Chloride	<100 *		320	100	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Naphthalene	<21 *		64	21	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
n-Butylbenzene	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
N-Propylbenzene	<27		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
p-Isopropyltoluene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
sec-Butylbenzene	<26		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Styrene	<25 *		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
tert-Butylbenzene	<26		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Tetrachloroethene	<24		64	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Toluene	<9.4		16	9.4	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
trans-1,2-Dichloroethene	<22 *		64	22	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Trichloroethene	<11		32	11	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Trichlorofluoromethane	<27 *		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Vinyl chloride	<17 *		32	17	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-05 (14-16)**

Date Collected: 05/01/17 11:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-12**

Matrix: Solid

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<14		32	14	ug/Kg	⌚	05/01/17 11:20	05/15/17 15:25	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	98			75 - 126			05/01/17 11:20	05/15/17 15:25	50
4-Bromofluorobenzene (Surr)	92			72 - 124			05/01/17 11:20	05/15/17 15:25	50
Dibromofluoromethane	101			75 - 120			05/01/17 11:20	05/15/17 15:25	50
Toluene-d8 (Surr)	93			75 - 120			05/01/17 11:20	05/15/17 15:25	50

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		0.50	0.23	mg/Kg	⌚	05/05/17 15:07	05/11/17 22:14	1

## **Client Sample ID: GP-06 (2-4)**

Date Collected: 05/01/17 12:00

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-13**

Matrix: Solid

Percent Solids: 80.9

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		32	23	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Ethylbenzene	<24		32	24	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Methyl tert-butyl ether	<15		32	15	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Naphthalene	<150		320	150	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Toluene	<22		32	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
1,2,4-Trimethylbenzene	<19		32	19	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
1,3,5-Trimethylbenzene	<19		32	19	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Xylenes, Total	<38		96	38	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>				
a,a,a-Trifluorotoluene	86			80 - 120			05/05/17 15:52	05/10/17 01:22	1

## **Client Sample ID: GP-06 (6-8)**

Date Collected: 05/01/17 12:05

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-14**

Matrix: Solid

Percent Solids: 84.9

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Ethylbenzene	<22		29	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Naphthalene	<140		290	140	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Toluene	<19		29	19	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Xylenes, Total	<34		86	34	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>				
a,a,a-Trifluorotoluene	91			80 - 120			05/05/17 15:52	05/10/17 01:49	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-07 (2-4)

Date Collected: 05/01/17 12:30

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-15

Matrix: Solid

Percent Solids: 79.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Methyl tert-butyl ether	<15		30	15	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Naphthalene	<150		300	150	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Toluene	<21		30	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Xylenes, Total	<37		91	37	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
<b>Surrogate</b>									
a,a,a-Trifluorotoluene	88			80 - 120					
							Prepared	Analyzed	Dil Fac
							05/05/17 15:52	05/10/17 02:15	1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Benzene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Chlorobenzene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Chloroform	<0.020		0.040	0.020	mg/L			05/09/17 01:09	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/09/17 01:09	20
Tetrachloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Trichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Vinyl chloride	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
<b>Surrogate</b>							Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126				05/09/17 01:09		20
4-Bromofluorobenzene (Surr)	108		72 - 124				05/09/17 01:09		20
Dibromofluoromethane	90		75 - 120				05/09/17 01:09		20
Toluene-d8 (Surr)	101		75 - 120				05/09/17 01:09		20

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 17:46	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		05/08/17 07:42	05/08/17 17:46	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 17:46	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 17:46	1
2-Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 17:46	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 17:46	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 17:46	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 17:46	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 17:46	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 17:46	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 17:46	1
Pyridine	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 17:46	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	87		40 - 145	05/08/17 07:42	05/08/17 17:46	1
2-Fluorobiphenyl	87		34 - 110	05/08/17 07:42	05/08/17 17:46	1
2-Fluorophenol (Surr)	60		27 - 110	05/08/17 07:42	05/08/17 17:46	1
Nitrobenzene-d5 (Surr)	96		36 - 120	05/08/17 07:42	05/08/17 17:46	1
Phenol-d5 (Surr)	41		20 - 100	05/08/17 07:42	05/08/17 17:46	1
Terphenyl-d14 (Surr)	103		40 - 145	05/08/17 07:42	05/08/17 17:46	1

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	D	05/08/17 08:10	05/08/17 21:45	1
Barium	0.38 J		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 21:45	1
Cadmium	0.0027 J		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 21:45	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:45	1
Copper	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:45	1
Lead	<0.0075		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 21:45	1
Nickel	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:45	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 21:45	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:45	1
Zinc	<0.020		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 21:45	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	D	05/08/17 13:40	05/09/17 10:13	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		40.0	40.0	Degrees F			05/11/17 18:10	1
Cyanide, Total	<0.16		0.45	0.16	mg/Kg		05/10/17 12:50	05/10/17 15:37	1
Sulfide	8.8 J		10	4.7	mg/Kg		05/15/17 17:36	05/15/17 21:49	1
pH	9.1		0.2	0.2	SU			05/09/17 16:04	1
Paint Filter	PASS				No Unit			05/11/17 22:41	1
Specific Gravity	2.1987				NONE			05/12/17 22:11	1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Percent Solids: 87.2

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Methyl tert-butyl ether	<14		28	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Naphthalene	<140		280	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Xylenes, Total	<34		84	34	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Wisconsin GRO	<2800		5600	2800	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1

### Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		80 - 120	05/05/17 15:52	05/10/17 02:42	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Percent Solids: 87.2

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		80 - 120	05/05/17 15:52	05/10/17 02:42	1

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.6		19	6.6	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1221	<8.2		19	8.2	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1232	<8.2		19	8.2	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1242	<6.1		19	6.1	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1248	<7.4		19	7.4	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1254	<4.0		19	4.0	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1260	<9.2		19	9.2	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		49 - 129	05/09/17 16:38	05/10/17 13:50	1
DCB Decachlorobiphenyl	67		37 - 121	05/09/17 16:38	05/10/17 13:50	1

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	2.2	J	4.5	1.8	mg/Kg	⊗	05/04/17 11:15	05/05/17 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	77		44 - 148				05/04/17 11:15	05/05/17 16:14	1

## Client Sample ID: GP-07 (14-16)

## Lab Sample ID: 500-127505-17

Matrix: Solid

Percent Solids: 86.6

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Naphthalene	270	J	280	130	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
1,3,5-Trimethylbenzene	23	J	28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Xylenes, Total	38	J	84	34	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		80 - 120				05/05/17 15:52	05/10/17 03:09	1

## Client Sample ID: GP-08 (2-4)

## Lab Sample ID: 500-127505-18

Matrix: Solid

Percent Solids: 88.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-08 (2-4)

Date Collected: 05/01/17 13:45

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-18

Matrix: Solid

Percent Solids: 88.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<140		290	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
Toluene	<20		29	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
Xylenes, Total	<35		87	35	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1

### Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		80 - 120	05/05/17 15:52	05/10/17 08:04	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.9		0.51	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:19	1

## Client Sample ID: GP-08 (6-8)

Date Collected: 05/01/17 13:50

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-19

Matrix: Solid

Percent Solids: 89.1

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Naphthalene	<130		280	130	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Xylenes, Total	<33		83	33	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1

### Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		80 - 120	05/05/17 15:52	05/10/17 03:36	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.3		0.53	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:31	1

## Client Sample ID: GP-09 (2-4)

Date Collected: 05/01/17 14:20

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-20

Matrix: Solid

Percent Solids: 85.2

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Methyl tert-butyl ether	<15		30	15	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Naphthalene	<150		300	150	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Toluene	36		30	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Xylenes, Total	<36		91	36	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-09 (2-4)**

Date Collected: 05/01/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-20**

Matrix: Solid

Percent Solids: 85.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		80 - 120	05/05/17 15:52	05/10/17 05:23	1

## **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	13		0.54	0.25	mg/Kg	✉	05/05/17 15:07	05/11/17 22:35	1

## **Client Sample ID: GP-09 (6-8)**

Date Collected: 05/01/17 14:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-21**

Matrix: Solid

Percent Solids: 84.7

## **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Ethylbenzene	<22		29	22	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Naphthalene	<140		290	140	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Toluene	<20		29	20	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
<b>1,2,4-Trimethylbenzene</b>	<b>20</b>	<b>J</b>	29	17	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Xylenes, Total	<35		87	35	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	90		80 - 120				05/05/17 15:52	05/10/17 05:50	1

## **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.0		0.55	0.25	mg/Kg	✉	05/05/17 15:07	05/11/17 22:40	1

## **Client Sample ID: GP-10 (2-4)**

Date Collected: 05/01/17 14:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-22**

Matrix: Solid

Percent Solids: 83.2

## **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Ethylbenzene	<23		30	23	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Methyl tert-butyl ether	<15		30	15	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Naphthalene	<150		300	150	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Toluene	<21		30	21	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Xylenes, Total	<37		91	37	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 06:16	1

## **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		0.56	0.26	mg/Kg	✉	05/05/17 15:07	05/11/17 22:44	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-10 (6-8)

Date Collected: 05/01/17 14:40

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-23

Matrix: Solid

Percent Solids: 84.7

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Naphthalene	<140		290	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Toluene	<20		29	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
1,2,4-Trimethylbenzene	<18		29	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
1,3,5-Trimethylbenzene	<18		29	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Xylenes, Total	<35		88	35	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91			80 - 120			05/05/17 15:52	05/10/17 06:43	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.9		0.53	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:47	1

## Client Sample ID: GP-11 (2-4)

Date Collected: 05/01/17 15:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-24

Matrix: Solid

Percent Solids: 88.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
<b>Ethylbenzene</b>	<b>60</b>		28	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
Methyl tert-butyl ether	<14		28	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
Naphthalene	<140		280	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
<b>1,2,4-Trimethylbenzene</b>	<b>31</b>		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
<b>Xylenes, Total</b>	<b>110</b>		85	34	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	95			80 - 120			05/05/17 15:52	05/10/17 07:10	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	63		0.49	0.23	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:50	1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Benzene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Chlorobenzene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Chloroform	<0.020		0.040	0.020	mg/L			05/09/17 01:35	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/09/17 01:35	20

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Trichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Vinyl chloride	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		75 - 126					05/09/17 01:35	20
4-Bromofluorobenzene (Surr)	114		72 - 124					05/09/17 01:35	20
Dibromofluoromethane	91		75 - 120					05/09/17 01:35	20
Toluene-d8 (Surr)	100		75 - 120					05/09/17 01:35	20

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 18:13	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		05/08/17 07:42	05/08/17 18:13	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 18:13	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 18:13	1
2-Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 18:13	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 18:13	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 18:13	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 18:13	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 18:13	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 18:13	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 18:13	1
Pyridine	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 18:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	86		40 - 145				05/08/17 07:42	05/08/17 18:13	1
2-Fluorobiphenyl	86		34 - 110				05/08/17 07:42	05/08/17 18:13	1
2-Fluorophenol (Surr)	57		27 - 110				05/08/17 07:42	05/08/17 18:13	1
Nitrobenzene-d5 (Surr)	93		36 - 120				05/08/17 07:42	05/08/17 18:13	1
Phenol-d5 (Surr)	40		20 - 100				05/08/17 07:42	05/08/17 18:13	1
Terphenyl-d14 (Surr)	100		40 - 145				05/08/17 07:42	05/08/17 18:13	1

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
Barium	0.15 J		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 21:50	1
Cadmium	0.0040 J		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 21:50	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
Copper	0.011 J		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
Lead	0.034 J		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 21:50	1
Nickel	0.024 J		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 21:50	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
Zinc	0.030 J		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 21:50	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:15	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		40.0	40.0	Degrees F			05/11/17 20:00	1
Cyanide, Total	<0.13		0.37	0.13	mg/Kg		05/10/17 12:50	05/10/17 15:37	1
Sulfide	6.2 J		9.7	4.6	mg/Kg		05/15/17 17:36	05/15/17 21:51	1
pH	8.8		0.2	0.2	SU			05/09/17 16:06	1
Paint Filter	PASS				No Unit			05/11/17 22:43	1
Specific Gravity	1.1838				NONE			05/12/17 22:15	1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

Percent Solids: 89.3

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<16		27	16	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Benzene	<19		27	19	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Ethylbenzene	<20		27	20	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Methyl tert-butyl ether	<13		27	13	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Naphthalene	<130		270	130	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Toluene	<18		27	18	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Xylenes, Total	<32		80	32	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Wisconsin GRO	<2700		5300	2700	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 07:37	1
a,a,a-Trifluorotoluene	96		80 - 120				05/05/17 15:52	05/10/17 07:37	1

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.5		19	6.5	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1221	<8.1		19	8.1	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1232	<8.1		19	8.1	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1242	<6.1		19	6.1	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1248	<7.3		19	7.3	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1254	<4.0		19	4.0	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1260	<9.1		19	9.1	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	64		49 - 129				05/09/17 16:38	05/10/17 14:06	1
DCB Decachlorobiphenyl	78		37 - 121				05/09/17 16:38	05/10/17 14:06	1

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	4.9		4.4	1.8	mg/Kg	✉	05/04/17 11:15	05/05/17 16:49	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Nonane	71		44 - 148				05/04/17 11:15	05/05/17 16:49	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

Percent Solids: 89.3

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.52	0.24	mg/Kg	⌚	05/05/17 15:07	05/11/17 22:53	1

## Client Sample ID: Trip Blank

Date Collected: 05/01/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-26

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1-Dichloroethane	<21 *		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1-Dichloroethene	<20 *		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1-Dichloropropene	<15		50	15	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2,3-Trichloropropane	<21		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dibromoethane	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dichloroethane	<20		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dichloropropene	<21		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,3-Dichloropropane	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
2,2-Dichloropropane	<22		50	22	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
2-Chlorotoluene	<16		50	16	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
4-Chlorotoluene	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Benzene	<7.3		13	7.3	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromobenzene	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromochloromethane	<21 *		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromodichloromethane	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromoform	<24		50	24	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromomethane	<40		100	40	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Carbon tetrachloride	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Chlorobenzene	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Chloroethane	<25		50	25	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Chloroform	<19 *		100	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Chloromethane	<16		50	16	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
cis-1,2-Dichloroethene	<20 *		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Dibromochloromethane	<24		50	24	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Dibromomethane	<14		50	14	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Dichlorodifluoromethane	<34		100	34	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Ethylbenzene	<9.2		13	9.2	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Hexachlorobutadiene	<22		50	22	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Isopropyl ether	<14		50	14	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: Trip Blank

Date Collected: 05/01/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-26

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<19		50	19	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Methyl tert-butyl ether	<20 *		50	20	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Methylene Chloride	<82 *		250	82	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Naphthalene	<17 *		50	17	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
n-Butylbenzene	<19		50	19	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
N-Propylbenzene	<21		50	21	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
p-Isopropyltoluene	<18		50	18	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
sec-Butylbenzene	<20		50	20	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Styrene	<19 *		50	19	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
tert-Butylbenzene	<20		50	20	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Tetrachloroethene	<19		50	19	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Toluene	<7.4		13	7.4	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
trans-1,2-Dichloroethene	<18 *		50	18	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Trichloroethene	<8.2		25	8.2	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Trichlorofluoromethane	<21 *		50	21	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Vinyl chloride	<13 *		25	13	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Xylenes, Total	<11		25	11	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)		100		75 - 126			05/01/17 00:00	05/15/17 15:55	50
4-Bromofluorobenzene (Surr)		93		72 - 124			05/01/17 00:00	05/15/17 15:55	50
Dibromofluoromethane		101		75 - 120			05/01/17 00:00	05/15/17 15:55	50
Toluene-d8 (Surr)		95		75 - 120			05/01/17 00:00	05/15/17 15:55	50

TestAmerica Chicago



# SFA Labs

**TestAmerica Laboratories, Inc.**

Attention: Sandie Fredrick

2417 Bond St  
University Park, IL 44720

Date Received: 05/05/2017

Date Reported: 05/15/17 17:06

Client Project: Soil/Waste

Client Project ID: Soil/Waste

PO# 2669273

Project #: Soil/Waste

## Certificate of Analysis

This analytical test report shall not be reproduced, except in full, without written permission from Eurofins S-F Analytical Laboratories.

All quality control samples and checks were within acceptance limits unless otherwise indicated. Test results pertain only to those items tested. All samples were in good condition when received by the laboratory unless otherwise noted. All LOD/LOQs are adjusted to reflect dilutions.

DNR #	Analyte	Result Wet Wt.	LOD Wet Wt.	Result Dry Wt.	LOD Dry Wt.	LOQ Dry Wt.	Units	Dilution Factor	Date Prepared	Date Analyzed	Method	Notes										
<b>1705123-01 GP-05 (6-8) (500-127505-11)</b>																						
<b>Date Collected: 05/01/2017</b>																						
<b>Preparation:</b> SW-846 5050 1994																						
Chlorine as Cl		0.005	0.002	0.005	0.002	0.006	% Wt.	1	5/15/17	05/15/17	ASTM D808											
Solids		Result: 85.98			% Wt.			Analyzed By: YT09		05/09/17		SM2540G 1997										
<b>1705123-02 GP-07 (6-8) (500-127505-16)</b>																						
<b>Date Collected: 05/01/2017</b>																						
<b>Preparation:</b> SW-846 5050 1994																						
Chlorine as Cl		0.006	0.002	0.006	0.002	0.007	% Wt.	1	5/15/17	05/15/17	ASTM D808											
Solids		Result: 86.74			% Wt.			Analyzed By: YT09		05/09/17		SM2540G 1997										
<b>1705123-03 GP-11 (6-8) (500-127505-25)</b>																						
<b>Date Collected: 05/01/2017</b>																						
<b>Preparation:</b> SW-846 5050 1994																						
Chlorine as Cl		0.028	0.002	0.032	0.002	0.006	% Wt.	1	5/15/17	05/15/17	ASTM D808											
Solids		Result: 89.25			% Wt.			Analyzed By: YT09		05/09/17		SM2540G 1997										

This report was prepared and printed by:

Josh Rhein, Chemistry Operations Manager

Page 1 of 1

| Eurofins S-F Analytical Laboratories | 2345 South 170<sup>th</sup> Street | New Berlin, WI 53151 |

| Phone: (262) 754-5300 | Fax: (262) 754-5310 | eurofinsus.com | ESFA@eurofinsus.com |

# Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC 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.

### GC 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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F3	Duplicate RPD exceeds the control limit

### General Chemistry

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.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

☒	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)

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## GC/MS VOA

### Prep Batch: 384046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	5035	
500-127505-7	GP-03 (6-8)	Total/NA	Solid	5035	
500-127505-8	GP-04 (2-4)	Total/NA	Solid	5035	
500-127505-9	GP-04 (6-8)	Total/NA	Solid	5035	
500-127505-10	GP-05 (2-4)	Total/NA	Solid	5035	
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI GRO	
500-127505-12	GP-05 (14-16)	Total/NA	Solid	5035	
500-127505-26	Trip Blank	Total/NA	Solid	5035	

### Leach Batch: 384086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	1311	
500-127505-16	GP-07 (6-8)	TCLP	Solid	1311	
500-127505-25	GP-11 (6-8)	TCLP	Solid	1311	
LB 500-384086/1-A	Method Blank	TCLP	Solid	1311	

### Analysis Batch: 384262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	8260B	
500-127505-16	GP-07 (6-8)	TCLP	Solid	8260B	
500-127505-25	GP-11 (6-8)	TCLP	Solid	8260B	
LB 500-384086/1-A	Method Blank	TCLP	Solid	8260B	
MB 500-384262/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-384262/4	Lab Control Sample	Total/NA	Solid	8260B	

### Analysis Batch: 385134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	8260B	
500-127505-7	GP-03 (6-8)	Total/NA	Solid	8260B	
500-127505-8	GP-04 (2-4)	Total/NA	Solid	8260B	
500-127505-9	GP-04 (6-8)	Total/NA	Solid	8260B	
500-127505-10	GP-05 (2-4)	Total/NA	Solid	8260B	
500-127505-11	GP-05 (6-8)	Total/NA	Solid	8260B	
500-127505-12	GP-05 (14-16)	Total/NA	Solid	8260B	
500-127505-26	Trip Blank	Total/NA	Solid	8260B	
MB 500-385134/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-385134/4	Lab Control Sample	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	1311	
500-127505-16	GP-07 (6-8)	TCLP	Solid	1311	
500-127505-25	GP-11 (6-8)	TCLP	Solid	1311	
LB 500-383992/1-B	Method Blank	TCLP	Solid	1311	
500-127505-11 MS	GP-05 (6-8)	TCLP	Solid	1311	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 384171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	3510C	383992
500-127505-16	GP-07 (6-8)	TCLP	Solid	3510C	383992
500-127505-25	GP-11 (6-8)	TCLP	Solid	3510C	383992
LB 500-383992/1-B	Method Blank	TCLP	Solid	3510C	383992
MB 500-384171/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	3510C	
500-127505-11 MS	GP-05 (6-8)	TCLP	Solid	3510C	383992

### Analysis Batch: 384241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	8270D	384171
500-127505-16	GP-07 (6-8)	TCLP	Solid	8270D	384171
500-127505-25	GP-11 (6-8)	TCLP	Solid	8270D	384171
LB 500-383992/1-B	Method Blank	TCLP	Solid	8270D	384171
MB 500-384171/1-A	Method Blank	Total/NA	Solid	8270D	384171
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	8270D	384171
500-127505-11 MS	GP-05 (6-8)	TCLP	Solid	8270D	384171

## GC VOA

### Prep Batch: 384046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI GRO	
LB3 500-384046/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-384046/23-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 500-384046/24-A	Lab Control Sample Dup	Total/NA	Solid	5035	

### Analysis Batch: 384093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI-GRO	384046
LB3 500-384046/21-A	Method Blank	Total/NA	Solid	WI-GRO	384046
LCS 500-384046/23-A	Lab Control Sample	Total/NA	Solid	WI-GRO	384046
LCSD 500-384046/24-A	Lab Control Sample Dup	Total/NA	Solid	WI-GRO	384046

### Prep Batch: 427841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-1	GP-01 (0-2)	Total/NA	Solid	WI GRO	
500-127505-2	GP-01 (6-8)	Total/NA	Solid	WI GRO	
500-127505-3	GP-02 (2-4)	Total/NA	Solid	WI GRO	
500-127505-4	GP-02 (6-8)	Total/NA	Solid	WI GRO	
500-127505-5	GP-02 (14-16)	Total/NA	Solid	WI GRO	
500-127505-13	GP-06 (2-4)	Total/NA	Solid	WI GRO	
500-127505-14	GP-06 (6-8)	Total/NA	Solid	WI GRO	
500-127505-15	GP-07 (2-4)	Total/NA	Solid	WI GRO	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	WI GRO	
500-127505-17	GP-07 (14-16)	Total/NA	Solid	WI GRO	
500-127505-18	GP-08 (2-4)	Total/NA	Solid	WI GRO	
500-127505-19	GP-08 (6-8)	Total/NA	Solid	WI GRO	
500-127505-20	GP-09 (2-4)	Total/NA	Solid	WI GRO	
500-127505-21	GP-09 (6-8)	Total/NA	Solid	WI GRO	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## GC VOA (Continued)

### Prep Batch: 427841 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-22	GP-10 (2-4)	Total/NA	Solid	WI GRO	
500-127505-23	GP-10 (6-8)	Total/NA	Solid	WI GRO	
500-127505-24	GP-11 (2-4)	Total/NA	Solid	WI GRO	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	WI GRO	
MB 490-427841/40-A	Method Blank	Total/NA	Solid	WI GRO	
LCS 490-427841/41-A	Lab Control Sample	Total/NA	Solid	WI GRO	
LCSD 490-427841/42-A	Lab Control Sample Dup	Total/NA	Solid	WI GRO	

### Analysis Batch: 428725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-1	GP-01 (0-2)	Total/NA	Solid	WDNR	427841
500-127505-2	GP-01 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-3	GP-02 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-4	GP-02 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-5	GP-02 (14-16)	Total/NA	Solid	WDNR	427841
500-127505-13	GP-06 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-14	GP-06 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-15	GP-07 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-16	GP-07 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-17	GP-07 (14-16)	Total/NA	Solid	WDNR	427841
500-127505-18	GP-08 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-19	GP-08 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-20	GP-09 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-21	GP-09 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-22	GP-10 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-23	GP-10 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-24	GP-11 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-25	GP-11 (6-8)	Total/NA	Solid	WDNR	427841
MB 490-427841/40-A	Method Blank	Total/NA	Solid	WDNR	427841
LCS 490-427841/41-A	Lab Control Sample	Total/NA	Solid	WDNR	427841
LCSD 490-427841/42-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	427841

## GC Semi VOA

### Prep Batch: 383737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI DRO PREP	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	WI DRO PREP	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	WI DRO PREP	
MB 500-383737/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	
LCS 500-383737/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-383737/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

### Analysis Batch: 383957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI-DRO	383737
500-127505-16	GP-07 (6-8)	Total/NA	Solid	WI-DRO	383737
500-127505-25	GP-11 (6-8)	Total/NA	Solid	WI-DRO	383737
MB 500-383737/1-A	Method Blank	Total/NA	Solid	WI-DRO	383737
LCS 500-383737/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	383737

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## GC Semi VOA (Continued)

### Analysis Batch: 383957 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 500-383737/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	383737

### Prep Batch: 384456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	3541	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	3541	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	3541	
MB 500-384456/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-384456/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 384545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	8082A	384456
500-127505-16	GP-07 (6-8)	Total/NA	Solid	8082A	384456
500-127505-25	GP-11 (6-8)	Total/NA	Solid	8082A	384456
MB 500-384456/1-A	Method Blank	Total/NA	Solid	8082A	384456
LCS 500-384456/2-A	Lab Control Sample	Total/NA	Solid	8082A	384456

## Metals

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	1311	
500-127505-16	GP-07 (6-8)	TCLP	Solid	1311	
500-127505-25	GP-11 (6-8)	TCLP	Solid	1311	
LB 500-383992/1-C	Method Blank	TCLP	Solid	1311	
LB 500-383992/1-D	Method Blank	TCLP	Solid	1311	

### Prep Batch: 383993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	3050B	
500-127505-7	GP-03 (6-8)	Total/NA	Solid	3050B	
500-127505-8	GP-04 (2-4)	Total/NA	Solid	3050B	
500-127505-9	GP-04 (6-8)	Total/NA	Solid	3050B	
500-127505-10	GP-05 (2-4)	Total/NA	Solid	3050B	
500-127505-11	GP-05 (6-8)	Total/NA	Solid	3050B	
500-127505-12	GP-05 (14-16)	Total/NA	Solid	3050B	
500-127505-18	GP-08 (2-4)	Total/NA	Solid	3050B	
500-127505-19	GP-08 (6-8)	Total/NA	Solid	3050B	
500-127505-20	GP-09 (2-4)	Total/NA	Solid	3050B	
500-127505-21	GP-09 (6-8)	Total/NA	Solid	3050B	
500-127505-22	GP-10 (2-4)	Total/NA	Solid	3050B	
500-127505-23	GP-10 (6-8)	Total/NA	Solid	3050B	
500-127505-24	GP-11 (2-4)	Total/NA	Solid	3050B	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	3050B	
MB 500-383993/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-383993/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-127505-25 MS	GP-11 (6-8)	Total/NA	Solid	3050B	
500-127505-25 MSD	GP-11 (6-8)	Total/NA	Solid	3050B	
500-127505-25 DU	GP-11 (6-8)	Total/NA	Solid	3050B	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Metals (Continued)

### Prep Batch: 384187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	3010A	383992
500-127505-16	GP-07 (6-8)	TCLP	Solid	3010A	383992
500-127505-25	GP-11 (6-8)	TCLP	Solid	3010A	383992
LB 500-383992/1-C	Method Blank	TCLP	Solid	3010A	383992
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Prep Batch: 384260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	7470A	383992
500-127505-16	GP-07 (6-8)	TCLP	Solid	7470A	383992
500-127505-25	GP-11 (6-8)	TCLP	Solid	7470A	383992
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	383992
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	

### Analysis Batch: 384328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	6010B	384187
500-127505-16	GP-07 (6-8)	TCLP	Solid	6010B	384187
500-127505-25	GP-11 (6-8)	TCLP	Solid	6010B	384187
LB 500-383992/1-C	Method Blank	TCLP	Solid	6010B	384187
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	6010B	384187

### Analysis Batch: 384394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	7470A	384260
500-127505-16	GP-07 (6-8)	TCLP	Solid	7470A	384260
500-127505-25	GP-11 (6-8)	TCLP	Solid	7470A	384260
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	384260
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	384260
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	384260

### Analysis Batch: 384865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	6010B	383993
500-127505-7	GP-03 (6-8)	Total/NA	Solid	6010B	383993
500-127505-8	GP-04 (2-4)	Total/NA	Solid	6010B	383993
500-127505-9	GP-04 (6-8)	Total/NA	Solid	6010B	383993
500-127505-10	GP-05 (2-4)	Total/NA	Solid	6010B	383993
500-127505-11	GP-05 (6-8)	Total/NA	Solid	6010B	383993
500-127505-12	GP-05 (14-16)	Total/NA	Solid	6010B	383993
500-127505-18	GP-08 (2-4)	Total/NA	Solid	6010B	383993
500-127505-19	GP-08 (6-8)	Total/NA	Solid	6010B	383993
500-127505-20	GP-09 (2-4)	Total/NA	Solid	6010B	383993
500-127505-21	GP-09 (6-8)	Total/NA	Solid	6010B	383993
500-127505-22	GP-10 (2-4)	Total/NA	Solid	6010B	383993
500-127505-23	GP-10 (6-8)	Total/NA	Solid	6010B	383993
500-127505-24	GP-11 (2-4)	Total/NA	Solid	6010B	383993
500-127505-25	GP-11 (6-8)	Total/NA	Solid	6010B	383993
MB 500-383993/1-A	Method Blank	Total/NA	Solid	6010B	383993
LCS 500-383993/2-A	Lab Control Sample	Total/NA	Solid	6010B	383993

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Metals (Continued)

### Analysis Batch: 384865 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-25 MS	GP-11 (6-8)	Total/NA	Solid	6010B	383993
500-127505-25 MSD	GP-11 (6-8)	Total/NA	Solid	6010B	383993
500-127505-25 DU	GP-11 (6-8)	Total/NA	Solid	6010B	383993

## General Chemistry

### Analysis Batch: 383751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	Moisture	
500-127505-7	GP-03 (6-8)	Total/NA	Solid	Moisture	
500-127505-8	GP-04 (2-4)	Total/NA	Solid	Moisture	
500-127505-9	GP-04 (6-8)	Total/NA	Solid	Moisture	
500-127505-10	GP-05 (2-4)	Total/NA	Solid	Moisture	
500-127505-11	GP-05 (6-8)	Total/NA	Solid	Moisture	
500-127505-12	GP-05 (14-16)	Total/NA	Solid	Moisture	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	Moisture	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	Moisture	
500-127505-26	Trip Blank	Total/NA	Solid	Moisture	
500-127505-8 DU	GP-04 (2-4)	Total/NA	Solid	Moisture	

### Analysis Batch: 384553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9045C	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9045C	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9045C	

### Prep Batch: 384580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9010B	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9010B	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9010B	
MB 500-384580/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-384580/2-A	Lab Control Sample	Total/NA	Solid	9010B	

### Analysis Batch: 384641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9014	384580
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9014	384580
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9014	384580
MB 500-384580/1-A	Method Blank	Total/NA	Solid	9014	384580
LCS 500-384580/2-A	Lab Control Sample	Total/NA	Solid	9014	384580

### Analysis Batch: 384855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9095A	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9095A	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9095A	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## General Chemistry (Continued)

### Analysis Batch: 384856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	1010	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	1010	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	1010	

### Analysis Batch: 385047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	SM 2710F	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	SM 2710F	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	SM 2710F	

### Prep Batch: 385245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9030B	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9030B	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9030B	
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9030B	

### Analysis Batch: 385402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9034	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9034	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9034	
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9034	
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9034	

### Analysis Batch: 427523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-1	GP-01 (0-2)	Total/NA	Solid	Moisture	
500-127505-2	GP-01 (6-8)	Total/NA	Solid	Moisture	
500-127505-3	GP-02 (2-4)	Total/NA	Solid	Moisture	
500-127505-4	GP-02 (6-8)	Total/NA	Solid	Moisture	
500-127505-5	GP-02 (14-16)	Total/NA	Solid	Moisture	
500-127505-13	GP-06 (2-4)	Total/NA	Solid	Moisture	
500-127505-14	GP-06 (6-8)	Total/NA	Solid	Moisture	
500-127505-15	GP-07 (2-4)	Total/NA	Solid	Moisture	
500-127505-17	GP-07 (14-16)	Total/NA	Solid	Moisture	
500-127505-18	GP-08 (2-4)	Total/NA	Solid	Moisture	
500-127505-19	GP-08 (6-8)	Total/NA	Solid	Moisture	
500-127505-20	GP-09 (2-4)	Total/NA	Solid	Moisture	
500-127505-21	GP-09 (6-8)	Total/NA	Solid	Moisture	
500-127505-22	GP-10 (2-4)	Total/NA	Solid	Moisture	
500-127505-4 DU	GP-02 (6-8)	Total/NA	Solid	Moisture	

### Analysis Batch: 427540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-23	GP-10 (6-8)	Total/NA	Solid	Moisture	
500-127505-24	GP-11 (2-4)	Total/NA	Solid	Moisture	
500-127505-23 DU	GP-10 (6-8)	Total/NA	Solid	Moisture	
500-127505-24 DU	GP-11 (2-4)	Total/NA	Solid	Moisture	

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127505-6	GP-03 (2-4)	97	89	101	94
500-127505-7	GP-03 (6-8)	97	91	100	94
500-127505-8	GP-04 (2-4)	98	92	99	94
500-127505-9	GP-04 (6-8)	100	93	102	94
500-127505-10	GP-05 (2-4)	98	90	100	94
500-127505-11	GP-05 (6-8)	97	92	99	95
500-127505-12	GP-05 (14-16)	98	92	101	93
500-127505-26	Trip Blank	100	93	101	95
LCS 500-384262/4	Lab Control Sample	103	109	93	102
LCS 500-385134/4	Lab Control Sample	87	90	94	96
MB 500-384262/6	Method Blank	105	114	89	100
MB 500-385134/6	Method Blank	91	94	97	96

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)  
 BFB = 4-Bromofluorobenzene (Surr)  
 DBFM = Dibromofluoromethane  
 TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127505-11	GP-05 (6-8)	103	110	89	101
500-127505-16	GP-07 (6-8)	104	108	90	101
500-127505-25	GP-11 (6-8)	105	114	91	100
LB 500-384086/1-A	Method Blank	104	110	89	97

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)  
 BFB = 4-Bromofluorobenzene (Surr)  
 DBFM = Dibromofluoromethane  
 TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
LCS 500-384171/2-A	Lab Control Sample	98	87	61	92	44	103
MB 500-384171/1-A	Method Blank	90	90	65	97	43	107

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)  
 FBP = 2-Fluorobiphenyl  
 2FP = 2-Fluorophenol (Surr)  
 NBZ = Nitrobenzene-d5 (Surr)

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

PHL = Phenol-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
500-127505-11	GP-05 (6-8)	90	86	59	95	42	104
500-127505-11 MS	GP-05 (6-8)	96	83	58	90	40	104
500-127505-16	GP-07 (6-8)	87	87	60	96	41	103
500-127505-25	GP-11 (6-8)	86	86	57	93	40	100
LB 500-383992/1-B	Method Blank	90	84	56	94	39	104

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TFT (80-120)	TFT (80-120)				
500-127505-1	GP-01 (0-2)	87	87				
500-127505-2	GP-01 (6-8)	88	88				
500-127505-3	GP-02 (2-4)	91	91				
500-127505-4	GP-02 (6-8)	89	89				
500-127505-5	GP-02 (14-16)	92	92				
500-127505-13	GP-06 (2-4)	86	86				
500-127505-14	GP-06 (6-8)	91	91				
500-127505-15	GP-07 (2-4)	88	88				
500-127505-16	GP-07 (6-8)	91	91				
500-127505-17	GP-07 (14-16)	90	90				
500-127505-18	GP-08 (2-4)	91	91				
500-127505-19	GP-08 (6-8)	91	91				
500-127505-20	GP-09 (2-4)	90	90				
500-127505-21	GP-09 (6-8)	90	90				
500-127505-22	GP-10 (2-4)	91	91				
500-127505-23	GP-10 (6-8)	91	91				
500-127505-24	GP-11 (2-4)	95	95				
500-127505-25	GP-11 (6-8)	91	91				
LCS 490-427841/41-A	Lab Control Sample	96	96				
LCSD 490-427841/42-A	Lab Control Sample Dup	97	97				
MB 490-427841/40-A	Method Blank	88	88				

### Surrogate Legend

TFT = a,a,a-Trifluorotoluene

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (49-129)	DCB1 (37-121)
500-127505-11	GP-05 (6-8)	61	62
500-127505-16	GP-07 (6-8)	68	67
500-127505-25	GP-11 (6-8)	64	78
LCS 500-384456/2-A	Lab Control Sample	76	63
MB 500-384456/1-A	Method Blank	76	70

### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		C9 (44-148)	
500-127505-11	GP-05 (6-8)	69	
500-127505-16	GP-07 (6-8)	77	
500-127505-25	GP-11 (6-8)	71	
LCS 500-383737/2-A	Lab Control Sample	77	
LCSD 500-383737/3-A	Lab Control Sample Dup	71	
MB 500-383737/1-A	Method Blank	83	

### Surrogate Legend

C9 = n-Nonane

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID:** MB 500-384262/6

**Matrix:** Solid

**Analysis Batch:** 384262

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Methyl Ethyl Ketone	<0.0025		0.0050	0.0025	mg/L			05/08/17 22:32	1
1,2-Dichloroethane	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Benzene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Carbon tetrachloride	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Chlorobenzene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Chloroform	<0.0010		0.0020	0.0010	mg/L			05/08/17 22:32	1
Tetrachloroethylene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Trichloroethylene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Vinyl chloride	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	105		75 - 126				05/08/17 22:32	1
4-Bromofluorobenzene (Surr)	114		72 - 124				05/08/17 22:32	1
Dibromofluoromethane	89		75 - 120				05/08/17 22:32	1
Toluene-d8 (Surr)	100		75 - 120				05/08/17 22:32	1

**Lab Sample ID:** LCS 500-384262/4

**Matrix:** Solid

**Analysis Batch:** 384262

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	MB	MB	Spike Added	LCN	LCN	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene			0.0500	0.0449		mg/L		90	67 - 122
Methyl Ethyl Ketone			0.0500	0.0524		mg/L		105	53 - 141
1,2-Dichloroethane			0.0500	0.0504		mg/L		101	68 - 127
Benzene			0.0500	0.0479		mg/L		96	70 - 120
Carbon tetrachloride			0.0500	0.0453		mg/L		91	65 - 122
Chlorobenzene			0.0500	0.0500		mg/L		100	70 - 120
Chloroform			0.0500	0.0455		mg/L		91	70 - 120
Tetrachloroethylene			0.0500	0.0518		mg/L		104	70 - 128
Trichloroethylene			0.0500	0.0488		mg/L		98	70 - 125
Vinyl chloride			0.0500	0.0415		mg/L		83	64 - 126

**LCS LCS**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					
4-Bromofluorobenzene (Surr)	109		72 - 124					
Dibromofluoromethane	93		75 - 120					
Toluene-d8 (Surr)	102		75 - 120					

**Lab Sample ID:** MB 500-385134/6

**Matrix:** Solid

**Analysis Batch:** 385134

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,1,1,2-Tetrachloroethane	<0.46		1.0		0.46	ug/Kg				05/15/17 11:01	1
1,1,1-Trichloroethane	<0.38		1.0		0.38	ug/Kg				05/15/17 11:01	1
1,1,2,2-Tetrachloroethane	<0.40		1.0		0.40	ug/Kg				05/15/17 11:01	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: MB 500-385134/6**

**Matrix: Solid**

**Analysis Batch: 385134**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.35				1.0	0.35	ug/Kg			05/15/17 11:01	1
1,1-Dichloroethane	<0.41				1.0	0.41	ug/Kg			05/15/17 11:01	1
1,1-Dichloroethene	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
1,1-Dichloropropene	<0.30				1.0	0.30	ug/Kg			05/15/17 11:01	1
1,2,3-Trichlorobenzene	<0.46				1.0	0.46	ug/Kg			05/15/17 11:01	1
1,2,3-Trichloropropane	<0.41				1.0	0.41	ug/Kg			05/15/17 11:01	1
1,2,4-Trichlorobenzene	<0.34				1.0	0.34	ug/Kg			05/15/17 11:01	1
1,2,4-Trimethylbenzene	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
1,2-Dibromo-3-Chloropropane	<2.0				5.0	2.0	ug/Kg			05/15/17 11:01	1
1,2-Dibromoethane	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
1,2-Dichlorobenzene	<0.33				1.0	0.33	ug/Kg			05/15/17 11:01	1
1,2-Dichloroethane	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
1,2-Dichloropropene	<0.43				1.0	0.43	ug/Kg			05/15/17 11:01	1
1,3,5-Trimethylbenzene	<0.38				1.0	0.38	ug/Kg			05/15/17 11:01	1
1,3-Dichlorobenzene	<0.40				1.0	0.40	ug/Kg			05/15/17 11:01	1
1,3-Dichloropropane	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
1,4-Dichlorobenzene	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
2,2-Dichloropropane	<0.44				1.0	0.44	ug/Kg			05/15/17 11:01	1
2-Chlorotoluene	<0.31				1.0	0.31	ug/Kg			05/15/17 11:01	1
4-Chlorotoluene	<0.35				1.0	0.35	ug/Kg			05/15/17 11:01	1
Benzene	<0.15				0.25	0.15	ug/Kg			05/15/17 11:01	1
Bromobenzene	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
Bromochloromethane	<0.43				1.0	0.43	ug/Kg			05/15/17 11:01	1
Bromodichloromethane	<0.37				1.0	0.37	ug/Kg			05/15/17 11:01	1
Bromoform	<0.48				1.0	0.48	ug/Kg			05/15/17 11:01	1
Bromomethane	<0.80				2.0	0.80	ug/Kg			05/15/17 11:01	1
Carbon tetrachloride	<0.38				1.0	0.38	ug/Kg			05/15/17 11:01	1
Chlorobenzene	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
Chloroethane	<0.50				1.0	0.50	ug/Kg			05/15/17 11:01	1
Chloroform	<0.37				2.0	0.37	ug/Kg			05/15/17 11:01	1
Chloromethane	<0.32				1.0	0.32	ug/Kg			05/15/17 11:01	1
cis-1,2-Dichloroethene	<0.41				1.0	0.41	ug/Kg			05/15/17 11:01	1
cis-1,3-Dichloropropene	<0.42				1.0	0.42	ug/Kg			05/15/17 11:01	1
Dibromochloromethane	<0.49				1.0	0.49	ug/Kg			05/15/17 11:01	1
Dibromomethane	<0.27				1.0	0.27	ug/Kg			05/15/17 11:01	1
Dichlorodifluoromethane	<0.67				2.0	0.67	ug/Kg			05/15/17 11:01	1
Ethylbenzene	<0.18				0.25	0.18	ug/Kg			05/15/17 11:01	1
Hexachlorobutadiene	<0.45				1.0	0.45	ug/Kg			05/15/17 11:01	1
Isopropyl ether	<0.28				1.0	0.28	ug/Kg			05/15/17 11:01	1
Isopropylbenzene	<0.38				1.0	0.38	ug/Kg			05/15/17 11:01	1
Methyl tert-butyl ether	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
Methylene Chloride	<1.6				5.0	1.6	ug/Kg			05/15/17 11:01	1
Naphthalene	<0.33				1.0	0.33	ug/Kg			05/15/17 11:01	1
n-Butylbenzene	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
N-Propylbenzene	<0.41				1.0	0.41	ug/Kg			05/15/17 11:01	1
p-Isopropyltoluene	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
sec-Butylbenzene	<0.40				1.0	0.40	ug/Kg			05/15/17 11:01	1
Styrene	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: MB 500-385134/6**

**Matrix: Solid**

**Analysis Batch: 385134**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			05/15/17 11:01	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			05/15/17 11:01	1
Toluene	<0.15		0.25	0.15	ug/Kg			05/15/17 11:01	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			05/15/17 11:01	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			05/15/17 11:01	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			05/15/17 11:01	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			05/15/17 11:01	1
Vinyl chloride	<0.26		0.50	0.26	ug/Kg			05/15/17 11:01	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			05/15/17 11:01	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	91		75 - 126		05/15/17 11:01	1
4-Bromofluorobenzene (Surr)	94		72 - 124		05/15/17 11:01	1
Dibromofluoromethane	97		75 - 120		05/15/17 11:01	1
Toluene-d8 (Surr)	96		75 - 120		05/15/17 11:01	1

**Lab Sample ID: LCS 500-385134/4**

**Matrix: Solid**

**Analysis Batch: 385134**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
1,1,1,2-Tetrachloroethane	50.0	50.0		ug/Kg		100	70 - 125	
1,1,1-Trichloroethane	50.0	41.0		ug/Kg		82	70 - 125	
1,1,2,2-Tetrachloroethane	50.0	46.1		ug/Kg		92	67 - 127	
1,1,2-Trichloroethane	50.0	48.9		ug/Kg		98	70 - 122	
1,1-Dichloroethane	50.0	42.3		ug/Kg		85	70 - 125	
1,1-Dichloroethene	50.0	39.3		ug/Kg		79	67 - 122	
1,1-Dichloropropene	50.0	42.4		ug/Kg		85	70 - 121	
1,2,3-Trichlorobenzene	50.0	41.2		ug/Kg		82	55 - 140	
1,2,3-Trichloropropane	50.0	39.9		ug/Kg		80	50 - 133	
1,2,4-Trichlorobenzene	50.0	41.1		ug/Kg		82	66 - 127	
1,2,4-Trimethylbenzene	50.0	48.3		ug/Kg		97	70 - 123	
1,2-Dibromo-3-Chloropropane	50.0	37.3		ug/Kg		75	56 - 123	
1,2-Dibromoethane	50.0	47.1		ug/Kg		94	70 - 125	
1,2-Dichlorobenzene	50.0	49.2		ug/Kg		98	70 - 125	
1,2-Dichloroethane	50.0	42.6		ug/Kg		85	68 - 127	
1,2-Dichloropropane	50.0	47.4		ug/Kg		95	67 - 130	
1,3,5-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 123	
1,3-Dichlorobenzene	50.0	49.1		ug/Kg		98	70 - 125	
1,3-Dichloropropane	50.0	46.7		ug/Kg		93	62 - 136	
1,4-Dichlorobenzene	50.0	49.2		ug/Kg		98	70 - 120	
2,2-Dichloropropane	50.0	33.2		ug/Kg		66	58 - 129	
2-Chlorotoluene	50.0	46.0		ug/Kg		92	70 - 125	
4-Chlorotoluene	50.0	45.5		ug/Kg		91	68 - 124	
Benzene	50.0	42.5		ug/Kg		85	70 - 120	
Bromobenzene	50.0	48.3		ug/Kg		97	70 - 122	
Bromochloromethane	50.0	48.0		ug/Kg		96	65 - 122	
Bromodichloromethane	50.0	42.2		ug/Kg		84	69 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: LCS 500-385134/4**

**Matrix: Solid**

**Analysis Batch: 385134**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Bromoform	50.0	51.4		ug/Kg		103	56 - 132		
Bromomethane	50.0	55.6		ug/Kg		111	40 - 130		
Carbon tetrachloride	50.0	41.9		ug/Kg		84	65 - 122		
Chlorobenzene	50.0	49.0		ug/Kg		98	70 - 120		
Chloroethane	50.0	42.1		ug/Kg		84	45 - 127		
Chloroform	50.0	42.5		ug/Kg		85	70 - 120		
Chloromethane	50.0	46.0		ug/Kg		92	54 - 147		
cis-1,2-Dichloroethene	50.0	44.5		ug/Kg		89	70 - 125		
cis-1,3-Dichloropropene	50.0	41.4		ug/Kg		83	64 - 127		
Dibromochloromethane	50.0	49.8		ug/Kg		100	68 - 125		
Dibromomethane	50.0	44.5		ug/Kg		89	70 - 120		
Dichlorodifluoromethane	50.0	35.6		ug/Kg		71	40 - 150		
Ethylbenzene	50.0	48.1		ug/Kg		96	70 - 120		
Hexachlorobutadiene	50.0	49.1		ug/Kg		98	51 - 150		
Isopropylbenzene	50.0	47.3		ug/Kg		95	70 - 126		
Methyl tert-butyl ether	50.0	34.9		ug/Kg		70	70 - 120		
Methylene Chloride	50.0	40.1		ug/Kg		80	69 - 125		
Naphthalene	50.0	37.0		ug/Kg		74	59 - 130		
n-Butylbenzene	50.0	45.8		ug/Kg		92	68 - 125		
N-Propylbenzene	50.0	46.4		ug/Kg		93	69 - 127		
p-Isopropyltoluene	50.0	47.4		ug/Kg		95	70 - 125		
sec-Butylbenzene	50.0	48.1		ug/Kg		96	70 - 123		
Styrene	50.0	48.9		ug/Kg		98	70 - 120		
tert-Butylbenzene	50.0	47.8		ug/Kg		96	70 - 121		
Tetrachloroethene	50.0	48.8		ug/Kg		98	70 - 128		
Toluene	50.0	45.1		ug/Kg		90	70 - 125		
trans-1,2-Dichloroethene	50.0	43.0		ug/Kg		86	70 - 125		
trans-1,3-Dichloropropene	50.0	40.6		ug/Kg		81	62 - 128		
Trichloroethene	50.0	48.5		ug/Kg		97	70 - 125		
Trichlorofluoromethane	50.0	41.5		ug/Kg		83	70 - 126		
Vinyl chloride	50.0	47.6		ug/Kg		95	64 - 126		
Xylenes, Total	100	91.7		ug/Kg		92	70 - 125		

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	87		75 - 126
4-Bromofluorobenzene (Surr)	90		72 - 124
Dibromofluoromethane	94		75 - 120
Toluene-d8 (Surr)	96		75 - 120

**Lab Sample ID: LB 500-384086/1-A**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/08/17 23:25	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20
Benzene	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID:** LB 500-384086/1-A

**Matrix:** Solid

**Analysis Batch:** 384262

**Client Sample ID:** Method Blank  
**Prep Type:** TCLP

Analyte	LB		Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Carbon tetrachloride	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20
Chlorobenzene	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20
Chloroform	<0.020		20	0.040	0.020	mg/L		05/08/17 23:25	20
Tetrachloroethene	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20
Trichloroethene	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20
Vinyl chloride	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20

Surrogate	LB		Dil Fac				
	%Recovery	Qualifier	Limits	Prepared	Analyzed		
1,2-Dichloroethane-d4 (Surr)	104		20	75 - 126		05/08/17 23:25	
4-Bromofluorobenzene (Surr)	110		20	72 - 124		05/08/17 23:25	
Dibromofluoromethane	89		20	75 - 120		05/08/17 23:25	
Toluene-d8 (Surr)	97		20	75 - 120		05/08/17 23:25	

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

**Lab Sample ID:** MB 500-384171/1-A

**Matrix:** Solid

**Analysis Batch:** 384241

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 384171

Analyte	MB		Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
1,4-Dichlorobenzene	<0.0020		1	0.0020	0.0020	mg/L		05/08/17 07:42	05/08/17 15:01
2,4,5-Trichlorophenol	<0.010		1	0.010	0.010	mg/L		05/08/17 07:42	05/08/17 15:01
2,4,6-Trichlorophenol	<0.0050		1	0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 15:01
2,4-Dinitrotoluene	<0.0010		1	0.0010	0.0010	mg/L		05/08/17 07:42	05/08/17 15:01
2-Methylphenol	<0.0020		1	0.0020	0.0020	mg/L		05/08/17 07:42	05/08/17 15:01
3 & 4 Methylphenol	<0.0020		1	0.0020	0.0020	mg/L		05/08/17 07:42	05/08/17 15:01
Hexachlorobenzene	<0.00050		1	0.00050	0.00050	mg/L		05/08/17 07:42	05/08/17 15:01
Hexachlorobutadiene	<0.0050		1	0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 15:01
Hexachloroethane	<0.0050		1	0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 15:01
Nitrobenzene	<0.0010		1	0.0010	0.0010	mg/L		05/08/17 07:42	05/08/17 15:01
Pentachlorophenol	<0.020		1	0.020	0.020	mg/L		05/08/17 07:42	05/08/17 15:01
Pyridine	<0.020		1	0.020	0.020	mg/L		05/08/17 07:42	05/08/17 15:01

Surrogate	MB		Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	
2,4,6-Tribromophenol (Surr)	90		1	40 - 145	05/08/17 07:42	05/08/17 15:01	
2-Fluorobiphenyl	90		1	34 - 110	05/08/17 07:42	05/08/17 15:01	
2-Fluorophenol (Surr)	65		1	27 - 110	05/08/17 07:42	05/08/17 15:01	
Nitrobenzene-d5 (Surr)	97		1	36 - 120	05/08/17 07:42	05/08/17 15:01	
Phenol-d5 (Surr)	43		1	20 - 100	05/08/17 07:42	05/08/17 15:01	
Terphenyl-d14 (Surr)	107		1	40 - 145	05/08/17 07:42	05/08/17 15:01	

**Lab Sample ID:** LCS 500-384171/2-A

**Matrix:** Solid

**Analysis Batch:** 384241

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 384171

Analyte	Spike		Dil Fac				
	Added	Result	Qualifer	Unit	%Rec.	Limits	
1,4-Dichlorobenzene	0.0400	0.0322	81	mg/L	23 - 110		

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: LCS 500-384171/2-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384171**

**%Rec.**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
2,4,5-Trichlorophenol	0.0400	0.0388		mg/L		97	63 - 120
2,4,6-Trichlorophenol	0.0400	0.0393		mg/L		98	62 - 110
2,4-Dinitrotoluene	0.0400	0.0432		mg/L		108	63 - 122
2-Methylphenol	0.0400	0.0342		mg/L		86	53 - 110
3 & 4 Methylphenol	0.0400	0.0329		mg/L		82	53 - 110
Hexachlorobenzene	0.0400	0.0375		mg/L		94	61 - 120
Hexachlorobutadiene	0.0400	0.0315		mg/L		79	20 - 100
Hexachloroethane	0.0400	0.0314		mg/L		79	20 - 100
Nitrobenzene	0.0400	0.0359		mg/L		90	53 - 110
Pentachlorophenol	0.0800	0.0779		mg/L		97	23 - 129
Pyridine	0.0400	0.0259		mg/L		65	15 - 110

Surrogate	LCS	LCS	<b>Limits</b>
	<b>%Recovery</b>	<b>Qualifier</b>	
2,4,6-Tribromophenol (Surr)	98		40 - 145
2-Fluorobiphenyl	87		34 - 110
2-Fluorophenol (Surr)	61		27 - 110
Nitrobenzene-d5 (Surr)	92		36 - 120
Phenol-d5 (Surr)	44		20 - 100
Terphenyl-d14 (Surr)	103		40 - 145

**Lab Sample ID: LB 500-383992/1-B**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384171**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 14:34	1
2-Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 14:34	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 14:34	1
Pyridine	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 14:34	1

Surrogate	LB	LB	<b>Limits</b>	Prepared	Analyzed	Dil Fac
	<b>%Recovery</b>	<b>Qualifier</b>		Prepared	Analyzed	
2,4,6-Tribromophenol (Surr)	90		40 - 145	05/08/17 07:42	05/08/17 14:34	1
2-Fluorobiphenyl	84		34 - 110	05/08/17 07:42	05/08/17 14:34	1
2-Fluorophenol (Surr)	56		27 - 110	05/08/17 07:42	05/08/17 14:34	1
Nitrobenzene-d5 (Surr)	94		36 - 120	05/08/17 07:42	05/08/17 14:34	1
Phenol-d5 (Surr)	39		20 - 100	05/08/17 07:42	05/08/17 14:34	1
Terphenyl-d14 (Surr)	104		40 - 145	05/08/17 07:42	05/08/17 14:34	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: 500-127505-11 MS**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: GP-05 (6-8)**

**Prep Type: TCLP**

**Prep Batch: 384171**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,4-Dichlorobenzene	<0.020		0.400	0.325		mg/L	81	23 - 110	
2,4,5-Trichlorophenol	<0.10		0.400	0.399		mg/L	100	63 - 120	
2,4,6-Trichlorophenol	<0.050		0.400	0.383		mg/L	96	62 - 110	
2,4-Dinitrotoluene	<0.010		0.400	0.431		mg/L	108	63 - 122	
2-Methylphenol	<0.020		0.400	0.339		mg/L	85	53 - 110	
3 & 4 Methylphenol	<0.020		0.400	0.316		mg/L	79	53 - 110	
Hexachlorobenzene	<0.0050		0.400	0.375		mg/L	94	61 - 120	
Hexachlorobutadiene	<0.050		0.400	0.313		mg/L	78	20 - 100	
Hexachloroethane	<0.050		0.400	0.319		mg/L	80	20 - 100	
Nitrobenzene	<0.010		0.400	0.366		mg/L	91	53 - 110	
Pentachlorophenol	<0.20		0.800	0.777		mg/L	97	23 - 129	
Pyridine	<0.20		0.400	0.252		mg/L	63	15 - 110	
<b>Surrogate</b>		<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>					
2,4,6-Tribromophenol (Sur)	96			40 - 145					
2-Fluorobiphenyl	83			34 - 110					
2-Fluorophenol (Sur)	58			27 - 110					
Nitrobenzene-d5 (Sur)	90			36 - 120					
Phenol-d5 (Sur)	40			20 - 100					
Terphenyl-d14 (Sur)	104			40 - 145					

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID: MB 490-427841/40-A**

**Matrix: Solid**

**Analysis Batch: 428725**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<18		25	18	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Ethylbenzene	<19		25	19	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Naphthalene	<120		250	120	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Toluene	<17		25	17	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Xylenes, Total	<30		75	30	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Wisconsin GRO	<2500		5000	2500	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
<b>Surrogate</b>		<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>					
a,a,a-Trifluorotoluene	88			80 - 120					
a,a,a-Trifluorotoluene	98			80 - 120					

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID: LCS 490-427841/41-A**

**Matrix: Solid**

**Analysis Batch: 428725**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Benzene	5000	4490		ug/Kg		90	76 - 120	
Ethylbenzene	5000	4530		ug/Kg		91	77 - 120	
Methyl tert-butyl ether	5000	5200		ug/Kg		104	73 - 120	
1,2,4-Trimethylbenzene	5000	4540		ug/Kg		91	60 - 140	
Naphthalene	5000	5460		ug/Kg		109	74 - 127	
1,3,5-Trimethylbenzene	5000	4580		ug/Kg		92	74 - 133	
Toluene	5000	4540		ug/Kg		91	79 - 120	
Wisconsin GRO	50000	52600		ug/Kg		105	80 - 120	
<b>Surrogate</b>		<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
a,a,a-Trifluorotoluene		96		80 - 120				
a,a,a-Trifluorotoluene		102		80 - 120				

**Lab Sample ID: LCSD 490-427841/42-A**

**Matrix: Solid**

**Analysis Batch: 428725**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
Benzene	5000	4750		ug/Kg		95	76 - 120	6	27
Ethylbenzene	5000	4630		ug/Kg		93	77 - 120	2	49
Methyl tert-butyl ether	5000	5360		ug/Kg		107	73 - 120	3	31
1,2,4-Trimethylbenzene	5000	4700		ug/Kg		94	60 - 140	3	50
Naphthalene	5000	5190		ug/Kg		104	74 - 127	5	50
1,3,5-Trimethylbenzene	5000	4740		ug/Kg		95	74 - 133	4	42
Toluene	5000	4780		ug/Kg		96	79 - 120	5	37
Wisconsin GRO	50000	53700		ug/Kg		107	80 - 120	2	20
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>					
a,a,a-Trifluorotoluene		97		80 - 120					
a,a,a-Trifluorotoluene		99		80 - 120					

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID: LB3 500-384046/21-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<500		1500	500	ug/Kg		05/06/17 01:30	05/07/17 20:24	50

**Lab Sample ID: LCS 500-384046/23-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
WI Gasoline Range Organics (C5-C10)	20000	22800		ug/Kg		114	80 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Lab Sample ID: LCSD 500-384046/24-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD RPD	RPD Limit
WI Gasoline Range Organics (C5-C10)	20000	22900		ug/Kg		114	80 - 120	0	20

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 500-384456/1-A**

**Matrix: Solid**

**Analysis Batch: 3844545**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier	Limits						
PCB-1016	<5.9		17	5.9	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1221	<7.3		17	7.3	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1232	<7.3		17	7.3	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1242	<5.5		17	5.5	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1248	<6.6		17	6.6	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1254	<3.6		17	3.6	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1260	<8.2		17	8.2	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
Surrogate	MB %Recovery	MB Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
	76		49 - 129				05/09/17 16:38	05/10/17 11:02	1
Tetrachloro-m-xylene							05/09/17 16:38	05/10/17 11:02	1
DCB Decachlorobiphenyl	70		37 - 121						

**Lab Sample ID: LCS 500-384456/2-A**

**Matrix: Solid**

**Analysis Batch: 3844545**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	Dil Fac
PCB-1016	167	135		ug/Kg		81	57 - 120	
PCB-1260	167	130		ug/Kg		78	61 - 125	
Surrogate	%Recovery	Qualifier	Limits					
Tetrachloro-m-xylene	76		49 - 129					
DCB Decachlorobiphenyl	63		37 - 121					

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

**Lab Sample ID: MB 500-383737/1-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.6		4.0	1.6 mg/Kg		05/04/17 11:15	05/05/17 14:27	1
Surrogate	%Recovery	Qualifier	Limits					
n-Nonane	83		44 - 148			05/04/17 11:15	05/05/17 14:27	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC) (Continued)

**Lab Sample ID: LCS 500-383737/2-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
WI Diesel Range Organics (C10-C28)	20.0	14.9		mg/Kg		75	70 - 120
Surrogate	%Recovery	LCS Qualifier	Limits				Limits
n-Nonane	77		44 - 148				

**Lab Sample ID: LCSD 500-383737/3-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD
WI Diesel Range Organics (C10-C28)	20.0	16.3		mg/Kg		81	70 - 120	9
Surrogate	%Recovery	LCSD Qualifier	Limits				Limits	RPD
n-Nonane	71		44 - 148					20

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 500-383993/1-A**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 383993**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.23		0.50	0.23	mg/Kg		05/05/17 15:07	05/11/17 21:41	1

**Lab Sample ID: LCS 500-383993/2-A**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 383993**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Lead	10.0	8.59		mg/Kg		86	80 - 120

**Lab Sample ID: 500-127505-25 MS**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: GP-11 (6-8)**

**Prep Type: Total/NA**

**Prep Batch: 383993**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Lead	11		10.1	20.6		mg/Kg	⊗	90	75 - 125

**Lab Sample ID: 500-127505-25 MSD**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: GP-11 (6-8)**

**Prep Type: Total/NA**

**Prep Batch: 383993**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Lead	11		10.2	24.1		mg/Kg	⊗	124	75 - 125

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-127505-25 DU**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: GP-11 (6-8)**

**Prep Type: Total/NA**

**Prep Batch: 383993**

**RPD**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Lead	11		21.6	F3	mg/Kg	※	61	20

**Lab Sample ID: LCS 500-384187/2-A**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384187**

**%Rec.**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Arsenic	0.100	0.0958		mg/L	96	80 - 120	
Barium	0.500	0.514		mg/L	103	80 - 120	
Cadmium	0.0500	0.0503		mg/L	101	80 - 120	
Chromium	0.200	0.194		mg/L	97	80 - 120	
Copper	0.250	0.254		mg/L	102	80 - 120	
Lead	0.100	0.0943		mg/L	94	80 - 120	
Nickel	0.500	0.486		mg/L	97	80 - 120	
Selenium	0.100	0.0946		mg/L	95	80 - 120	
Silver	0.0500	0.0473		mg/L	95	80 - 120	
Zinc	0.500	0.457		mg/L	91	80 - 120	

**Lab Sample ID: LB 500-383992/1-C**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384187**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.010		0.050	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Barium	<0.050		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 20:33	1
Cadmium	<0.0020		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 20:33	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Copper	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Lead	<0.0075		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 20:33	1
Nickel	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 20:33	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Zinc	<0.020		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 20:33	1

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-384260/12-A**

**Matrix: Solid**

**Analysis Batch: 384394**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384260**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:03	1

**Lab Sample ID: LCS 500-384260/13-A**

**Matrix: Solid**

**Analysis Batch: 384394**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384260**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Mercury	0.00200	0.00212		mg/L	106	80 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Lab Sample ID: LB 500-383992/1-D**

**Matrix: Solid**

**Analysis Batch: 384394**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384260**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	D	05/08/17 13:40	05/09/17 10:06	1

## Method: 9014 - Cyanide

**Lab Sample ID: MB 500-384580/1-A**

**Matrix: Solid**

**Analysis Batch: 384641**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384580**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.17		0.50	0.17	mg/Kg	D	05/10/17 12:50	05/10/17 15:33	1

**Lab Sample ID: LCS 500-384580/2-A**

**Matrix: Solid**

**Analysis Batch: 384641**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384580**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Cyanide, Total	5.00	5.00		mg/Kg	D	100	80 - 120

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

**Lab Sample ID: MB 500-385245/1-A**

**Matrix: Solid**

**Analysis Batch: 385402**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 385245**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<4.7		10	4.7	mg/Kg	D	05/15/17 17:36	05/15/17 21:39	1

**Lab Sample ID: LCS 500-385245/2-A**

**Matrix: Solid**

**Analysis Batch: 385402**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 385245**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfide	338	335		mg/Kg	D	99	80 - 120

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-01 (0-2)**

Date Collected: 05/01/17 08:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

**Client Sample ID: GP-01 (0-2)**

Date Collected: 05/01/17 08:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-1**

Matrix: Solid

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/09/17 23:35	FKG	TAL NSH

**Client Sample ID: GP-01 (6-8)**

Date Collected: 05/01/17 08:45

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

**Client Sample ID: GP-01 (6-8)**

Date Collected: 05/01/17 08:45

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-2**

Matrix: Solid

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 00:02	FKG	TAL NSH

**Client Sample ID: GP-02 (2-4)**

Date Collected: 05/01/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

**Client Sample ID: GP-02 (2-4)**

Date Collected: 05/01/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-3**

Matrix: Solid

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 00:28	FKG	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-02 (6-8)**

Date Collected: 05/01/17 09:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-02 (6-8)**

Date Collected: 05/01/17 09:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-4**

Matrix: Solid

Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 00:55	FKG	TAL NSH

## **Client Sample ID: GP-02 (14-16)**

Date Collected: 05/01/17 09:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-5**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-02 (14-16)**

Date Collected: 05/01/17 09:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-5**

Matrix: Solid

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 08:30	FKG	TAL NSH

## **Client Sample ID: GP-03 (2-4)**

Date Collected: 05/01/17 10:10

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-6**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-03 (2-4)**

Date Collected: 05/01/17 10:10

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-6**

Matrix: Solid

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 10:10	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 12:30	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 21:48	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-03 (6-8)**

**Date Collected:** 05/01/17 10:15  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-7**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-03 (6-8)**

**Date Collected:** 05/01/17 10:15  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-7**

**Matrix:** Solid  
**Percent Solids:** 87.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 10:15	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 12:59	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 21:52	PJ1	TAL CHI

## **Client Sample ID: GP-04 (2-4)**

**Date Collected:** 05/01/17 10:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-8**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-04 (2-4)**

**Date Collected:** 05/01/17 10:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-8**

**Matrix:** Solid  
**Percent Solids:** 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 10:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 13:28	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 21:56	PJ1	TAL CHI

## **Client Sample ID: GP-04 (6-8)**

**Date Collected:** 05/01/17 10:40  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-9**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-04 (6-8)**

**Date Collected:** 05/01/17 10:40  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-9**

**Matrix:** Solid  
**Percent Solids:** 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 10:40	WRE	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-04 (6-8)

Date Collected: 05/01/17 10:40  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-9

Matrix: Solid  
Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	385134	05/15/17 13:58	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:01	PJ1	TAL CHI

## Client Sample ID: GP-05 (2-4)

Date Collected: 05/01/17 11:00  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## Client Sample ID: GP-05 (2-4)

Date Collected: 05/01/17 11:00  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-10

Matrix: Solid  
Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 11:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 14:27	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:05	PJ1	TAL CHI

## Client Sample ID: GP-05 (6-8)

Date Collected: 05/01/17 11:10  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			384086	05/06/17 13:35	RMP	TAL CHI
TCLP	Analysis	8260B		20	384262	05/09/17 00:42	JMP	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3510C			384171	05/08/17 07:42	JJH	TAL CHI
TCLP	Analysis	8270D		1	384241	05/08/17 15:28	GES	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3010A			384187	05/08/17 08:10	JEF	TAL CHI
TCLP	Analysis	6010B		1	384328	05/08/17 21:40	PJ1	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	7470A			384260	05/08/17 13:40	MJD	TAL CHI
TCLP	Analysis	7470A		1	384394	05/09/17 10:12	MJD	TAL CHI
Total/NA	Analysis	1010		1	384856		ADK	TAL CHI
					(Start) 05/11/17 16:20			
					(End) 05/11/17 18:10			
Total/NA	Prep	9010B			384580	05/10/17 12:50	MAN	TAL CHI
Total/NA	Analysis	9014		1	384641		MAN	TAL CHI
					(Start) 05/10/17 15:36			
					(End) 05/10/17 15:37			

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			385245	05/15/17 17:36	JBJ	TAL CHI
Total/NA	Analysis	9034		1	385402	05/15/17 21:48	JBJ	TAL CHI
Total/NA	Analysis	9045C		1	384553	(Start) 05/09/17 16:02	SMO	TAL CHI
						(End) 05/09/17 16:04		
Total/NA	Analysis	9095A		1	384855		ADK	TAL CHI
						(Start) 05/11/17 22:39		
						(End) 05/11/17 22:41		
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI
Total/NA	Analysis	SM 2710F		1	385047		ADK	TAL CHI
						(Start) 05/12/17 22:07		
						(End) 05/12/17 22:11		

**Client Sample ID: GP-05 (6-8)**

Date Collected: 05/01/17 11:10

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-11**

Matrix: Solid

Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			384046	05/01/17 11:10	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 14:56	TCT	TAL CHI
Total/NA	Prep	WI GRO			384046	05/01/17 11:10	WRE	TAL CHI
Total/NA	Analysis	WI-GRO		50	384093	05/07/17 21:31	WRE	TAL CHI
Total/NA	Prep	3541			384456	05/09/17 16:38	JP1	TAL CHI
Total/NA	Analysis	8082A		1	384545	05/10/17 13:35	BJH	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 15:38	SAW	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:09	PJ1	TAL CHI

**Client Sample ID: GP-05 (14-16)**

Date Collected: 05/01/17 11:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-12**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

**Client Sample ID: GP-05 (14-16)**

Date Collected: 05/01/17 11:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-12**

Matrix: Solid

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 11:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 15:25	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:14	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-06 (2-4)**

Date Collected: 05/01/17 12:00  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-13**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-06 (2-4)**

Date Collected: 05/01/17 12:00  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-13**

Matrix: Solid

Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 01:22	FKG	TAL NSH

## **Client Sample ID: GP-06 (6-8)**

Date Collected: 05/01/17 12:05  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-14**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-06 (6-8)**

Date Collected: 05/01/17 12:05  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-14**

Matrix: Solid

Percent Solids: 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 01:49	FKG	TAL NSH

## **Client Sample ID: GP-07 (2-4)**

Date Collected: 05/01/17 12:30  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-15**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-07 (2-4)**

Date Collected: 05/01/17 12:30  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-15**

Matrix: Solid

Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 02:15	FKG	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			384086	05/06/17 13:35	RMP	TAL CHI
TCLP	Analysis	8260B		20	384262	05/09/17 01:09	JMP	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3510C			384171	05/08/17 07:42	JJH	TAL CHI
TCLP	Analysis	8270D		1	384241	05/08/17 17:46	GES	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3010A			384187	05/08/17 08:10	JEF	TAL CHI
TCLP	Analysis	6010B		1	384328	05/08/17 21:45	PJ1	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	7470A			384260	05/08/17 13:40	MJD	TAL CHI
TCLP	Analysis	7470A		1	384394	05/09/17 10:13	MJD	TAL CHI
Total/NA	Analysis	1010		1	384856		ADK	TAL CHI
					(Start) 05/11/17 18:10			
					(End) 05/11/17 20:00			
Total/NA	Prep	9010B			384580	05/10/17 12:50	MAN	TAL CHI
Total/NA	Analysis	9014		1	384641		MAN	TAL CHI
					(Start) 05/10/17 15:37			
					(End) 05/10/17 15:37			
Total/NA	Prep	9030B			385245	05/15/17 17:36	JBJ	TAL CHI
Total/NA	Analysis	9034		1	385402	05/15/17 21:49	JBJ	TAL CHI
Total/NA	Analysis	9045C		1	384553		SMO	TAL CHI
					(Start) 05/09/17 16:04			
					(End) 05/09/17 16:06			
Total/NA	Analysis	9095A		1	384855		ADK	TAL CHI
					(Start) 05/11/17 22:41			
					(End) 05/11/17 22:43			
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI
Total/NA	Analysis	SM 2710F		1	385047		ADK	TAL CHI
					(Start) 05/12/17 22:11			
					(End) 05/12/17 22:15			

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 02:42	FKG	TAL NSH
Total/NA	Prep	3541			384456	05/09/17 16:38	JP1	TAL CHI
Total/NA	Analysis	8082A		1	384545	05/10/17 13:50	BJH	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 16:14	SAW	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-07 (14-16)**

**Date Collected:** 05/01/17 12:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-17**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-07 (14-16)**

**Date Collected:** 05/01/17 12:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-17**

**Matrix:** Solid  
**Percent Solids:** 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 03:09	FKG	TAL NSH

## **Client Sample ID: GP-08 (2-4)**

**Date Collected:** 05/01/17 13:45  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-18**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-08 (2-4)**

**Date Collected:** 05/01/17 13:45  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-18**

**Matrix:** Solid  
**Percent Solids:** 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 08:04	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:19	PJ1	TAL CHI

## **Client Sample ID: GP-08 (6-8)**

**Date Collected:** 05/01/17 13:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-19**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-08 (6-8)**

**Date Collected:** 05/01/17 13:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-19**

**Matrix:** Solid  
**Percent Solids:** 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 03:36	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-08 (6-8)**

Date Collected: 05/01/17 13:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-19**

Matrix: Solid

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	384865	05/11/17 22:31	PJ1	TAL CHI

## **Client Sample ID: GP-09 (2-4)**

Date Collected: 05/01/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-20**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-09 (2-4)**

Date Collected: 05/01/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-20**

Matrix: Solid

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 05:23	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:35	PJ1	TAL CHI

## **Client Sample ID: GP-09 (6-8)**

Date Collected: 05/01/17 14:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-21**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-09 (6-8)**

Date Collected: 05/01/17 14:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-21**

Matrix: Solid

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 05:50	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:40	PJ1	TAL CHI

## **Client Sample ID: GP-10 (2-4)**

Date Collected: 05/01/17 14:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-22**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-10 (2-4)**

Date Collected: 05/01/17 14:35  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-22**

Matrix: Solid  
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 06:16	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:44	PJ1	TAL CHI

## **Client Sample ID: GP-10 (6-8)**

Date Collected: 05/01/17 14:40  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-23**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-10 (6-8)**

Date Collected: 05/01/17 14:40  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-23**

Matrix: Solid  
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 06:43	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:47	PJ1	TAL CHI

## **Client Sample ID: GP-11 (2-4)**

Date Collected: 05/01/17 15:00  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-24**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-11 (2-4)**

Date Collected: 05/01/17 15:00  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-24**

Matrix: Solid  
Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 07:10	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:50	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			384086	05/06/17 13:35	RMP	TAL CHI
TCLP	Analysis	8260B		20	384262	05/09/17 01:35	JMP	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3510C			384171	05/08/17 07:42	JJH	TAL CHI
TCLP	Analysis	8270D		1	384241	05/08/17 18:13	GES	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3010A			384187	05/08/17 08:10	JEF	TAL CHI
TCLP	Analysis	6010B		1	384328	05/08/17 21:50	PJ1	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	7470A			384260	05/08/17 13:40	MJD	TAL CHI
TCLP	Analysis	7470A		1	384394	05/09/17 10:15	MJD	TAL CHI
Total/NA	Analysis	1010		1	384856		ADK	TAL CHI
					(Start) 05/11/17 20:00			
					(End) 05/11/17 21:50			
Total/NA	Prep	9010B			384580	05/10/17 12:50	MAN	TAL CHI
Total/NA	Analysis	9014		1	384641		MAN	TAL CHI
					(Start) 05/10/17 15:37			
					(End) 05/10/17 15:37			
Total/NA	Prep	9030B			385245	05/15/17 17:36	JBJ	TAL CHI
Total/NA	Analysis	9034		1	385402	05/15/17 21:51	JBJ	TAL CHI
Total/NA	Analysis	9045C		1	384553		SMO	TAL CHI
					(Start) 05/09/17 16:06			
					(End) 05/09/17 16:08			
Total/NA	Analysis	9095A		1	384855		ADK	TAL CHI
					(Start) 05/11/17 22:43			
					(End) 05/11/17 22:45			
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI
Total/NA	Analysis	SM 2710F		1	385047		ADK	TAL CHI
					(Start) 05/12/17 22:15			
					(End) 05/12/17 22:19			

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 07:37	FKG	TAL NSH
Total/NA	Prep	3541			384456	05/09/17 16:38	JP1	TAL CHI
Total/NA	Analysis	8082A		1	384545	05/10/17 14:06	BJH	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 16:49	SAW	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:53	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: Trip Blank

Date Collected: 05/01/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## Client Sample ID: Trip Blank

Date Collected: 05/01/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-26

Matrix: Solid

Percent Solids: 100.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 15:55	TCT	TAL CHI

### Laboratory References:

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

## Accreditation/Certification Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

### Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

### Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998020430	08-31-17

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To	(optional)
Contact:	
Company:	
Address:	
Address:	
Phone:	
Fax:	
E-Mail:	

Bill To	(optional)
Contact:	
Company:	
Address:	
Address:	
Phone:	
Fax:	
PO#/Reference#	

## Chain of Custody Record

Lab Job #: 500-127505

Chain of Custody Number: \_\_\_\_\_

Page 1 of 3 (3.9)(3.3)

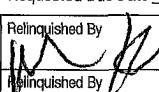
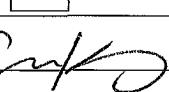
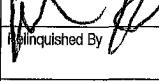
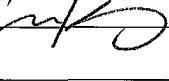
Temperature °C of Cooler: \_\_\_\_\_

- Preservative Key
1. HCl, Cool to 4°
  2. H2SO4, Cool to 4°
  3. HNO3, Cool to 4°
  4. NaOH, Cool to 4°
  5. NaOH/Zn, Cool to 4°
  6. NaHSO4
  7. Cool to 4°
  8. None
  9. Other

Client ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Preservative	1	1	8	Vol S	Lead	Comments
			Date	Time									
1		GP-01 (0-2)	5/1	835	2	S	X						
2		GP-01 (6-8)		845	2		X						
3		GP-02 (2-4)		915	2		X						
4		GP-02 (6-8)		925	2		X						
5		GP-02 (14-16)		930	2		X						
6		GP-03 (2-4)		1010	3		X						
7		GP-03 (6-8)		1015	3		X						
8		GP-04 (2-4)		1035	3		X						
9		GP-04 (6-8)		1040	3		X						
10		GP-05 (2-4)		1100	3		X						

Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company <u>TRC</u>	Date <u>5/01/17</u>	Time <u>1630</u>	Received By 	Company <u>TA</u>	Date <u>05/03/17</u>	Time <u>0900</u>	Lab Courier <input type="checkbox"/>
Relinquished By 	Company	Date	Time	Received By 	Company	Date	Time	Shipped <input type="checkbox"/>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered <input type="checkbox"/>

Matrix Key  
WW - Wastewater  
W - Water  
S - Soil  
SL - Sludge  
MS - Miscellaneous  
OL - Oil  
A - Air  
SE - Sediment  
SO - Soil  
L - Leachate  
WI - Wipe  
DW - Drinking Water  
O - Other

Client Comments

Lab Comments:



500-127505 COC

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60464  
Phone: 708.534.5200 Fax: 708.534.5211

Report To	(optional)
Contact:	
Company:	
Address:	
Address:	
Phone:	
Fax:	
E-Mail:	

Bill To	(optional)
Contact:	
Company:	
Address:	
Address:	
Phone:	
Fax:	
PO#/Reference#	

## Chain of Custody Record

Lab Job #: 500-127505

Chain of Custody Number:

Page 2 of 3

Temperature °C of Cooler:

- Preservative Key
1. HCl, Cool to 4°
  2. H2SO4, Cool to 4°
  3. HNO3, Cool to 4°
  4. NaOH, Cool to 4°
  5. NaOH/Zn, Cool to 4°
  6. NaHSO4
  7. Cool to 4°
  8. None
  9. Other

Client ID	Client Project #	Preservative	Parameter								Comments
			# of Containers	Matrix	PVCs + Nap	VOCs	Lead	GRO	DEO	Protocol B	
11	GP-05 (6-8)	5/01	1110	4	S	X	X	X	X	X	
12	GP-05 (14-16)		1120	3		X	X				
13	GP-06 (2-4)		1200	2		X					
14	GP-06 (6-8)		1205	2		X					
15	GP-07 (2-4)		1230	2		X					
16	GP-07 (6-8)		1235	4		X			X	X	
17	GP-07 (14-16)		1250	2		X					
18	GP-08 (2-4)		1345	3		X		X			
19	GP-08 (6-8)		1350	3		X		X			
20	GP-09 (2-4)		1420	3		X		X			

Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company TRC	Date 5/01/17	Time 1630	Received By 	Company TA	Date 05/03/17	Time 0900	Lab Courier <input type="checkbox"/>
Relinquished By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Shipped <input type="checkbox"/>
Relinquished By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Hand Delivered <input type="checkbox"/>

Matrix Key WW - Wastewater W - Water S - Soil SL - Sludge MS - Miscellaneous OL - Oil A - Air	Client Comments	Lab Comments:
--	-----------------	---------------

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To Contact: _____	(optional)	Bill To Contact: _____	(optional)
Company: _____		Company: _____	
Address: _____		Address: _____	
Address: _____		Address: _____	
Phone: _____		Phone: _____	
Fax: _____		Fax: _____	
E-Mail: _____		PO#/Reference# _____	

## ***Chain of Custody Record***

Lab Job #: 500-127505

Chain of Custody Number:

Page 3 of 3

Temperature °C of Cooler:

### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
Requested Due Date

## Sample Disposal

[Return to Client](#)

#### Disposal by Lab

Archive for Months

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company TRE	Date 5/01/17	Time 1630	Received By 	Company TA	Date 05/03/17	Time 0900	Lab Courier <input type="text"/>
Relinquished By 	Company <input type="text"/>	Date <input type="text"/>	Time <input type="text"/>	Received By 	Company <input type="text"/>	Date <input type="text"/>	Time <input type="text"/>	Shipped <input type="text"/>
Relinquished By 	Company <input type="text"/>	Date <input type="text"/>	Time <input type="text"/>	Received By 	Company <input type="text"/>	Date <input type="text"/>	Time <input type="text"/>	Hand Delivered <input type="text"/>

Matrix Key	
WW - Wastewater	SE - Sediment
W - Water	SO - Soil
S - Soil	L - Leachate
SL - Sludge	WI - Wipe
MS - Miscellaneous	DW - Drinking Wa
OL - Oil	O - Other
A - Air	

## **Client Comments**

**Lab Comments:**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16

PRINT USING THIS PAGE

ORIGIN/ARRLIA (262) 901-2153  
MIRANDA KARRIAS  
TRC ENVIRONMENTAL  
150 N PATRICK BLVD, SUITE 180  
BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DATE: 01 MAY 17  
ACTWT: 25.00 LB  
CAD: 110326482INET3850  
BILL RECIPIENT

ORIGIN/ARRLIA (262) 901-2153  
MIRANDA KARRIAS  
TRC ENVIRONMENTAL  
150 N PATRICK BLVD, SUITE 180  
BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DATE: 01 MAY 17  
ACTWT: 25.00 LB  
CAD: 110326482INET3850  
BILL RECIPIENT

TO ATTN: SAMPLE RECEIVING  
TEST AMERICA - CHICAGO

2417 BOND ST



UNIVERSITY PARK IL 60484

(708) 534-5200

REF:

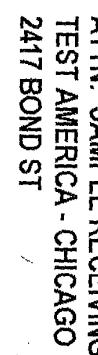
DEPT:

500-127505 Waybill  
PO:

546J1873453C1

TO ATTN: SAMPLE RECEIVING  
TEST AMERICA - CHICAGO

2417 BOND ST



UNIVERSITY PARK IL 60484

(708) 534-5200

REF:

DEPT:

PO:

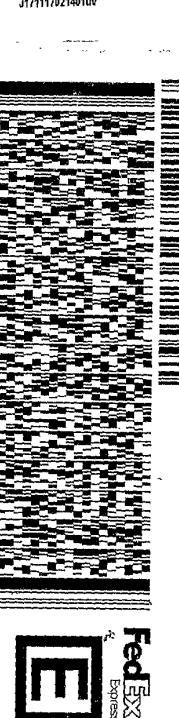
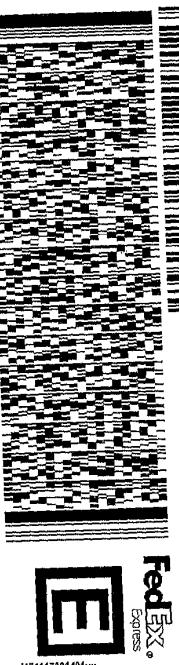
546J1873453C1

TUE - 02 MAY 10:30A  
1 of 2  
PRIORITY OVERNIGHT

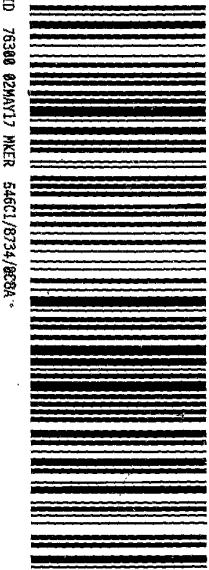
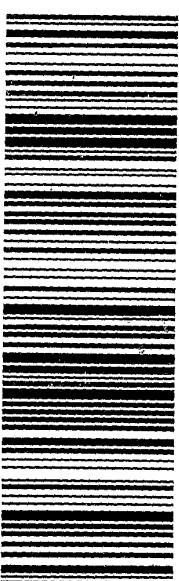
REF: 0263  
MPS# 7790 3027 6782  
Mstr# 7790 3027 5856  
0201

TUE - 02 MAY 10:30A  
2 of 2  
PRIORITY OVERNIGHT

60484  
IL-JUS  
ORD



79 JOTA  
60484  
IL-JUS  
ORD



FID 76300 02MAY17 MKER 546C1/8734/08284



THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN

## COOLER RECEIPT FORM



Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 13:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front / back

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) HG

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 # \_\_\_\_\_

I certify that I unloaded the cooler and answered questions 7-14 (initial) SJ

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) SJ

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) SJ

I certify that I attached a label with the unique LIMS number to each container (initial) SJ

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES  NO # \_\_\_\_\_





THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN



500-127505-02 Chain of Custody

## COOLER RECEIPT FORM

Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 13:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front/back

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) HG

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 # B

I certify that I unloaded the cooler and answered questions 7-14 (initial) B

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) B

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) B

I certify that I attached a label with the unique LIMS number to each container (initial) B

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO # \_\_\_\_\_

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16

## TestAmerica Chicago

2417 Bond Street  
University Park, IL 60484  
Phone (708) 534-5200 Fax (708) 534-5211

## Chain of Custody Record

Loc: 500  
**127505**

TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information (Sub Contract Lab)</b>		Sampler:	Lab P/M: Frederick, Sandie J	COC No.: 500-86708-2						
Client Contact:		Phone:	E-Mail: sample.frederick@testamericainc.com	Page: 2 of 2						
Company: TestAmerica Laboratories, Inc		Address:	Accredited Laboratories Required (See note): State Program - Wisconsin	Job #: 500-127505-1						
2960 Foster Creighton Drive, Nashville State Zip: TN, 37204		Due Date Requested:	TAT Requested (days): 5/4/2017	<b>Analysis Requested</b>						
Phone: 615-726-0177(Tel) 615-726-3404(Fax) Email: Project Name: STH 11 Kentucky to Kearney - 275788 Site:		PO #:	NO #:							
		SSOW#:								
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab, B=brng, A=At)	Matrix (W=water, S=solid, G=gaseous, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Moisture/ Percent Moisture/Solids	WI_GRO/WIGRO_P_FM PVOC+NAP	Total Number of containers	Special Instructions/Note:
GP-07 (14-16) (500-127505-17)	5/1/17	12:50	Solid	X	X					
GP-08 (2-4) (500-127505-18)	5/1/17	13:45	Solid	X	X					2
GP-08 (6-8) (500-127505-19)	5/1/17	13:50	Solid	X	X					2
GP-09 (2-4) (500-127505-20)	5/1/17	14:20	Solid	X	X					2
GP-09 (6-8) (500-127505-21)	5/1/17	14:25	Solid	X	X					2
GP-10 (2-4) (500-127505-22)	5/1/17	14:35	Solid	X	X					2
GP-10 (6-8) (500-127505-23)	5/1/17	14:40	Solid	X	X					2
GP-11 (2-4) (500-127505-24)	5/1/17	15:00	Solid	X	X					2
GP-11 (6-8) (500-127505-25)	5/1/17	15:05	Solid	X	X					1
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analytic & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I										
<b>Possible Hazard Identification</b>		<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>								
<i>Unconfirmed</i>		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal/By Lab <input type="checkbox"/> Archive For Months								
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2								
Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		Special Instructions/QC Requirements:				
Relinquished by: <i>S. J.</i>		DateTime: 05/03/17 16:00	Company: TA	Received by:	Date/Time:	Company				
Relinquished by:		Date/Time:	Company	Received by:	Date/Time:	Company				
Custody Seals intact:		Date/Time: 05/03/17 20:46 Company: TAN								
△ Yes △ No		Cooler Temperature(s) °C and other remarks:								

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127505-1

**Login Number:** 127505

**List Source:** TestAmerica Chicago

**List Number:** 1

**Creator:** Kelsey, Shawn M

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		6
The cooler's custody seal, if present, is intact.	True		7
Sample custody seals, if present, are intact.	True		8
The cooler or samples do not appear to have been compromised or tampered with.	True		9
Samples were received on ice.	True		10
Cooler Temperature is acceptable.	True		11
Cooler Temperature is recorded.	True	(3.9)(3.3)c	12
COC is present.	True		13
COC is filled out in ink and legible.	True		14
COC is filled out with all pertinent information.	True		15
Is the Field Sampler's name present on COC?	True		16
There are no discrepancies between the containers received and the COC.	True		
Samples are received within Holding Time (excluding tests with immediate HTs)	True		
Sample containers have legible labels.	True		
Containers are not broken or leaking.	True		
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	True		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127505-1

**Login Number:** 127505

**List Number:** 2

**Creator:** Shaw, Rashard M

**List Source:** TestAmerica Nashville

**List Creation:** 05/04/17 02:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127505-1

**Login Number:** 127505

**List Number:** 3

**Creator:** Shaw, Rashard M

**List Source:** TestAmerica Nashville

**List Creation:** 05/04/17 02:20 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-127508-1

Client Project/Site: STH 11 Kentucky to Kearney - 275788

For:

TRC Environmental Corporation.

150 N. Patrick Blvd.

Suite 180

Brookfield, Wisconsin 53045

Attn: Mr. Bryan Bergmann

Sandie Fredrick

Authorized for release by:

5/17/2017 4:26:59 PM

Sandie Fredrick, Project Manager II

(920)261-1660

[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://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
Case Narrative .....	3
Detection Summary .....	4
Method Summary .....	8
Sample Summary .....	9
Client Sample Results .....	10
Subcontract Data .....	35
Definitions .....	36
QC Association .....	37
Surrogate Summary .....	45
QC Sample Results .....	48
Chronicle .....	62
Certification Summary .....	75
Chain of Custody .....	76
Receipt Checklists .....	87

# Case Narrative

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Job ID: 500-127508-1

### Laboratory: TestAmerica Chicago

#### Narrative

##### Job Narrative 500-127508-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 5/3/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.2° C and 5.4° C.

#### GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for the soil preparation batch 384046 recovered outside control limits for 12 analytes. These analytes were biased high in the preparation batch LCS, but were within limits in the analytical batch LCS; therefore, the data has been reported.

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

#### GC/MS Semi VOA

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

#### GC VOA

Method(s) WI-GRO: The continuing calibration verification (CCV) associated with batch 490-428992 recovered above the upper control limit for Naphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCV 490-428992/15).

Method(s) WI-GRO: Surrogate recovery for the following sample was outside control limits: GP-21 (6-8) (500-127508-21). Evidence of matrix interference is present; 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.

#### GC Semi VOA

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

#### Metals

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

#### General Chemistry

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

#### Subcontract non-Sister

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

#### Organic Prep

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

#### VOA Prep

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

#### Subcontract Work

Method % Chlorine: This method was subcontracted to SF Analytical Laboratories. The subcontract laboratory certification is different from that of the facility issuing the final report.

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-12 (2-4)

## Lab Sample ID: 500-127508-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	19	F1	0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-12 (6-8)

## Lab Sample ID: 500-127508-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	36		31	18	ug/Kg	1	⊗	WDNR	Total/NA
Lead	9.7		0.57	0.26	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-13 (2-4)

## Lab Sample ID: 500-127508-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	16		0.58	0.27	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-13 (6-8)

## Lab Sample ID: 500-127508-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-14 (2-4)

## Lab Sample ID: 500-127508-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	51		18	11	ug/Kg	50	⊗	8260B	Total/NA
Lead	15		0.58	0.27	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-14 (6-8)

## Lab Sample ID: 500-127508-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	16		0.65	0.30	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-15 (2-4)

## Lab Sample ID: 500-127508-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.8		0.49	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-15 (6-8)

## Lab Sample ID: 500-127508-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.5		0.51	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-16 (2-4)

## Lab Sample ID: 500-127508-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	22	J	30	18	ug/Kg	1	⊗	WDNR	Total/NA
Lead	16		0.56	0.26	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-16 (6-8)

## Lab Sample ID: 500-127508-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.5		0.56	0.26	mg/Kg	1	⊗	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-17 (2-4)

## Lab Sample ID: 500-127508-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.1		0.51	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-17 (6-8)

## Lab Sample ID: 500-127508-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.6		0.57	0.27	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-18 (2-4)

## Lab Sample ID: 500-127508-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	10		0.48	0.22	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-18 (6-8)

## Lab Sample ID: 500-127508-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.3		0.51	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-19 (2-4)

## Lab Sample ID: 500-127508-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	23		0.45	0.21	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-19 (6-8)

## Lab Sample ID: 500-127508-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		0.58	0.27	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-20 (2-4)

## Lab Sample ID: 500-127508-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	16	J	27	16	ug/Kg	1	⊗	WDNR	Total/NA

## Client Sample ID: GP-20 (6-8)

## Lab Sample ID: 500-127508-18

No Detections.

## Client Sample ID: GP-20 (14-16)

## Lab Sample ID: 500-127508-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	79		30	21	ug/Kg	1	⊗	WDNR	Total/NA
Naphthalene	440		300	140	ug/Kg	1	⊗	WDNR	Total/NA
1,3,5-Trimethylbenzene	25	J	30	18	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	36	J	89	36	ug/Kg	1	⊗	WDNR	Total/NA

## Client Sample ID: GP-21 (2-4)

## Lab Sample ID: 500-127508-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	94		31	22	ug/Kg	1	⊗	WDNR	Total/NA
Ethylbenzene	35		31	24	ug/Kg	1	⊗	WDNR	Total/NA
Methyl tert-butyl ether	160		31	15	ug/Kg	1	⊗	WDNR	Total/NA
Naphthalene	510		310	150	ug/Kg	1	⊗	WDNR	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-21 (2-4) (Continued)

## Lab Sample ID: 500-127508-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	25	J	31	21	ug/Kg	1	⊗	WDNR	Total/NA
1,2,4-Trimethylbenzene	62		31	19	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	61	J	94	37	ug/Kg	1	⊗	WDNR	Total/NA

## Client Sample ID: GP-21 (6-8)

## Lab Sample ID: 500-127508-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2600		31	19	ug/Kg	1	⊗	WDNR	Total/NA
1,3,5-Trimethylbenzene	1000		31	19	ug/Kg	1	⊗	WDNR	Total/NA
Benzene	610		31	23	ug/Kg	1	⊗	WDNR	Total/NA
Ethylbenzene	7200		31	24	ug/Kg	1	⊗	WDNR	Total/NA
Methyl tert-butyl ether	17	J	31	15	ug/Kg	1	⊗	WDNR	Total/NA
Naphthalene	55000		6300	3000	ug/Kg	20	⊗	WDNR	Total/NA
Toluene	590		31	21	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	2500		94	38	ug/Kg	1	⊗	WDNR	Total/NA
Wisconsin GRO	2000000		130000	63000	ug/Kg	20	⊗	WDNR	Total/NA

## Client Sample ID: GP-22 (2-4)

## Lab Sample ID: 500-127508-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	91		33	20	ug/Kg	1	⊗	WDNR	Total/NA
Lead	44		0.50	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-22 (6-8)

## Lab Sample ID: 500-127508-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.4		0.48	0.22	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-23 (2-4)

## Lab Sample ID: 500-127508-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.9		0.51	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-23 (6-8)

## Lab Sample ID: 500-127508-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	170	J	290	140	ug/Kg	1	⊗	WDNR	Total/NA
Lead	7.7		0.50	0.23	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.44	J	0.50	0.050	mg/L	1		6010B	TCLP
Nickel	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Flashpoint	>176		40.0	40.0	Degrees F	1		1010	Total/NA
Cyanide, Total	0.28	J	0.41	0.14	mg/Kg	1		9014	Total/NA
pH	9.0		0.2	0.2	SU	1		9045C	Total/NA
Paint Filter	PASS				No Unit	1		9095A	Total/NA
Specific Gravity	2.2442				NONE	1		SM 2710F	Total/NA

## Client Sample ID: GP-24 (2-4)

## Lab Sample ID: 500-127508-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	27	V F1	0.54	0.25	mg/Kg	1	⊗	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

### **Client Sample ID: GP-24 (6-8)**

### **Lab Sample ID: 500-127508-27**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		0.53	0.25	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-25 (2-4)**

### **Lab Sample ID: 500-127508-28**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	15		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-25 (6-8)**

### **Lab Sample ID: 500-127508-29**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	120		72	28	ug/Kg	50	⊗	8260B	Total/NA
Naphthalene	150	*	72	24	ug/Kg	50	⊗	8260B	Total/NA
N-Propylbenzene	620		72	30	ug/Kg	50	⊗	8260B	Total/NA
WI Gasoline Range Organics (C5-C10)	350000		43000	14000	ug/Kg	1000	⊗	WI-GRO	Total/NA
WI Diesel Range Organics (C10-C28)	22		7.0	2.8	mg/Kg	1	⊗	WI-DRO	Total/NA
Lead	26		0.55	0.26	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: Trip Blank**

### **Lab Sample ID: 500-127508-30**

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
WI-GRO	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL CHI
9014	Cyanide	SW846	TAL CHI
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL CHI
9045C	pH	SW846	TAL CHI
9095A	Paint Filter	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL NSH
Moisture	Percent Moisture	EPA	TAL CHI
SM 2710F	Specific Gravity, Density	SM	TAL CHI
% Chlorine	General Sub Contract Method	NONE	SFAL

**Protocol References:**

EPA = US Environmental Protection Agency

NONE = NONE

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

**Laboratory References:**

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Sample Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
500-127508-1	GP-12 (2-4)	Solid	05/02/17 08:25	05/03/17 09:00	1
500-127508-2	GP-12 (6-8)	Solid	05/02/17 08:30	05/03/17 09:00	2
500-127508-3	GP-13 (2-4)	Solid	05/02/17 09:15	05/03/17 09:00	3
500-127508-4	GP-13 (6-8)	Solid	05/02/17 09:20	05/03/17 09:00	4
500-127508-5	GP-14 (2-4)	Solid	05/02/17 09:30	05/03/17 09:00	5
500-127508-6	GP-14 (6-8)	Solid	05/02/17 09:35	05/03/17 09:00	6
500-127508-7	GP-15 (2-4)	Solid	05/02/17 09:55	05/03/17 09:00	7
500-127508-8	GP-15 (6-8)	Solid	05/02/17 10:00	05/03/17 09:00	8
500-127508-9	GP-16 (2-4)	Solid	05/02/17 10:30	05/03/17 09:00	9
500-127508-10	GP-16 (6-8)	Solid	05/02/17 10:35	05/03/17 09:00	10
500-127508-11	GP-17 (2-4)	Solid	05/02/17 10:50	05/03/17 09:00	11
500-127508-12	GP-17 (6-8)	Solid	05/02/17 10:55	05/03/17 09:00	12
500-127508-13	GP-18 (2-4)	Solid	05/02/17 11:25	05/03/17 09:00	13
500-127508-14	GP-18 (6-8)	Solid	05/02/17 11:30	05/03/17 09:00	14
500-127508-15	GP-19 (2-4)	Solid	05/02/17 11:50	05/03/17 09:00	15
500-127508-16	GP-19 (6-8)	Solid	05/02/17 11:55	05/03/17 09:00	16
500-127508-17	GP-20 (2-4)	Solid	05/02/17 12:20	05/03/17 09:00	17
500-127508-18	GP-20 (6-8)	Solid	05/02/17 12:25	05/03/17 09:00	18
500-127508-19	GP-20 (14-16)	Solid	05/02/17 12:30	05/03/17 09:00	19
500-127508-20	GP-21 (2-4)	Solid	05/02/17 12:50	05/03/17 09:00	20
500-127508-21	GP-21 (6-8)	Solid	05/02/17 12:55	05/03/17 09:00	21
500-127508-22	GP-22 (2-4)	Solid	05/02/17 13:35	05/03/17 09:00	22
500-127508-23	GP-22 (6-8)	Solid	05/02/17 13:40	05/03/17 09:00	23
500-127508-24	GP-23 (2-4)	Solid	05/02/17 13:50	05/03/17 09:00	24
500-127508-25	GP-23 (6-8)	Solid	05/02/17 13:05	05/03/17 09:00	25
500-127508-26	GP-24 (2-4)	Solid	05/02/17 14:15	05/03/17 09:00	26
500-127508-27	GP-24 (6-8)	Solid	05/02/17 14:20	05/03/17 09:00	27
500-127508-28	GP-25 (2-4)	Solid	05/02/17 14:35	05/03/17 09:00	28
500-127508-29	GP-25 (6-8)	Solid	05/02/17 14:40	05/03/17 09:00	29
500-127508-30	Trip Blank	Solid	05/02/17 00:00	05/03/17 09:00	30

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-12 (2-4)

Date Collected: 05/02/17 08:25

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-1

Matrix: Solid

Percent Solids: 86.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Ethylbenzene	<22		29	22	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Naphthalene	<140		290	140	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Toluene	<20		29	20	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
1,2,4-Trimethylbenzene	<18		29	18	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
1,3,5-Trimethylbenzene	<18		29	18	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Xylenes, Total	<35		88	35	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 17:34	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19	F1	0.52	0.24	mg/Kg	✉	05/06/17 11:05	05/11/17 03:14	1

## Client Sample ID: GP-12 (6-8)

Date Collected: 05/02/17 08:30

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-2

Matrix: Solid

Percent Solids: 83.8

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		31	22	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Ethylbenzene	<23		31	23	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Methyl tert-butyl ether	<15		31	15	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Naphthalene	<150		310	150	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Toluene	<21		31	21	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
<b>1,2,4-Trimethylbenzene</b>	<b>36</b>		31	18	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
1,3,5-Trimethylbenzene	<18		31	18	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Xylenes, Total	<37		92	37	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 18:01	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.7		0.57	0.26	mg/Kg	✉	05/06/17 11:05	05/11/17 03:32	1

## Client Sample ID: GP-13 (2-4)

Date Collected: 05/02/17 09:15

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-3

Matrix: Solid

Percent Solids: 81.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<34		74	34	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1,1-Trichloroethane	<28		74	28	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1,2,2-Tetrachloroethane	<29		74	29	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1,2-Trichloroethane	<26		74	26	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1-Dichloroethane	<30 *		74	30	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1-Dichloroethene	<29 *		74	29	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1-Dichloropropene	<22		74	22	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-13 (2-4)**

**Date Collected: 05/02/17 09:15**

**Date Received: 05/03/17 09:00**

**Lab Sample ID: 500-127508-3**

**Matrix: Solid**

**Percent Solids: 81.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<34		74	34	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2,3-Trichloropropane	<31		74	31	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2,4-Trichlorobenzene	<25		74	25	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2,4-Trimethylbenzene	<26		74	26	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dibromo-3-Chloropropane	<150		370	150	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dibromoethane	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dichlorobenzene	<25		74	25	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dichloroethane	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dichloropropane	<32		74	32	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,3,5-Trimethylbenzene	<28		74	28	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,3-Dichlorobenzene	<30		74	30	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,3-Dichloropropane	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,4-Dichlorobenzene	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
2,2-Dichloropropane	<33		74	33	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
2-Chlorotoluene	<23		74	23	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
4-Chlorotoluene	<26		74	26	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Benzene	<11		18	11	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromobenzene	<26		74	26	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromochloromethane	<32 *		74	32	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromodichloromethane	<28		74	28	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromoform	<36		74	36	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromomethane	<59		150	59	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Carbon tetrachloride	<28		74	28	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Chlorobenzene	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Chloroethane	<37		74	37	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Chloroform	<27 *		150	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Chloromethane	<24		74	24	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
cis-1,2-Dichloroethene	<30 *		74	30	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
cis-1,3-Dichloropropene	<31		74	31	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Dibromochloromethane	<36		74	36	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Dibromomethane	<20		74	20	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Dichlorodifluoromethane	<50		150	50	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Ethylbenzene	<14		18	14	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Hexachlorobutadiene	<33		74	33	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Isopropyl ether	<20		74	20	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Isopropylbenzene	<28		74	28	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Methyl tert-butyl ether	<29 *		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Methylene Chloride	<120 *		370	120	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Naphthalene	<25 *		74	25	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
n-Butylbenzene	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
N-Propylbenzene	<31		74	31	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
p-Isopropyltoluene	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
sec-Butylbenzene	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Styrene	<29 *		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
tert-Butylbenzene	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Tetrachloroethene	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Toluene	<11		18	11	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
trans-1,2-Dichloroethene	<26 *		74	26	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
trans-1,3-Dichloropropene	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-13 (2-4)**

Date Collected: 05/02/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-3**

Matrix: Solid

Percent Solids: 81.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<12		37	12	ug/Kg	⌚	05/02/17 09:15	05/16/17 04:52	50
Trichlorofluoromethane	<32 *		74	32	ug/Kg	⌚	05/02/17 09:15	05/16/17 04:52	50
Vinyl chloride	<19 *		37	19	ug/Kg	⌚	05/02/17 09:15	05/16/17 04:52	50
Xylenes, Total	<16		37	16	ug/Kg	⌚	05/02/17 09:15	05/16/17 04:52	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126				05/02/17 09:15	05/16/17 04:52	50
4-Bromofluorobenzene (Surr)	106		72 - 124				05/02/17 09:15	05/16/17 04:52	50
Dibromofluoromethane	89		75 - 120				05/02/17 09:15	05/16/17 04:52	50
Toluene-d8 (Surr)	92		75 - 120				05/02/17 09:15	05/16/17 04:52	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		0.58	0.27	mg/Kg	⌚	05/06/17 11:05	05/11/17 03:38	1

**Client Sample ID: GP-13 (6-8)**

Date Collected: 05/02/17 09:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-4**

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<34		73	34	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1,1-Trichloroethane	<28		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1,2,2-Tetrachloroethane	<29		73	29	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1,2-Trichloroethane	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1-Dichloroethane	<30 *		73	30	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1-Dichloroethene	<28 *		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1-Dichloropropene	<22		73	22	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2,3-Trichlorobenzene	<33		73	33	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2,3-Trichloropropane	<30		73	30	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2,4-Trichlorobenzene	<25		73	25	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2,4-Trimethylbenzene	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dibromoethane	<28		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dichlorobenzene	<24		73	24	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dichloroethane	<28		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dichloropropene	<31		73	31	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,3,5-Trimethylbenzene	<28		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,3-Dichlorobenzene	<29		73	29	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,3-Dichloropropane	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,4-Dichlorobenzene	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
2,2-Dichloropropane	<32		73	32	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
2-Chlorotoluene	<23		73	23	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
4-Chlorotoluene	<25		73	25	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Benzene	<11		18	11	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromobenzene	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromochloromethane	<31 *		73	31	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromodichloromethane	<27		73	27	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromoform	<35		73	35	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromomethane	<58		150	58	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-13 (6-8)**

Date Collected: 05/02/17 09:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-4**

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<28		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Chlorobenzene	<28		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Chloroethane	<37		73	37	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Chloroform	<27 *		150	27	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Chloromethane	<23		73	23	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
cis-1,2-Dichloroethene	<30 *		73	30	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
cis-1,3-Dichloropropene	<30		73	30	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Dibromochloromethane	<35		73	35	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Dibromomethane	<20		73	20	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Dichlorodifluoromethane	<49		150	49	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Hexachlorobutadiene	<32		73	32	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Isopropyl ether	<20		73	20	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Isopropylbenzene	<28		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Methyl tert-butyl ether	<29 *		73	29	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Methylene Chloride	<120 *		360	120	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Naphthalene	<24 *		73	24	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
n-Butylbenzene	<28		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
N-Propylbenzene	<30		73	30	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
p-Isopropyltoluene	<26		73	26	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
sec-Butylbenzene	<29		73	29	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Styrene	<28 *		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
tert-Butylbenzene	<29		73	29	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Tetrachloroethene	<27		73	27	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Toluene	<11		18	11	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
trans-1,2-Dichloroethene	<25 *		73	25	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
trans-1,3-Dichloropropene	<26		73	26	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Trichloroethene	<12		36	12	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Trichlorofluoromethane	<31 *		73	31	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Vinyl chloride	<19 *		36	19	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Xylenes, Total	<16		36	16	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100			75 - 126			05/02/17 09:20	05/16/17 05:18	50
4-Bromofluorobenzene (Surr)	108			72 - 124			05/02/17 09:20	05/16/17 05:18	50
Dibromofluoromethane	89			75 - 120			05/02/17 09:20	05/16/17 05:18	50
Toluene-d8 (Surr)	93			75 - 120			05/02/17 09:20	05/16/17 05:18	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.52	0.24	mg/Kg	⊗	05/06/17 11:05	05/11/17 03:48	1

**Client Sample ID: GP-14 (2-4)**

Date Collected: 05/02/17 09:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-5**

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		72	33	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
1,1,1-Trichloroethane	<27		72	27	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-14 (2-4)**

Date Collected: 05/02/17 09:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-5**

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<29		72	29	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,1,2-Trichloroethane	<25		72	25	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,1-Dichloroethane	<30 *		72	30	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,1-Dichloroethene	<28 *		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,1-Dichloropropene	<22		72	22	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2,3-Trichlorobenzene	<33		72	33	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2,3-Trichloropropane	<30		72	30	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2,4-Trichlorobenzene	<25		72	25	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2,4-Trimethylbenzene	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dibromoethane	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dichlorobenzene	<24		72	24	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dichloroethane	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dichloropropane	<31		72	31	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,3,5-Trimethylbenzene	<27		72	27	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,3-Dichlorobenzene	<29		72	29	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,3-Dichloropropane	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,4-Dichlorobenzene	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
2,2-Dichloropropane	<32		72	32	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
2-Chlorotoluene	<23		72	23	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
4-Chlorotoluene	<25		72	25	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
<b>Benzene</b>	<b>51</b>		18	11	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromobenzene	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromochloromethane	<31 *		72	31	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromodichloromethane	<27		72	27	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromoform	<35		72	35	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromomethane	<58		140	58	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Carbon tetrachloride	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Chlorobenzene	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Chloroethane	<36		72	36	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Chloroform	<27 *		140	27	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Chloromethane	<23		72	23	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
cis-1,2-Dichloroethene	<29 *		72	29	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
cis-1,3-Dichloropropene	<30		72	30	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Dibromochloromethane	<35		72	35	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Dibromomethane	<20		72	20	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Dichlorodifluoromethane	<49		140	49	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Ethylbenzene	<13		18	13	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Hexachlorobutadiene	<32		72	32	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Isopropyl ether	<20		72	20	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Isopropylbenzene	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Methyl tert-butyl ether	<28 *		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Methylene Chloride	<120 *		360	120	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Naphthalene	<24 *		72	24	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
n-Butylbenzene	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
N-Propylbenzene	<30		72	30	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
p-Isopropyltoluene	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
sec-Butylbenzene	<29		72	29	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Styrene	<28 *		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-14 (2-4)**

Date Collected: 05/02/17 09:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-5**

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	<29		72	29	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
Tetrachloroethene	<27		72	27	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
Toluene	<11		18	11	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
trans-1,2-Dichloroethene	<25 *		72	25	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
trans-1,3-Dichloropropene	<26		72	26	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
Trichloroethene	<12		36	12	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
Trichlorofluoromethane	<31 *		72	31	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
Vinyl chloride	<19 *		36	19	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
Xylenes, Total	<16		36	16	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>		<b>Prepared</b>		<b>Analyzed</b>	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103			75 - 126		05/02/17 09:30		05/16/17 05:44	50
4-Bromofluorobenzene (Surr)	105			72 - 124		05/02/17 09:30		05/16/17 05:44	50
Dibromofluoromethane	88			75 - 120		05/02/17 09:30		05/16/17 05:44	50
Toluene-d8 (Surr)	94			75 - 120		05/02/17 09:30		05/16/17 05:44	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	15		0.58	0.27	mg/Kg	⊗	05/06/17 11:05	05/11/17 03:51	1

**Client Sample ID: GP-14 (6-8)**

Date Collected: 05/02/17 09:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-6**

Matrix: Solid

Percent Solids: 73.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<40		87	40	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,1,1-Trichloroethane	<33		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,1,2,2-Tetrachloroethane	<34		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,1,2-Trichloroethane	<31		87	31	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,1-Dichloroethane	<36 *		87	36	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,1-Dichloroethene	<34 *		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,1-Dichloropropene	<26		87	26	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,2,3-Trichlorobenzene	<40		87	40	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,2,3-Trichloropropane	<36		87	36	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,2,4-Trichlorobenzene	<30		87	30	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,2,4-Trimethylbenzene	<31		87	31	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,2-Dibromo-3-Chloropropane	<170		430	170	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,2-Dibromoethane	<33		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,2-Dichlorobenzene	<29		87	29	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,2-Dichloroethane	<34		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,2-Dichloropropane	<37		87	37	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,3,5-Trimethylbenzene	<33		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,3-Dichlorobenzene	<35		87	35	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,3-Dichloropropane	<31		87	31	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
1,4-Dichlorobenzene	<32		87	32	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
2,2-Dichloropropane	<38		87	38	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
2-Chlorotoluene	<27		87	27	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
4-Chlorotoluene	<30		87	30	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Benzene	<13		22	13	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-14 (6-8)**

Date Collected: 05/02/17 09:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-6**

Matrix: Solid

Percent Solids: 73.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<31		87	31	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Bromoform	<37 *		87	37	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Bromochloromethane	<32		87	32	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Bromodichloromethane	<42		87	42	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Bromomethane	<69		170	69	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Carbon tetrachloride	<33		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Chlorobenzene	<33		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Chloroethane	<44		87	44	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Chloroform	<32 *		170	32	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Chloromethane	<28		87	28	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
cis-1,2-Dichloroethene	<35 *		87	35	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
cis-1,3-Dichloropropene	<36		87	36	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Dibromochloromethane	<42		87	42	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Dibromomethane	<23		87	23	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Dichlorodifluoromethane	<58		170	58	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Ethylbenzene	<16		22	16	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Hexachlorobutadiene	<39		87	39	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Isopropyl ether	<24		87	24	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Isopropylbenzene	<33		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Methyl tert-butyl ether	<34 *		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Methylene Chloride	<140 *		430	140	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Naphthalene	<29 *		87	29	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
n-Butylbenzene	<34		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
N-Propylbenzene	<36		87	36	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
p-Isopropyltoluene	<31		87	31	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
sec-Butylbenzene	<34		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Styrene	<33 *		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
tert-Butylbenzene	<34		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Tetrachloroethene	<32		87	32	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Toluene	<13		22	13	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
trans-1,2-Dichloroethene	<30 *		87	30	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
trans-1,3-Dichloropropene	<31		87	31	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Trichloroethene	<14		43	14	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Trichlorofluoromethane	<37 *		87	37	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Vinyl chloride	<23 *		43	23	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Xylenes, Total	<19		43	19	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126	05/02/17 09:35	05/16/17 06:11	50
4-Bromofluorobenzene (Surr)	106		72 - 124	05/02/17 09:35	05/16/17 06:11	50
Dibromofluoromethane	89		75 - 120	05/02/17 09:35	05/16/17 06:11	50
Toluene-d8 (Surr)	93		75 - 120	05/02/17 09:35	05/16/17 06:11	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		0.65	0.30	mg/Kg	⊗	05/06/17 11:05	05/11/17 03:54	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-15 (2-4)

Date Collected: 05/02/17 09:55

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-7

Matrix: Solid

Percent Solids: 92.0

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Naphthalene	<130		280	130	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Xylenes, Total	<33		84	33	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	90			80 - 120			05/05/17 15:52	05/10/17 18:28	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.8		0.49	0.23	mg/Kg	⊗	05/06/17 11:05	05/11/17 03:58	1

## Client Sample ID: GP-15 (6-8)

Date Collected: 05/02/17 10:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-8

Matrix: Solid

Percent Solids: 85.0

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		30	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Naphthalene	<140		300	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Toluene	<20		30	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Xylenes, Total	<36		89	36	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	89			80 - 120			05/05/17 15:52	05/10/17 18:55	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.5		0.51	0.23	mg/Kg	⊗	05/06/17 11:05	05/11/17 04:02	1

## Client Sample ID: GP-16 (2-4)

Date Collected: 05/02/17 10:30

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-9

Matrix: Solid

Percent Solids: 81.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		30	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
Naphthalene	<140		300	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
Toluene	<20		30	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
<b>1,2,4-Trimethylbenzene</b>	<b>22 J</b>		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-16 (2-4)

Date Collected: 05/02/17 10:30

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-9

Matrix: Solid

Percent Solids: 81.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<36		89	36	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 19:22	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		0.56	0.26	mg/Kg	⌚	05/06/17 11:05	05/11/17 04:06	1

## Client Sample ID: GP-16 (6-8)

Date Collected: 05/02/17 10:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-10

Matrix: Solid

Percent Solids: 83.9

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Ethylbenzene	<23		30	23	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Methyl tert-butyl ether	<15		30	15	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Naphthalene	<150		300	150	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Toluene	<21		30	21	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Xylenes, Total	<36		91	36	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 19:48	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.5		0.56	0.26	mg/Kg	⌚	05/06/17 11:05	05/11/17 04:10	1

## Client Sample ID: GP-17 (2-4)

Date Collected: 05/02/17 10:50

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-11

Matrix: Solid

Percent Solids: 91.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Ethylbenzene	<22		28	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Methyl tert-butyl ether	<14		28	14	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Naphthalene	<140		280	140	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Toluene	<19		28	19	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Xylenes, Total	<34		85	34	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 20:15	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-17 (2-4)**

Date Collected: 05/02/17 10:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-11**

Matrix: Solid

Percent Solids: 91.5

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.1		0.51	0.24	mg/Kg	✉	05/06/17 11:05	05/11/17 04:15	1

## **Client Sample ID: GP-17 (6-8)**

Date Collected: 05/02/17 10:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-12**

Matrix: Solid

Percent Solids: 79.8

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		32	23	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Ethylbenzene	<24		32	24	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Methyl tert-butyl ether	<15		32	15	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Naphthalene	<150		320	150	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Toluene	<22		32	22	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
1,2,4-Trimethylbenzene	<19		32	19	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
1,3,5-Trimethylbenzene	<19		32	19	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Xylenes, Total	<39		97	39	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>		<b>Prepared</b>		<b>Analyzed</b>	Dil Fac
a,a,a-Trifluorotoluene		90		80 - 120		05/05/17 15:52		05/10/17 20:42	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.6		0.57	0.27	mg/Kg	✉	05/06/17 11:05	05/11/17 13:32	1

## **Client Sample ID: GP-18 (2-4)**

Date Collected: 05/02/17 11:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-13**

Matrix: Solid

Percent Solids: 94.0

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<14		24	14	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
1,3,5-Trimethylbenzene	<14		24	14	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Benzene	<17		24	17	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Ethylbenzene	<18		24	18	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Methyl tert-butyl ether	<11		24	11	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Naphthalene	<110		240	110	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Toluene	<16		24	16	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Xylenes, Total	<28		71	28	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Wisconsin GRO	<2400		4700	2400	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>		<b>Prepared</b>		<b>Analyzed</b>	Dil Fac
a,a,a-Trifluorotoluene		91		80 - 120		05/05/17 15:52		05/10/17 21:09	1
a,a,a-Trifluorotoluene		101		80 - 120		05/05/17 15:52		05/10/17 21:09	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10		0.48	0.22	mg/Kg	✉	05/06/17 11:05	05/11/17 04:23	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-18 (6-8)**

Date Collected: 05/02/17 11:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-14**

Matrix: Solid

Percent Solids: 93.5

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Ethylbenzene	<21		28	21	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Naphthalene	<130		280	130	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Toluene	<19		28	19	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Xylenes, Total	<33		83	33	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91			80 - 120			05/05/17 15:52	05/10/17 21:36	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.3		0.51	0.24	mg/Kg	✉	05/06/17 11:05	05/11/17 04:35	1

## **Client Sample ID: GP-19 (2-4)**

Date Collected: 05/02/17 11:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-15**

Matrix: Solid

Percent Solids: 95.2

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<17		24	17	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Ethylbenzene	<18		24	18	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Methyl tert-butyl ether	<11		24	11	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Naphthalene	<110		240	110	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Toluene	<16		24	16	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
1,2,4-Trimethylbenzene	<14		24	14	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
1,3,5-Trimethylbenzene	<14		24	14	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Xylenes, Total	<28		71	28	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	89			80 - 120			05/05/17 15:52	05/10/17 23:23	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	23		0.45	0.21	mg/Kg	✉	05/06/17 11:05	05/11/17 04:39	1

## **Client Sample ID: GP-19 (6-8)**

Date Collected: 05/02/17 11:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-16**

Matrix: Solid

Percent Solids: 82.1

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		30	21	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
Ethylbenzene	<23		30	23	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
Naphthalene	<140		300	140	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
Toluene	<20		30	20	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-19 (6-8)**

Date Collected: 05/02/17 11:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-16**

Matrix: Solid

Percent Solids: 82.1

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<36		89	36	ug/Kg	⌚	05/05/17 15:52	05/10/17 23:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	90		80 - 120				05/05/17 15:52	05/10/17 23:50	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.58	0.27	mg/Kg	⌚	05/06/17 11:05	05/11/17 04:50	1

## **Client Sample ID: GP-20 (2-4)**

Date Collected: 05/02/17 12:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-17**

Matrix: Solid

Percent Solids: 91.3

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<19		27	19	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Ethylbenzene	<20		27	20	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Methyl tert-butyl ether	<13		27	13	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Naphthalene	<130		270	130	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Toluene	<18		27	18	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
<b>1,2,4-Trimethylbenzene</b>	<b>16 J</b>		27	16	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Xylenes, Total	<32		80	32	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	90		80 - 120				05/05/17 15:52	05/11/17 00:17	1

## **Client Sample ID: GP-20 (6-8)**

Date Collected: 05/02/17 12:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-18**

Matrix: Solid

Percent Solids: 90.1

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		27	20	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Ethylbenzene	<21		27	21	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Methyl tert-butyl ether	<13		27	13	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Naphthalene	<130		270	130	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Toluene	<19		27	19	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
1,2,4-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Xylenes, Total	<33		82	33	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	88		80 - 120				05/05/17 15:52	05/11/17 00:44	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-20 (14-16)**

Date Collected: 05/02/17 12:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-19**

Matrix: Solid

Percent Solids: 86.6

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	79		30	21	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Naphthalene	440		300	140	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Toluene	<20		30	20	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
1,3,5-Trimethylbenzene	25 J		30	18	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Xylenes, Total	36 J		89	36	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
<i>Surrogate</i>	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86			80 - 120			05/05/17 15:52	05/11/17 12:11	1

**Client Sample ID: GP-21 (2-4)**

Date Collected: 05/02/17 12:50

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-20**

Matrix: Solid

Percent Solids: 80.8

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	94		31	22	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Ethylbenzene	35		31	24	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Methyl tert-butyl ether	160		31	15	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Naphthalene	510		310	150	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Toluene	25 J		31	21	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
1,2,4-Trimethylbenzene	62		31	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
1,3,5-Trimethylbenzene	<19		31	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Xylenes, Total	61 J		94	37	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
<i>Surrogate</i>	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98			80 - 120			05/05/17 15:52	05/11/17 09:30	1

**Client Sample ID: GP-21 (6-8)**

Date Collected: 05/02/17 12:55

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-21**

Matrix: Solid

Percent Solids: 81.1

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2600		31	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
1,3,5-Trimethylbenzene	1000		31	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Benzene	610		31	23	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Ethylbenzene	7200		31	24	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Methyl tert-butyl ether	17 J		31	15	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Naphthalene	55000		6300	3000	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:24	20
Toluene	590		31	21	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Xylenes, Total	2500		94	38	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Wisconsin GRO	2000000		130000	63000	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:24	20
<i>Surrogate</i>	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	125 X		80 - 120				05/05/17 15:52	05/11/17 10:24	20
a,a,a-Trifluorotoluene	88		80 - 120				05/05/17 15:52	05/11/17 10:24	20
a,a,a-Trifluorotoluene	173 X		80 - 120				05/05/17 15:52	05/11/17 10:51	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-22 (2-4)**

Date Collected: 05/02/17 13:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-22**

Matrix: Solid

Percent Solids: 85.9

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<24		33	24	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
Ethylbenzene	<25		33	25	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
Methyl tert-butyl ether	<16		33	16	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
Naphthalene	<160		330	160	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:57	1
Toluene	<22		33	22	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
<b>1,2,4-Trimethylbenzene</b>	<b>91</b>		33	20	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
1,3,5-Trimethylbenzene	<20		33	20	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
Xylenes, Total	<40		99	40	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	81		80 - 120				05/05/17 15:52	05/11/17 02:31	1
a,a,a-Trifluorotoluene	89		80 - 120				05/05/17 15:52	05/11/17 09:57	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	44		0.50	0.23	mg/Kg	⊗	05/06/17 11:05	05/11/17 04:54	1

**Client Sample ID: GP-22 (6-8)**

**Lab Sample ID: 500-127508-23**

Matrix: Solid

Percent Solids: 93.6

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<17		23	17	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Ethylbenzene	<18		23	18	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Methyl tert-butyl ether	<11		23	11	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Naphthalene	<110		230	110	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Toluene	<16		23	16	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
1,2,4-Trimethylbenzene	<14		23	14	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
1,3,5-Trimethylbenzene	<14		23	14	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Xylenes, Total	<28		70	28	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	88		80 - 120				05/05/17 15:52	05/11/17 02:58	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.4		0.48	0.22	mg/Kg	⊗	05/06/17 11:05	05/11/17 04:57	1

**Client Sample ID: GP-23 (2-4)**

**Lab Sample ID: 500-127508-24**

Matrix: Solid

Percent Solids: 89.0

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
Naphthalene	<140		290	140	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
Toluene	<19		29	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-23 (2-4)

Date Collected: 05/02/17 13:50

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-24

Matrix: Solid

Percent Solids: 89.0

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/11/17 03:25	1
Xylenes, Total	<34		86	34	ug/Kg	⌚	05/05/17 15:52	05/11/17 03:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	87		80 - 120				05/05/17 15:52	05/11/17 03:25	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.9		0.51	0.23	mg/Kg	⌚	05/06/17 11:05	05/11/17 05:01	1

## Client Sample ID: GP-23 (6-8)

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-25

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Benzene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Chlorobenzene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Chloroform	<0.020		0.040	0.020	mg/L			05/09/17 02:01	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/09/17 02:01	20
Tetrachloroethene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Trichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Vinyl chloride	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100		75 - 126					05/09/17 02:01	20
4-Bromofluorobenzene (Surr)	109		72 - 124					05/09/17 02:01	20
Dibromofluoromethane	84		75 - 120					05/09/17 02:01	20
Toluene-d8 (Surr)	103		75 - 120					05/09/17 02:01	20

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
2-Methylphenol	<0.020		0.020	0.020	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Hexachloroethane	<0.050		0.050	0.050	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Nitrobenzene	<0.010		0.010	0.010	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Pyridine	<0.20		0.20	0.20	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol (Surr)	91		40 - 145					05/08/17 07:42	1
2-Fluorobiphenyl	90		34 - 110					05/08/17 07:42	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-25**

Matrix: Solid

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	62		27 - 110	05/08/17 07:42	05/08/17 18:41	1
Nitrobenzene-d5 (Surr)	99		36 - 120	05/08/17 07:42	05/08/17 18:41	1
Phenol-d5 (Surr)	43		20 - 100	05/08/17 07:42	05/08/17 18:41	1
Terphenyl-d14 (Surr)	108		40 - 145	05/08/17 07:42	05/08/17 18:41	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
<b>Barium</b>	<b>0.44 J</b>		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 21:55	1
Cadmium	<0.0020		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 21:55	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
Copper	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
Lead	<0.0075		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 21:55	1
<b>Nickel</b>	<b>0.022 J</b>		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 21:55	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
Zinc	<0.020		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 21:55	1

## Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:16	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Flashpoint</b>	<b>&gt;176</b>		40.0	40.0	Degrees F			05/15/17 14:30	1
<b>Cyanide, Total</b>	<b>0.28 J</b>		0.41	0.14	mg/Kg		05/15/17 17:10	05/15/17 20:21	1
Sulfide	<4.6		9.8	4.6	mg/Kg		05/15/17 17:36	05/15/17 21:53	1
pH	<b>9.0</b>		0.2	0.2	SU			05/09/17 16:08	1
Paint Filter	<b>PASS</b>				No Unit			05/15/17 21:43	1
Specific Gravity	<b>2.2442</b>				NONE			05/12/17 22:19	1

**Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-25**

Matrix: Solid

Percent Solids: 85.3

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Benzene	<21		29	21	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Ethylbenzene	<22		29	22	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
<b>Naphthalene</b>	<b>170 J</b>		290	140	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Toluene	<20		29	20	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Xylenes, Total	<35		87	35	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Wisconsin GRO	<2900		5800	2900	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	87		80 - 120	05/05/17 15:52	05/11/17 06:59	1
a,a,a-Trifluorotoluene	97		80 - 120	05/05/17 15:52	05/11/17 06:59	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-25**

Matrix: Solid

Percent Solids: 86.8

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.5		18	6.5	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1221	<8.0		18	8.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1232	<8.0		18	8.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1242	<6.0		18	6.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1248	<7.2		18	7.2	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1254	<3.9		18	3.9	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1260	<9.0		18	9.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	67		49 - 129				05/09/17 16:38	05/10/17 14:21	1
DCB Decachlorobiphenyl	71		37 - 121				05/09/17 16:38	05/10/17 14:21	1

**Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.8		4.5	1.8	mg/Kg	⌚	05/04/17 11:15	05/05/17 17:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Nonane	76		44 - 148				05/04/17 11:15	05/05/17 17:25	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.7		0.50	0.23	mg/Kg	⌚	05/06/17 11:05	05/11/17 05:06	1

**Client Sample ID: GP-24 (2-4)**

**Lab Sample ID: 500-127508-26**

Matrix: Solid

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		66	30	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1,1-Trichloroethane	<25		66	25	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1,2,2-Tetrachloroethane	<26		66	26	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1,2-Trichloroethane	<23		66	23	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1-Dichloroethane	<27 *		66	27	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1-Dichloroethene	<26 *		66	26	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1-Dichloropropene	<20		66	20	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2,3-Trichlorobenzene	<30		66	30	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2,3-Trichloropropane	<27		66	27	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2,4-Trichlorobenzene	<23		66	23	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dibromoethane	<25		66	25	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dichlorobenzene	<22		66	22	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dichloroethane	<26		66	26	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dichloropropane	<28		66	28	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,3-Dichlorobenzene	<26		66	26	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,3-Dichloropropane	<24		66	24	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,4-Dichlorobenzene	<24		66	24	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
2,2-Dichloropropane	<29		66	29	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
2-Chlorotoluene	<21		66	21	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-24 (2-4)

Date Collected: 05/02/17 14:15

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-26

Matrix: Solid

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<23		66	23	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Benzene	<9.6		16	9.6	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromobenzene	<23		66	23	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromochloromethane	<28 *		66	28	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromodichloromethane	<25		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromoform	<32		66	32	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromomethane	<52		130	52	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Carbon tetrachloride	<25		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Chlorobenzene	<25		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Chloroethane	<33		66	33	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Chloroform	<24 *		130	24	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Chloromethane	<21		66	21	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
cis-1,2-Dichloroethene	<27 *		66	27	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
cis-1,3-Dichloropropene	<27		66	27	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Dibromochloromethane	<32		66	32	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Dibromomethane	<18		66	18	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Dichlorodifluoromethane	<44		130	44	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Ethylbenzene	<12		16	12	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Hexachlorobutadiene	<29		66	29	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Isopropyl ether	<18		66	18	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Isopropylbenzene	<25		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Methyl tert-butyl ether	<26 *		66	26	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Methylene Chloride	<110 *		330	110	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Naphthalene	<22 *		66	22	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
n-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
N-Propylbenzene	<27		66	27	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
p-Isopropyltoluene	<24		66	24	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
sec-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Styrene	<25 *		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
tert-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Tetrachloroethene	<24		66	24	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Toluene	<9.7		16	9.7	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
trans-1,2-Dichloroethene	<23 *		66	23	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
trans-1,3-Dichloropropene	<24		66	24	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Trichloroethene	<11		33	11	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Trichlorofluoromethane	<28 *		66	28	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Vinyl chloride	<17 *		33	17	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Xylenes, Total	<15		33	15	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	103			75 - 126			05/02/17 14:15	05/16/17 06:37	50
4-Bromofluorobenzene (Surr)	107			72 - 124			05/02/17 14:15	05/16/17 06:37	50
Dibromofluoromethane	88			75 - 120			05/02/17 14:15	05/16/17 06:37	50
Toluene-d8 (Surr)	93			75 - 120			05/02/17 14:15	05/16/17 06:37	50

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	27	V F1	0.54	0.25	mg/Kg	⊗	05/06/17 11:07	05/10/17 18:27	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-24 (6-8)**

Date Collected: 05/02/17 14:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-27**

Matrix: Solid

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		67	31	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1,1-Trichloroethane	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1,2,2-Tetrachloroethane	<27		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1,2-Trichloroethane	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1-Dichloroethane	<28 *		67	28	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1-Dichloroethene	<26 *		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1-Dichloropropene	<20		67	20	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2,3-Trichlorobenzene	<31		67	31	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2,3-Trichloropropane	<28		67	28	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2,4-Trichlorobenzene	<23		67	23	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2,4-Trimethylbenzene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dibromo-3-Chloropropane	<130		340	130	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dibromoethane	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dichlorobenzene	<23		67	23	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dichloroethane	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dichloropropene	<29		67	29	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,3,5-Trimethylbenzene	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,3-Dichlorobenzene	<27		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,3-Dichloropropane	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,4-Dichlorobenzene	<25		67	25	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
2,2-Dichloropropane	<30		67	30	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
2-Chlorotoluene	<21		67	21	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
4-Chlorotoluene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Benzene	<9.8		17	9.8	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromobenzene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromochloromethane	<29 *		67	29	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromodichloromethane	<25		67	25	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromoform	<33		67	33	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromomethane	<54		130	54	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Carbon tetrachloride	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Chlorobenzene	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Chloroethane	<34		67	34	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Chloroform	<25 *		130	25	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Chloromethane	<22		67	22	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
cis-1,2-Dichloroethene	<27 *		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
cis-1,3-Dichloropropene	<28		67	28	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Dibromochloromethane	<33		67	33	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Dibromomethane	<18		67	18	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Dichlorodifluoromethane	<45		130	45	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Ethylbenzene	<12		17	12	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Hexachlorobutadiene	<30		67	30	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Isopropyl ether	<19		67	19	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Isopropylbenzene	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Methyl tert-butyl ether	<27 *		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Methylene Chloride	<110 *		340	110	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Naphthalene	<23 *		67	23	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
n-Butylbenzene	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
N-Propylbenzene	<28		67	28	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
p-Isopropyltoluene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-24 (6-8)

Date Collected: 05/02/17 14:20

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-27

Matrix: Solid

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<27		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Styrene	<26 *		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
tert-Butylbenzene	<27		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Tetrachloroethene	<25		67	25	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Toluene	<9.9		17	9.9	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
trans-1,2-Dichloroethene	<24 *		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
trans-1,3-Dichloropropene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Trichloroethene	<11		34	11	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Trichlorofluoromethane	<29 *		67	29	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Vinyl chloride	<18 *		34	18	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Xylenes, Total	<15		34	15	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)		105		75 - 126			05/02/17 14:20	05/16/17 07:03	50
4-Bromofluorobenzene (Surr)		106		72 - 124			05/02/17 14:20	05/16/17 07:03	50
Dibromofluoromethane		90		75 - 120			05/02/17 14:20	05/16/17 07:03	50
Toluene-d8 (Surr)		93		75 - 120			05/02/17 14:20	05/16/17 07:03	50

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.53	0.25	mg/Kg	⊗	05/06/17 11:07	05/10/17 18:54	1

## Client Sample ID: GP-25 (2-4)

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-28

Matrix: Solid

Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		66	31	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1,1-Trichloroethane	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1,2,2-Tetrachloroethane	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1,2-Trichloroethane	<23		66	23	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1-Dichloroethane	<27 *		66	27	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1-Dichloroethene	<26 *		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1-Dichloropropene	<20		66	20	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2,3-Trichlorobenzene	<30		66	30	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2,3-Trichloropropane	<27		66	27	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2,4-Trichlorobenzene	<23		66	23	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dibromoethane	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dichlorobenzene	<22		66	22	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dichloroethane	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dichloropropane	<28		66	28	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,3-Dichlorobenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,3-Dichloropropane	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,4-Dichlorobenzene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
2,2-Dichloropropane	<29		66	29	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
2-Chlorotoluene	<21		66	21	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-25 (2-4)

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-28

Matrix: Solid

Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<23		66	23	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Benzene	<9.7		17	9.7	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromobenzene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromochloromethane	<28 *		66	28	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromodichloromethane	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromoform	<32		66	32	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromomethane	<53		130	53	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Carbon tetrachloride	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Chlorobenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Chloroethane	<33		66	33	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Chloroform	<24 *		130	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Chloromethane	<21		66	21	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
cis-1,2-Dichloroethene	<27 *		66	27	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
cis-1,3-Dichloropropene	<28		66	28	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Dibromochloromethane	<32		66	32	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Dibromomethane	<18		66	18	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Dichlorodifluoromethane	<45		130	45	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Ethylbenzene	<12		17	12	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Hexachlorobutadiene	<30		66	30	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Isopropyl ether	<18		66	18	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Isopropylbenzene	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Methyl tert-butyl ether	<26 *		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Methylene Chloride	<110 *		330	110	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Naphthalene	<22 *		66	22	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
n-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
N-Propylbenzene	<27		66	27	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
p-Isopropyltoluene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
sec-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Styrene	<26 *		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
tert-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Tetrachloroethene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Toluene	<9.7		17	9.7	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
trans-1,2-Dichloroethene	<23 *		66	23	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
trans-1,3-Dichloropropene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Trichloroethene	<11		33	11	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Trichlorofluoromethane	<28 *		66	28	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Vinyl chloride	<17 *		33	17	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Xylenes, Total	<15		33	15	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100			75 - 126			05/02/17 14:35	05/16/17 07:29	50
4-Bromofluorobenzene (Surr)	106			72 - 124			05/02/17 14:35	05/16/17 07:29	50
Dibromofluoromethane	88			75 - 120			05/02/17 14:35	05/16/17 07:29	50
Toluene-d8 (Surr)	92			75 - 120			05/02/17 14:35	05/16/17 07:29	50

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	15		0.52	0.24	mg/Kg	⊗	05/06/17 11:07	05/10/17 18:59	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-25 (6-8)**

Date Collected: 05/02/17 14:40

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-29**

Matrix: Solid

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		72	33	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1,1-Trichloroethane	<27		72	27	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1,2,2-Tetrachloroethane	<29		72	29	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1,2-Trichloroethane	<25		72	25	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1-Dichloroethane	<29 *		72	29	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1-Dichloroethene	<28 *		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1-Dichloropropene	<21		72	21	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2,3-Trichlorobenzene	<33		72	33	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2,3-Trichloropropane	<30		72	30	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2,4-Trichlorobenzene	<25		72	25	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2,4-Trimethylbenzene	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dibromoethane	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dichlorobenzene	<24		72	24	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dichloroethane	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dichloropropene	<31		72	31	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,3,5-Trimethylbenzene	<27		72	27	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,3-Dichlorobenzene	<29		72	29	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,3-Dichloropropane	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,4-Dichlorobenzene	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
2,2-Dichloropropane	<32		72	32	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
2-Chlorotoluene	<23		72	23	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
4-Chlorotoluene	<25		72	25	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Benzene	<10		18	10	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromobenzene	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromochloromethane	<31 *		72	31	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromodichloromethane	<27		72	27	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromoform	<35		72	35	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromomethane	<57		140	57	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Carbon tetrachloride	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Chlorobenzene	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Chloroethane	<36		72	36	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Chloroform	<27 *		140	27	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Chloromethane	<23		72	23	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
cis-1,2-Dichloroethene	<29 *		72	29	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
cis-1,3-Dichloropropene	<30		72	30	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Dibromochloromethane	<35		72	35	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Dibromomethane	<19		72	19	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Dichlorodifluoromethane	<48		140	48	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Hexachlorobutadiene	<32		72	32	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Isopropyl ether	<20		72	20	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
<b>Isopropylbenzene</b>	<b>120</b>		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Methyl tert-butyl ether	<28 *		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Methylene Chloride	<120 *		360	120	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
<b>Naphthalene</b>	<b>150 *</b>		72	24	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
n-Butylbenzene	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
<b>N-Propylbenzene</b>	<b>620</b>		72	30	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
p-Isopropyltoluene	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-25 (6-8)**

Date Collected: 05/02/17 14:40

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-29**

Matrix: Solid

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<29		72	29	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Styrene	<28 *		72	28	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
tert-Butylbenzene	<29		72	29	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Tetrachloroethene	<27		72	27	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Toluene	<11		18	11	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
trans-1,2-Dichloroethene	<25 *		72	25	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
trans-1,3-Dichloropropene	<26		72	26	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Trichloroethene	<12		36	12	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Trichlorofluoromethane	<31 *		72	31	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Vinyl chloride	<19 *		36	19	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Xylenes, Total	<16		36	16	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126	05/02/17 14:40	05/16/17 07:55	50
4-Bromofluorobenzene (Surr)	103		72 - 124	05/02/17 14:40	05/16/17 07:55	50
Dibromofluoromethane	90		75 - 120	05/02/17 14:40	05/16/17 07:55	50
Toluene-d8 (Surr)	95		75 - 120	05/02/17 14:40	05/16/17 07:55	50

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	350000		43000	14000	ug/Kg	✉	05/02/17 14:40	05/07/17 22:05	1000

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	22		7.0	2.8	mg/Kg	✉	05/04/17 11:15	05/05/17 18:01	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	86		44 - 148	05/04/17 11:15	05/05/17 18:01	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	26		0.55	0.26	mg/Kg	✉	05/06/17 11:07	05/10/17 19:03	1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-127508-30**

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1-Dichloroethane	<21 *		50	21	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1-Dichloroethene	<20 *		50	20	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1-Dichloropropene	<15		50	15	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,2,3-Trichloropropane	<21		50	21	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: Trip Blank

Date Collected: 05/02/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-30

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dibromoethane	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dichloroethane	<20		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dichloropropane	<21		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,3-Dichloropropane	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
2,2-Dichloropropane	<22		50	22	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
2-Chlorotoluene	<16		50	16	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
4-Chlorotoluene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Benzene	<7.3		13	7.3	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromobenzene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromochloromethane	<21 *		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromodichloromethane	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromoform	<24		50	24	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromomethane	<40		100	40	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Carbon tetrachloride	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Chlorobenzene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Chloroethane	<25		50	25	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Chloroform	<19 *		100	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Chloromethane	<16		50	16	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
cis-1,2-Dichloroethene	<20 *		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Dibromochloromethane	<24		50	24	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Dibromomethane	<14		50	14	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Dichlorodifluoromethane	<34		100	34	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Ethylbenzene	<9.2		13	9.2	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Hexachlorobutadiene	<22		50	22	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Isopropyl ether	<14		50	14	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Isopropylbenzene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Methyl tert-butyl ether	<20 *		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Methylene Chloride	<82 *		250	82	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Naphthalene	<17 *		50	17	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
n-Butylbenzene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
N-Propylbenzene	<21		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
p-Isopropyltoluene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
sec-Butylbenzene	<20		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Styrene	<19 *		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
tert-Butylbenzene	<20		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Tetrachloroethene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Toluene	<7.4		13	7.4	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
trans-1,2-Dichloroethene	<18 *		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Trichloroethene	<8.2		25	8.2	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Trichlorofluoromethane	<21 *		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Vinyl chloride	<13 *		25	13	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: Trip Blank**

Date Collected: 05/02/17 00:00

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-30**

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<11		25	11	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
<b>Surrogate</b>									
1,2-Dichloroethane-d4 (Surr)	102		75 - 126				05/02/17 00:00	05/16/17 01:22	50
4-Bromofluorobenzene (Surr)	103		72 - 124				05/02/17 00:00	05/16/17 01:22	50
Dibromofluoromethane	88		75 - 120				05/02/17 00:00	05/16/17 01:22	50
Toluene-d8 (Surr)	92		75 - 120				05/02/17 00:00	05/16/17 01:22	50



# SFA Labs

**TestAmerica Laboratories, Inc.**  
Attention: Sandie Fredrick  
2417 Bond St  
University Park, IL 44720

**Date Received:** 05/05/2017  
**Date Reported:** 05/15/17 17:07  
**Client Project:** Soil/Waste  
**Client Project ID:** Soil/Waste  
**PO#** 2669273  
**Project #:** Soil/Waste

## Certificate of Analysis

This analytical test report shall not be reproduced, except in full, without written permission from Eurofins S-F Analytical Laboratories. All quality control samples and checks were within acceptance limits unless otherwise indicated. Test results pertain only to those items tested. All samples were in good condition when received by the laboratory unless otherwise noted. All LOD/LOQs are adjusted to reflect dilutions.

This report was prepared and printed by:

Page 1 of 1

Josh Rhein, Chemistry Operations Manager

| Eurofins S-F Analytical Laboratories | 2345 South 170<sup>th</sup> Street | New Berlin, WI 53151 |  
| Phone: (262) 754-5300 | Fax: (262) 754-5310 | [eurofinsus.com](http://eurofinsus.com) | [ESFA@eurofinsus.com](mailto:ESFA@eurofinsus.com) |

# Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC 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.
X	Surrogate is outside control limits

### Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
V	Serial Dilution exceeds the control limits

### General Chemistry

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.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

☒	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)

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## GC/MS VOA

### Prep Batch: 384046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-3	GP-13 (2-4)	Total/NA	Solid	5035	5
500-127508-4	GP-13 (6-8)	Total/NA	Solid	5035	6
500-127508-5	GP-14 (2-4)	Total/NA	Solid	5035	7
500-127508-6	GP-14 (6-8)	Total/NA	Solid	5035	8
500-127508-26	GP-24 (2-4)	Total/NA	Solid	5035	9
500-127508-27	GP-24 (6-8)	Total/NA	Solid	5035	10
500-127508-28	GP-25 (2-4)	Total/NA	Solid	5035	11
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI GRO	12
500-127508-30	Trip Blank	Total/NA	Solid	5035	13

### Leach Batch: 384086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	1311	10
LB 500-384086/1-A	Method Blank	TCLP	Solid	1311	11

### Analysis Batch: 384262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	8260B	384086
LB 500-384086/1-A	Method Blank	TCLP	Solid	8260B	384086
MB 500-384262/6	Method Blank	Total/NA	Solid	8260B	13
LCS 500-384262/4	Lab Control Sample	Total/NA	Solid	8260B	14

### Analysis Batch: 385282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-3	GP-13 (2-4)	Total/NA	Solid	8260B	384046
500-127508-4	GP-13 (6-8)	Total/NA	Solid	8260B	384046
500-127508-5	GP-14 (2-4)	Total/NA	Solid	8260B	384046
500-127508-6	GP-14 (6-8)	Total/NA	Solid	8260B	384046
500-127508-26	GP-24 (2-4)	Total/NA	Solid	8260B	384046
500-127508-27	GP-24 (6-8)	Total/NA	Solid	8260B	384046
500-127508-28	GP-25 (2-4)	Total/NA	Solid	8260B	384046
500-127508-29	GP-25 (6-8)	Total/NA	Solid	8260B	384046
500-127508-30	Trip Blank	Total/NA	Solid	8260B	384046
MB 500-385282/6	Method Blank	Total/NA	Solid	8260B	15
LCS 500-385282/4	Lab Control Sample	Total/NA	Solid	8260B	16

## GC/MS Semi VOA

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	1311	13
LB 500-383992/1-B	Method Blank	TCLP	Solid	1311	14

### Prep Batch: 384171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	3510C	383992
LB 500-383992/1-B	Method Blank	TCLP	Solid	3510C	383992
MB 500-384171/1-A	Method Blank	Total/NA	Solid	3510C	15
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	3510C	16

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 384241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	8270D	384171
LB 500-383992/1-B	Method Blank	TCLP	Solid	8270D	384171
MB 500-384171/1-A	Method Blank	Total/NA	Solid	8270D	384171
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	8270D	384171

## GC VOA

### Prep Batch: 384046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI GRO	9
LB3 500-384046/21-A	Method Blank	Total/NA	Solid	5035	10
LCS 500-384046/23-A	Lab Control Sample	Total/NA	Solid	5035	11
LCSD 500-384046/24-A	Lab Control Sample Dup	Total/NA	Solid	5035	12

### Analysis Batch: 384093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI-GRO	384046
LB3 500-384046/21-A	Method Blank	Total/NA	Solid	WI-GRO	13
LCS 500-384046/23-A	Lab Control Sample	Total/NA	Solid	WI-GRO	14
LCSD 500-384046/24-A	Lab Control Sample Dup	Total/NA	Solid	WI-GRO	15

### Prep Batch: 427841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	WI GRO	16
500-127508-2	GP-12 (6-8)	Total/NA	Solid	WI GRO	
500-127508-7	GP-15 (2-4)	Total/NA	Solid	WI GRO	
500-127508-8	GP-15 (6-8)	Total/NA	Solid	WI GRO	
500-127508-9	GP-16 (2-4)	Total/NA	Solid	WI GRO	
500-127508-10	GP-16 (6-8)	Total/NA	Solid	WI GRO	
500-127508-11	GP-17 (2-4)	Total/NA	Solid	WI GRO	
500-127508-12	GP-17 (6-8)	Total/NA	Solid	WI GRO	
500-127508-13	GP-18 (2-4)	Total/NA	Solid	WI GRO	
500-127508-14	GP-18 (6-8)	Total/NA	Solid	WI GRO	
500-127508-15	GP-19 (2-4)	Total/NA	Solid	WI GRO	
500-127508-16	GP-19 (6-8)	Total/NA	Solid	WI GRO	
500-127508-17	GP-20 (2-4)	Total/NA	Solid	WI GRO	
500-127508-18	GP-20 (6-8)	Total/NA	Solid	WI GRO	
500-127508-19	GP-20 (14-16)	Total/NA	Solid	WI GRO	
500-127508-20	GP-21 (2-4)	Total/NA	Solid	WI GRO	
500-127508-21	GP-21 (6-8)	Total/NA	Solid	WI GRO	
500-127508-22	GP-22 (2-4)	Total/NA	Solid	WI GRO	
500-127508-23	GP-22 (6-8)	Total/NA	Solid	WI GRO	
500-127508-24	GP-23 (2-4)	Total/NA	Solid	WI GRO	
500-127508-25	GP-23 (6-8)	Total/NA	Solid	WI GRO	
MB 490-427841/43-A	Method Blank	Total/NA	Solid	WI GRO	
LCS 490-427841/44-A	Lab Control Sample	Total/NA	Solid	WI GRO	
LCSD 490-427841/45-A	Lab Control Sample Dup	Total/NA	Solid	WI GRO	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## GC VOA (Continued)

### Analysis Batch: 428992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-2	GP-12 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-7	GP-15 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-8	GP-15 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-9	GP-16 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-10	GP-16 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-11	GP-17 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-12	GP-17 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-13	GP-18 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-14	GP-18 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-15	GP-19 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-16	GP-19 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-17	GP-20 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-18	GP-20 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-19	GP-20 (14-16)	Total/NA	Solid	WDNR	427841
500-127508-20	GP-21 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-21	GP-21 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-21	GP-21 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-22	GP-22 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-22	GP-22 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-23	GP-22 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-24	GP-23 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-25	GP-23 (6-8)	Total/NA	Solid	WDNR	427841
MB 490-427841/43-A	Method Blank	Total/NA	Solid	WDNR	427841
MB 490-427841/43-A	Method Blank	Total/NA	Solid	WDNR	427841
LCS 490-427841/44-A	Lab Control Sample	Total/NA	Solid	WDNR	427841
LCS 490-427841/44-A	Lab Control Sample	Total/NA	Solid	WDNR	427841
LCSD 490-427841/45-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	427841
LCSD 490-427841/45-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	427841

## GC Semi VOA

### Prep Batch: 383737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	WI DRO PREP	
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI DRO PREP	
MB 500-383737/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	
LCS 500-383737/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-383737/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

### Analysis Batch: 383957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	WI-DRO	383737
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI-DRO	383737
MB 500-383737/1-A	Method Blank	Total/NA	Solid	WI-DRO	383737
LCS 500-383737/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	383737
LCSD 500-383737/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	383737

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## GC Semi VOA (Continued)

### Prep Batch: 384456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	3541	
MB 500-384456/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-384456/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 384545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	8082A	384456
MB 500-384456/1-A	Method Blank	Total/NA	Solid	8082A	384456
LCS 500-384456/2-A	Lab Control Sample	Total/NA	Solid	8082A	384456

## Metals

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	1311	
LB 500-383992/1-C	Method Blank	TCLP	Solid	1311	
LB 500-383992/1-D	Method Blank	TCLP	Solid	1311	

### Prep Batch: 384019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	3050B	
500-127508-2	GP-12 (6-8)	Total/NA	Solid	3050B	
500-127508-3	GP-13 (2-4)	Total/NA	Solid	3050B	
500-127508-4	GP-13 (6-8)	Total/NA	Solid	3050B	
500-127508-5	GP-14 (2-4)	Total/NA	Solid	3050B	
500-127508-6	GP-14 (6-8)	Total/NA	Solid	3050B	
500-127508-7	GP-15 (2-4)	Total/NA	Solid	3050B	
500-127508-8	GP-15 (6-8)	Total/NA	Solid	3050B	
500-127508-9	GP-16 (2-4)	Total/NA	Solid	3050B	
500-127508-10	GP-16 (6-8)	Total/NA	Solid	3050B	
500-127508-11	GP-17 (2-4)	Total/NA	Solid	3050B	
500-127508-12	GP-17 (6-8)	Total/NA	Solid	3050B	
500-127508-13	GP-18 (2-4)	Total/NA	Solid	3050B	
500-127508-14	GP-18 (6-8)	Total/NA	Solid	3050B	
500-127508-15	GP-19 (2-4)	Total/NA	Solid	3050B	
500-127508-16	GP-19 (6-8)	Total/NA	Solid	3050B	
500-127508-22	GP-22 (2-4)	Total/NA	Solid	3050B	
500-127508-23	GP-22 (6-8)	Total/NA	Solid	3050B	
500-127508-24	GP-23 (2-4)	Total/NA	Solid	3050B	
500-127508-25	GP-23 (6-8)	Total/NA	Solid	3050B	
MB 500-384019/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-384019/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-127508-1 MS	GP-12 (2-4)	Total/NA	Solid	3050B	
500-127508-1 MSD	GP-12 (2-4)	Total/NA	Solid	3050B	
500-127508-1 DU	GP-12 (2-4)	Total/NA	Solid	3050B	

### Prep Batch: 384021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-26	GP-24 (2-4)	Total/NA	Solid	3050B	
500-127508-27	GP-24 (6-8)	Total/NA	Solid	3050B	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Metals (Continued)

### Prep Batch: 384021 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-28	GP-25 (2-4)	Total/NA	Solid	3050B	
500-127508-29	GP-25 (6-8)	Total/NA	Solid	3050B	
MB 500-384021/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-384021/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-127508-26 MS	GP-24 (2-4)	Total/NA	Solid	3050B	
500-127508-26 MSD	GP-24 (2-4)	Total/NA	Solid	3050B	
500-127508-26 DU	GP-24 (2-4)	Total/NA	Solid	3050B	

### Prep Batch: 384187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	3010A	383992
LB 500-383992/1-C	Method Blank	TCLP	Solid	3010A	383992
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Prep Batch: 384260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	7470A	383992
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	383992
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	

### Analysis Batch: 384328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	6010B	384187
LB 500-383992/1-C	Method Blank	TCLP	Solid	6010B	384187
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	6010B	384187

### Analysis Batch: 384394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	7470A	384260
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	384260
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	384260
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	384260

### Analysis Batch: 384719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-26	GP-24 (2-4)	Total/NA	Solid	6010B	384021
500-127508-27	GP-24 (6-8)	Total/NA	Solid	6010B	384021
500-127508-28	GP-25 (2-4)	Total/NA	Solid	6010B	384021
500-127508-29	GP-25 (6-8)	Total/NA	Solid	6010B	384021
MB 500-384021/1-A	Method Blank	Total/NA	Solid	6010B	384021
LCS 500-384021/2-A	Lab Control Sample	Total/NA	Solid	6010B	384021
500-127508-26 MS	GP-24 (2-4)	Total/NA	Solid	6010B	384021
500-127508-26 MSD	GP-24 (2-4)	Total/NA	Solid	6010B	384021
500-127508-26 DU	GP-24 (2-4)	Total/NA	Solid	6010B	384021

### Analysis Batch: 384724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	6010B	384019
500-127508-2	GP-12 (6-8)	Total/NA	Solid	6010B	384019
500-127508-3	GP-13 (2-4)	Total/NA	Solid	6010B	384019

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Metals (Continued)

### Analysis Batch: 384724 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-4	GP-13 (6-8)	Total/NA	Solid	6010B	384019
500-127508-5	GP-14 (2-4)	Total/NA	Solid	6010B	384019
500-127508-6	GP-14 (6-8)	Total/NA	Solid	6010B	384019
500-127508-7	GP-15 (2-4)	Total/NA	Solid	6010B	384019
500-127508-8	GP-15 (6-8)	Total/NA	Solid	6010B	384019
500-127508-9	GP-16 (2-4)	Total/NA	Solid	6010B	384019
500-127508-10	GP-16 (6-8)	Total/NA	Solid	6010B	384019
500-127508-11	GP-17 (2-4)	Total/NA	Solid	6010B	384019
500-127508-13	GP-18 (2-4)	Total/NA	Solid	6010B	384019
500-127508-14	GP-18 (6-8)	Total/NA	Solid	6010B	384019
500-127508-15	GP-19 (2-4)	Total/NA	Solid	6010B	384019
500-127508-16	GP-19 (6-8)	Total/NA	Solid	6010B	384019
500-127508-22	GP-22 (2-4)	Total/NA	Solid	6010B	384019
500-127508-23	GP-22 (6-8)	Total/NA	Solid	6010B	384019
500-127508-24	GP-23 (2-4)	Total/NA	Solid	6010B	384019
500-127508-25	GP-23 (6-8)	Total/NA	Solid	6010B	384019
MB 500-384019/1-A	Method Blank	Total/NA	Solid	6010B	384019
LCS 500-384019/2-A	Lab Control Sample	Total/NA	Solid	6010B	384019
500-127508-1 MS	GP-12 (2-4)	Total/NA	Solid	6010B	384019
500-127508-1 MSD	GP-12 (2-4)	Total/NA	Solid	6010B	384019
500-127508-1 DU	GP-12 (2-4)	Total/NA	Solid	6010B	384019

### Analysis Batch: 384827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-12	GP-17 (6-8)	Total/NA	Solid	6010B	384019

## General Chemistry

### Analysis Batch: 383751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-3	GP-13 (2-4)	Total/NA	Solid	Moisture	
500-127508-4	GP-13 (6-8)	Total/NA	Solid	Moisture	
500-127508-5	GP-14 (2-4)	Total/NA	Solid	Moisture	
500-127508-6	GP-14 (6-8)	Total/NA	Solid	Moisture	
500-127508-25	GP-23 (6-8)	Total/NA	Solid	Moisture	
500-127508-26	GP-24 (2-4)	Total/NA	Solid	Moisture	
500-127508-27	GP-24 (6-8)	Total/NA	Solid	Moisture	
500-127508-28	GP-25 (2-4)	Total/NA	Solid	Moisture	
500-127508-29	GP-25 (6-8)	Total/NA	Solid	Moisture	
500-127508-30	Trip Blank	Total/NA	Solid	Moisture	

### Analysis Batch: 384553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9045C	

### Analysis Batch: 384965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-22	GP-22 (2-4)	Total/NA	Solid	Moisture	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## General Chemistry (Continued)

### Analysis Batch: 385047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	SM 2710F	

### Prep Batch: 385217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9010B	
MB 500-385217/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-385217/2-A	Lab Control Sample	Total/NA	Solid	9010B	

### Prep Batch: 385245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9030B	
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9030B	

### Analysis Batch: 385286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9095A	

### Analysis Batch: 385288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	1010	

### Analysis Batch: 385342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9014	385217
MB 500-385217/1-A	Method Blank	Total/NA	Solid	9014	385217
LCS 500-385217/2-A	Lab Control Sample	Total/NA	Solid	9014	385217

### Analysis Batch: 385402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9034	385245
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9034	385245
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9034	385245

### Analysis Batch: 427540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	Moisture	
500-127508-2	GP-12 (6-8)	Total/NA	Solid	Moisture	
500-127508-7	GP-15 (2-4)	Total/NA	Solid	Moisture	
500-127508-8	GP-15 (6-8)	Total/NA	Solid	Moisture	
500-127508-9	GP-16 (2-4)	Total/NA	Solid	Moisture	
500-127508-10	GP-16 (6-8)	Total/NA	Solid	Moisture	
500-127508-11	GP-17 (2-4)	Total/NA	Solid	Moisture	
500-127508-12	GP-17 (6-8)	Total/NA	Solid	Moisture	
500-127508-13	GP-18 (2-4)	Total/NA	Solid	Moisture	
500-127508-14	GP-18 (6-8)	Total/NA	Solid	Moisture	
500-127508-15	GP-19 (2-4)	Total/NA	Solid	Moisture	
500-127508-16	GP-19 (6-8)	Total/NA	Solid	Moisture	
500-127508-17	GP-20 (2-4)	Total/NA	Solid	Moisture	
500-127508-18	GP-20 (6-8)	Total/NA	Solid	Moisture	
500-127508-19	GP-20 (14-16)	Total/NA	Solid	Moisture	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## General Chemistry (Continued)

### Analysis Batch: 427540 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-20	GP-21 (2-4)	Total/NA	Solid	Moisture	5
500-127508-21	GP-21 (6-8)	Total/NA	Solid	Moisture	6
500-127508-23	GP-22 (6-8)	Total/NA	Solid	Moisture	7
500-127508-24	GP-23 (2-4)	Total/NA	Solid	Moisture	8
500-127508-25	GP-23 (6-8)	Total/NA	Solid	Moisture	9

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127508-3	GP-13 (2-4)	102	106	89	92
500-127508-4	GP-13 (6-8)	100	108	89	93
500-127508-5	GP-14 (2-4)	103	105	88	94
500-127508-6	GP-14 (6-8)	103	106	89	93
500-127508-26	GP-24 (2-4)	103	107	88	93
500-127508-27	GP-24 (6-8)	105	106	90	93
500-127508-28	GP-25 (2-4)	100	106	88	92
500-127508-29	GP-25 (6-8)	103	103	90	95
500-127508-30	Trip Blank	102	103	88	92
LCS 500-384262/4	Lab Control Sample	103	109	93	102
LCS 500-385282/4	Lab Control Sample	97	100	90	91
MB 500-384262/6	Method Blank	105	114	89	100
MB 500-385282/6	Method Blank	98	107	89	92

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127508-25	GP-23 (6-8)	100	109	84	103
LB 500-384086/1-A	Method Blank	104	110	89	97

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
LCS 500-384171/2-A	Lab Control Sample	98	87	61	92	44	103
MB 500-384171/1-A	Method Blank	90	90	65	97	43	107

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

TPH = Terphenyl-d14 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
500-127508-25	GP-23 (6-8)	91	90	62	99	43	108
LB 500-383992/1-B	Method Blank	90	84	56	94	39	104

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TFT (80-120)	TFT (80-120)
500-127508-1	GP-12 (2-4)	91	91
500-127508-2	GP-12 (6-8)	91	91
500-127508-7	GP-15 (2-4)	90	90
500-127508-8	GP-15 (6-8)	89	89
500-127508-9	GP-16 (2-4)	91	91
500-127508-10	GP-16 (6-8)	91	91
500-127508-11	GP-17 (2-4)	91	91
500-127508-12	GP-17 (6-8)	90	90
500-127508-13	GP-18 (2-4)	91	91
500-127508-14	GP-18 (6-8)	91	91
500-127508-15	GP-19 (2-4)	89	89
500-127508-16	GP-19 (6-8)	90	90
500-127508-17	GP-20 (2-4)	90	90
500-127508-18	GP-20 (6-8)	88	88
500-127508-19	GP-20 (14-16)	86	86
500-127508-20	GP-21 (2-4)	98	98
500-127508-21	GP-21 (6-8)	125 X	125 X
500-127508-21	GP-21 (6-8)	173 X	173 X
500-127508-22	GP-22 (2-4)	81	81
500-127508-22	GP-22 (2-4)	89	89
500-127508-23	GP-22 (6-8)	88	88
500-127508-24	GP-23 (2-4)	87	87
500-127508-25	GP-23 (6-8)	87	87
LCS 490-427841/44-A	Lab Control Sample	95	95
LCS 490-427841/44-A	Lab Control Sample	93	93
LCSD 490-427841/45-A	Lab Control Sample Dup	95	95
LCSD 490-427841/45-A	Lab Control Sample Dup	91	91
MB 490-427841/43-A	Method Blank	86	86
MB 490-427841/43-A	Method Blank	89	89

### Surrogate Legend

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

TFT = a,a,a-Trifluorotoluene

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (49-129)	DCB1 (37-121)
500-127508-25	GP-23 (6-8)	67	71
LCS 500-384456/2-A	Lab Control Sample	76	63
MB 500-384456/1-A	Method Blank	76	70

### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		C9 (44-148)	
500-127508-25	GP-23 (6-8)	76	
500-127508-29	GP-25 (6-8)	86	
LCS 500-383737/2-A	Lab Control Sample	77	
LCSD 500-383737/3-A	Lab Control Sample Dup	71	
MB 500-383737/1-A	Method Blank	83	

### Surrogate Legend

C9 = n-Nonane

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID:** MB 500-384262/6

**Matrix:** Solid

**Analysis Batch:** 384262

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Methyl Ethyl Ketone	<0.0025		0.0050	0.0025	mg/L			05/08/17 22:32	1
1,2-Dichloroethane	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Benzene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Carbon tetrachloride	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Chlorobenzene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Chloroform	<0.0010		0.0020	0.0010	mg/L			05/08/17 22:32	1
Tetrachloroethylene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Trichloroethylene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Vinyl chloride	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	105		75 - 126				05/08/17 22:32	1
4-Bromofluorobenzene (Surr)	114		72 - 124				05/08/17 22:32	1
Dibromofluoromethane	89		75 - 120				05/08/17 22:32	1
Toluene-d8 (Surr)	100		75 - 120				05/08/17 22:32	1

**Lab Sample ID:** LCS 500-384262/4

**Matrix:** Solid

**Analysis Batch:** 384262

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	MB	MB	Spike Added	LCN	LCN	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene			0.0500	0.0449		mg/L		90	67 - 122
Methyl Ethyl Ketone			0.0500	0.0524		mg/L		105	53 - 141
1,2-Dichloroethane			0.0500	0.0504		mg/L		101	68 - 127
Benzene			0.0500	0.0479		mg/L		96	70 - 120
Carbon tetrachloride			0.0500	0.0453		mg/L		91	65 - 122
Chlorobenzene			0.0500	0.0500		mg/L		100	70 - 120
Chloroform			0.0500	0.0455		mg/L		91	70 - 120
Tetrachloroethylene			0.0500	0.0518		mg/L		104	70 - 128
Trichloroethylene			0.0500	0.0488		mg/L		98	70 - 125
Vinyl chloride			0.0500	0.0415		mg/L		83	64 - 126

**LCS LCS**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					
4-Bromofluorobenzene (Surr)	109		72 - 124					
Dibromofluoromethane	93		75 - 120					
Toluene-d8 (Surr)	102		75 - 120					

**Lab Sample ID:** MB 500-385282/6

**Matrix:** Solid

**Analysis Batch:** 385282

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,1,1,2-Tetrachloroethane	<0.46		1.0		0.46	ug/Kg				05/16/17 00:56	1
1,1,1-Trichloroethane	<0.38		1.0		0.38	ug/Kg				05/16/17 00:56	1
1,1,2,2-Tetrachloroethane	<0.40		1.0		0.40	ug/Kg				05/16/17 00:56	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: MB 500-385282/6**

**Matrix: Solid**

**Analysis Batch: 385282**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.35				1.0	0.35	ug/Kg			05/16/17 00:56	1
1,1-Dichloroethane	<0.41				1.0	0.41	ug/Kg			05/16/17 00:56	1
1,1-Dichloroethene	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
1,1-Dichloropropene	<0.30				1.0	0.30	ug/Kg			05/16/17 00:56	1
1,2,3-Trichlorobenzene	<0.46				1.0	0.46	ug/Kg			05/16/17 00:56	1
1,2,3-Trichloropropane	<0.41				1.0	0.41	ug/Kg			05/16/17 00:56	1
1,2,4-Trichlorobenzene	<0.34				1.0	0.34	ug/Kg			05/16/17 00:56	1
1,2,4-Trimethylbenzene	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
1,2-Dibromo-3-Chloropropane	<2.0				5.0	2.0	ug/Kg			05/16/17 00:56	1
1,2-Dibromoethane	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
1,2-Dichlorobenzene	<0.33				1.0	0.33	ug/Kg			05/16/17 00:56	1
1,2-Dichloroethane	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
1,2-Dichloropropene	<0.43				1.0	0.43	ug/Kg			05/16/17 00:56	1
1,3,5-Trimethylbenzene	<0.38				1.0	0.38	ug/Kg			05/16/17 00:56	1
1,3-Dichlorobenzene	<0.40				1.0	0.40	ug/Kg			05/16/17 00:56	1
1,3-Dichloropropane	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
1,4-Dichlorobenzene	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
2,2-Dichloropropane	<0.44				1.0	0.44	ug/Kg			05/16/17 00:56	1
2-Chlorotoluene	<0.31				1.0	0.31	ug/Kg			05/16/17 00:56	1
4-Chlorotoluene	<0.35				1.0	0.35	ug/Kg			05/16/17 00:56	1
Benzene	<0.15				0.25	0.15	ug/Kg			05/16/17 00:56	1
Bromobenzene	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
Bromochloromethane	<0.43				1.0	0.43	ug/Kg			05/16/17 00:56	1
Bromodichloromethane	<0.37				1.0	0.37	ug/Kg			05/16/17 00:56	1
Bromoform	<0.48				1.0	0.48	ug/Kg			05/16/17 00:56	1
Bromomethane	<0.80				2.0	0.80	ug/Kg			05/16/17 00:56	1
Carbon tetrachloride	<0.38				1.0	0.38	ug/Kg			05/16/17 00:56	1
Chlorobenzene	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
Chloroethane	<0.50				1.0	0.50	ug/Kg			05/16/17 00:56	1
Chloroform	<0.37				2.0	0.37	ug/Kg			05/16/17 00:56	1
Chloromethane	<0.32				1.0	0.32	ug/Kg			05/16/17 00:56	1
cis-1,2-Dichloroethene	<0.41				1.0	0.41	ug/Kg			05/16/17 00:56	1
cis-1,3-Dichloropropene	<0.42				1.0	0.42	ug/Kg			05/16/17 00:56	1
Dibromochloromethane	<0.49				1.0	0.49	ug/Kg			05/16/17 00:56	1
Dibromomethane	<0.27				1.0	0.27	ug/Kg			05/16/17 00:56	1
Dichlorodifluoromethane	<0.67				2.0	0.67	ug/Kg			05/16/17 00:56	1
Ethylbenzene	<0.18				0.25	0.18	ug/Kg			05/16/17 00:56	1
Hexachlorobutadiene	<0.45				1.0	0.45	ug/Kg			05/16/17 00:56	1
Isopropyl ether	<0.28				1.0	0.28	ug/Kg			05/16/17 00:56	1
Isopropylbenzene	<0.38				1.0	0.38	ug/Kg			05/16/17 00:56	1
Methyl tert-butyl ether	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
Methylene Chloride	<1.6				5.0	1.6	ug/Kg			05/16/17 00:56	1
Naphthalene	<0.33				1.0	0.33	ug/Kg			05/16/17 00:56	1
n-Butylbenzene	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
N-Propylbenzene	<0.41				1.0	0.41	ug/Kg			05/16/17 00:56	1
p-Isopropyltoluene	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
sec-Butylbenzene	<0.40				1.0	0.40	ug/Kg			05/16/17 00:56	1
Styrene	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: MB 500-385282/6**

**Matrix: Solid**

**Analysis Batch: 385282**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			05/16/17 00:56	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			05/16/17 00:56	1
Toluene	<0.15		0.25	0.15	ug/Kg			05/16/17 00:56	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			05/16/17 00:56	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			05/16/17 00:56	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			05/16/17 00:56	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			05/16/17 00:56	1
Vinyl chloride	<0.26		0.50	0.26	ug/Kg			05/16/17 00:56	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			05/16/17 00:56	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	98		75 - 126		05/16/17 00:56	1
4-Bromofluorobenzene (Surr)	107		72 - 124		05/16/17 00:56	1
Dibromofluoromethane	89		75 - 120		05/16/17 00:56	1
Toluene-d8 (Surr)	92		75 - 120		05/16/17 00:56	1

**Lab Sample ID: LCS 500-385282/4**

**Matrix: Solid**

**Analysis Batch: 385282**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
1,1,1,2-Tetrachloroethane	50.0	50.8		ug/Kg		102	70 - 125	
1,1,1-Trichloroethane	50.0	48.8		ug/Kg		98	70 - 125	
1,1,2,2-Tetrachloroethane	50.0	47.9		ug/Kg		96	67 - 127	
1,1,2-Trichloroethane	50.0	51.0		ug/Kg		102	70 - 122	
1,1-Dichloroethane	50.0	58.6		ug/Kg		117	70 - 125	
1,1-Dichloroethene	50.0	48.0		ug/Kg		96	67 - 122	
1,1-Dichloropropene	50.0	51.2		ug/Kg		102	70 - 121	
1,2,3-Trichlorobenzene	50.0	41.3		ug/Kg		83	55 - 140	
1,2,3-Trichloropropane	50.0	47.2		ug/Kg		94	50 - 133	
1,2,4-Trichlorobenzene	50.0	48.8		ug/Kg		98	66 - 127	
1,2,4-Trimethylbenzene	50.0	54.4		ug/Kg		109	70 - 123	
1,2-Dibromo-3-Chloropropane	50.0	41.2		ug/Kg		82	56 - 123	
1,2-Dibromoethane	50.0	48.7		ug/Kg		97	70 - 125	
1,2-Dichlorobenzene	50.0	52.5		ug/Kg		105	70 - 125	
1,2-Dichloroethane	50.0	57.8		ug/Kg		116	68 - 127	
1,2-Dichloropropane	50.0	64.7		ug/Kg		129	67 - 130	
1,3,5-Trimethylbenzene	50.0	54.3		ug/Kg		109	70 - 123	
1,3-Dichlorobenzene	50.0	54.6		ug/Kg		109	70 - 125	
1,3-Dichloropropane	50.0	51.0		ug/Kg		102	62 - 136	
1,4-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 120	
2,2-Dichloropropane	50.0	48.9		ug/Kg		98	58 - 129	
2-Chlorotoluene	50.0	54.0		ug/Kg		108	70 - 125	
4-Chlorotoluene	50.0	52.1		ug/Kg		104	68 - 124	
Benzene	50.0	53.0		ug/Kg		106	70 - 120	
Bromobenzene	50.0	56.7		ug/Kg		113	70 - 122	
Bromochloromethane	50.0	50.1		ug/Kg		100	65 - 122	
Bromodichloromethane	50.0	49.3		ug/Kg		99	69 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: LCS 500-385282/4**

**Matrix: Solid**

**Analysis Batch: 385282**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Bromoform	50.0	54.5		ug/Kg		109	56 - 132	
Bromomethane	50.0	37.3		ug/Kg		75	40 - 130	
Carbon tetrachloride	50.0	51.0		ug/Kg		102	65 - 122	
Chlorobenzene	50.0	51.6		ug/Kg		103	70 - 120	
Chloroethane	50.0	39.2		ug/Kg		78	45 - 127	
Chloroform	50.0	48.6		ug/Kg		97	70 - 120	
Chloromethane	50.0	70.6		ug/Kg		141	54 - 147	
cis-1,2-Dichloroethene	50.0	52.0		ug/Kg		104	70 - 125	
cis-1,3-Dichloropropene	50.0	50.5		ug/Kg		101	64 - 127	
Dibromochloromethane	50.0	49.5		ug/Kg		99	68 - 125	
Dibromomethane	50.0	49.0		ug/Kg		98	70 - 120	
Dichlorodifluoromethane	50.0	51.5		ug/Kg		103	40 - 150	
Ethylbenzene	50.0	52.3		ug/Kg		105	70 - 120	
Hexachlorobutadiene	50.0	63.4		ug/Kg		127	51 - 150	
Isopropylbenzene	50.0	56.9		ug/Kg		114	70 - 126	
Methyl tert-butyl ether	50.0	45.4		ug/Kg		91	70 - 120	
Methylene Chloride	50.0	46.5		ug/Kg		93	69 - 125	
Naphthalene	50.0	38.9		ug/Kg		78	59 - 130	
n-Butylbenzene	50.0	52.7		ug/Kg		105	68 - 125	
N-Propylbenzene	50.0	54.3		ug/Kg		109	69 - 127	
p-Isopropyltoluene	50.0	54.3		ug/Kg		109	70 - 125	
sec-Butylbenzene	50.0	54.2		ug/Kg		108	70 - 123	
Styrene	50.0	50.3		ug/Kg		101	70 - 120	
tert-Butylbenzene	50.0	56.5		ug/Kg		113	70 - 121	
Tetrachloroethene	50.0	59.9		ug/Kg		120	70 - 128	
Toluene	50.0	51.8		ug/Kg		104	70 - 125	
trans-1,2-Dichloroethene	50.0	49.5		ug/Kg		99	70 - 125	
trans-1,3-Dichloropropene	50.0	48.2		ug/Kg		96	62 - 128	
Trichloroethene	50.0	57.9		ug/Kg		116	70 - 125	
Trichlorofluoromethane	50.0	48.1		ug/Kg		96	70 - 126	
Vinyl chloride	50.0	61.3		ug/Kg		123	64 - 126	
Xylenes, Total	100	101		ug/Kg		101	70 - 125	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		75 - 126
4-Bromofluorobenzene (Surr)	100		72 - 124
Dibromofluoromethane	90		75 - 120
Toluene-d8 (Surr)	91		75 - 120

**Lab Sample ID: LB 500-384086/1-A**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/08/17 23:25	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20
Benzene	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: LB 500-384086/1-A**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**

Analyte	LB		Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
Carbon tetrachloride	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20
Chlorobenzene	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20
Chloroform	<0.020		20	0.040	0.020	mg/L		05/08/17 23:25	20
Tetrachloroethene	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20
Trichloroethene	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20
Vinyl chloride	<0.010		20	0.020	0.010	mg/L		05/08/17 23:25	20

Surrogate	LB		Dil Fac				
	%Recovery	Qualifier	Limits	Prepared	Analyzed		
1,2-Dichloroethane-d4 (Surr)	104		20	75 - 126		05/08/17 23:25	
4-Bromofluorobenzene (Surr)	110		20	72 - 124		05/08/17 23:25	
Dibromofluoromethane	89		20	75 - 120		05/08/17 23:25	
Toluene-d8 (Surr)	97		20	75 - 120		05/08/17 23:25	

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

**Lab Sample ID: MB 500-384171/1-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 384171**

Analyte	MB		Dil Fac						
	Result	Qualifier		RL	MDL	Unit	D	Prepared	Analyzed
1,4-Dichlorobenzene	<0.0020		1	0.0020	0.0020	mg/L		05/08/17 07:42	05/08/17 15:01
2,4,5-Trichlorophenol	<0.010		1	0.010	0.010	mg/L		05/08/17 07:42	05/08/17 15:01
2,4,6-Trichlorophenol	<0.0050		1	0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 15:01
2,4-Dinitrotoluene	<0.0010		1	0.0010	0.0010	mg/L		05/08/17 07:42	05/08/17 15:01
2-Methylphenol	<0.0020		1	0.0020	0.0020	mg/L		05/08/17 07:42	05/08/17 15:01
3 & 4 Methylphenol	<0.0020		1	0.0020	0.0020	mg/L		05/08/17 07:42	05/08/17 15:01
Hexachlorobenzene	<0.00050		1	0.00050	0.00050	mg/L		05/08/17 07:42	05/08/17 15:01
Hexachlorobutadiene	<0.0050		1	0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 15:01
Hexachloroethane	<0.0050		1	0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 15:01
Nitrobenzene	<0.0010		1	0.0010	0.0010	mg/L		05/08/17 07:42	05/08/17 15:01
Pentachlorophenol	<0.020		1	0.020	0.020	mg/L		05/08/17 07:42	05/08/17 15:01
Pyridine	<0.020		1	0.020	0.020	mg/L		05/08/17 07:42	05/08/17 15:01

Surrogate	MB		Dil Fac				
	%Recovery	Qualifier		Limits	Prepared	Analyzed	
2,4,6-Tribromophenol (Surr)	90		1	40 - 145	05/08/17 07:42	05/08/17 15:01	
2-Fluorobiphenyl	90		1	34 - 110	05/08/17 07:42	05/08/17 15:01	
2-Fluorophenol (Surr)	65		1	27 - 110	05/08/17 07:42	05/08/17 15:01	
Nitrobenzene-d5 (Surr)	97		1	36 - 120	05/08/17 07:42	05/08/17 15:01	
Phenol-d5 (Surr)	43		1	20 - 100	05/08/17 07:42	05/08/17 15:01	
Terphenyl-d14 (Surr)	107		1	40 - 145	05/08/17 07:42	05/08/17 15:01	

**Lab Sample ID: LCS 500-384171/2-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 384171**

Analyte	Spike Added	LCS		Dil Fac	
		Result	Qualifier		%Rec.
1,4-Dichlorobenzene	0.0400	0.0322		81	23 - 110

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: LCS 500-384171/2-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384171**

**%Rec.**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
2,4,5-Trichlorophenol	0.0400	0.0388		mg/L		97	63 - 120
2,4,6-Trichlorophenol	0.0400	0.0393		mg/L		98	62 - 110
2,4-Dinitrotoluene	0.0400	0.0432		mg/L		108	63 - 122
2-Methylphenol	0.0400	0.0342		mg/L		86	53 - 110
3 & 4 Methylphenol	0.0400	0.0329		mg/L		82	53 - 110
Hexachlorobenzene	0.0400	0.0375		mg/L		94	61 - 120
Hexachlorobutadiene	0.0400	0.0315		mg/L		79	20 - 100
Hexachloroethane	0.0400	0.0314		mg/L		79	20 - 100
Nitrobenzene	0.0400	0.0359		mg/L		90	53 - 110
Pentachlorophenol	0.0800	0.0779		mg/L		97	23 - 129
Pyridine	0.0400	0.0259		mg/L		65	15 - 110

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	98		40 - 145
2-Fluorobiphenyl	87		34 - 110
2-Fluorophenol (Surr)	61		27 - 110
Nitrobenzene-d5 (Surr)	92		36 - 120
Phenol-d5 (Surr)	44		20 - 100
Terphenyl-d14 (Surr)	103		40 - 145

**Lab Sample ID: LB 500-383992/1-B**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384171**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 14:34	1
2-Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 14:34	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 14:34	1
Pyridine	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 14:34	1

Surrogate	LB	LB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier		Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	90		40 - 145	05/08/17 07:42	05/08/17 14:34	1
2-Fluorobiphenyl	84		34 - 110	05/08/17 07:42	05/08/17 14:34	1
2-Fluorophenol (Surr)	56		27 - 110	05/08/17 07:42	05/08/17 14:34	1
Nitrobenzene-d5 (Surr)	94		36 - 120	05/08/17 07:42	05/08/17 14:34	1
Phenol-d5 (Surr)	39		20 - 100	05/08/17 07:42	05/08/17 14:34	1
Terphenyl-d14 (Surr)	104		40 - 145	05/08/17 07:42	05/08/17 14:34	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID: MB 490-427841/43-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<18		25	18	ug/Kg		05/06/17 12:45	05/10/17 17:07	1
Ethylbenzene	<19		25	19	ug/Kg		05/06/17 12:45	05/10/17 17:07	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		05/06/17 12:45	05/10/17 17:07	1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		05/06/17 12:45	05/10/17 17:07	1
Naphthalene	<120		250	120	ug/Kg		05/06/17 12:45	05/10/17 17:07	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		05/06/17 12:45	05/10/17 17:07	1
Toluene	<17		25	17	ug/Kg		05/06/17 12:45	05/10/17 17:07	1
Xylenes, Total	<30		75	30	ug/Kg		05/06/17 12:45	05/10/17 17:07	1
Wisconsin GRO	<2500		5000	2500	ug/Kg		05/06/17 12:45	05/10/17 17:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	89		80 - 120	05/06/17 12:45	05/10/17 17:07	1
a,a,a-Trifluorotoluene	102		80 - 120	05/06/17 12:45	05/10/17 17:07	1

**Lab Sample ID: MB 490-427841/43-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<18		25	18	ug/Kg		05/06/17 12:45	05/11/17 06:32	1
Ethylbenzene	<19		25	19	ug/Kg		05/06/17 12:45	05/11/17 06:32	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		05/06/17 12:45	05/11/17 06:32	1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		05/06/17 12:45	05/11/17 06:32	1
Naphthalene	<120		250	120	ug/Kg		05/06/17 12:45	05/11/17 06:32	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		05/06/17 12:45	05/11/17 06:32	1
Toluene	<17		25	17	ug/Kg		05/06/17 12:45	05/11/17 06:32	1
Xylenes, Total	<30		75	30	ug/Kg		05/06/17 12:45	05/11/17 06:32	1
Wisconsin GRO	<2500		5000	2500	ug/Kg		05/06/17 12:45	05/11/17 06:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		80 - 120	05/06/17 12:45	05/11/17 06:32	1
a,a,a-Trifluorotoluene	96		80 - 120	05/06/17 12:45	05/11/17 06:32	1

**Lab Sample ID: LCS 490-427841/44-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzene	5000	4940		ug/Kg		99	76 - 120
Ethylbenzene	5000	4820		ug/Kg		96	77 - 120
Methyl tert-butyl ether	5000	5520		ug/Kg		110	73 - 120
1,2,4-Trimethylbenzene	5000	4880		ug/Kg		98	60 - 140
Naphthalene	5000	5720		ug/Kg		114	74 - 127
1,3,5-Trimethylbenzene	5000	4900		ug/Kg		98	74 - 133
Toluene	5000	4920		ug/Kg		98	79 - 120
Wisconsin GRO	50000	58100		ug/Kg		116	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID: LCS 490-427841/44-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	95		80 - 120
a,a,a-Trifluorotoluene	104		80 - 120

**Lab Sample ID: LCS 490-427841/44-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Benzene	5000	4930		ug/Kg		99	76 - 120	
Ethylbenzene	5000	4910		ug/Kg		98	77 - 120	
Methyl tert-butyl ether	5000	5530		ug/Kg		111	73 - 120	
1,2,4-Trimethylbenzene	5000	4910		ug/Kg		98	60 - 140	
Naphthalene	5000	5600		ug/Kg		112	74 - 127	
1,3,5-Trimethylbenzene	5000	4950		ug/Kg		99	74 - 133	
Toluene	5000	4970		ug/Kg		99	79 - 120	
Wisconsin GRO	50000	57900		ug/Kg		116	80 - 120	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	93		80 - 120
a,a,a-Trifluorotoluene	101		80 - 120

**Lab Sample ID: LCSD 490-427841/45-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Benzene	5000	4810		ug/Kg		96	76 - 120	3	27	
Ethylbenzene	5000	4710		ug/Kg		94	77 - 120	2	49	
Methyl tert-butyl ether	5000	5560		ug/Kg		111	73 - 120	1	31	
1,2,4-Trimethylbenzene	5000	4750		ug/Kg		95	60 - 140	3	50	
Naphthalene	5000	5470		ug/Kg		109	74 - 127	5	50	
1,3,5-Trimethylbenzene	5000	4790		ug/Kg		96	74 - 133	2	42	
Toluene	5000	4820		ug/Kg		96	79 - 120	2	37	
Wisconsin GRO	50000	56100		ug/Kg		112	80 - 120	3	20	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	95		80 - 120
a,a,a-Trifluorotoluene	101		80 - 120

**Lab Sample ID: LCSD 490-427841/45-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Benzene	5000	4890		ug/Kg		98	76 - 120	1	27	
Ethylbenzene	5000	4780		ug/Kg		96	77 - 120	3	49	
Methyl tert-butyl ether	5000	5730		ug/Kg		115	73 - 120	3	31	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID: LCSD 490-427841/45-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 427841**

**%Rec.**

**RPD**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2,4-Trimethylbenzene	5000	4820		ug/Kg		96	60 - 140	2	50
Naphthalene	5000	5760		ug/Kg		115	74 - 127	3	50
1,3,5-Trimethylbenzene	5000	4860		ug/Kg		97	74 - 133	2	42
Toluene	5000	4900		ug/Kg		98	79 - 120	2	37
Wisconsin GRO	50000	59200		ug/Kg		118	80 - 120	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	91		80 - 120
a,a,a-Trifluorotoluene	101		80 - 120

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID: LB3 500-384046/21-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<500		1500	500	ug/Kg		05/06/17 01:30	05/07/17 20:24	50

**Lab Sample ID: LCS 500-384046/23-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
WI Gasoline Range Organics (C5-C10)	20000	22800		ug/Kg		114	80 - 120

**Lab Sample ID: LCSD 500-384046/24-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
WI Gasoline Range Organics (C5-C10)	20000	22900		ug/Kg		114	80 - 120	0	20

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 500-384456/1-A**

**Matrix: Solid**

**Analysis Batch: 384455**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1221	<7.3		17	7.3	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1232	<7.3		17	7.3	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1242	<5.5		17	5.5	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1248	<6.6		17	6.6	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1254	<3.6		17	3.6	ug/Kg		05/09/17 16:38	05/10/17 11:02	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: MB 500-384456/1-A**

**Matrix: Solid**

**Analysis Batch: 384545**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	MB		RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed		
PCB-1260	<8.2		17	8.2	ug/Kg	D	05/09/17 16:38	05/10/17 11:02		1
<b>Surrogate</b>										
Tetrachloro-m-xylene	76		49 - 129				Prepared	Analyzed		
DCB Decachlorobiphenyl	70		37 - 121				05/09/17 16:38	05/10/17 11:02		1

**Lab Sample ID: LCS 500-384456/2-A**

**Matrix: Solid**

**Analysis Batch: 384545**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	MB		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier								
PCB-1016			167	135		ug/Kg	D	81	57 - 120	
PCB-1260			167	130		ug/Kg		78	61 - 125	
<b>Surrogate</b>										
Tetrachloro-m-xylene	76		49 - 129				Prepared	Analyzed		
DCB Decachlorobiphenyl	63		37 - 121				05/09/17 16:38	05/10/17 11:02		1

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

**Lab Sample ID: MB 500-383737/1-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	MB		RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed		
WI Diesel Range Organics (C10-C28)	<1.6		4.0	1.6	mg/Kg	D	05/04/17 11:15	05/05/17 14:27		1
<b>Surrogate</b>										
n-Nonane	83		44 - 148				Prepared	Analyzed		

**Lab Sample ID: LCS 500-383737/2-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	MB		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier								
WI Diesel Range Organics (C10-C28)			20.0	14.9		mg/Kg	D	75	70 - 120	
<b>Surrogate</b>										
n-Nonane	77		44 - 148				Prepared	Analyzed		

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC) (Continued)

**Lab Sample ID: LCSD 500-383737/3-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
WI Diesel Range Organics (C10-C28)	20.0	16.3		mg/Kg		81	70 - 120	9		20
<i>Surrogate</i>										
		LCSD %Recovery	LCSD Qualifier	Limits						
<i>n</i> -Nonane	71			44 - 148						

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 500-384019/1-A**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.23		0.50	0.23	mg/Kg		05/06/17 11:05	05/11/17 03:07	1

**Lab Sample ID: LCS 500-384019/2-A**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits	
Lead	10.0	8.72		mg/Kg		87	80 - 120		

**Lab Sample ID: 500-127508-1 MS**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: GP-12 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	Limits
Lead	19	F1	10.1	22.7	F1	mg/Kg	⊗	39	75 - 125	

**Lab Sample ID: 500-127508-1 MSD**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: GP-12 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Lead	19	F1	10.2	23.0	F1	mg/Kg	⊗	42	75 - 125	1

**Lab Sample ID: 500-127508-1 DU**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: GP-12 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	RPD	RPD	Limit
Lead	19	F1	10.2	17.4		mg/Kg	⊗			7

**Lab Sample ID: MB 500-384021/1-A**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.23		0.50	0.23	mg/Kg		05/06/17 11:07	05/10/17 18:20	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Lab Sample ID: LCS 500-384021/2-A**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Lead	10.0	8.43		mg/Kg	84	80 - 120	

**Lab Sample ID: 500-127508-26 MS**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: GP-24 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Lead	27	V F1	10.2	37.2		mg/Kg	⊗	103	75 - 125

**Lab Sample ID: 500-127508-26 MSD**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: GP-24 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Lead	27	V F1	10.7	34.0	F1	mg/Kg	⊗	69	75 - 125

**Lab Sample ID: 500-127508-26 DU**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: GP-24 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD
Lead	27	V F1	23.2		mg/Kg	⊗	14	20

**Lab Sample ID: LCS 500-384187/2-A**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384187**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0958		mg/L	96	80 - 120	
Barium	0.500	0.514		mg/L	103	80 - 120	
Cadmium	0.0500	0.0503		mg/L	101	80 - 120	
Chromium	0.200	0.194		mg/L	97	80 - 120	
Copper	0.250	0.254		mg/L	102	80 - 120	
Lead	0.100	0.0943		mg/L	94	80 - 120	
Nickel	0.500	0.486		mg/L	97	80 - 120	
Selenium	0.100	0.0946		mg/L	95	80 - 120	
Silver	0.0500	0.0473		mg/L	95	80 - 120	
Zinc	0.500	0.457		mg/L	91	80 - 120	

**Lab Sample ID: LB 500-383992/1-C**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384187**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	05/08/17 08:10	05/08/17 20:33		1
Barium	<0.050		0.50	0.050	mg/L	05/08/17 08:10	05/08/17 20:33		1
Cadmium	<0.0020		0.0050	0.0020	mg/L	05/08/17 08:10	05/08/17 20:33		1
Chromium	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 20:33		1
Copper	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 20:33		1
Lead	<0.0075		0.050	0.0075	mg/L	05/08/17 08:10	05/08/17 20:33		1
Nickel	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 20:33		1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID:** LB 500-383992/1-C

**Matrix:** Solid

**Analysis Batch:** 384328

**Client Sample ID:** Method Blank

**Prep Type:** TCLP

**Prep Batch:** 384187

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.020		0.050		0.020	mg/L		05/08/17 08:10	05/08/17 20:33		1
Silver	<0.010		0.025		0.010	mg/L		05/08/17 08:10	05/08/17 20:33		1
Zinc	<0.020		0.10		0.020	mg/L		05/08/17 08:10	05/08/17 20:33		1

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID:** MB 500-384260/12-A

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 384260

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		0.00020	mg/L		05/08/17 13:40	05/09/17 10:03		1

**Lab Sample ID:** LCS 500-384260/13-A

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 384260

Analyte	Spike		LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	
	Added										
Mercury	0.00200		0.00212		0.00200		mg/L	106	80 - 120		

**Lab Sample ID:** LB 500-383992/1-D

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** Method Blank

**Prep Type:** TCLP

**Prep Batch:** 384260

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		0.00020	mg/L		05/08/17 13:40	05/09/17 10:06		1

## Method: 9014 - Cyanide

**Lab Sample ID:** MB 500-385217/1-A

**Matrix:** Solid

**Analysis Batch:** 385342

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 385217

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.17		0.50		0.17	mg/Kg		05/15/17 17:10	05/15/17 20:20		1

**Lab Sample ID:** LCS 500-385217/2-A

**Matrix:** Solid

**Analysis Batch:** 385342

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 385217

Analyte	Spike		LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	
	Added										
Cyanide, Total	5.00		4.75		5.00		mg/Kg	95	80 - 120		

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-385245/1-A

Matrix: Solid

Analysis Batch: 385402

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 385245

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<4.7		10	4.7	mg/Kg		05/15/17 17:36	05/15/17 21:39	1

Lab Sample ID: LCS 500-385245/2-A

Matrix: Solid

Analysis Batch: 385402

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 385245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfide	338	335		mg/Kg		99	80 - 120

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-12 (2-4)**

Date Collected: 05/02/17 08:25

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

**Client Sample ID: GP-12 (2-4)**

Date Collected: 05/02/17 08:25

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-1**

Matrix: Solid

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 17:34	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:14	PJ1	TAL CHI

**Client Sample ID: GP-12 (6-8)**

Date Collected: 05/02/17 08:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

**Client Sample ID: GP-12 (6-8)**

Date Collected: 05/02/17 08:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-2**

Matrix: Solid

Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 18:01	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:32	PJ1	TAL CHI

**Client Sample ID: GP-13 (2-4)**

Date Collected: 05/02/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

**Client Sample ID: GP-13 (2-4)**

Date Collected: 05/02/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-3**

Matrix: Solid

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 09:15	WRE	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-13 (2-4)**

**Date Collected:** 05/02/17 09:15  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-3**

**Matrix:** Solid  
**Percent Solids:** 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	385282	05/16/17 04:52	TCT	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:38	PJ1	TAL CHI

## **Client Sample ID: GP-13 (6-8)**

**Date Collected:** 05/02/17 09:20  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-4**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-13 (6-8)**

**Date Collected:** 05/02/17 09:20  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-4**

**Matrix:** Solid  
**Percent Solids:** 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 09:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 05:18	TCT	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:48	PJ1	TAL CHI

## **Client Sample ID: GP-14 (2-4)**

**Date Collected:** 05/02/17 09:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-5**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-14 (2-4)**

**Date Collected:** 05/02/17 09:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-5**

**Matrix:** Solid  
**Percent Solids:** 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 09:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 05:44	TCT	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:51	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-14 (6-8)**

**Date Collected:** 05/02/17 09:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-6**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-14 (6-8)**

**Date Collected:** 05/02/17 09:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-6**

**Matrix:** Solid  
**Percent Solids:** 73.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 09:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 06:11	TCT	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:54	PJ1	TAL CHI

## **Client Sample ID: GP-15 (2-4)**

**Date Collected:** 05/02/17 09:55  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-7**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-15 (2-4)**

**Date Collected:** 05/02/17 09:55  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-7**

**Matrix:** Solid  
**Percent Solids:** 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 18:28	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:58	PJ1	TAL CHI

## **Client Sample ID: GP-15 (6-8)**

**Date Collected:** 05/02/17 10:00  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-8**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-15 (6-8)**

**Date Collected:** 05/02/17 10:00  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-8**

**Matrix:** Solid  
**Percent Solids:** 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-15 (6-8)**

**Date Collected:** 05/02/17 10:00  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-8**

**Matrix:** Solid  
**Percent Solids:** 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	428992	05/10/17 18:55	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:02	PJ1	TAL CHI

## **Client Sample ID: GP-16 (2-4)**

**Date Collected:** 05/02/17 10:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-9**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-16 (2-4)**

**Date Collected:** 05/02/17 10:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-9**

**Matrix:** Solid  
**Percent Solids:** 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 19:22	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:06	PJ1	TAL CHI

## **Client Sample ID: GP-16 (6-8)**

**Date Collected:** 05/02/17 10:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-10**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-16 (6-8)**

**Date Collected:** 05/02/17 10:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-10**

**Matrix:** Solid  
**Percent Solids:** 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 19:48	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:10	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-17 (2-4)**

**Date Collected:** 05/02/17 10:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-11**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-17 (2-4)**

**Date Collected:** 05/02/17 10:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-11**

**Matrix:** Solid

**Percent Solids:** 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 20:15	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:15	PJ1	TAL CHI

## **Client Sample ID: GP-17 (6-8)**

**Date Collected:** 05/02/17 10:55  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-12**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-17 (6-8)**

**Date Collected:** 05/02/17 10:55  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-12**

**Matrix:** Solid

**Percent Solids:** 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 20:42	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384827	05/11/17 13:32	PJ1	TAL CHI

## **Client Sample ID: GP-18 (2-4)**

**Date Collected:** 05/02/17 11:25  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-13**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-18 (2-4)**

**Date Collected:** 05/02/17 11:25  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-13**

**Matrix:** Solid

**Percent Solids:** 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-18 (2-4)**

Date Collected: 05/02/17 11:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-13**

Matrix: Solid

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	428992	05/10/17 21:09	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:23	PJ1	TAL CHI

## **Client Sample ID: GP-18 (6-8)**

Date Collected: 05/02/17 11:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-14**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-18 (6-8)**

Date Collected: 05/02/17 11:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-14**

Matrix: Solid

Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 21:36	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:35	PJ1	TAL CHI

## **Client Sample ID: GP-19 (2-4)**

Date Collected: 05/02/17 11:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-15**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-19 (2-4)**

Date Collected: 05/02/17 11:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-15**

Matrix: Solid

Percent Solids: 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 23:23	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:39	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-19 (6-8)**

Date Collected: 05/02/17 11:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-16**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-19 (6-8)**

Date Collected: 05/02/17 11:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-16**

Matrix: Solid

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 23:50	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:50	PJ1	TAL CHI

## **Client Sample ID: GP-20 (2-4)**

Date Collected: 05/02/17 12:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-17**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-20 (2-4)**

Date Collected: 05/02/17 12:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-17**

Matrix: Solid

Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 00:17	A1B	TAL NSH

## **Client Sample ID: GP-20 (6-8)**

Date Collected: 05/02/17 12:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-18**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-20 (6-8)**

Date Collected: 05/02/17 12:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-18**

Matrix: Solid

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 00:44	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-20 (14-16)**

Date Collected: 05/02/17 12:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-19**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-20 (14-16)**

Date Collected: 05/02/17 12:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-19**

Matrix: Solid

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 12:11	A1B	TAL NSH

## **Client Sample ID: GP-21 (2-4)**

Date Collected: 05/02/17 12:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-20**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-21 (2-4)**

Date Collected: 05/02/17 12:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-20**

Matrix: Solid

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 09:30	A1B	TAL NSH

## **Client Sample ID: GP-21 (6-8)**

Date Collected: 05/02/17 12:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-21**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-21 (6-8)**

Date Collected: 05/02/17 12:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-21**

Matrix: Solid

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		20	428992	05/11/17 10:24	A1B	TAL NSH
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 10:51	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-22 (2-4)**

Date Collected: 05/02/17 13:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-22**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	384965	05/12/17 14:00	LWN	TAL CHI

## **Client Sample ID: GP-22 (2-4)**

Date Collected: 05/02/17 13:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-22**

Matrix: Solid

Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 02:31	A1B	TAL NSH
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 09:57	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:54	PJ1	TAL CHI

## **Client Sample ID: GP-22 (6-8)**

Date Collected: 05/02/17 13:40

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-23**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-22 (6-8)**

Date Collected: 05/02/17 13:40

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-23**

Matrix: Solid

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 02:58	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:57	PJ1	TAL CHI

## **Client Sample ID: GP-23 (2-4)**

Date Collected: 05/02/17 13:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-24**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-23 (2-4)

Date Collected: 05/02/17 13:50

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-24

Matrix: Solid

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 03:25	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 05:01	PJ1	TAL CHI

## Client Sample ID: GP-23 (6-8)

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			384086	05/06/17 13:35	RMP	TAL CHI
TCLP	Analysis	8260B		20	384262	05/09/17 02:01	JMP	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3510C			384171	05/08/17 07:42	JJH	TAL CHI
TCLP	Analysis	8270D		1	384241	05/08/17 18:41	GES	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3010A			384187	05/08/17 08:10	JEF	TAL CHI
TCLP	Analysis	6010B		1	384328	05/08/17 21:55	PJ1	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	7470A			384260	05/08/17 13:40	MJD	TAL CHI
TCLP	Analysis	7470A		1	384394	05/09/17 10:16	MJD	TAL CHI
Total/NA	Analysis	1010		1	385288		ADK	TAL CHI
					(Start) 05/15/17 14:30			
					(End) 05/15/17 16:22			
Total/NA	Prep	9010B			385217	05/15/17 17:10	MAN	TAL CHI
Total/NA	Analysis	9014		1	385342		MAN	TAL CHI
					(Start) 05/15/17 20:21			
					(End) 05/15/17 20:22			
Total/NA	Prep	9030B			385245	05/15/17 17:36	JB	TAL CHI
Total/NA	Analysis	9034		1	385402	05/15/17 21:53	JB	TAL CHI
Total/NA	Analysis	9045C		1	384553		SMO	TAL CHI
					(Start) 05/09/17 16:08			
					(End) 05/09/17 16:10			
Total/NA	Analysis	9095A		1	385286		ADK	TAL CHI
					(Start) 05/15/17 21:43			
					(End) 05/15/17 21:46			
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH
Total/NA	Analysis	SM 2710F		1	385047		ADK	TAL CHI
					(Start) 05/12/17 22:19			
					(End) 05/12/17 22:24			

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-25**

Matrix: Solid

Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 06:59	A1B	TAL NSH

## **Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-25**

Matrix: Solid

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			384456	05/09/17 16:38	JP1	TAL CHI
Total/NA	Analysis	8082A		1	384545	05/10/17 14:21	BJH	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 17:25	SAW	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 05:06	PJ1	TAL CHI

## **Client Sample ID: GP-24 (2-4)**

Date Collected: 05/02/17 14:15

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-26**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-24 (2-4)**

Date Collected: 05/02/17 14:15

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-26**

Matrix: Solid

Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 14:15	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 06:37	TCT	TAL CHI
Total/NA	Prep	3050B			384021	05/06/17 11:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384719	05/10/17 18:27	PJ1	TAL CHI

## **Client Sample ID: GP-24 (6-8)**

Date Collected: 05/02/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-27**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-24 (6-8)**

Date Collected: 05/02/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-27**

Matrix: Solid

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 14:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 07:03	TCT	TAL CHI
Total/NA	Prep	3050B			384021	05/06/17 11:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384719	05/10/17 18:54	PJ1	TAL CHI

## **Client Sample ID: GP-25 (2-4)**

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-28**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-25 (2-4)**

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-28**

Matrix: Solid

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 14:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 07:29	TCT	TAL CHI
Total/NA	Prep	3050B			384021	05/06/17 11:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384719	05/10/17 18:59	PJ1	TAL CHI

## **Client Sample ID: GP-25 (6-8)**

Date Collected: 05/02/17 14:40

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-29**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-25 (6-8)**

Date Collected: 05/02/17 14:40

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-29**

Matrix: Solid

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			384046	05/02/17 14:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 07:55	TCT	TAL CHI
Total/NA	Prep	WI GRO			384046	05/02/17 14:40	WRE	TAL CHI
Total/NA	Analysis	WI-GRO		1000	384093	05/07/17 22:05	WRE	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 18:01	SAW	TAL CHI
Total/NA	Prep	3050B			384021	05/06/17 11:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384719	05/10/17 19:03	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: Trip Blank

Date Collected: 05/02/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## Client Sample ID: Trip Blank

Date Collected: 05/02/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-30

Matrix: Solid

Percent Solids: 100.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 01:22	TCT	TAL CHI

### Laboratory References:

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

## Accreditation/Certification Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

### Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

### Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998020430	08-31-17

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

<p>Report To <span style="float: right;">(optional)</span></p> <p>Contact: _____</p> <p>Company: _____</p> <p>Address: _____</p> <p>Address: _____</p> <p>Phone: _____</p> <p>Fax: _____</p> <p>E-Mail: _____</p>	<p>Bill To <span style="float: right;">(optional)</span></p> <p>Contact: _____</p> <p>Company: _____</p> <p>Address: _____</p> <p>Address: _____</p> <p>Phone: _____</p> <p>Fax: _____</p> <p>PO#/Reference#: _____</p>
---	---

## ***Chain of Custody Record***

Lab Job #: 500-127508

Chain of Custody Number:

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: (9.2)(3.4)

Client	TRC	Client Project #	275783	Preservative	I	8	I	I	B					Preservative Key
Project Name	STH #1 - Kentucky to Kearney			Parameter										1. HCl, Cool to 4°
Project Location/State	Race, WI													2. H2SO4, Cool to 4°
Sampler	M.Kernics			Lab PM										3. HNO3, Cool to 4°
Lab ID	MS/MSD	Sample ID	Sampling	Date	Time	# of Containers	Matrix	Proc's	Wrap	Lead	Gro	Vac:	Dro	Comments
1		GP-12 (2-4)	8/02	825				X	X	X				
2		GP-12 (6-8)		930				X	X	X				
3		GP-13 (2-4)		915				X	X	X				
4		GP-13 (6-8)		920				X	X	X				
5		GP-14 (2-4)		930				X	X	X				
6		GP-14 (6-8)		935				X	X	X				
7		GP-15 (2-4)		955				X	X	X				
8		GP-15 (6-8)		1000				X	X	X				
9		GP-16 (2-4)		1030				X	X	X				
10		GP-16 (6-8)		1035				X	X	X				

#### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other

## Sample Disposal

[Return to Client](#)

#### **Disposal by Lab**

Archive for  
Manuscripts

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Lab Courier
	TR	5/02	1630		TA	05/03/17	0900	
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped

	Matrix Key
WW - Wastewater	SE - Sediment
W - Water	SO - Soil
S - Soil	L - Leachate
SL - Sludge	WI - Wipe
MS - Miscellaneous	DW - Drinking Water
OL - Oil	O - Other
A - Air	

#### **Client Comments**

**Lab Comments:**



500-127508 COC

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To Contact: Company: Address: Address: Phone: Fax: E-Mail:	(optional)	Bill To Contact: Company: Address: Address: Phone: Fax: PO#/Reference#	(optional)
		<b>Chain of Custody Record</b>	
		Lab Job #: <u>500-127508</u>	
		Chain of Custody Number: _____	
		Page <u>2</u> of <u>3</u>	
		Temperature °C of Cooler: _____	

#### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  
Requested Due Date:

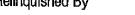
## Sample Disposal

[Return to Client](#)

### Disposal by Lab

Archive for Months

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company TRE	Date 5/02	Time 1630	Received By 	Company TA	Date 05/03/17	Time 0900	Lab Courier <input type="checkbox"/>
Relinquished By 	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By 	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Shipped <input type="checkbox"/>
Relinquished By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Hand Delivered <input type="checkbox"/>
Matrix Key WW - Wastewater W - Water S - Soil SL - Sediment	SE - Sediment SO - Soil L - Leachate	Client Comments			Lab Comments:			

# TestAmerica

**THE LEADER IN ENVIRONMENTAL TESTING**

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To	(optional)	Bill To	(optional)
Contact:		Contact:	
Company:		Company:	
Address:		Address:	
Address:		Address:	
Phone:		Phone:	
Fax:		Fax:	
E-Mail:		PO#/Reference#	

## ***Chain of Custody Record***

Lab Job #: 500-127508

Chain of Custody Number:

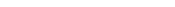
Page 3 of 3

Temperature °C of Cooler:

#### Turnaround Time Required (Business Days)

### **Sample Disposal**

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
Requested Due Date

Relinquished By 	Company TRE	Date 5/24/17	Time 1630	Received By 	Company TA	Date 05/03/17	Time 0900
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier

Shipped

Hand Delivered

Matrix Key	Client Comments	Lab Comments:
WW – Wastewater	SE – Sediment	
W – Water	SO – Soil	
S – Soil	L – Leachate	
SL – Sludge	WI – Wipe	
MS – Miscellaneous	DW – Drinking Water	
OL – Oil	O – Other	
A – Air		

**Fredrick, Sandie**

---

**From:** Kahrilas, Miranda <MKahrilas@trcsolutions.com>  
**Sent:** Wednesday, May 03, 2017 4:38 PM  
**To:** Fredrick, Sandie; Bergmann, Bryan  
**Subject:** RE: TestAmerica Sample Login Confirmation files from 500-127508 STH 11 Kentucky to Kearney - 275788

Sandie,

Please add GRO to the sample analysis for Lab ID 29, Sample ID GP-25 (6-8). I believe you would be able to take this from the methanol kit that was already included, but please let me know if you need me to send over another.

Thanks!  
Miranda

**From:** Fredrick, Sandie [<mailto:sandie.fredrick@testamericainc.com>]  
**Sent:** Wednesday, May 03, 2017 1:45 PM  
**To:** Bergmann, Bryan <[BBergmann@trcsolutions.com](mailto:BBergmann@trcsolutions.com)>; Kahrilas, Miranda <[MKahrilas@trcsolutions.com](mailto:MKahrilas@trcsolutions.com)>  
**Subject:** TestAmerica Sample Login Confirmation files from 500-127508 STH 11 Kentucky to Kearney - 275788

Hello Bryan/Miranda,

Attached, please find the Sample Confirmation files for job 500-127508; STH 11 Kentucky to Kearney - 275788

Please feel free to contact me if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: [Project Feedback](#)

**SANDIE J FREDRICK**  
Project Manager II

**TestAmerica Chicago**  
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 920.261.1660  
[www.testamericainc.com](http://www.testamericainc.com)

Reference: [336983]  
Attachments: 3

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16

ORIGIN ID: RRIA (262) 901-2153  
MIRANDA KAHNLAS  
TRC ENVIRONMENTAL  
150 N PATRICK BLVD, SUITE 180  
BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DATE: 02 MAY 17  
ACT WGT: 25.00 LB  
ACWGT: 25.00 LB  
CAD: 1103264820/NET: 3850  
BILL RECIPIENT

ORIGIN ID: RRIA (262) 901-2153  
MIRANDA KAHNLAS  
TRC ENVIRONMENTAL  
150 N PATRICK BLVD, SUITE 180  
BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DAT  
ACT WGT  
CAD: 110  
BILL REC

TO ATTN: SAMPLE RECEIVING  
TEST AMERICA - CHICAGO  
2417 BOND ST

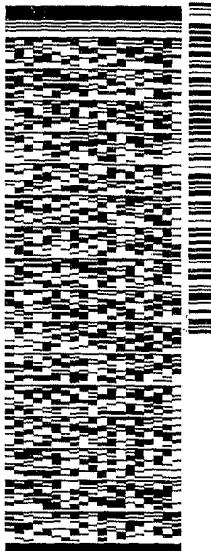


UNIVERSITY PARK IL 60484

500-127508 Waybill

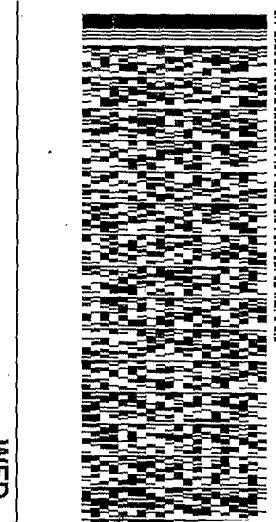
UNIVERSITY PARK IL 60484  
(708) 534-5200  
REF: J171117021401uv  
PO: DEPT:

RT 510  
ST 2



J171117021401uv

546.J1873463C1



2 of 2

WED -  
PRIORITY

MPN# 7790 4639 2081  
Mstr# 7790 4639 2173

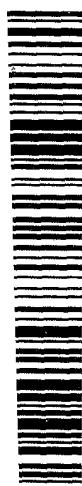
[0263]

[0201]

1 of 2  
WED - 03 MAY 10:30A  
PRIORITY OVERNIGHT

TRK# 0201  
7790 4639 2173  
## MASTER ##

60484  
ORD



79 JOTA



THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN

## COOLER RECEIPT FORM



Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 13:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front/back

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) HG

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 # 8

I certify that I unloaded the cooler and answered questions 7-14 (initial) S

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) S

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) S

I certify that I attached a label with the unique LIMS number to each container (initial) S

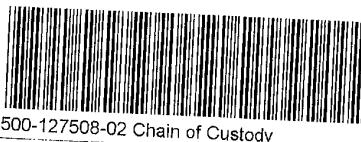
21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#





THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN

## COOLER RECEIPT FORM



Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 13:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx \_\_\_\_\_

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front/back

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) HG

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 # S

I certify that I unloaded the cooler and answered questions 7-14 (initial) S

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) S

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) S

I certify that I attached a label with the unique LIMS number to each container (initial) S

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# \_\_\_\_\_

**TestAmerica Chicago**  
2417 Bond Street  
University Park || 60484

2417 Bond Street  
University Park, IL 60484  
Phone (708) 534-5200 Fax (708) 534-5211

## Chain of Custody Record

Loc: 500  
**127508**

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

## Possible Hazard Identification

Unconfirmed

**Deliverable Requested:** I, II, III, IV, Other (specify) \_\_\_\_\_

10

כטבון נכו לאוּמָה וְעַמּוֹד

卷之三

*Relinquished by — /*

Relinquished by

1



THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN

## COOLER RECEIPT FORM



500-127508-03 Chain of Custody

Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 15:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx \_\_\_\_\_

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front/back

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) HG

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 # 23

I certify that I unloaded the cooler and answered questions 7-14 (initial) 23

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) 23

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) 23

I certify that I attached a label with the unique LIMS number to each container (initial) 23

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# \_\_\_\_\_



## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127508-1

**Login Number:** 127508

**List Source:** TestAmerica Chicago

**List Number:** 1

**Creator:** Kelsey, Shawn M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	(4.2)(5.4)c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127508-1

**Login Number:** 127508

**List Number:** 2

**Creator:** Shaw, Rashard M

**List Source:** TestAmerica Nashville

**List Creation:** 05/04/17 02:20 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-130269-1

Client Project/Site: Multiple Sites along STH 11 - 275788

For:

TRC Environmental Corporation.

150 N. Patrick Blvd.

Suite 180

Brookfield, Wisconsin 53045

Attn: Mr. Bryan Bergmann

Authorized for release by:

7/11/2017 2:18:51 PM

Sandie Fredrick, Project Manager II

(920)261-1660

[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://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
Case Narrative .....	3
Detection Summary .....	4
Method Summary .....	7
Sample Summary .....	8
Client Sample Results .....	9
Definitions .....	24
QC Association .....	25
Surrogate Summary .....	29
QC Sample Results .....	31
Chronicle .....	46
Certification Summary .....	56
Chain of Custody .....	57
Receipt Checklists .....	65

# Case Narrative

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Job ID: 500-130269-1

### Laboratory: TestAmerica Chicago

#### Narrative

#### Job Narrative 500-130269-1

#### Comments

Sample analysis for 22-23 cancelled at client's request.

#### Receipt

The samples were received on 6/28/2017 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.7° C and 5.9° C.

#### GC/MS VOA

Method(s) 8260B: The extraction LCS associated with preparation batch 391290 had several analyte recoveries above control limits. The instrument LCS associated with analytical batch 391652 had all analytes within control limits; therefore re-analysis was not performed. The data have been reported and qualified. GP-35 (4-6) (500-130269-1), GP-35 (8-10) (500-130269-2), GP-35 (12-14) (500-130269-3) and Trip Blank (500-130269-30)

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

#### GC VOA

Method(s) WI-GRO: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 490-441726 and analytical batch 490-442472/442527.

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

#### Metals

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

#### Organic Prep

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

#### VOA Prep

Method(s) WI GRO: Methanol added to achieve 1:1 ratio. GP-36 (2-4) (500-130269-4), GP-36 (6-8) (500-130269-5), GP-37 (2-4) (500-130269-6), GP-37 (6-8) (500-130269-7), GP-38 (2-4) (500-130269-8), GP-38 (6-8) (500-130269-9), GP-39 (2-4) (500-130269-10), GP-39 (6-8) (500-130269-11), GP-40 (2-4) (500-130269-12), GP-41 (2-4) (500-130269-13), GP-42 (2-4) (500-130269-14), GP-42 (6-8) (500-130269-15), GP-43 (2-4) (500-130269-16), GP-43 (6-8) (500-130269-17), GP-44 (2-4) (500-130269-18), GP-45 (2-4) (500-130269-20), GP-47 (2-4) (500-130269-24), GP-47 (6-8) (500-130269-25), GP-48 (2-4) (500-130269-26), GP-48 (6-8) (500-130269-27) and GP-49 (2-4) (500-130269-28)

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

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

### **Client Sample ID: GP-35 (4-6)**

### **Lab Sample ID: 500-130269-1**

No Detections.

### **Client Sample ID: GP-35 (8-10)**

### **Lab Sample ID: 500-130269-2**

No Detections.

### **Client Sample ID: GP-35 (12-14)**

### **Lab Sample ID: 500-130269-3**

No Detections.

### **Client Sample ID: GP-36 (2-4)**

### **Lab Sample ID: 500-130269-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	38		33	20	ug/Kg	1	⊗	WDNR	Total/NA

### **Client Sample ID: GP-36 (6-8)**

### **Lab Sample ID: 500-130269-5**

No Detections.

### **Client Sample ID: GP-37 (2-4)**

### **Lab Sample ID: 500-130269-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	14	J	29	14	ug/Kg	1	⊗	WDNR	Total/NA

### **Client Sample ID: GP-37 (6-8)**

### **Lab Sample ID: 500-130269-7**

No Detections.

### **Client Sample ID: GP-38 (2-4)**

### **Lab Sample ID: 500-130269-8**

No Detections.

### **Client Sample ID: GP-38 (6-8)**

### **Lab Sample ID: 500-130269-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	220	J	320	190	ug/Kg	10	⊗	WDNR	Total/NA

### **Client Sample ID: GP-39 (2-4)**

### **Lab Sample ID: 500-130269-10**

No Detections.

### **Client Sample ID: GP-39 (6-8)**

### **Lab Sample ID: 500-130269-11**

No Detections.

### **Client Sample ID: GP-40 (2-4)**

### **Lab Sample ID: 500-130269-12**

No Detections.

### **Client Sample ID: GP-41 (2-4)**

### **Lab Sample ID: 500-130269-13**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	19	J	30	18	ug/Kg	1	⊗	WDNR	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

### Client Sample ID: GP-42 (2-4)

### Lab Sample ID: 500-130269-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.57	0.26	mg/Kg	1	⊗	6010B	Total/NA

### Client Sample ID: GP-42 (6-8)

### Lab Sample ID: 500-130269-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.3		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

### Client Sample ID: GP-43 (2-4)

### Lab Sample ID: 500-130269-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	77		0.55	0.25	mg/Kg	1	⊗	6010B	Total/NA

### Client Sample ID: GP-43 (6-8)

### Lab Sample ID: 500-130269-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	14	J	27	13	ug/Kg	1	⊗	WDNR	Total/NA
Lead	6.0		0.45	0.21	mg/Kg	1	⊗	6010B	Total/NA

### Client Sample ID: GP-44 (2-4)

### Lab Sample ID: 500-130269-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	18	J	29	18	ug/Kg	1	⊗	WDNR	Total/NA
Lead	19		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

### Client Sample ID: GP-44 (6-8)

### Lab Sample ID: 500-130269-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.9		0.55	0.25	mg/Kg	1	⊗	6010B	Total/NA

### Client Sample ID: GP-45 (2-4)

### Lab Sample ID: 500-130269-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.6		0.55	0.25	mg/Kg	1	⊗	6010B	Total/NA

### Client Sample ID: GP-45 (6-8)

### Lab Sample ID: 500-130269-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.5		0.53	0.24	mg/Kg	1	⊗	6010B	Total/NA

### Client Sample ID: GP-47 (2-4)

### Lab Sample ID: 500-130269-24

No Detections.

### Client Sample ID: GP-47 (6-8)

### Lab Sample ID: 500-130269-25

No Detections.

### Client Sample ID: GP-48 (2-4)

### Lab Sample ID: 500-130269-26

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

### Client Sample ID: GP-48 (6-8)

### Lab Sample ID: 500-130269-27

No Detections.

### Client Sample ID: GP-49 (2-4)

### Lab Sample ID: 500-130269-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	29		29	17	ug/Kg	1	⊗	WDNR	Total/NA

### Client Sample ID: GP-49 (6-8)

### Lab Sample ID: 500-130269-29

No Detections.

### Client Sample ID: Trip Blank

### Lab Sample ID: 500-130269-30

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Method Summary

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
6010B	Metals (ICP)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI
Moisture	Percent Moisture	EPA	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.

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Sample Summary

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
500-130269-1	GP-35 (4-6)	Solid	06/27/17 08:30	06/28/17 10:10	1
500-130269-2	GP-35 (8-10)	Solid	06/27/17 08:40	06/28/17 10:10	2
500-130269-3	GP-35 (12-14)	Solid	06/27/17 08:45	06/28/17 10:10	3
500-130269-4	GP-36 (2-4)	Solid	06/27/17 09:25	06/28/17 10:10	4
500-130269-5	GP-36 (6-8)	Solid	06/27/17 09:30	06/28/17 10:10	5
500-130269-6	GP-37 (2-4)	Solid	06/27/17 09:40	06/28/17 10:10	6
500-130269-7	GP-37 (6-8)	Solid	06/27/17 09:45	06/28/17 10:10	7
500-130269-8	GP-38 (2-4)	Solid	06/27/17 10:05	06/28/17 10:10	8
500-130269-9	GP-38 (6-8)	Solid	06/27/17 10:10	06/28/17 10:10	9
500-130269-10	GP-39 (2-4)	Solid	06/27/17 10:30	06/28/17 10:10	10
500-130269-11	GP-39 (6-8)	Solid	06/27/17 10:35	06/28/17 10:10	11
500-130269-12	GP-40 (2-4)	Solid	06/27/17 11:10	06/28/17 10:10	12
500-130269-13	GP-41 (2-4)	Solid	06/27/17 11:15	06/28/17 10:10	13
500-130269-14	GP-42 (2-4)	Solid	06/27/17 11:45	06/28/17 10:10	14
500-130269-15	GP-42 (6-8)	Solid	06/27/17 11:50	06/28/17 10:10	15
500-130269-16	GP-43 (2-4)	Solid	06/27/17 12:20	06/28/17 10:10	1
500-130269-17	GP-43 (6-8)	Solid	06/27/17 12:25	06/28/17 10:10	2
500-130269-18	GP-44 (2-4)	Solid	06/27/17 12:45	06/28/17 10:10	3
500-130269-19	GP-44 (6-8)	Solid	06/27/17 12:50	06/28/17 10:10	4
500-130269-20	GP-45 (2-4)	Solid	06/27/17 13:20	06/28/17 10:10	5
500-130269-21	GP-45 (6-8)	Solid	06/27/17 13:25	06/28/17 10:10	6
500-130269-24	GP-47 (2-4)	Solid	06/27/17 14:05	06/28/17 10:10	7
500-130269-25	GP-47 (6-8)	Solid	06/27/17 14:10	06/28/17 10:10	8
500-130269-26	GP-48 (2-4)	Solid	06/27/17 14:25	06/28/17 10:10	9
500-130269-27	GP-48 (6-8)	Solid	06/27/17 14:30	06/28/17 10:10	10
500-130269-28	GP-49 (2-4)	Solid	06/27/17 14:45	06/28/17 10:10	11
500-130269-29	GP-49 (6-8)	Solid	06/27/17 14:50	06/28/17 10:10	12
500-130269-30	Trip Blank	Solid	06/27/17 00:00	06/28/17 10:10	13

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Client Sample ID: GP-35 (4-6)

Date Collected: 06/27/17 08:30

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-1

Matrix: Solid

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		65	30	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,1,1-Trichloroethane	<25		65	25	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,1,2,2-Tetrachloroethane	<26		65	26	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,1,2-Trichloroethane	<23		65	23	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,1-Dichloroethane	<27		65	27	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,1-Dichloroethene	<25		65	25	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,1-Dichloropropene	<19		65	19	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,2,3-Trichlorobenzene	<30		65	30	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,2,3-Trichloropropane	<27		65	27	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,2,4-Trichlorobenzene	<22		65	22	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,2,4-Trimethylbenzene	<23		65	23	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,2-Dibromoethane	<25		65	25	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,2-Dichlorobenzene	<22		65	22	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,2-Dichloroethane	<26		65	26	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,2-Dichloropropane	<28		65	28	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,3,5-Trimethylbenzene	<25		65	25	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,3-Dichlorobenzene	<26		65	26	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,3-Dichloropropane	<24		65	24	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
1,4-Dichlorobenzene	<24		65	24	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
2,2-Dichloropropane	<29		65	29	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
2-Chlorotoluene	<20		65	20	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
4-Chlorotoluene	<23		65	23	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Benzene	<9.5		16	9.5	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Bromobenzene	<23		65	23	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Bromochloromethane	<28		65	28	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Bromodichloromethane	<24		65	24	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Bromoform	<32		65	32	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Bromomethane	<52		130	52	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Carbon tetrachloride	<25		65	25	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Chlorobenzene	<25		65	25	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Chloroethane	<33		65	33	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Chloroform	<24		130	24	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Chloromethane	<21		65	21	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
cis-1,2-Dichloroethene	<27		65	27	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
cis-1,3-Dichloropropene	<27		65	27	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Dibromochloromethane	<32		65	32	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Dibromomethane	<18		65	18	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Dichlorodifluoromethane	<44		130	44	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Ethylbenzene	<12 *		16	12	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Hexachlorobutadiene	<29		65	29	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Isopropyl ether	<18		65	18	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Isopropylbenzene	<25		65	25	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Methyl tert-butyl ether	<26		65	26	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Methylene Chloride	<110		330	110	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
Naphthalene	<22		65	22	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
n-Butylbenzene	<25		65	25	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
N-Propylbenzene	<27		65	27	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50
p-Isopropyltoluene	<24		65	24	ug/Kg	☀	06/27/17 08:30	07/10/17 15:27	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

**Client Sample ID: GP-35 (4-6)**

Date Collected: 06/27/17 08:30

Date Received: 06/28/17 10:10

**Lab Sample ID: 500-130269-1**

Matrix: Solid

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<26	*	65	26	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
Styrene	<25		65	25	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
tert-Butylbenzene	<26		65	26	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
Tetrachloroethene	<24		65	24	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
Toluene	<9.6	*	16	9.6	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
trans-1,2-Dichloroethene	<23		65	23	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
trans-1,3-Dichloropropene	<24		65	24	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
Trichloroethene	<11		33	11	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
Trichlorofluoromethane	<28		65	28	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
Vinyl chloride	<17		33	17	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
Xylenes, Total	<14		33	14	ug/Kg	⊗	06/27/17 08:30	07/10/17 15:27	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	86			75 - 126			06/27/17 08:30	07/10/17 15:27	50
4-Bromofluorobenzene (Surr)	86			72 - 124			06/27/17 08:30	07/10/17 15:27	50
Dibromofluoromethane	92			75 - 120			06/27/17 08:30	07/10/17 15:27	50
Toluene-d8 (Surr)	93			75 - 120			06/27/17 08:30	07/10/17 15:27	50

**Client Sample ID: GP-35 (8-10)**

Date Collected: 06/27/17 08:40

Date Received: 06/28/17 10:10

**Lab Sample ID: 500-130269-2**

Matrix: Solid

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<29		64	29	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,1,2,2-Tetrachloroethane	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,1,2-Trichloroethane	<22		64	22	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,1-Dichloroethane	<26		64	26	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,1-Dichloroethene	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,1-Dichloropropene	<19		64	19	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,2,3-Trichloropropane	<26		64	26	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,2-Dibromoethane	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,2-Dichloroethane	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,2-Dichloropropane	<27		64	27	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,3-Dichlorobenzene	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,3-Dichloropropane	<23		64	23	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
2,2-Dichloropropane	<28		64	28	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
2-Chlorotoluene	<20		64	20	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
4-Chlorotoluene	<22		64	22	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Benzene	<9.3		16	9.3	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Bromobenzene	<23		64	23	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Bromochloromethane	<27		64	27	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

**Client Sample ID: GP-35 (8-10)**

Date Collected: 06/27/17 08:40

Date Received: 06/28/17 10:10

**Lab Sample ID: 500-130269-2**

Matrix: Solid

Percent Solids: 87.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	<24		64	24	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Bromoform	<31		64	31	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Bromomethane	<51		130	51	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Carbon tetrachloride	<24		64	24	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Chlorobenzene	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Chloroethane	<32		64	32	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Chloroform	<23		130	23	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Chloromethane	<20		64	20	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
cis-1,2-Dichloroethene	<26		64	26	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
cis-1,3-Dichloropropene	<26		64	26	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Dibromochloromethane	<31		64	31	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Dibromomethane	<17		64	17	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Dichlorodifluoromethane	<43		130	43	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Ethylbenzene	<12 *		16	12	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Hexachlorobutadiene	<28		64	28	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Isopropyl ether	<18		64	18	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Isopropylbenzene	<24		64	24	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Methylene Chloride	<100		320	100	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Naphthalene	<21		64	21	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
n-Butylbenzene	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
N-Propylbenzene	<26		64	26	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
p-Isopropyltoluene	<23		64	23	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
sec-Butylbenzene	<25 *		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Styrene	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
tert-Butylbenzene	<25		64	25	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Tetrachloroethene	<23		64	23	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Toluene	<9.3 *		16	9.3	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
trans-1,2-Dichloroethene	<22		64	22	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Trichloroethene	<10		32	10	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Trichlorofluoromethane	<27		64	27	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Vinyl chloride	<17		32	17	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
Xylenes, Total	<14		32	14	ug/Kg	⊗	06/27/17 08:40	07/10/17 15:53	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	86			75 - 126			06/27/17 08:40	07/10/17 15:53	50
4-Bromofluorobenzene (Surr)	87			72 - 124			06/27/17 08:40	07/10/17 15:53	50
Dibromofluoromethane	92			75 - 120			06/27/17 08:40	07/10/17 15:53	50
Toluene-d8 (Surr)	92			75 - 120			06/27/17 08:40	07/10/17 15:53	50

**Client Sample ID: GP-35 (12-14)**

Date Collected: 06/27/17 08:45

Date Received: 06/28/17 10:10

**Lab Sample ID: 500-130269-3**

Matrix: Solid

Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<27		58	27	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,1,1-Trichloroethane	<22		58	22	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,1,2,2-Tetrachloroethane	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

**Client Sample ID: GP-35 (12-14)**

**Date Collected: 06/27/17 08:45**

**Date Received: 06/28/17 10:10**

**Lab Sample ID: 500-130269-3**

**Matrix: Solid**

**Percent Solids: 88.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<21		58	21	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,1-Dichloroethane	<24		58	24	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,1-Dichloroethene	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,1-Dichloropropene	<17		58	17	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,2,3-Trichlorobenzene	<27		58	27	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,2,3-Trichloropropane	<24		58	24	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,2,4-Trichlorobenzene	<20		58	20	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,2,4-Trimethylbenzene	<21		58	21	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,2-Dibromo-3-Chloropropane	<120		290	120	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,2-Dibromoethane	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,2-Dichlorobenzene	<19		58	19	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,2-Dichloroethane	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,2-Dichloropropane	<25		58	25	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,3,5-Trimethylbenzene	<22		58	22	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,3-Dichlorobenzene	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,3-Dichloropropane	<21		58	21	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
1,4-Dichlorobenzene	<21		58	21	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
2,2-Dichloropropane	<26		58	26	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
2-Chlorotoluene	<18		58	18	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
4-Chlorotoluene	<20		58	20	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Benzene	<8.5		15	8.5	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Bromobenzene	<21		58	21	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Bromochloromethane	<25		58	25	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Bromodichloromethane	<22		58	22	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Bromoform	<28		58	28	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Bromomethane	<46		120	46	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Carbon tetrachloride	<22		58	22	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Chlorobenzene	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Chloroethane	<29		58	29	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Chloroform	<22		120	22	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Chloromethane	<19		58	19	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
cis-1,2-Dichloroethene	<24		58	24	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
cis-1,3-Dichloropropene	<24		58	24	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Dibromochloromethane	<28		58	28	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Dibromomethane	<16		58	16	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Dichlorodifluoromethane	<39		120	39	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Ethylbenzene	<11 *		15	11	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Hexachlorobutadiene	<26		58	26	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Isopropyl ether	<16		58	16	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Isopropylbenzene	<22		58	22	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Methyl tert-butyl ether	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Methylene Chloride	<95		290	95	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Naphthalene	<19		58	19	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
n-Butylbenzene	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
N-Propylbenzene	<24		58	24	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
p-Isopropyltoluene	<21		58	21	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
sec-Butylbenzene	<23 *		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Styrene	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
tert-Butylbenzene	<23		58	23	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

**Client Sample ID: GP-35 (12-14)**

Date Collected: 06/27/17 08:45

Date Received: 06/28/17 10:10

**Lab Sample ID: 500-130269-3**

Matrix: Solid

Percent Solids: 88.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<22		58	22	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Toluene	<8.6 *		15	8.6	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
trans-1,2-Dichloroethene	<20		58	20	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
trans-1,3-Dichloropropene	<21		58	21	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Trichloroethene	<9.6		29	9.6	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Trichlorofluoromethane	<25		58	25	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Vinyl chloride	<15		29	15	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
Xylenes, Total	<13		29	13	ug/Kg	⊗	06/27/17 08:45	07/10/17 16:19	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	85			75 - 126			06/27/17 08:45	07/10/17 16:19	50
4-Bromofluorobenzene (Surr)	87			72 - 124			06/27/17 08:45	07/10/17 16:19	50
Dibromofluoromethane	92			75 - 120			06/27/17 08:45	07/10/17 16:19	50
Toluene-d8 (Surr)	93			75 - 120			06/27/17 08:45	07/10/17 16:19	50

**Client Sample ID: GP-36 (2-4)**

Date Collected: 06/27/17 09:25

Date Received: 06/28/17 10:10

**Lab Sample ID: 500-130269-4**

Matrix: Solid

Percent Solids: 78.5

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		33	23	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:21	1
Ethylbenzene	<25		33	25	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:21	1
Methyl tert-butyl ether	<16		33	16	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:21	1
Naphthalene	<160		330	160	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:21	1
Toluene	<22		33	22	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:21	1
<b>1,2,4-Trimethylbenzene</b>	<b>38</b>		33	20	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:21	1
1,3,5-Trimethylbenzene	<20		33	20	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:21	1
Xylenes, Total	<39		98	39	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	93			80 - 120			06/30/17 08:52	07/03/17 18:21	1

**Client Sample ID: GP-36 (6-8)**

Date Collected: 06/27/17 09:30

Date Received: 06/28/17 10:10

**Lab Sample ID: 500-130269-5**

Matrix: Solid

Percent Solids: 82.2

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		31	23	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:48	1
Ethylbenzene	<24		31	24	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:48	1
Methyl tert-butyl ether	<15		31	15	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:48	1
Naphthalene	<150		310	150	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:48	1
Toluene	<21		31	21	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:48	1
1,2,4-Trimethylbenzene	<19		31	19	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:48	1
1,3,5-Trimethylbenzene	<19		31	19	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:48	1
Xylenes, Total	<38		94	38	ug/Kg	⊗	06/30/17 08:52	07/03/17 18:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	95			80 - 120			06/30/17 08:52	07/03/17 18:48	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-37 (2-4)**

Date Collected: 06/27/17 09:40

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-6**

Matrix: Solid

Percent Solids: 87.6

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:15	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:15	1
<b>Methyl tert-butyl ether</b>	<b>14 J</b>		29	14	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:15	1
Naphthalene	<140		290	140	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:15	1
Toluene	<20		29	20	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:15	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:15	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:15	1
Xylenes, Total	<34		86	34	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	97			80 - 120			06/30/17 08:52	07/03/17 19:15	1

## **Client Sample ID: GP-37 (6-8)**

Date Collected: 06/27/17 09:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-7**

Matrix: Solid

Percent Solids: 80.6

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		32	23	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:42	1
Ethylbenzene	<24		32	24	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:42	1
Methyl tert-butyl ether	<15		32	15	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:42	1
Naphthalene	<150		320	150	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:42	1
Toluene	<22		32	22	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:42	1
1,2,4-Trimethylbenzene	<19		32	19	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:42	1
1,3,5-Trimethylbenzene	<19		32	19	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:42	1
Xylenes, Total	<38		96	38	ug/Kg	⊗	06/30/17 08:52	07/03/17 19:42	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98			80 - 120			06/30/17 08:52	07/03/17 19:42	1

## **Client Sample ID: GP-38 (2-4)**

Date Collected: 06/27/17 10:05

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-8**

Matrix: Solid

Percent Solids: 82.5

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		31	22	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:08	1
Ethylbenzene	<23		31	23	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:08	1
Methyl tert-butyl ether	<15		31	15	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:08	1
Naphthalene	<150		310	150	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:08	1
Toluene	<21		31	21	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:08	1
1,2,4-Trimethylbenzene	<18		31	18	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:08	1
1,3,5-Trimethylbenzene	<18		31	18	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:08	1
Xylenes, Total	<37		92	37	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	100			80 - 120			06/30/17 08:52	07/03/17 20:08	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-38 (6-8)**

Date Collected: 06/27/17 10:10

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-9**

Matrix: Solid

Percent Solids: 81.0

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<230		320	230	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:35	10
Ethylbenzene	<240		320	240	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:35	10
Methyl tert-butyl ether	<150		320	150	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:35	10
Naphthalene	<1500		3200	1500	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:35	10
Toluene	<220		320	220	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:35	10
<b>1,2,4-Trimethylbenzene</b>	<b>220</b>	<b>J</b>	320	190	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:35	10
1,3,5-Trimethylbenzene	<190		320	190	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:35	10
Xylenes, Total	<380		950	380	ug/Kg	⊗	06/30/17 08:52	07/03/17 20:35	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		80 - 120				06/30/17 08:52	07/03/17 20:35	10

## **Client Sample ID: GP-39 (2-4)**

Date Collected: 06/27/17 10:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-10**

Matrix: Solid

Percent Solids: 75.8

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<240		330	240	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:02	10
Ethylbenzene	<250		330	250	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:02	10
Methyl tert-butyl ether	<160		330	160	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:02	10
Naphthalene	<1600		3300	1600	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:02	10
Toluene	<220		330	220	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:02	10
1,2,4-Trimethylbenzene	<200		330	200	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:02	10
1,3,5-Trimethylbenzene	<200		330	200	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:02	10
Xylenes, Total	<390		990	390	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:02	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	101		80 - 120				06/30/17 08:52	07/03/17 21:02	10

## **Client Sample ID: GP-39 (6-8)**

Date Collected: 06/27/17 10:35

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-11**

Matrix: Solid

Percent Solids: 88.1

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<200		280	200	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:29	10
Ethylbenzene	<210		280	210	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:29	10
Methyl tert-butyl ether	<130		280	130	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:29	10
Naphthalene	<1300		2800	1300	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:29	10
Toluene	<190		280	190	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:29	10
1,2,4-Trimethylbenzene	<170		280	170	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:29	10
1,3,5-Trimethylbenzene	<170		280	170	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:29	10
Xylenes, Total	<340		840	340	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:29	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	100		80 - 120				06/30/17 08:52	07/03/17 21:29	10

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Client Sample ID: GP-40 (2-4)

Date Collected: 06/27/17 11:10

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-12

Matrix: Solid

Percent Solids: 79.7

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		32	23	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:56	1
Ethylbenzene	<24		32	24	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:56	1
Methyl tert-butyl ether	<15		32	15	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:56	1
Naphthalene	<150		320	150	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:56	1
Toluene	<22		32	22	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:56	1
1,2,4-Trimethylbenzene	<19		32	19	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:56	1
1,3,5-Trimethylbenzene	<19		32	19	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:56	1
Xylenes, Total	<38		96	38	ug/Kg	⊗	06/30/17 08:52	07/03/17 21:56	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	97			80 - 120			06/30/17 08:52	07/03/17 21:56	1

## Client Sample ID: GP-41 (2-4)

Date Collected: 06/27/17 11:15

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-13

Matrix: Solid

Percent Solids: 82.0

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	⊗	06/30/17 08:52	07/03/17 22:22	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	06/30/17 08:52	07/03/17 22:22	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	06/30/17 08:52	07/03/17 22:22	1
Naphthalene	<140		300	140	ug/Kg	⊗	06/30/17 08:52	07/03/17 22:22	1
Toluene	<20		30	20	ug/Kg	⊗	06/30/17 08:52	07/03/17 22:22	1
<b>1,2,4-Trimethylbenzene</b>	<b>19 J</b>		30	18	ug/Kg	⊗	06/30/17 08:52	07/03/17 22:22	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	06/30/17 08:52	07/03/17 22:22	1
Xylenes, Total	<36		90	36	ug/Kg	⊗	06/30/17 08:52	07/03/17 22:22	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	97			80 - 120			06/30/17 08:52	07/03/17 22:22	1

## Client Sample ID: GP-42 (2-4)

Date Collected: 06/27/17 11:45

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-14

Matrix: Solid

Percent Solids: 86.9

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	06/30/17 08:52	07/04/17 00:09	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	06/30/17 08:52	07/04/17 00:09	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	06/30/17 08:52	07/04/17 00:09	1
Naphthalene	<140		290	140	ug/Kg	⊗	06/30/17 08:52	07/04/17 00:09	1
Toluene	<20		29	20	ug/Kg	⊗	06/30/17 08:52	07/04/17 00:09	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⊗	06/30/17 08:52	07/04/17 00:09	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⊗	06/30/17 08:52	07/04/17 00:09	1
Xylenes, Total	<35		87	35	ug/Kg	⊗	06/30/17 08:52	07/04/17 00:09	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	94			80 - 120			06/30/17 08:52	07/04/17 00:09	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		0.57	0.26	mg/Kg	⊗	07/05/17 15:05	07/06/17 13:13	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Client Sample ID: GP-42 (6-8)

Date Collected: 06/27/17 11:50

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-15

Matrix: Solid

Percent Solids: 85.6

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<210		300	210	ug/Kg	⌚	06/30/17 08:52	07/04/17 00:36	10
Ethylbenzene	<230		300	230	ug/Kg	⌚	06/30/17 08:52	07/04/17 00:36	10
Methyl tert-butyl ether	<140		300	140	ug/Kg	⌚	06/30/17 08:52	07/04/17 00:36	10
Naphthalene	<1400		3000	1400	ug/Kg	⌚	06/30/17 08:52	07/04/17 00:36	10
Toluene	<200		300	200	ug/Kg	⌚	06/30/17 08:52	07/04/17 00:36	10
1,2,4-Trimethylbenzene	<180		300	180	ug/Kg	⌚	06/30/17 08:52	07/04/17 00:36	10
1,3,5-Trimethylbenzene	<180		300	180	ug/Kg	⌚	06/30/17 08:52	07/04/17 00:36	10
Xylenes, Total	<360		890	360	ug/Kg	⌚	06/30/17 08:52	07/04/17 00:36	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	95		80 - 120				06/30/17 08:52	07/04/17 00:36	10

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.3		0.52	0.24	mg/Kg	⌚	07/05/17 15:05	07/06/17 13:17	1

## Client Sample ID: GP-43 (2-4)

## Lab Sample ID: 500-130269-16

Matrix: Solid

Percent Solids: 84.2

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<210		290	210	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:03	10
Ethylbenzene	<220		290	220	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:03	10
Methyl tert-butyl ether	<140		290	140	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:03	10
Naphthalene	<1400		2900	1400	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:03	10
Toluene	<200		290	200	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:03	10
1,2,4-Trimethylbenzene	<180		290	180	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:03	10
1,3,5-Trimethylbenzene	<180		290	180	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:03	10
Xylenes, Total	<350		880	350	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:03	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	97		80 - 120				06/30/17 08:52	07/04/17 01:03	10

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	77		0.55	0.25	mg/Kg	⌚	07/05/17 15:05	07/06/17 13:32	1

## Client Sample ID: GP-43 (6-8)

## Lab Sample ID: 500-130269-17

Matrix: Solid

Percent Solids: 91.9

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<19		27	19	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:30	1
Ethylbenzene	<20		27	20	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:30	1
<b>Methyl tert-butyl ether</b>	<b>14 J</b>		27	13	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:30	1
Naphthalene	<130		270	130	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:30	1
Toluene	<18		27	18	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:30	1
1,2,4-Trimethylbenzene	<16		27	16	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:30	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	⌚	06/30/17 08:52	07/04/17 01:30	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Client Sample ID: GP-43 (6-8)

Date Collected: 06/27/17 12:25

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-17

Matrix: Solid

Percent Solids: 91.9

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<32		80	32	ug/Kg	⊗	06/30/17 08:52	07/04/17 01:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98		80 - 120				06/30/17 08:52	07/04/17 01:30	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.0		0.45	0.21	mg/Kg	⊗	07/05/17 15:05	07/06/17 13:35	1

## Client Sample ID: GP-44 (2-4)

Date Collected: 06/27/17 12:45

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-18

Matrix: Solid

Percent Solids: 86.0

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	06/30/17 08:52	07/04/17 01:57	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	06/30/17 08:52	07/04/17 01:57	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	06/30/17 08:52	07/04/17 01:57	1
Naphthalene	<140		290	140	ug/Kg	⊗	06/30/17 08:52	07/04/17 01:57	1
Toluene	<20		29	20	ug/Kg	⊗	06/30/17 08:52	07/04/17 01:57	1
<b>1,2,4-Trimethylbenzene</b>	<b>18 J</b>		29	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 01:57	1
1,3,5-Trimethylbenzene	<18		29	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 01:57	1
Xylenes, Total	<35		88	35	ug/Kg	⊗	06/30/17 08:52	07/04/17 01:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98		80 - 120				06/30/17 08:52	07/04/17 01:57	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19		0.52	0.24	mg/Kg	⊗	07/05/17 15:05	07/06/17 13:39	1

## Client Sample ID: GP-44 (6-8)

Date Collected: 06/27/17 12:50

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-19

Matrix: Solid

Percent Solids: 83.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<19		27	19	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:24	1
Ethylbenzene	<20		27	20	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:24	1
Methyl tert-butyl ether	<13		27	13	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:24	1
Naphthalene	<130		270	130	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:24	1
Toluene	<18		27	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:24	1
1,2,4-Trimethylbenzene	<16		27	16	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:24	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:24	1
Xylenes, Total	<32		80	32	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:24	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96		80 - 120				06/30/17 08:52	07/04/17 02:24	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-44 (6-8)**

Date Collected: 06/27/17 12:50  
Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-19**

Matrix: Solid

Percent Solids: 83.5

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.9		0.55	0.25	mg/Kg	⊗	07/05/17 15:05	07/06/17 13:43	1

## **Client Sample ID: GP-45 (2-4)**

Date Collected: 06/27/17 13:20  
Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-20**

Matrix: Solid

Percent Solids: 88.0

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:51	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:51	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:51	1
Naphthalene	<140		290	140	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:51	1
Toluene	<20		29	20	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:51	1
1,2,4-Trimethylbenzene	<18		29	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:51	1
1,3,5-Trimethylbenzene	<18		29	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:51	1
Xylenes, Total	<35		88	35	ug/Kg	⊗	06/30/17 08:52	07/04/17 02:51	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	97		80 - 120				06/30/17 08:52	07/04/17 02:51	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.6		0.55	0.25	mg/Kg	⊗	07/05/17 15:05	07/06/17 13:47	1

## **Client Sample ID: GP-45 (6-8)**

Date Collected: 06/27/17 13:25  
Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-21**

Matrix: Solid

Percent Solids: 88.8

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<19		26	19	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:17	1
Ethylbenzene	<20		26	20	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:17	1
Methyl tert-butyl ether	<13		26	13	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:17	1
Naphthalene	<130		260	130	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:17	1
Toluene	<18		26	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:17	1
1,2,4-Trimethylbenzene	<16		26	16	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:17	1
1,3,5-Trimethylbenzene	<16		26	16	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:17	1
Xylenes, Total	<31		79	31	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98		80 - 120				06/30/17 08:52	07/04/17 03:17	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.5		0.53	0.24	mg/Kg	⊗	07/05/17 15:05	07/06/17 13:50	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Client Sample ID: GP-47 (2-4)

Date Collected: 06/27/17 14:05

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-24

Matrix: Solid

Percent Solids: 92.6

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<19		26	19	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:44	1
Ethylbenzene	<20		26	20	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:44	1
Methyl tert-butyl ether	<12		26	12	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:44	1
Naphthalene	<120		260	120	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:44	1
Toluene	<18		26	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:44	1
1,2,4-Trimethylbenzene	<16		26	16	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:44	1
1,3,5-Trimethylbenzene	<16		26	16	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:44	1
Xylenes, Total	<31		78	31	ug/Kg	⊗	06/30/17 08:52	07/04/17 03:44	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96			80 - 120			06/30/17 08:52	07/04/17 03:44	1

## Client Sample ID: GP-47 (6-8)

Date Collected: 06/27/17 14:10

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-25

Matrix: Solid

Percent Solids: 81.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		32	23	ug/Kg	⊗	06/30/17 08:52	07/04/17 04:11	1
Ethylbenzene	<24		32	24	ug/Kg	⊗	06/30/17 08:52	07/04/17 04:11	1
Methyl tert-butyl ether	<15		32	15	ug/Kg	⊗	06/30/17 08:52	07/04/17 04:11	1
Naphthalene	<150		320	150	ug/Kg	⊗	06/30/17 08:52	07/04/17 04:11	1
Toluene	<22		32	22	ug/Kg	⊗	06/30/17 08:52	07/04/17 04:11	1
1,2,4-Trimethylbenzene	<19		32	19	ug/Kg	⊗	06/30/17 08:52	07/04/17 04:11	1
1,3,5-Trimethylbenzene	<19		32	19	ug/Kg	⊗	06/30/17 08:52	07/04/17 04:11	1
Xylenes, Total	<38		95	38	ug/Kg	⊗	06/30/17 08:52	07/04/17 04:11	1
<b>Surrogate</b>				80 - 120			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	98			80 - 120			06/30/17 08:52	07/04/17 04:11	1

## Client Sample ID: GP-48 (2-4)

Date Collected: 06/27/17 14:25

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-26

Matrix: Solid

Percent Solids: 79.0

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		31	23	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:03	1
Ethylbenzene	<24		31	24	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:03	1
Methyl tert-butyl ether	<15		31	15	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:03	1
Naphthalene	<150		310	150	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:03	1
Toluene	<21		31	21	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:03	1
1,2,4-Trimethylbenzene	<19		31	19	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:03	1
1,3,5-Trimethylbenzene	<19		31	19	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:03	1
Xylenes, Total	<38		94	38	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:03	1
<b>Surrogate</b>				80 - 120			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	93			80 - 120			06/30/17 08:52	07/04/17 12:03	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-48 (6-8)**

Date Collected: 06/27/17 14:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-27**

Matrix: Solid

Percent Solids: 80.8

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:30	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:30	1
Methyl tert-butyl ether	<15		30	15	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:30	1
Naphthalene	<150		300	150	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:30	1
Toluene	<21		30	21	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:30	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:30	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:30	1
Xylenes, Total	<36		91	36	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:30	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	94						06/30/17 08:52	07/04/17 12:30	1

## **Client Sample ID: GP-49 (2-4)**

Date Collected: 06/27/17 14:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-28**

Matrix: Solid

Percent Solids: 90.5

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:57	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:57	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:57	1
Naphthalene	<140		290	140	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:57	1
Toluene	<20		29	20	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:57	1
<b>1,2,4-Trimethylbenzene</b>	<b>29</b>		29	17	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:57	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:57	1
Xylenes, Total	<34		86	34	ug/Kg	⊗	06/30/17 08:52	07/04/17 12:57	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	96						06/30/17 08:52	07/04/17 12:57	1

## **Client Sample ID: GP-49 (6-8)**

Date Collected: 06/27/17 14:50

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-29**

Matrix: Solid

Percent Solids: 93.9

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<17		24	17	ug/Kg	⊗	06/30/17 08:52	07/04/17 13:24	1
Ethylbenzene	<18		24	18	ug/Kg	⊗	06/30/17 08:52	07/04/17 13:24	1
Methyl tert-butyl ether	<11		24	11	ug/Kg	⊗	06/30/17 08:52	07/04/17 13:24	1
Naphthalene	<110		240	110	ug/Kg	⊗	06/30/17 08:52	07/04/17 13:24	1
Toluene	<16		24	16	ug/Kg	⊗	06/30/17 08:52	07/04/17 13:24	1
1,2,4-Trimethylbenzene	<14		24	14	ug/Kg	⊗	06/30/17 08:52	07/04/17 13:24	1
1,3,5-Trimethylbenzene	<14		24	14	ug/Kg	⊗	06/30/17 08:52	07/04/17 13:24	1
Xylenes, Total	<29		71	29	ug/Kg	⊗	06/30/17 08:52	07/04/17 13:24	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	100						06/30/17 08:52	07/04/17 13:24	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Client Sample ID: Trip Blank

Date Collected: 06/27/17 00:00

Date Received: 06/28/17 10:10

## Lab Sample ID: 500-130269-30

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,1-Dichloroethane	<21		50	21	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,1-Dichloroethene	<20		50	20	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,1-Dichloropropene	<15		50	15	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,2,3-Trichloropropane	<21		50	21	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,2-Dibromoethane	<19		50	19	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,2-Dichloroethane	<20		50	20	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,2-Dichloropropene	<21		50	21	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,3-Dichloropropane	<18		50	18	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
2,2-Dichloropropane	<22		50	22	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
2-Chlorotoluene	<16		50	16	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
4-Chlorotoluene	<18		50	18	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Benzene	<7.3		13	7.3	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Bromobenzene	<18		50	18	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Bromochloromethane	<21		50	21	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Bromodichloromethane	<19		50	19	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Bromoform	<24		50	24	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Bromomethane	<40		100	40	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Carbon tetrachloride	<19		50	19	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Chlorobenzene	<19		50	19	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Chloroethane	<25		50	25	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Chloroform	<19		100	19	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Chloromethane	<16		50	16	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Dibromochloromethane	<24		50	24	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Dibromomethane	<14		50	14	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Dichlorodifluoromethane	<34		100	34	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Ethylbenzene	<9.2 *		13	9.2	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Hexachlorobutadiene	<22		50	22	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Isopropyl ether	<14		50	14	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Isopropylbenzene	<19		50	19	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Methyl tert-butyl ether	<20		50	20	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Methylene Chloride	<82		250	82	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
Naphthalene	<17		50	17	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
n-Butylbenzene	<19		50	19	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
N-Propylbenzene	<21		50	21	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50
p-Isopropyltoluene	<18		50	18	ug/Kg	✉	06/27/17 00:00	07/10/17 16:46	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: Trip Blank**

Date Collected: 06/27/17 00:00

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-30**

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<20	*	50	20	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
Styrene	<19		50	19	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
tert-Butylbenzene	<20		50	20	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
Tetrachloroethene	<19		50	19	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
Toluene	<7.4	*	13	7.4	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
Trichloroethene	<8.2		25	8.2	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
Trichlorofluoromethane	<21		50	21	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
Vinyl chloride	<13		25	13	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
Xylenes, Total	<11		25	11	ug/Kg	⌚	06/27/17 00:00	07/10/17 16:46	50
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)		87		75 - 126			06/27/17 00:00	07/10/17 16:46	50
4-Bromofluorobenzene (Surr)		86		72 - 124			06/27/17 00:00	07/10/17 16:46	50
Dibromofluoromethane		93		75 - 120			06/27/17 00:00	07/10/17 16:46	50
Toluene-d8 (Surr)		91		75 - 120			06/27/17 00:00	07/10/17 16:46	50

TestAmerica Chicago

# Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC 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.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

□	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)

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## GC/MS VOA

### Prep Batch: 391290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-1	GP-35 (4-6)	Total/NA	Solid	5035	5
500-130269-2	GP-35 (8-10)	Total/NA	Solid	5035	6
500-130269-3	GP-35 (12-14)	Total/NA	Solid	5035	7
500-130269-30	Trip Blank	Total/NA	Solid	5035	8
LB3 500-391290/10-A	Method Blank	Total/NA	Solid	5035	9
LCS 500-391290/11-A	Lab Control Sample	Total/NA	Solid	5035	10
500-130269-3 MS	GP-35 (12-14)	Total/NA	Solid	5035	11
500-130269-3 MSD	GP-35 (12-14)	Total/NA	Solid	5035	12

### Analysis Batch: 391652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB3 500-391290/10-A	Method Blank	Total/NA	Solid	8260B	391290
MB 500-391652/7	Method Blank	Total/NA	Solid	8260B	10
LCS 500-391290/11-A	Lab Control Sample	Total/NA	Solid	8260B	391290
LCS 500-391652/5	Lab Control Sample	Total/NA	Solid	8260B	11

### Analysis Batch: 392365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-1	GP-35 (4-6)	Total/NA	Solid	8260B	391290
500-130269-2	GP-35 (8-10)	Total/NA	Solid	8260B	391290
500-130269-3	GP-35 (12-14)	Total/NA	Solid	8260B	391290
500-130269-30	Trip Blank	Total/NA	Solid	8260B	391290
MB 500-392365/6	Method Blank	Total/NA	Solid	8260B	12
LCS 500-392365/4	Lab Control Sample	Total/NA	Solid	8260B	13
500-130269-3 MS	GP-35 (12-14)	Total/NA	Solid	8260B	391290
500-130269-3 MSD	GP-35 (12-14)	Total/NA	Solid	8260B	391290

## GC VOA

### Prep Batch: 441726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-4	GP-36 (2-4)	Total/NA	Solid	WI GRO	
500-130269-5	GP-36 (6-8)	Total/NA	Solid	WI GRO	
500-130269-6	GP-37 (2-4)	Total/NA	Solid	WI GRO	
500-130269-7	GP-37 (6-8)	Total/NA	Solid	WI GRO	
500-130269-8	GP-38 (2-4)	Total/NA	Solid	WI GRO	
500-130269-9	GP-38 (6-8)	Total/NA	Solid	WI GRO	
500-130269-10	GP-39 (2-4)	Total/NA	Solid	WI GRO	
500-130269-11	GP-39 (6-8)	Total/NA	Solid	WI GRO	
500-130269-12	GP-40 (2-4)	Total/NA	Solid	WI GRO	
500-130269-13	GP-41 (2-4)	Total/NA	Solid	WI GRO	
500-130269-14	GP-42 (2-4)	Total/NA	Solid	WI GRO	
500-130269-15	GP-42 (6-8)	Total/NA	Solid	WI GRO	
500-130269-16	GP-43 (2-4)	Total/NA	Solid	WI GRO	
500-130269-17	GP-43 (6-8)	Total/NA	Solid	WI GRO	
500-130269-18	GP-44 (2-4)	Total/NA	Solid	WI GRO	
500-130269-19	GP-44 (6-8)	Total/NA	Solid	WI GRO	
500-130269-20	GP-45 (2-4)	Total/NA	Solid	WI GRO	
500-130269-21	GP-45 (6-8)	Total/NA	Solid	WI GRO	
500-130269-24	GP-47 (2-4)	Total/NA	Solid	WI GRO	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## GC VOA (Continued)

### Prep Batch: 441726 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-25	GP-47 (6-8)	Total/NA	Solid	WI GRO	5
500-130269-26	GP-48 (2-4)	Total/NA	Solid	WI GRO	6
500-130269-27	GP-48 (6-8)	Total/NA	Solid	WI GRO	7
500-130269-28	GP-49 (2-4)	Total/NA	Solid	WI GRO	8
500-130269-29	GP-49 (6-8)	Total/NA	Solid	WI GRO	9
MB 490-441726/1-A	Method Blank	Total/NA	Solid	WI GRO	10
MB 490-441726/52-A	Method Blank	Total/NA	Solid	WI GRO	11
LCS 490-441726/2-A	Lab Control Sample	Total/NA	Solid	WI GRO	12
LCS 490-441726/53-A	Lab Control Sample	Total/NA	Solid	WI GRO	13
LCSD 490-441726/3-A	Lab Control Sample Dup	Total/NA	Solid	WI GRO	14
LCSD 490-441726/54-A	Lab Control Sample Dup	Total/NA	Solid	WI GRO	15

### Analysis Batch: 442472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-4	GP-36 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-5	GP-36 (6-8)	Total/NA	Solid	WDNR	441726
500-130269-6	GP-37 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-7	GP-37 (6-8)	Total/NA	Solid	WDNR	441726
500-130269-8	GP-38 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-9	GP-38 (6-8)	Total/NA	Solid	WDNR	441726
500-130269-10	GP-39 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-11	GP-39 (6-8)	Total/NA	Solid	WDNR	441726
500-130269-12	GP-40 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-13	GP-41 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-14	GP-42 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-15	GP-42 (6-8)	Total/NA	Solid	WDNR	441726
500-130269-16	GP-43 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-17	GP-43 (6-8)	Total/NA	Solid	WDNR	441726
500-130269-18	GP-44 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-19	GP-44 (6-8)	Total/NA	Solid	WDNR	441726
500-130269-20	GP-45 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-21	GP-45 (6-8)	Total/NA	Solid	WDNR	441726
500-130269-24	GP-47 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-25	GP-47 (6-8)	Total/NA	Solid	WDNR	441726
MB 490-441726/1-A	Method Blank	Total/NA	Solid	WDNR	441726
LCS 490-441726/2-A	Lab Control Sample	Total/NA	Solid	WDNR	441726
LCSD 490-441726/3-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	441726

### Analysis Batch: 442527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-26	GP-48 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-27	GP-48 (6-8)	Total/NA	Solid	WDNR	441726
500-130269-28	GP-49 (2-4)	Total/NA	Solid	WDNR	441726
500-130269-29	GP-49 (6-8)	Total/NA	Solid	WDNR	441726
MB 490-441726/52-A	Method Blank	Total/NA	Solid	WDNR	441726
LCS 490-441726/53-A	Lab Control Sample	Total/NA	Solid	WDNR	441726
LCSD 490-441726/54-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	441726

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Metals

### Prep Batch: 391928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-14	GP-42 (2-4)	Total/NA	Solid	3050B	5
500-130269-15	GP-42 (6-8)	Total/NA	Solid	3050B	6
500-130269-16	GP-43 (2-4)	Total/NA	Solid	3050B	7
500-130269-17	GP-43 (6-8)	Total/NA	Solid	3050B	8
500-130269-18	GP-44 (2-4)	Total/NA	Solid	3050B	9
500-130269-19	GP-44 (6-8)	Total/NA	Solid	3050B	10
500-130269-20	GP-45 (2-4)	Total/NA	Solid	3050B	11
500-130269-21	GP-45 (6-8)	Total/NA	Solid	3050B	12
MB 500-391928/1-A	Method Blank	Total/NA	Solid	3050B	13
LCS 500-391928/2-A	Lab Control Sample	Total/NA	Solid	3050B	14

### Analysis Batch: 392169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-14	GP-42 (2-4)	Total/NA	Solid	6010B	391928
500-130269-15	GP-42 (6-8)	Total/NA	Solid	6010B	391928
500-130269-16	GP-43 (2-4)	Total/NA	Solid	6010B	391928
500-130269-17	GP-43 (6-8)	Total/NA	Solid	6010B	391928
500-130269-18	GP-44 (2-4)	Total/NA	Solid	6010B	391928
500-130269-19	GP-44 (6-8)	Total/NA	Solid	6010B	391928
500-130269-20	GP-45 (2-4)	Total/NA	Solid	6010B	391928
500-130269-21	GP-45 (6-8)	Total/NA	Solid	6010B	391928
MB 500-391928/1-A	Method Blank	Total/NA	Solid	6010B	391928
LCS 500-391928/2-A	Lab Control Sample	Total/NA	Solid	6010B	391928

## General Chemistry

### Analysis Batch: 391194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-1	GP-35 (4-6)	Total/NA	Solid	Moisture	
500-130269-2	GP-35 (8-10)	Total/NA	Solid	Moisture	
500-130269-3	GP-35 (12-14)	Total/NA	Solid	Moisture	
500-130269-14	GP-42 (2-4)	Total/NA	Solid	Moisture	
500-130269-15	GP-42 (6-8)	Total/NA	Solid	Moisture	
500-130269-16	GP-43 (2-4)	Total/NA	Solid	Moisture	
500-130269-17	GP-43 (6-8)	Total/NA	Solid	Moisture	
500-130269-18	GP-44 (2-4)	Total/NA	Solid	Moisture	
500-130269-19	GP-44 (6-8)	Total/NA	Solid	Moisture	
500-130269-20	GP-45 (2-4)	Total/NA	Solid	Moisture	
500-130269-21	GP-45 (6-8)	Total/NA	Solid	Moisture	
500-130269-30	Trip Blank	Total/NA	Solid	Moisture	
500-130269-17 DU	GP-43 (6-8)	Total/NA	Solid	Moisture	

### Analysis Batch: 441458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-4	GP-36 (2-4)	Total/NA	Solid	Moisture	
500-130269-5	GP-36 (6-8)	Total/NA	Solid	Moisture	
500-130269-6	GP-37 (2-4)	Total/NA	Solid	Moisture	
500-130269-7	GP-37 (6-8)	Total/NA	Solid	Moisture	
500-130269-8	GP-38 (2-4)	Total/NA	Solid	Moisture	
500-130269-9	GP-38 (6-8)	Total/NA	Solid	Moisture	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## General Chemistry (Continued)

### Analysis Batch: 441458 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-130269-10	GP-39 (2-4)	Total/NA	Solid	Moisture	5
500-130269-11	GP-39 (6-8)	Total/NA	Solid	Moisture	6
500-130269-12	GP-40 (2-4)	Total/NA	Solid	Moisture	7
500-130269-13	GP-41 (2-4)	Total/NA	Solid	Moisture	8
500-130269-24	GP-47 (2-4)	Total/NA	Solid	Moisture	9
500-130269-25	GP-47 (6-8)	Total/NA	Solid	Moisture	10
500-130269-26	GP-48 (2-4)	Total/NA	Solid	Moisture	11
500-130269-27	GP-48 (6-8)	Total/NA	Solid	Moisture	12
500-130269-28	GP-49 (2-4)	Total/NA	Solid	Moisture	13
500-130269-29	GP-49 (6-8)	Total/NA	Solid	Moisture	14

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-130269-1	GP-35 (4-6)	86	86	92	93
500-130269-2	GP-35 (8-10)	86	87	92	92
500-130269-3	GP-35 (12-14)	85	87	92	93
500-130269-3 MS	GP-35 (12-14)	85	84	93	92
500-130269-3 MSD	GP-35 (12-14)	88	84	94	94
500-130269-30	Trip Blank	87	86	93	91
LB3 500-391290/10-A	Method Blank	83	96	86	103
LCS 500-391290/11-A	Lab Control Sample	86	92	90	102
LCS 500-391652/5	Lab Control Sample	82	94	90	104
LCS 500-392365/4	Lab Control Sample	83	82	93	92
MB 500-391652/7	Method Blank	83	96	87	102
MB 500-392365/6	Method Blank	85	84	93	93

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT (80-120)			
500-130269-4	GP-36 (2-4)	93			
500-130269-5	GP-36 (6-8)	95			
500-130269-6	GP-37 (2-4)	97			
500-130269-7	GP-37 (6-8)	98			
500-130269-8	GP-38 (2-4)	100			
500-130269-9	GP-38 (6-8)	96			
500-130269-10	GP-39 (2-4)	101			
500-130269-11	GP-39 (6-8)	100			
500-130269-12	GP-40 (2-4)	97			
500-130269-13	GP-41 (2-4)	97			
500-130269-14	GP-42 (2-4)	94			
500-130269-15	GP-42 (6-8)	95			
500-130269-16	GP-43 (2-4)	97			
500-130269-17	GP-43 (6-8)	98			
500-130269-18	GP-44 (2-4)	98			
500-130269-19	GP-44 (6-8)	96			
500-130269-20	GP-45 (2-4)	97			
500-130269-21	GP-45 (6-8)	98			
500-130269-24	GP-47 (2-4)	96			
500-130269-25	GP-47 (6-8)	98			
500-130269-26	GP-48 (2-4)	93			
500-130269-27	GP-48 (6-8)	94			
500-130269-28	GP-49 (2-4)	96			
500-130269-29	GP-49 (6-8)	100			

TestAmerica Chicago

## Surrogate Summary

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 27578

TestAmerica Job ID: 500-130269-1

## **Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)**

## **Matrix: Solid**

### **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	TFT		Percent Surrogate Recovery (Acceptance Limits)			
		(80-120)		80	100	120	140
LCS 490-441726/2-A	Lab Control Sample	100					
LCS 490-441726/53-A	Lab Control Sample	96					
LCSD 490-441726/3-A	Lab Control Sample Dup	104					
LCSD 490-441726/54-A	Lab Control Sample Dup	105					
MB 490-441726/1-A	Method Blank	92					
MB 490-441726/52-A	Method Blank	89					

## Surrogate Legend

TFT = a,a,a-Trifluorotoluene

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: LB3 500-391290/10-A**

**Matrix: Solid**

**Analysis Batch: 391652**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 391290**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,1-Dichloroethane	<21		50	21	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,1-Dichloroethene	<20		50	20	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,1-Dichloropropene	<15		50	15	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,2,3-Trichloropropane	<21		50	21	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,2-Dibromoethane	<19		50	19	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,2-Dichloroethane	<20		50	20	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,2-Dichloropropane	<21		50	21	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,3-Dichloropropane	<18		50	18	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
2,2-Dichloropropane	<22		50	22	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
2-Chlorotoluene	<16		50	16	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
4-Chlorotoluene	<18		50	18	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Benzene	<7.3		13	7.3	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Bromobenzene	<18		50	18	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Bromochloromethane	<21		50	21	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Bromodichloromethane	<19		50	19	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Bromoform	<24		50	24	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Bromomethane	<40		100	40	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Carbon tetrachloride	<19		50	19	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Chlorobenzene	<19		50	19	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Chloroethane	<25		50	25	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Chloroform	<19		100	19	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Chloromethane	<16		50	16	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Dibromochloromethane	<24		50	24	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Dibromomethane	<14		50	14	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Dichlorodifluoromethane	<34		100	34	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Ethylbenzene	<9.2		13	9.2	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Hexachlorobutadiene	<22		50	22	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Isopropyl ether	<14		50	14	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Isopropylbenzene	<19		50	19	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Methyl tert-butyl ether	<20		50	20	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Methylene Chloride	<82		250	82	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
Naphthalene	<17		50	17	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
n-Butylbenzene	<19		50	19	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50
N-Propylbenzene	<21		50	21	ug/Kg	06/29/17 09:30	07/03/17 09:58	50	50

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: LB3 500-391290/10-A**

**Matrix: Solid**

**Analysis Batch: 391652**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 391290**

Analyte	LB3	LB3	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	LB3	LB3							Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<18		50		18	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
sec-Butylbenzene	<20		50		20	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
Styrene	<19		50		19	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
tert-Butylbenzene	<20		50		20	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
Tetrachloroethene	<19		50		19	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
Toluene	<7.4		13		7.4	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
trans-1,2-Dichloroethene	<18		50		18	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
trans-1,3-Dichloropropene	<18		50		18	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
Trichloroethene	<8.2		25		8.2	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
Trichlorofluoromethane	<21		50		21	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
Vinyl chloride	<13		25		13	ug/Kg		06/29/17 09:30	07/03/17 09:58		50
Xylenes, Total	<11		25		11	ug/Kg		06/29/17 09:30	07/03/17 09:58		50

Surrogate	LB3	LB3	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	LB3	LB3						
1,2-Dichloroethane-d4 (Surr)	83		75 - 126			06/29/17 09:30	07/03/17 09:58	50
4-Bromofluorobenzene (Surr)	96		72 - 124			06/29/17 09:30	07/03/17 09:58	50
Dibromofluoromethane	86		75 - 120			06/29/17 09:30	07/03/17 09:58	50
Toluene-d8 (Surr)	103		75 - 120			06/29/17 09:30	07/03/17 09:58	50

**Lab Sample ID: LCS 500-391290/11-A**

**Matrix: Solid**

**Analysis Batch: 391652**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 391290**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier							
1,1,1,2-Tetrachloroethane	2500	2930		2930		ug/Kg		117	70 - 125	
1,1,1-Trichloroethane	2500	2850		2850		ug/Kg		114	70 - 125	
1,1,2,2-Tetrachloroethane	2500	2890		2890		ug/Kg		116	67 - 127	
1,1,2-Trichloroethane	2500	2920		2920		ug/Kg		117	70 - 122	
1,1-Dichloroethane	2500	2810		2810		ug/Kg		112	70 - 125	
1,1-Dichloroethene	2500	2890		2890		ug/Kg		116	67 - 122	
1,1-Dichloropropene	2500	2900		2900		ug/Kg		116	70 - 121	
1,2,3-Trichlorobenzene	2500	2920		2920		ug/Kg		117	55 - 140	
1,2,3-Trichloropropane	2500	2760		2760		ug/Kg		110	50 - 133	
1,2,4-Trichlorobenzene	2500	2960		2960		ug/Kg		118	66 - 127	
1,2,4-Trimethylbenzene	2500	3040		3040		ug/Kg		121	70 - 123	
1,2-Dibromo-3-Chloropropane	2500	2450		2450		ug/Kg		98	56 - 123	
1,2-Dibromoethane	2500	2940		2940		ug/Kg		117	70 - 125	
1,2-Dichlorobenzene	2500	3010		3010		ug/Kg		120	70 - 125	
1,2-Dichloroethane	2500	2710		2710		ug/Kg		108	68 - 127	
1,2-Dichloropropane	2500	2950		2950		ug/Kg		118	67 - 130	
1,3,5-Trimethylbenzene	2500	3060		3060		ug/Kg		122	70 - 123	
1,3-Dichlorobenzene	2500	2980		2980		ug/Kg		119	70 - 125	
1,3-Dichloropropane	2500	2950		2950		ug/Kg		118	62 - 136	
1,4-Dichlorobenzene	2500	2970		2970		ug/Kg		119	70 - 120	
2,2-Dichloropropane	2500	2600		2600		ug/Kg		104	58 - 129	
2-Chlorotoluene	2500	2980		2980		ug/Kg		119	70 - 125	
4-Chlorotoluene	2500	2970		2970		ug/Kg		119	68 - 124	
Benzene	2500	2980		2980		ug/Kg		119	70 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: LCS 500-391290/11-A**

**Matrix: Solid**

**Analysis Batch: 391652**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 391290**

**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Bromobenzene	2500	3010		ug/Kg	120	70 - 122	
Bromochloromethane	2500	2870		ug/Kg	115	65 - 122	
Bromodichloromethane	2500	2730		ug/Kg	109	69 - 120	
Bromoform	2500	2760		ug/Kg	111	56 - 132	
Bromomethane	2500	2390		ug/Kg	96	40 - 130	
Carbon tetrachloride	2500	2700		ug/Kg	108	65 - 122	
Chlorobenzene	2500	3010		ug/Kg	120	70 - 120	
Chloroethane	2500	2480		ug/Kg	99	45 - 127	
Chloroform	2500	2800		ug/Kg	112	70 - 120	
Chloromethane	2500	2550		ug/Kg	102	54 - 147	
cis-1,2-Dichloroethene	2500	2880		ug/Kg	115	70 - 125	
cis-1,3-Dichloropropene	2500	2930		ug/Kg	117	64 - 127	
Dibromochloromethane	2500	2860		ug/Kg	115	68 - 125	
Dibromomethane	2500	2750		ug/Kg	110	70 - 120	
Dichlorodifluoromethane	2500	2570		ug/Kg	103	40 - 150	
Ethylbenzene	2500	3090 *		ug/Kg	123	70 - 120	
Hexachlorobutadiene	2500	3220		ug/Kg	129	51 - 150	
Isopropylbenzene	2500	3070		ug/Kg	123	70 - 126	
Methyl tert-butyl ether	2500	2700		ug/Kg	108	70 - 120	
Methylene Chloride	2500	2830		ug/Kg	113	69 - 125	
Naphthalene	2500	2810		ug/Kg	112	59 - 130	
n-Butylbenzene	2500	3090		ug/Kg	124	68 - 125	
N-Propylbenzene	2500	3080		ug/Kg	123	69 - 127	
p-Isopropyltoluene	2500	3050		ug/Kg	122	70 - 125	
sec-Butylbenzene	2500	3100 *		ug/Kg	124	70 - 123	
Styrene	2500	2930		ug/Kg	117	70 - 120	
tert-Butylbenzene	2500	3010		ug/Kg	120	70 - 121	
Tetrachloroethene	2500	3190		ug/Kg	128	70 - 128	
Toluene	2500	3180 *		ug/Kg	127	70 - 125	
trans-1,2-Dichloroethene	2500	2930		ug/Kg	117	70 - 125	
trans-1,3-Dichloropropene	2500	2860		ug/Kg	114	62 - 128	
Trichloroethene	2500	2790		ug/Kg	112	70 - 125	
Trichlorofluoromethane	2500	2610		ug/Kg	104	70 - 126	
Vinyl chloride	2500	2970		ug/Kg	119	64 - 126	
Xylenes, Total	5000	5880		ug/Kg	118	70 - 125	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		75 - 126
4-Bromofluorobenzene (Surr)	92		72 - 124
Dibromofluoromethane	90		75 - 120
Toluene-d8 (Surr)	102		75 - 120

**Lab Sample ID: 500-130269-3 MS**

**Matrix: Solid**

**Analysis Batch: 392365**

**Client Sample ID: GP-35 (12-14)**

**Prep Type: Total/NA**

**Prep Batch: 391290**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,1,1,2-Tetrachloroethane	<27		2920	2750		ug/Kg	☒	94	70 - 125

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: 500-130269-3 MS**

**Matrix: Solid**

**Analysis Batch: 392365**

**Client Sample ID: GP-35 (12-14)**

**Prep Type: Total/NA**

**Prep Batch: 391290**

**%Rec.**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
1,1,1-Trichloroethane	<22		2920	2710		ug/Kg	⊗	93	70 - 125		
1,1,2,2-Tetrachloroethane	<23		2920	2740		ug/Kg	⊗	94	67 - 127		
1,1,2-Trichloroethane	<21		2920	2820		ug/Kg	⊗	97	70 - 122		
1,1-Dichloroethane	<24		2920	2700		ug/Kg	⊗	93	70 - 125		
1,1-Dichloroethene	<23		2920	3020		ug/Kg	⊗	103	67 - 122		
1,1-Dichloropropene	<17		2920	2590		ug/Kg	⊗	89	70 - 121		
1,2,3-Trichlorobenzene	<27		2920	3190		ug/Kg	⊗	109	55 - 140		
1,2,3-Trichloropropane	<24		2920	2580		ug/Kg	⊗	88	50 - 133		
1,2,4-Trichlorobenzene	<20		2920	2820		ug/Kg	⊗	96	66 - 127		
1,2,4-Trimethylbenzene	<21		2920	2500		ug/Kg	⊗	86	70 - 123		
1,2-Dibromo-3-Chloropropane	<120		2920	2360		ug/Kg	⊗	81	56 - 123		
1,2-Dibromoethane	<23		2920	2910		ug/Kg	⊗	100	70 - 125		
1,2-Dichlorobenzene	<19		2920	2740		ug/Kg	⊗	94	70 - 125		
1,2-Dichloroethane	<23		2920	2650		ug/Kg	⊗	91	68 - 127		
1,2-Dichloropropane	<25		2920	2810		ug/Kg	⊗	96	67 - 130		
1,3,5-Trimethylbenzene	<22		2920	2510		ug/Kg	⊗	86	70 - 123		
1,3-Dichlorobenzene	<23		2920	2690		ug/Kg	⊗	92	70 - 125		
1,3-Dichloropropane	<21		2920	2650		ug/Kg	⊗	91	62 - 136		
1,4-Dichlorobenzene	<21		2920	2650		ug/Kg	⊗	91	70 - 120		
2,2-Dichloropropane	<26		2920	2900		ug/Kg	⊗	99	58 - 129		
2-Chlorotoluene	<18		2920	2360		ug/Kg	⊗	81	70 - 125		
4-Chlorotoluene	<20		2920	2360		ug/Kg	⊗	81	68 - 124		
Benzene	<8.5		2920	2640		ug/Kg	⊗	90	70 - 120		
Bromobenzene	<21		2920	2820		ug/Kg	⊗	96	70 - 122		
Bromochloromethane	<25		2920	2990		ug/Kg	⊗	103	65 - 122		
Bromodichloromethane	<22		2920	2630		ug/Kg	⊗	90	69 - 120		
Bromoform	<28		2920	2730		ug/Kg	⊗	94	56 - 132		
Bromomethane	<46		2920	3490		ug/Kg	⊗	120	40 - 130		
Carbon tetrachloride	<22		2920	2610		ug/Kg	⊗	89	65 - 122		
Chlorobenzene	<23		2920	2740		ug/Kg	⊗	94	70 - 120		
Chloroethane	<29		2920	2800		ug/Kg	⊗	96	45 - 127		
Chloroform	<22		2920	2580		ug/Kg	⊗	88	70 - 120		
Chloromethane	<19		2920	3950		ug/Kg	⊗	135	54 - 147		
cis-1,2-Dichloroethene	<24		2920	2790		ug/Kg	⊗	96	70 - 125		
cis-1,3-Dichloropropene	<24		2920	2590		ug/Kg	⊗	89	64 - 127		
Dibromochloromethane	<28		2920	2870		ug/Kg	⊗	98	68 - 125		
Dibromomethane	<16		2920	2640		ug/Kg	⊗	91	70 - 120		
Dichlorodifluoromethane	<39		2920	3340		ug/Kg	⊗	114	40 - 150		
Ethylbenzene	<11 *		2920	2890		ug/Kg	⊗	99	70 - 120		
Hexachlorobutadiene	<26		2920	2600		ug/Kg	⊗	89	51 - 150		
Isopropylbenzene	<22		2920	2540		ug/Kg	⊗	87	70 - 126		
Methyl tert-butyl ether	<23		2920	2590		ug/Kg	⊗	89	70 - 120		
Methylene Chloride	<95		2920	2890		ug/Kg	⊗	99	69 - 125		
Naphthalene	<19		2920	3250		ug/Kg	⊗	111	59 - 130		
n-Butylbenzene	<23		2920	2390		ug/Kg	⊗	82	68 - 125		
N-Propylbenzene	<24		2920	2390		ug/Kg	⊗	82	69 - 127		
p-Isopropyltoluene	<21		2920	2630		ug/Kg	⊗	90	70 - 125		
sec-Butylbenzene	<23 *		2920	2580		ug/Kg	⊗	88	70 - 123		

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: 500-130269-3 MS**

**Matrix: Solid**

**Analysis Batch: 392365**

**Client Sample ID: GP-35 (12-14)**

**Prep Type: Total/NA**

**Prep Batch: 391290**

**%Rec.**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
Styrene	<23		2920	2780		ug/Kg	⊗	95	70 - 120		
tert-Butylbenzene	<23		2920	2620		ug/Kg	⊗	90	70 - 121		
Tetrachloroethene	<22		2920	2950		ug/Kg	⊗	101	70 - 128		
Toluene	<8.6 *		2920	2660		ug/Kg	⊗	91	70 - 125		
trans-1,2-Dichloroethene	<20		2920	2880		ug/Kg	⊗	99	70 - 125		
trans-1,3-Dichloropropene	<21		2920	2490		ug/Kg	⊗	85	62 - 128		
Trichloroethene	<9.6		2920	3160		ug/Kg	⊗	108	70 - 125		
Trichlorofluoromethane	<25		2920	3010		ug/Kg	⊗	103	70 - 126		
Vinyl chloride	<15		2920	3200		ug/Kg	⊗	110	64 - 126		
Xylenes, Total	<13		5840	5100		ug/Kg	⊗	87	70 - 125		
<b>MS MS</b>											
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>							
1,2-Dichloroethane-d4 (Surr)		85		75 - 126							
4-Bromofluorobenzene (Surr)		84		72 - 124							
Dibromofluoromethane		93		75 - 120							
Toluene-d8 (Surr)		92		75 - 120							

**Lab Sample ID: 500-130269-3 MSD**

**Matrix: Solid**

**Analysis Batch: 392365**

**Client Sample ID: GP-35 (12-14)**

**Prep Type: Total/NA**

**Prep Batch: 391290**

**%Rec.**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	<27		2920	2880		ug/Kg	⊗	99	70 - 125	5	30
1,1,1-Trichloroethane	<22		2920	2870		ug/Kg	⊗	98	70 - 125	6	30
1,1,2,2-Tetrachloroethane	<23		2920	2940		ug/Kg	⊗	101	67 - 127	7	30
1,1,2-Trichloroethane	<21		2920	3070		ug/Kg	⊗	105	70 - 122	9	30
1,1-Dichloroethane	<24		2920	2830		ug/Kg	⊗	97	70 - 125	5	30
1,1-Dichloroethene	<23		2920	3160		ug/Kg	⊗	108	67 - 122	5	30
1,1-Dichloropropene	<17		2920	2690		ug/Kg	⊗	92	70 - 121	4	30
1,2,3-Trichlorobenzene	<27		2920	3270		ug/Kg	⊗	112	55 - 140	3	30
1,2,3-Trichloropropane	<24		2920	2360		ug/Kg	⊗	81	50 - 133	9	30
1,2,4-Trichlorobenzene	<20		2920	2900		ug/Kg	⊗	99	66 - 127	3	30
1,2,4-Trimethylbenzene	<21		2920	2590		ug/Kg	⊗	89	70 - 123	3	30
1,2-Dibromo-3-Chloropropane	<120		2920	2420		ug/Kg	⊗	83	56 - 123	2	30
1,2-Dibromoethane	<23		2920	3040		ug/Kg	⊗	104	70 - 125	4	30
1,2-Dichlorobenzene	<19		2920	2860		ug/Kg	⊗	98	70 - 125	4	30
1,2-Dichloroethane	<23		2920	2710		ug/Kg	⊗	93	68 - 127	2	30
1,2-Dichloropropane	<25		2920	2940		ug/Kg	⊗	101	67 - 130	5	30
1,3,5-Trimethylbenzene	<22		2920	2580		ug/Kg	⊗	88	70 - 123	3	30
1,3-Dichlorobenzene	<23		2920	2760		ug/Kg	⊗	95	70 - 125	3	30
1,3-Dichloropropane	<21		2920	2810		ug/Kg	⊗	96	62 - 136	6	30
1,4-Dichlorobenzene	<21		2920	2700		ug/Kg	⊗	93	70 - 120	2	30
2,2-Dichloropropane	<26		2920	2960		ug/Kg	⊗	102	58 - 129	2	30
2-Chlorotoluene	<18		2920	2440		ug/Kg	⊗	84	70 - 125	3	30
4-Chlorotoluene	<20		2920	2400		ug/Kg	⊗	82	68 - 124	2	30
Benzene	<8.5		2920	2760		ug/Kg	⊗	95	70 - 120	5	30
Bromobenzene	<21		2920	2890		ug/Kg	⊗	99	70 - 122	3	30
Bromochloromethane	<25		2920	3150		ug/Kg	⊗	108	65 - 122	5	30

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: 500-130269-3 MSD**

**Matrix: Solid**

**Analysis Batch: 392365**

**Client Sample ID: GP-35 (12-14)**

**Prep Type: Total/NA**

**Prep Batch: 391290**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Bromodichloromethane	<22		2920	2760		ug/Kg	⊗	95	69 - 120	5	30
Bromoform	<28		2920	2860		ug/Kg	⊗	98	56 - 132	4	30
Bromomethane	<46		2920	3710		ug/Kg	⊗	127	40 - 130	6	30
Carbon tetrachloride	<22		2920	2730		ug/Kg	⊗	94	65 - 122	5	30
Chlorobenzene	<23		2920	2820		ug/Kg	⊗	97	70 - 120	3	30
Chloroethane	<29		2920	3110		ug/Kg	⊗	106	45 - 127	10	30
Chloroform	<22		2920	2730		ug/Kg	⊗	93	70 - 120	6	30
Chloromethane	<19		2920	4040		ug/Kg	⊗	139	54 - 147	2	30
cis-1,2-Dichloroethene	<24		2920	2920		ug/Kg	⊗	100	70 - 125	5	30
cis-1,3-Dichloropropene	<24		2920	2730		ug/Kg	⊗	94	64 - 127	5	30
Dibromochloromethane	<28		2920	3000		ug/Kg	⊗	103	68 - 125	4	30
Dibromomethane	<16		2920	2770		ug/Kg	⊗	95	70 - 120	5	30
Dichlorodifluoromethane	<39		2920	3580		ug/Kg	⊗	123	40 - 150	7	30
Ethylbenzene	<11 *		2920	2990		ug/Kg	⊗	102	70 - 120	3	30
Hexachlorobutadiene	<26		2920	2690		ug/Kg	⊗	92	51 - 150	3	30
Isopropylbenzene	<22		2920	2630		ug/Kg	⊗	90	70 - 126	3	30
Methyl tert-butyl ether	<23		2920	2700		ug/Kg	⊗	93	70 - 120	4	30
Methylene Chloride	<95		2920	3060		ug/Kg	⊗	105	69 - 125	6	30
Naphthalene	<19		2920	3360		ug/Kg	⊗	115	59 - 130	3	30
n-Butylbenzene	<23		2920	2450		ug/Kg	⊗	84	68 - 125	2	30
N-Propylbenzene	<24		2920	2440		ug/Kg	⊗	84	69 - 127	2	30
p-Isopropyltoluene	<21		2920	2690		ug/Kg	⊗	92	70 - 125	2	30
sec-Butylbenzene	<23 *		2920	2650		ug/Kg	⊗	91	70 - 123	3	30
Styrene	<23		2920	2890		ug/Kg	⊗	99	70 - 120	4	30
tert-Butylbenzene	<23		2920	2740		ug/Kg	⊗	94	70 - 121	5	30
Tetrachloroethene	<22		2920	3070		ug/Kg	⊗	105	70 - 128	4	30
Toluene	<8.6 *		2920	2760		ug/Kg	⊗	95	70 - 125	4	30
trans-1,2-Dichloroethene	<20		2920	3020		ug/Kg	⊗	103	70 - 125	5	30
trans-1,3-Dichloropropene	<21		2920	2650		ug/Kg	⊗	91	62 - 128	6	30
Trichloroethene	<9.6		2920	3210		ug/Kg	⊗	110	70 - 125	2	30
Trichlorofluoromethane	<25		2920	3090		ug/Kg	⊗	106	70 - 126	3	30
Vinyl chloride	<15		2920	3310		ug/Kg	⊗	114	64 - 126	4	30
Xylenes, Total	<13		5840	5320		ug/Kg	⊗	91	70 - 125	4	30

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	88		75 - 126
4-Bromofluorobenzene (Surr)	84		72 - 124
Dibromofluoromethane	94		75 - 120
Toluene-d8 (Surr)	94		75 - 120

**Lab Sample ID: MB 500-391652/7**

**Matrix: Solid**

**Analysis Batch: 391652**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			07/03/17 09:31	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			07/03/17 09:31	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			07/03/17 09:31	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

Lab Sample ID: MB 500-391652/7

Matrix: Solid

Analysis Batch: 391652

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.35				1.0	0.35	ug/Kg			07/03/17 09:31	1
1,1-Dichloroethane	<0.41				1.0	0.41	ug/Kg			07/03/17 09:31	1
1,1-Dichloroethene	<0.39				1.0	0.39	ug/Kg			07/03/17 09:31	1
1,1-Dichloropropene	<0.30				1.0	0.30	ug/Kg			07/03/17 09:31	1
1,2,3-Trichlorobenzene	<0.46				1.0	0.46	ug/Kg			07/03/17 09:31	1
1,2,3-Trichloropropane	<0.41				1.0	0.41	ug/Kg			07/03/17 09:31	1
1,2,4-Trichlorobenzene	<0.34				1.0	0.34	ug/Kg			07/03/17 09:31	1
1,2,4-Trimethylbenzene	<0.36				1.0	0.36	ug/Kg			07/03/17 09:31	1
1,2-Dibromo-3-Chloropropane	<2.0				5.0	2.0	ug/Kg			07/03/17 09:31	1
1,2-Dibromoethane	<0.39				1.0	0.39	ug/Kg			07/03/17 09:31	1
1,2-Dichlorobenzene	<0.33				1.0	0.33	ug/Kg			07/03/17 09:31	1
1,2-Dichloroethane	<0.39				1.0	0.39	ug/Kg			07/03/17 09:31	1
1,2-Dichloropropene	<0.43				1.0	0.43	ug/Kg			07/03/17 09:31	1
1,3,5-Trimethylbenzene	<0.38				1.0	0.38	ug/Kg			07/03/17 09:31	1
1,3-Dichlorobenzene	<0.40				1.0	0.40	ug/Kg			07/03/17 09:31	1
1,3-Dichloropropane	<0.36				1.0	0.36	ug/Kg			07/03/17 09:31	1
1,4-Dichlorobenzene	<0.36				1.0	0.36	ug/Kg			07/03/17 09:31	1
2,2-Dichloropropane	<0.44				1.0	0.44	ug/Kg			07/03/17 09:31	1
2-Chlorotoluene	<0.31				1.0	0.31	ug/Kg			07/03/17 09:31	1
4-Chlorotoluene	<0.35				1.0	0.35	ug/Kg			07/03/17 09:31	1
Benzene	<0.15				0.25	0.15	ug/Kg			07/03/17 09:31	1
Bromobenzene	<0.36				1.0	0.36	ug/Kg			07/03/17 09:31	1
Bromochloromethane	<0.43				1.0	0.43	ug/Kg			07/03/17 09:31	1
Bromodichloromethane	<0.37				1.0	0.37	ug/Kg			07/03/17 09:31	1
Bromoform	<0.48				1.0	0.48	ug/Kg			07/03/17 09:31	1
Bromomethane	<0.80				2.0	0.80	ug/Kg			07/03/17 09:31	1
Carbon tetrachloride	<0.38				1.0	0.38	ug/Kg			07/03/17 09:31	1
Chlorobenzene	<0.39				1.0	0.39	ug/Kg			07/03/17 09:31	1
Chloroethane	<0.50				1.0	0.50	ug/Kg			07/03/17 09:31	1
Chloroform	<0.37				2.0	0.37	ug/Kg			07/03/17 09:31	1
Chloromethane	<0.32				1.0	0.32	ug/Kg			07/03/17 09:31	1
cis-1,2-Dichloroethene	<0.41				1.0	0.41	ug/Kg			07/03/17 09:31	1
cis-1,3-Dichloropropene	<0.42				1.0	0.42	ug/Kg			07/03/17 09:31	1
Dibromochloromethane	<0.49				1.0	0.49	ug/Kg			07/03/17 09:31	1
Dibromomethane	<0.27				1.0	0.27	ug/Kg			07/03/17 09:31	1
Dichlorodifluoromethane	<0.67				2.0	0.67	ug/Kg			07/03/17 09:31	1
Ethylbenzene	<0.18				0.25	0.18	ug/Kg			07/03/17 09:31	1
Hexachlorobutadiene	<0.45				1.0	0.45	ug/Kg			07/03/17 09:31	1
Isopropyl ether	<0.28				1.0	0.28	ug/Kg			07/03/17 09:31	1
Isopropylbenzene	<0.38				1.0	0.38	ug/Kg			07/03/17 09:31	1
Methyl tert-butyl ether	<0.39				1.0	0.39	ug/Kg			07/03/17 09:31	1
Methylene Chloride	<1.6				5.0	1.6	ug/Kg			07/03/17 09:31	1
Naphthalene	<0.33				1.0	0.33	ug/Kg			07/03/17 09:31	1
n-Butylbenzene	<0.39				1.0	0.39	ug/Kg			07/03/17 09:31	1
N-Propylbenzene	<0.41				1.0	0.41	ug/Kg			07/03/17 09:31	1
p-Isopropyltoluene	<0.36				1.0	0.36	ug/Kg			07/03/17 09:31	1
sec-Butylbenzene	<0.40				1.0	0.40	ug/Kg			07/03/17 09:31	1
Styrene	<0.39				1.0	0.39	ug/Kg			07/03/17 09:31	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: MB 500-391652/7**

**Matrix: Solid**

**Analysis Batch: 391652**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			07/03/17 09:31	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			07/03/17 09:31	1
Toluene	<0.15		0.25	0.15	ug/Kg			07/03/17 09:31	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			07/03/17 09:31	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			07/03/17 09:31	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			07/03/17 09:31	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			07/03/17 09:31	1
Vinyl chloride	<0.26		0.50	0.26	ug/Kg			07/03/17 09:31	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			07/03/17 09:31	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	83		75 - 126		07/03/17 09:31	1
4-Bromofluorobenzene (Surr)	96		72 - 124		07/03/17 09:31	1
Dibromofluoromethane	87		75 - 120		07/03/17 09:31	1
Toluene-d8 (Surr)	102		75 - 120		07/03/17 09:31	1

**Lab Sample ID: LCS 500-391652/5**

**Matrix: Solid**

**Analysis Batch: 391652**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
1,1,1,2-Tetrachloroethane	50.0	44.1		ug/Kg		88	70 - 125	
1,1,1-Trichloroethane	50.0	46.1		ug/Kg		92	70 - 125	
1,1,2,2-Tetrachloroethane	50.0	41.3		ug/Kg		83	67 - 127	
1,1,2-Trichloroethane	50.0	42.8		ug/Kg		86	70 - 122	
1,1-Dichloroethane	50.0	44.4		ug/Kg		89	70 - 125	
1,1-Dichloroethene	50.0	47.8		ug/Kg		96	67 - 122	
1,1-Dichloropropene	50.0	47.5		ug/Kg		95	70 - 121	
1,2,3-Trichlorobenzene	50.0	42.6		ug/Kg		85	55 - 140	
1,2,3-Trichloropropane	50.0	39.9		ug/Kg		80	50 - 133	
1,2,4-Trichlorobenzene	50.0	44.7		ug/Kg		89	66 - 127	
1,2,4-Trimethylbenzene	50.0	48.4		ug/Kg		97	70 - 123	
1,2-Dibromo-3-Chloropropane	50.0	36.9		ug/Kg		74	56 - 123	
1,2-Dibromoethane	50.0	43.7		ug/Kg		87	70 - 125	
1,2-Dichlorobenzene	50.0	45.6		ug/Kg		91	70 - 125	
1,2-Dichloroethane	50.0	39.8		ug/Kg		80	68 - 127	
1,2-Dichloropropane	50.0	45.0		ug/Kg		90	67 - 130	
1,3,5-Trimethylbenzene	50.0	48.8		ug/Kg		98	70 - 123	
1,3-Dichlorobenzene	50.0	47.7		ug/Kg		95	70 - 125	
1,3-Dichloropropane	50.0	43.9		ug/Kg		88	62 - 136	
1,4-Dichlorobenzene	50.0	45.9		ug/Kg		92	70 - 120	
2,2-Dichloropropane	50.0	43.1		ug/Kg		86	58 - 129	
2-Chlorotoluene	50.0	46.9		ug/Kg		94	70 - 125	
4-Chlorotoluene	50.0	47.7		ug/Kg		95	68 - 124	
Benzene	50.0	46.9		ug/Kg		94	70 - 120	
Bromobenzene	50.0	46.5		ug/Kg		93	70 - 122	
Bromochloromethane	50.0	43.1		ug/Kg		86	65 - 122	
Bromodichloromethane	50.0	41.9		ug/Kg		84	69 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: LCS 500-391652/5**

**Matrix: Solid**

**Analysis Batch: 391652**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Bromoform	50.0	39.8		ug/Kg		80	56 - 132		
Bromomethane	50.0	46.2		ug/Kg		92	40 - 130		
Carbon tetrachloride	50.0	44.7		ug/Kg		89	65 - 122		
Chlorobenzene	50.0	46.4		ug/Kg		93	70 - 120		
Chloroethane	50.0	45.2		ug/Kg		90	45 - 127		
Chloroform	50.0	43.5		ug/Kg		87	70 - 120		
Chloromethane	50.0	49.2		ug/Kg		98	54 - 147		
cis-1,2-Dichloroethene	50.0	45.5		ug/Kg		91	70 - 125		
cis-1,3-Dichloropropene	50.0	43.7		ug/Kg		87	64 - 127		
Dibromochloromethane	50.0	42.8		ug/Kg		86	68 - 125		
Dibromomethane	50.0	40.1		ug/Kg		80	70 - 120		
Dichlorodifluoromethane	50.0	64.8		ug/Kg		130	40 - 150		
Ethylbenzene	50.0	48.3		ug/Kg		97	70 - 120		
Hexachlorobutadiene	50.0	51.4		ug/Kg		103	51 - 150		
Isopropylbenzene	50.0	49.4		ug/Kg		99	70 - 126		
Methyl tert-butyl ether	50.0	38.9		ug/Kg		78	70 - 120		
Methylene Chloride	50.0	45.1		ug/Kg		90	69 - 125		
Naphthalene	50.0	40.1		ug/Kg		80	59 - 130		
n-Butylbenzene	50.0	50.7		ug/Kg		101	68 - 125		
N-Propylbenzene	50.0	49.9		ug/Kg		100	69 - 127		
p-Isopropyltoluene	50.0	48.9		ug/Kg		98	70 - 125		
sec-Butylbenzene	50.0	50.7		ug/Kg		101	70 - 123		
Styrene	50.0	45.2		ug/Kg		90	70 - 120		
tert-Butylbenzene	50.0	49.5		ug/Kg		99	70 - 121		
Tetrachloroethene	50.0	52.1		ug/Kg		104	70 - 128		
Toluene	50.0	49.8		ug/Kg		100	70 - 125		
trans-1,2-Dichloroethene	50.0	47.3		ug/Kg		95	70 - 125		
trans-1,3-Dichloropropene	50.0	41.9		ug/Kg		84	62 - 128		
Trichloroethene	50.0	44.8		ug/Kg		90	70 - 125		
Trichlorofluoromethane	50.0	47.6		ug/Kg		95	70 - 126		
Vinyl chloride	50.0	56.7		ug/Kg		113	64 - 126		
Xylenes, Total	100	93.0		ug/Kg		93	70 - 125		

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	82		75 - 126
4-Bromofluorobenzene (Surr)	94		72 - 124
Dibromofluoromethane	90		75 - 120
Toluene-d8 (Surr)	104		75 - 120

**Lab Sample ID: MB 500-392365/6**

**Matrix: Solid**

**Analysis Batch: 392365**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			07/10/17 08:51	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			07/10/17 08:51	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			07/10/17 08:51	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			07/10/17 08:51	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: MB 500-392365/6**

**Matrix: Solid**

**Analysis Batch: 392365**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<0.41				1.0	0.41	ug/Kg			07/10/17 08:51	1
1,1-Dichloroethene	<0.39				1.0	0.39	ug/Kg			07/10/17 08:51	1
1,1-Dichloropropene	<0.30				1.0	0.30	ug/Kg			07/10/17 08:51	1
1,2,3-Trichlorobenzene	<0.46				1.0	0.46	ug/Kg			07/10/17 08:51	1
1,2,3-Trichloropropane	<0.41				1.0	0.41	ug/Kg			07/10/17 08:51	1
1,2,4-Trichlorobenzene	<0.34				1.0	0.34	ug/Kg			07/10/17 08:51	1
1,2,4-Trimethylbenzene	<0.36				1.0	0.36	ug/Kg			07/10/17 08:51	1
1,2-Dibromo-3-Chloropropane	<2.0				5.0	2.0	ug/Kg			07/10/17 08:51	1
1,2-Dibromoethane	<0.39				1.0	0.39	ug/Kg			07/10/17 08:51	1
1,2-Dichlorobenzene	<0.33				1.0	0.33	ug/Kg			07/10/17 08:51	1
1,2-Dichloroethane	<0.39				1.0	0.39	ug/Kg			07/10/17 08:51	1
1,2-Dichloropropane	<0.43				1.0	0.43	ug/Kg			07/10/17 08:51	1
1,3,5-Trimethylbenzene	<0.38				1.0	0.38	ug/Kg			07/10/17 08:51	1
1,3-Dichlorobenzene	<0.40				1.0	0.40	ug/Kg			07/10/17 08:51	1
1,3-Dichloropropane	<0.36				1.0	0.36	ug/Kg			07/10/17 08:51	1
1,4-Dichlorobenzene	<0.36				1.0	0.36	ug/Kg			07/10/17 08:51	1
2,2-Dichloropropane	<0.44				1.0	0.44	ug/Kg			07/10/17 08:51	1
2-Chlorotoluene	<0.31				1.0	0.31	ug/Kg			07/10/17 08:51	1
4-Chlorotoluene	<0.35				1.0	0.35	ug/Kg			07/10/17 08:51	1
Benzene	<0.15				0.25	0.15	ug/Kg			07/10/17 08:51	1
Bromobenzene	<0.36				1.0	0.36	ug/Kg			07/10/17 08:51	1
Bromochloromethane	<0.43				1.0	0.43	ug/Kg			07/10/17 08:51	1
Bromodichloromethane	<0.37				1.0	0.37	ug/Kg			07/10/17 08:51	1
Bromoform	<0.48				1.0	0.48	ug/Kg			07/10/17 08:51	1
Bromomethane	<0.80				2.0	0.80	ug/Kg			07/10/17 08:51	1
Carbon tetrachloride	<0.38				1.0	0.38	ug/Kg			07/10/17 08:51	1
Chlorobenzene	<0.39				1.0	0.39	ug/Kg			07/10/17 08:51	1
Chloroethane	<0.50				1.0	0.50	ug/Kg			07/10/17 08:51	1
Chloroform	<0.37				2.0	0.37	ug/Kg			07/10/17 08:51	1
Chloromethane	<0.32				1.0	0.32	ug/Kg			07/10/17 08:51	1
cis-1,2-Dichloroethene	<0.41				1.0	0.41	ug/Kg			07/10/17 08:51	1
cis-1,3-Dichloropropene	<0.42				1.0	0.42	ug/Kg			07/10/17 08:51	1
Dibromochloromethane	<0.49				1.0	0.49	ug/Kg			07/10/17 08:51	1
Dibromomethane	<0.27				1.0	0.27	ug/Kg			07/10/17 08:51	1
Dichlorodifluoromethane	<0.67				2.0	0.67	ug/Kg			07/10/17 08:51	1
Ethylbenzene	<0.18				0.25	0.18	ug/Kg			07/10/17 08:51	1
Hexachlorobutadiene	<0.45				1.0	0.45	ug/Kg			07/10/17 08:51	1
Isopropyl ether	<0.28				1.0	0.28	ug/Kg			07/10/17 08:51	1
Isopropylbenzene	<0.38				1.0	0.38	ug/Kg			07/10/17 08:51	1
Methyl tert-butyl ether	<0.39				1.0	0.39	ug/Kg			07/10/17 08:51	1
Methylene Chloride	<1.6				5.0	1.6	ug/Kg			07/10/17 08:51	1
Naphthalene	<0.33				1.0	0.33	ug/Kg			07/10/17 08:51	1
n-Butylbenzene	<0.39				1.0	0.39	ug/Kg			07/10/17 08:51	1
N-Propylbenzene	<0.41				1.0	0.41	ug/Kg			07/10/17 08:51	1
p-Isopropyltoluene	<0.36				1.0	0.36	ug/Kg			07/10/17 08:51	1
sec-Butylbenzene	<0.40				1.0	0.40	ug/Kg			07/10/17 08:51	1
Styrene	<0.39				1.0	0.39	ug/Kg			07/10/17 08:51	1
tert-Butylbenzene	<0.40				1.0	0.40	ug/Kg			07/10/17 08:51	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

**Lab Sample ID: MB 500-392365/6**

**Matrix: Solid**

**Analysis Batch: 392365**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			07/10/17 08:51	1
Toluene	<0.15		0.25	0.15	ug/Kg			07/10/17 08:51	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			07/10/17 08:51	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			07/10/17 08:51	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			07/10/17 08:51	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			07/10/17 08:51	1
Vinyl chloride	<0.26		0.50	0.26	ug/Kg			07/10/17 08:51	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			07/10/17 08:51	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	85		75 - 126		07/10/17 08:51	1
4-Bromofluorobenzene (Surr)	84		72 - 124		07/10/17 08:51	1
Dibromofluoromethane	93		75 - 120		07/10/17 08:51	1
Toluene-d8 (Surr)	93		75 - 120		07/10/17 08:51	1

**Lab Sample ID: LCS 500-392365/4**

**Matrix: Solid**

**Analysis Batch: 392365**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	50.0	46.2		ug/Kg		92	70 - 125
1,1,1-Trichloroethane	50.0	48.8		ug/Kg		98	70 - 125
1,1,2,2-Tetrachloroethane	50.0	42.1		ug/Kg		84	67 - 127
1,1,2-Trichloroethane	50.0	45.0		ug/Kg		90	70 - 122
1,1-Dichloroethane	50.0	45.8		ug/Kg		92	70 - 125
1,1-Dichloroethene	50.0	53.2		ug/Kg		106	67 - 122
1,1-Dichloropropene	50.0	45.6		ug/Kg		91	70 - 121
1,2,3-Trichlorobenzene	50.0	49.5		ug/Kg		99	55 - 140
1,2,3-Trichloropropane	50.0	37.6		ug/Kg		75	50 - 133
1,2,4-Trichlorobenzene	50.0	47.6		ug/Kg		95	66 - 127
1,2,4-Trimethylbenzene	50.0	41.9		ug/Kg		84	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	36.1		ug/Kg		72	56 - 123
1,2-Dibromoethane	50.0	47.0		ug/Kg		94	70 - 125
1,2-Dichlorobenzene	50.0	45.4		ug/Kg		91	70 - 125
1,2-Dichloroethane	50.0	42.4		ug/Kg		85	68 - 127
1,2-Dichloropropene	50.0	45.1		ug/Kg		90	67 - 130
1,3,5-Trimethylbenzene	50.0	42.5		ug/Kg		85	70 - 123
1,3-Dichlorobenzene	50.0	45.5		ug/Kg		91	70 - 125
1,3-Dichloropropane	50.0	42.3		ug/Kg		85	62 - 136
1,4-Dichlorobenzene	50.0	44.8		ug/Kg		90	70 - 120
2,2-Dichloropropane	50.0	54.7		ug/Kg		109	58 - 129
2-Chlorotoluene	50.0	39.8		ug/Kg		80	70 - 125
4-Chlorotoluene	50.0	39.7		ug/Kg		79	68 - 124
Benzene	50.0	43.5		ug/Kg		87	70 - 120
Bromobenzene	50.0	46.0		ug/Kg		92	70 - 122
Bromochloromethane	50.0	48.7		ug/Kg		97	65 - 122
Bromodichloromethane	50.0	43.0		ug/Kg		86	69 - 120
Bromoform	50.0	47.0		ug/Kg		94	56 - 132

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

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

Lab Sample ID: LCS 500-392365/4

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 392365

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Bromomethane	50.0	59.8		ug/Kg		120	99	40 - 130	
Carbon tetrachloride	50.0	46.9		ug/Kg		94	65 - 122		
Chlorobenzene	50.0	45.3		ug/Kg		91	70 - 120		
Chloroethane	50.0	54.6		ug/Kg		109	45 - 127		
Chloroform	50.0	43.5		ug/Kg		87	70 - 120		
Chloromethane	50.0	66.0		ug/Kg		132	54 - 147		
cis-1,2-Dichloroethene	50.0	46.8		ug/Kg		94	70 - 125		
cis-1,3-Dichloropropene	50.0	42.6		ug/Kg		85	64 - 127		
Dibromochloromethane	50.0	46.7		ug/Kg		93	68 - 125		
Dibromomethane	50.0	42.0		ug/Kg		84	70 - 120		
Dichlorodifluoromethane	50.0	58.4		ug/Kg		117	40 - 150		
Ethylbenzene	50.0	49.4		ug/Kg		99	70 - 120		
Hexachlorobutadiene	50.0	44.3		ug/Kg		89	51 - 150		
Isopropylbenzene	50.0	43.8		ug/Kg		88	70 - 126		
Methyl tert-butyl ether	50.0	41.0		ug/Kg		82	70 - 120		
Methylene Chloride	50.0	48.2		ug/Kg		96	69 - 125		
Naphthalene	50.0	47.4		ug/Kg		95	59 - 130		
n-Butylbenzene	50.0	42.4		ug/Kg		85	68 - 125		
N-Propylbenzene	50.0	41.1		ug/Kg		82	69 - 127		
p-Isopropyltoluene	50.0	45.2		ug/Kg		90	70 - 125		
sec-Butylbenzene	50.0	43.6		ug/Kg		87	70 - 123		
Styrene	50.0	46.1		ug/Kg		92	70 - 120		
tert-Butylbenzene	50.0	43.9		ug/Kg		88	70 - 121		
Tetrachloroethene	50.0	52.8		ug/Kg		106	70 - 128		
Toluene	50.0	44.4		ug/Kg		89	70 - 125		
trans-1,2-Dichloroethene	50.0	51.5		ug/Kg		103	70 - 125		
trans-1,3-Dichloropropene	50.0	41.7		ug/Kg		83	62 - 128		
Trichloroethene	50.0	53.3		ug/Kg		107	70 - 125		
Trichlorofluoromethane	50.0	51.7		ug/Kg		103	70 - 126		
Vinyl chloride	50.0	52.7		ug/Kg		105	64 - 126		
Xylenes, Total	100	87.8		ug/Kg		88	70 - 125		

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	83		75 - 126
4-Bromofluorobenzene (Surr)	82		72 - 124
Dibromofluoromethane	93		75 - 120
Toluene-d8 (Surr)	92		75 - 120

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Lab Sample ID: MB 490-441726/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 442472

Prep Batch: 441726

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<18		25	18	ug/Kg		06/30/17 08:52	07/03/17 17:55	1
Ethylbenzene	<19		25	19	ug/Kg		06/30/17 08:52	07/03/17 17:55	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		06/30/17 08:52	07/03/17 17:55	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID: MB 490-441726/1-A**

**Matrix: Solid**

**Analysis Batch: 442472**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 441726**

Analyte	MB		RL	MDL	Unit	D	Prepared		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
Naphthalene	<120		250	120	ug/Kg	06/30/17 08:52	07/03/17 17:55	1	
Toluene	<17		25	17	ug/Kg	06/30/17 08:52	07/03/17 17:55	1	
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg	06/30/17 08:52	07/03/17 17:55	1	
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg	06/30/17 08:52	07/03/17 17:55	1	
Xylenes, Total	<30		75	30	ug/Kg	06/30/17 08:52	07/03/17 17:55	1	

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
a,a,a-Trifluorotoluene	92		80 - 120	06/30/17 08:52	07/03/17 17:55	1

**Lab Sample ID: MB 490-441726/52-A**

**Matrix: Solid**

**Analysis Batch: 442527**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 441726**

Analyte	MB		RL	MDL	Unit	D	Prepared		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
Benzene	<18		25	18	ug/Kg	06/30/17 09:14	07/04/17 11:37	1	
Ethylbenzene	<19		25	19	ug/Kg	06/30/17 09:14	07/04/17 11:37	1	
Methyl tert-butyl ether	<12		25	12	ug/Kg	06/30/17 09:14	07/04/17 11:37	1	
Naphthalene	<120		250	120	ug/Kg	06/30/17 09:14	07/04/17 11:37	1	
Toluene	<17		25	17	ug/Kg	06/30/17 09:14	07/04/17 11:37	1	
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg	06/30/17 09:14	07/04/17 11:37	1	
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg	06/30/17 09:14	07/04/17 11:37	1	
Xylenes, Total	<30		75	30	ug/Kg	06/30/17 09:14	07/04/17 11:37	1	

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
a,a,a-Trifluorotoluene	89		80 - 120	06/30/17 09:14	07/04/17 11:37	1

**Lab Sample ID: LCS 490-441726/2-A**

**Matrix: Solid**

**Analysis Batch: 442472**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 441726**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Benzene	5000	4770		ug/Kg	95	76 - 120	
Ethylbenzene	5000	4950		ug/Kg	99	77 - 120	
Methyl tert-butyl ether	5000	4460		ug/Kg	89	73 - 120	
Naphthalene	5000	4140		ug/Kg	83	74 - 127	
Toluene	5000	4810		ug/Kg	96	79 - 120	
1,2,4-Trimethylbenzene	5000	4530		ug/Kg	91	60 - 140	
1,3,5-Trimethylbenzene	5000	4690		ug/Kg	94	74 - 133	

Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
a,a,a-Trifluorotoluene	100		80 - 120			

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID: LCS 490-441726/53-A**

**Matrix: Solid**

**Analysis Batch: 442527**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 441726**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Benzene	5000	5020		ug/Kg		100	76 - 120	
Ethylbenzene	5000	5090		ug/Kg		102	77 - 120	
Methyl tert-butyl ether	5000	4700		ug/Kg		94	73 - 120	
Naphthalene	5000	4380		ug/Kg		88	74 - 127	
Toluene	5000	5080		ug/Kg		102	79 - 120	
1,2,4-Trimethylbenzene	5000	4770		ug/Kg		95	60 - 140	
1,3,5-Trimethylbenzene	5000	4940		ug/Kg		99	74 - 133	
<b>Surrogate</b>		<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
a,a,a-Trifluorotoluene	96			80 - 120				

**Lab Sample ID: LCSD 490-441726/3-A**

**Matrix: Solid**

**Analysis Batch: 442472**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 441726**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Benzene	5000	4860		ug/Kg		97	76 - 120	2	27	
Ethylbenzene	5000	4980		ug/Kg		100	77 - 120	1	49	
Methyl tert-butyl ether	5000	4610		ug/Kg		92	73 - 120	3	31	
Naphthalene	5000	3960		ug/Kg		79	74 - 127	4	50	
Toluene	5000	4870		ug/Kg		97	79 - 120	1	37	
1,2,4-Trimethylbenzene	5000	4510		ug/Kg		90	60 - 140	1	50	
1,3,5-Trimethylbenzene	5000	4690		ug/Kg		94	74 - 133	0	42	
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
a,a,a-Trifluorotoluene	104			80 - 120						

**Lab Sample ID: LCSD 490-441726/54-A**

**Matrix: Solid**

**Analysis Batch: 442527**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 441726**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Benzene	5000	4910		ug/Kg		98	76 - 120	2	27	
Ethylbenzene	5000	5050		ug/Kg		101	77 - 120	1	49	
Methyl tert-butyl ether	5000	4790		ug/Kg		96	73 - 120	2	31	
Naphthalene	5000	4130		ug/Kg		83	74 - 127	6	50	
Toluene	5000	4960		ug/Kg		99	79 - 120	2	37	
1,2,4-Trimethylbenzene	5000	4660		ug/Kg		93	60 - 140	2	50	
1,3,5-Trimethylbenzene	5000	4840		ug/Kg		97	74 - 133	2	42	
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
a,a,a-Trifluorotoluene	105			80 - 120						

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-391928/1-A

Matrix: Solid

Analysis Batch: 392169

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 391928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.23		0.50	0.23	mg/Kg		07/05/17 15:05	07/06/17 12:43	1

Lab Sample ID: LCS 500-391928/2-A

Matrix: Solid

Analysis Batch: 392169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 391928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Lead	10.0	8.39		mg/Kg		84	80 - 120

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-35 (4-6)**

Date Collected: 06/27/17 08:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-35 (4-6)**

Date Collected: 06/27/17 08:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-1**

Matrix: Solid

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			391290	06/27/17 08:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	392365	07/10/17 15:27	PMF	TAL CHI

## **Client Sample ID: GP-35 (8-10)**

Date Collected: 06/27/17 08:40

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-35 (8-10)**

Date Collected: 06/27/17 08:40

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-2**

Matrix: Solid

Percent Solids: 87.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			391290	06/27/17 08:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	392365	07/10/17 15:53	PMF	TAL CHI

## **Client Sample ID: GP-35 (12-14)**

Date Collected: 06/27/17 08:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-35 (12-14)**

Date Collected: 06/27/17 08:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-3**

Matrix: Solid

Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			391290	06/27/17 08:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	392365	07/10/17 16:19	PMF	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-36 (2-4)**

Date Collected: 06/27/17 09:25

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-36 (2-4)**

Date Collected: 06/27/17 09:25

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-4**

Matrix: Solid

Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/03/17 18:21	A1B	TAL NSH

## **Client Sample ID: GP-36 (6-8)**

Date Collected: 06/27/17 09:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-5**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-36 (6-8)**

Date Collected: 06/27/17 09:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-5**

Matrix: Solid

Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/03/17 18:48	A1B	TAL NSH

## **Client Sample ID: GP-37 (2-4)**

Date Collected: 06/27/17 09:40

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-6**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-37 (2-4)**

Date Collected: 06/27/17 09:40

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-6**

Matrix: Solid

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/03/17 19:15	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-37 (6-8)**

Date Collected: 06/27/17 09:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-37 (6-8)**

Date Collected: 06/27/17 09:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-7**

Matrix: Solid

Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/03/17 19:42	A1B	TAL NSH

## **Client Sample ID: GP-38 (2-4)**

Date Collected: 06/27/17 10:05

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-8**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-38 (2-4)**

Date Collected: 06/27/17 10:05

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-8**

Matrix: Solid

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/03/17 20:08	A1B	TAL NSH

## **Client Sample ID: GP-38 (6-8)**

Date Collected: 06/27/17 10:10

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-9**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-38 (6-8)**

Date Collected: 06/27/17 10:10

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-9**

Matrix: Solid

Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		10	442472	07/03/17 20:35	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-39 (2-4)**

Date Collected: 06/27/17 10:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-10**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-39 (2-4)**

Date Collected: 06/27/17 10:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-10**

Matrix: Solid

Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		10	442472	07/03/17 21:02	A1B	TAL NSH

## **Client Sample ID: GP-39 (6-8)**

Date Collected: 06/27/17 10:35

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-11**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-39 (6-8)**

Date Collected: 06/27/17 10:35

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-11**

Matrix: Solid

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		10	442472	07/03/17 21:29	A1B	TAL NSH

## **Client Sample ID: GP-40 (2-4)**

Date Collected: 06/27/17 11:10

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-12**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-40 (2-4)**

Date Collected: 06/27/17 11:10

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-12**

Matrix: Solid

Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/03/17 21:56	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-41 (2-4)**

Date Collected: 06/27/17 11:15

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-13**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-41 (2-4)**

Date Collected: 06/27/17 11:15

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-13**

Matrix: Solid

Percent Solids: 82.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/03/17 22:22	A1B	TAL NSH

## **Client Sample ID: GP-42 (2-4)**

Date Collected: 06/27/17 11:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-14**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-42 (2-4)**

Date Collected: 06/27/17 11:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-14**

Matrix: Solid

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/04/17 00:09	A1B	TAL NSH
Total/NA	Prep	3050B			391928	07/05/17 15:05	AAP	TAL CHI
Total/NA	Analysis	6010B		1	392169	07/06/17 13:13	KML	TAL CHI

## **Client Sample ID: GP-42 (6-8)**

Date Collected: 06/27/17 11:50

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-15**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-42 (6-8)**

Date Collected: 06/27/17 11:50

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-15**

Matrix: Solid

Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		10	442472	07/04/17 00:36	A1B	TAL NSH
Total/NA	Prep	3050B			391928	07/05/17 15:05	AAP	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-42 (6-8)**

Date Collected: 06/27/17 11:50

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-15**

Matrix: Solid

Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	392169	07/06/17 13:17	KML	TAL CHI

## **Client Sample ID: GP-43 (2-4)**

Date Collected: 06/27/17 12:20

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-16**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-43 (2-4)**

Date Collected: 06/27/17 12:20

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-16**

Matrix: Solid

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		10	442472	07/04/17 01:03	A1B	TAL NSH
Total/NA	Prep	3050B			391928	07/05/17 15:05	AAP	TAL CHI
Total/NA	Analysis	6010B		1	392169	07/06/17 13:32	KML	TAL CHI

## **Client Sample ID: GP-43 (6-8)**

Date Collected: 06/27/17 12:25

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-17**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-43 (6-8)**

Date Collected: 06/27/17 12:25

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-17**

Matrix: Solid

Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/04/17 01:30	A1B	TAL NSH
Total/NA	Prep	3050B			391928	07/05/17 15:05	AAP	TAL CHI
Total/NA	Analysis	6010B		1	392169	07/06/17 13:35	KML	TAL CHI

## **Client Sample ID: GP-44 (2-4)**

Date Collected: 06/27/17 12:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-18**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-44 (2-4)**

**Date Collected: 06/27/17 12:45**

**Date Received: 06/28/17 10:10**

## **Lab Sample ID: 500-130269-18**

**Matrix: Solid**

**Percent Solids: 86.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/04/17 01:57	A1B	TAL NSH
Total/NA	Prep	3050B			391928	07/05/17 15:05	AAP	TAL CHI
Total/NA	Analysis	6010B		1	392169	07/06/17 13:39	KML	TAL CHI

## **Client Sample ID: GP-44 (6-8)**

**Date Collected: 06/27/17 12:50**

**Date Received: 06/28/17 10:10**

## **Lab Sample ID: 500-130269-19**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-44 (6-8)**

**Date Collected: 06/27/17 12:50**

**Date Received: 06/28/17 10:10**

## **Lab Sample ID: 500-130269-19**

**Matrix: Solid**

**Percent Solids: 83.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/04/17 02:24	A1B	TAL NSH
Total/NA	Prep	3050B			391928	07/05/17 15:05	AAP	TAL CHI
Total/NA	Analysis	6010B		1	392169	07/06/17 13:43	KML	TAL CHI

## **Client Sample ID: GP-45 (2-4)**

**Date Collected: 06/27/17 13:20**

**Date Received: 06/28/17 10:10**

## **Lab Sample ID: 500-130269-20**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-45 (2-4)**

**Date Collected: 06/27/17 13:20**

**Date Received: 06/28/17 10:10**

## **Lab Sample ID: 500-130269-20**

**Matrix: Solid**

**Percent Solids: 88.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/04/17 02:51	A1B	TAL NSH
Total/NA	Prep	3050B			391928	07/05/17 15:05	AAP	TAL CHI
Total/NA	Analysis	6010B		1	392169	07/06/17 13:47	KML	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-45 (6-8)**

Date Collected: 06/27/17 13:25

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-21**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:04	LWN	TAL CHI

## **Client Sample ID: GP-45 (6-8)**

Date Collected: 06/27/17 13:25

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-21**

Matrix: Solid

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/04/17 03:17	A1B	TAL NSH
Total/NA	Prep	3050B			391928	07/05/17 15:05	AAP	TAL CHI
Total/NA	Analysis	6010B		1	392169	07/06/17 13:50	KML	TAL CHI

## **Client Sample ID: GP-47 (2-4)**

Date Collected: 06/27/17 14:05

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-24**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-47 (2-4)**

Date Collected: 06/27/17 14:05

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-24**

Matrix: Solid

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/04/17 03:44	A1B	TAL NSH

## **Client Sample ID: GP-47 (6-8)**

Date Collected: 06/27/17 14:10

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-25**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-47 (6-8)**

Date Collected: 06/27/17 14:10

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-25**

Matrix: Solid

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442472	07/04/17 04:11	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-48 (2-4)**

Date Collected: 06/27/17 14:25

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-26**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-48 (2-4)**

Date Collected: 06/27/17 14:25

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-26**

Matrix: Solid

Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442527	07/04/17 12:03	A1B	TAL NSH

## **Client Sample ID: GP-48 (6-8)**

Date Collected: 06/27/17 14:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-27**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-48 (6-8)**

Date Collected: 06/27/17 14:30

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-27**

Matrix: Solid

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442527	07/04/17 12:30	A1B	TAL NSH

## **Client Sample ID: GP-49 (2-4)**

Date Collected: 06/27/17 14:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-28**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-49 (2-4)**

Date Collected: 06/27/17 14:45

Date Received: 06/28/17 10:10

## **Lab Sample ID: 500-130269-28**

Matrix: Solid

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442527	07/04/17 12:57	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

## **Client Sample ID: GP-49 (6-8)**

**Date Collected:** 06/27/17 14:50

**Date Received:** 06/28/17 10:10

## **Lab Sample ID: 500-130269-29**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	441458	06/29/17 12:21	BAA	TAL NSH

## **Client Sample ID: GP-49 (6-8)**

**Date Collected:** 06/27/17 14:50

**Date Received:** 06/28/17 10:10

## **Lab Sample ID: 500-130269-29**

**Matrix:** Solid

**Percent Solids:** 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			441726	06/30/17 08:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	442527	07/04/17 13:24	A1B	TAL NSH

## **Client Sample ID: Trip Blank**

**Date Collected:** 06/27/17 00:00

**Date Received:** 06/28/17 10:10

## **Lab Sample ID: 500-130269-30**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	391194	06/28/17 14:18	LWN	TAL CHI

## **Client Sample ID: Trip Blank**

**Date Collected:** 06/27/17 00:00

**Date Received:** 06/28/17 10:10

## **Lab Sample ID: 500-130269-30**

**Matrix:** Solid

**Percent Solids:** 100.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			391290	06/27/17 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	392365	07/10/17 16:46	PMF	TAL CHI

### **Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TestAmerica Chicago

## Accreditation/Certification Summary

Client: TRC Environmental Corporation.

Project/Site: Multiple Sites along STH 11 - 275788

TestAmerica Job ID: 500-130269-1

### Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17 *

### Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998020430	08-31-17

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Chicago

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

(optional)		(optional)	
Report To Contact: Company: Address: Address: Phone: Fax: E-Mail:		Bill To Contact: Company: Address: Address: Phone: Fax: PO#/Reference#	
Lab Job #: <u>580-130269</u>			
Chain of Custody Number: _____			
Page <u>1</u> of <u>3</u> Temperature °C of Colder: <u>5.8 → 5.9, 3.6 → 3.7</u>			

Client <i>TRC</i>	Client Project # <i>275783</i>	Preservative	1	1									
			Parameter										
Project Name <i>Multiple sites along STH 11</i>	Lab Project #												
Project Location/State <i>Racine, WI</i>	Lab PM												
Sampler <i>M. Kainles</i>													
Lab ID	MS/MSD	Sample ID	Sampling	# of Containers	Matrix	VOCs	PCPs + Deg						Comments
1		GP-35 (4-6)	6/27 830	2	S	X							
2		GP-35 (8-10)	840	1		XX							
3		GP-35 (12-14)	845	1		XX							
4		GP-36 (2-4)	925				XX						
5		GP-36 (6-8)	930				XX						
6		GP-37 (2-4)	940				XX						
7		GP-37 (6-8)	945				XX						
8		GP-38 (2-4)	1005				XX						
9		GP-38 (6-8)	1010				XX						
10		GP-39 (2-4)	1030				X						

Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other \_\_\_\_\_

Requested Due Date \_\_\_\_\_

Sample Disposal

Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <i>M.K.</i>	Company <i>TRC</i>	Date <i>6/27/17</i>	Time <i>1800</i>	Received By <i>Mark Sanderson</i>	Company <i>TRAC</i>	Date <i>6/28/17</i>	Time <i>1010</i>	Lab Courier <input type="checkbox"/>	
Relinquished By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Shipped <input type="checkbox"/> <i>FX Priority</i>	
Relinquished By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Hand Delivered <input type="checkbox"/>	
Matrix Key WW - Wastewater W - Water S - Soil SL - Sludge MS - Miscellaneous OL - Oil A - Air	Client Comments					Lab Comments:			

SE - Sediment  
SO - Soil  
L - Leachate  
WI - Wipe  
DW - Drinking Water  
O - Other

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

(optional)		(optional)	
Report To	Contact:	Bill To	Contact:
Company:	Address:	Company:	Address:
Address:	Address:	Address:	Address:
Phone:	Fax:	Phone:	Fax:
E-Mail:			
PO#/Reference#			

## Chain of Custody Record

Lab Job #: 500-130269

Chain of Custody Number:

Page 2 of 3

Temperature °C of Cooler: 5.8-5.9; 3.6-3.7

Client TRC	Client Project # 275788	Preservative	1	8										Preservative Key 1. HCl, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other						
			Parameter	1	8	10	12	18	20	22	28	30	32							
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix													Comments	
			Date	Time																
11		GP-39 (6-8)	6/27	1035	2	S	X													
12		GP-40 (2-4)		1110			X													
13		GP-41 (2-4)		1115			X													
14		GP-42 (2-4)		1145	3		X	X	X											
15		GP-42 (6-8)		1150			X	X	X											
16		GP-43 (2-4)		1220			X	X	X											
17		GP-43 (6-8)		1225			X	X	X											
18		GP-44 (2-4)		1245			X	X	X											
19		GP-44 (6-8)		1250			X	X	X											
20		GP-45 (2-4)		1320			X	X	X											

### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other

Requested Due Date \_\_\_\_\_ (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company TRC	Date 6/27/17	Time 1600	Received By 	Company TA-LAB	Date 6/28/17	Time 1010	Lab Courier _____	
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____	Shipped EX Priority	
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____	Hand Delivered _____	
Matrix Key WW - Wastewater W - Water S - Soil SL - Sludge MS - Miscellaneous OL - Oil A - Air	SE - Sediment SO - Soil L - Leachate WI - Wipe DW - Drinking Water O - Other	Client Comments				Lab Comments: 06/28/17			

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

(optional)		(optional)	
Report To	Contact:	Bill To	Contact:
Company:		Company:	
Address:		Address:	
Address:		Address:	
Phone:		Phone:	
Fax:		Fax:	
E-Mail:		PO#/Reference#	

## Chain of Custody Record

Lab Job #: 500-130269

Chain of Custody Number:

Page 3 of 3

Temperature °C of Cooler: 58-59, 3.6=3.7

Client	Client Project #	Preservative	Parameter										Preservative Key
			1	8	1								
Project Name	Multiple sites along STA V	Sampling	# of Containers	Matrix	Loc 1	Loc 2	Loc 3	Loc 4	Loc 5	Loc 6	Loc 7		
Project Location/State	Laurel, WI	Lab Project #											
Sampler	M. Kehler	Lab PM											
21	GP-45 (6-3)	6/27 1325	3	S	X	X							
22	GP-46 (2-4)	1340	2		X								HOLD
23	GP-46 (6-3)	1345	1		X								HOLD
24	GP-47 (2-4)	1405	1		X	X							
25	GP-47 (6-3)	1410	1		X								
26	GP-48 (2-4)	1425	1		X								
27	GP-48 (6-3)	1430	1		X								
28	GP-49 (2-4)	1445	1		X								
29	GP-49 (6-3)	1450	1		X								
30	TRIP BLANK	—	—										

Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Lab Courier
	TLC	06/27/17	1000		TACI	06/28/17	1010	<input type="text"/>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped

Matrix Key	Client Comments	Lab Comments:
WW - Wastewater W - Water S - Soil SL - Sludge MS - Miscellaneous OL - Oil A - Air	SE - Sediment SO - Soil L - Leachate WI - Wipe DW - Drinking Water O - Other	

MIRANDA KAHRLAS  
TRC ENVIRONMENTAL  
150 N PATRICK BLVD, SUITE 180  
BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DATE: 27JUN17  
ACTWGT: 25.00 LB  
CAD: 110326482/NET3850

BILL RECIPIENT

TO ATTN: SAMPLE RECEIVING  
TEST AMERICA - CHICAGO  
2417 BOND ST

UNIVERSITY PARK IL 60484  
(708) 534-5200 REF  
INV PO

DEPT



JT111721467ur

1 of 2  
TRK#  
[0201] 7795 0701 1605  
## MASTER ##

WED - 28 JUN 10:30A  
PRIORITY OVERNIGHT

79 JOTA

60484  
IL-US ORD

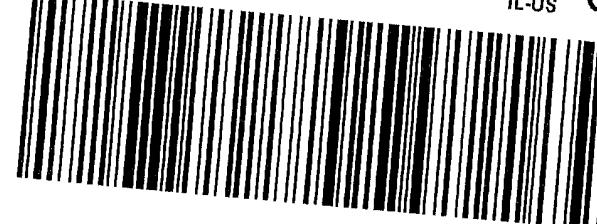


2 of 2  
MPS#  
[0263] 7795 0701 1763  
Mstr# 7795 0701 1605

WED - 28 JUN 10:30A  
PRIORITY OVERNIGHT

79 JOTA

60484  
IL-US ORD



500-130269 Waybill



500-130269 Chain of Custody

## COOLER RECEIPT FORM

Cooler Received/Opened On 06-29-2017 @ 09:50

Time Samples Removed From Cooler \_\_\_\_\_ Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3770 (last 4 digits, FedEx) Courier: FedExIR Gun ID 14740456 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_2. Temperature of rep. sample or temp blank when opened: 2.3 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: 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) es7. 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 None9. 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 # esI certify that I unloaded the cooler and answered questions 7-14 (initial) es

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) es

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) esI certify that I attached a label with the unique LIMS number to each container (initial) es21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# es

1    2    3    4    5    6    7    8    9    10    11    12    13    14    15

## TestAmerica Chicago

2417 Bond Street  
University Park, IL 60484  
Phone (708) 534-5200 Fax (708) 534-5211

## Chain of Custody Record

**500-130269**

**TestAmerica**  
HE & LEADER IN ENVIRONMENTAL TESTING

<b>Client Information (Sub Contract Lab)</b>		Sampler:	Lab P.M. Fredrick, Sandie J	QC No.: J0-89981-1
Client Contact: Shipping/Receiving		Phone:	E-Mail: sandie.fredrick@testamericainc.com	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc		Address:	State of Origin: Wisconsin	Job #: 500-130269-1
2960 Foster Creighton Drive, Nashville TN, 37204		Due Date Requested:	TAT Requested (days): 6/29/2017	Accreditations Required (See note): State Program - Wisconsin
Phone: 615-726-0177(Tel) 615-726-3404(Fax) Email: Project Name: WISDOT Site:		P.O. #:	WO #:	
		SSOW#:		

Analysis Requested									
Field Filtered Sample (Yes or No)									
Perform MS/MSD (Yes or No)									
Moisture/ Percent Moisture/Solids									
WI_GRO/WIGRO_P_FM PVOC+NAP									
Total Number of containers									
Special Instructions>Note:									
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, B=matrix Aqueous)	Preservation Code:				
GP-36 (2-4) (500-130269-4)	6/27/17	Central	Solid	X	X				
GP-36 (6-8) (500-130269-5)	6/27/17	Central	Solid	X	X				
GP-37 (2-4) (500-130269-6)	6/27/17	Central	Solid	X	X				
GP-37 (6-8) (500-130269-7)	6/27/17	Central	Solid	X	X				
GP-38 (2-4) (500-130269-8)	6/27/17	Central	Solid	X	X				
GP-38 (6-8) (500-130269-9)	6/27/17	Central	Solid	X	X				
GP-39 (2-4) (500-130269-10)	6/27/17	Central	Solid	X	X				
GP-39 (6-8) (500-130269-11)	6/27/17	Central	Solid	X	X				
GP-40 (2-4) (500-130269-12)	6/27/17	Central	Solid	X	X				

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analysis & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

### Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For

Method of Shipment:

Empty Kit Relinquished by:

*Sandie*

Date:

Time:

Received by:

Date/Time:

Company:

6-29-17

1600

Company

J

Received by:

Date/Time:

Company

6-29-17

9:50

Company

J

Received by:

Date/Time:

Company

6-29-17

2:3

Company

**TestAmerica Chicago**  
2417 Bond Street  
Chicago, IL 60641

2417 Bond Street  
University Park, IL 60484  
Phone (708) 534-5200 Fax (708) 534-5211

## Chain of Custody Record

FEST L'AMERICA THE ENVIRONMENTAL TESTIMONY

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

TestAmerica Chicago

2417 Bold Street  
University Park, IL 60484  
Phone (708) 534-5200 Fax (708) 534-5211

## Chain of Custody Record

TestAmerica

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

### *Possible Hazard Identification*

**Deliverable Requested:** I, II, III, IV, Other (specify) \_\_\_\_\_

Empty Kit Relinquished b

Relinquished by

REQUISITE

Custody Seals

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-130269-1

**Login Number:** 130269

**List Source:** TestAmerica Chicago

**List Number:** 1

**Creator:** Sanchez, Ariel M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7, 5.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-130269-1

**Login Number:** 130269

**List Number:** 2

**Creator:** Stewart, Eric S

**List Source:** TestAmerica Nashville

**List Creation:** 06/29/17 11:48 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-130269-1

**Login Number:** 130269

**List Number:** 3

**Creator:** Stewart, Eric S

**List Source:** TestAmerica Nashville

**List Creation:** 06/29/17 11:54 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

All Ticket Types  
History and Waiting  
\* - Confirmed Qty Applied to Billing

## Detail Contract Activity Report

January 01, 2020 to December 14, 2020

Specific Contract(s) : '3063201859'

All Facilities

3063201859

Ticket Date	Facility & Ticket Number	Customer	Truck	Material	Billing Quantity
03/23/2020 I 01	1082647	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL-ALT D	22.98 TN
03/23/2020 I 01	1082657	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL-ALT D	20.71 TN
03/23/2020 I 01	1082671	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL-ALT D	11.88 TN
03/24/2020 I 01	1082695	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL-ALT D	17.63 TN
03/24/2020 I 01	1082710	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL-ALT D	12.52 TN
03/24/2020 I 01	1082717	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL-ALT D	19.75 TN
03/24/2020 I 01	1082733	333441 - ZIGNEGO COMPANY, INC.	RDP25	SW-CONT SOIL-ALT D	17.36 TN
03/24/2020 I 01	1082737	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL-ALT D	17.70 TN
03/24/2020 I 01	1082742	333441 - ZIGNEGO COMPANY, INC.	RDP25	SW-CONT SOIL-ALT D	15.89 TN
03/25/2020 I 01	1082791	333441 - ZIGNEGO COMPANY, INC.	JMT5	SW-CONT SOIL-ALT D	19.11 TN
03/25/2020 I 01	1082800	333441 - ZIGNEGO COMPANY, INC.	JMT5	SW-CONT SOIL-ALT D	15.52 TN
03/25/2020 I 01	1082810	333441 - ZIGNEGO COMPANY, INC.	JMT5	SW-CONT SOIL-ALT D	19.94 TN
03/25/2020 I 01	1082822	333441 - ZIGNEGO COMPANY, INC.	JMT5	SW-CONT SOIL-ALT D	20.06 TN
03/25/2020 I 01	1082839	333441 - ZIGNEGO COMPANY, INC.	JMT5	SW-CONT SOIL-ALT D	19.79 TN
03/25/2020 I 01	1082866	333441 - ZIGNEGO COMPANY, INC.	JMT5	SW-CONT SOIL-ALT D	18.31 TN
04/09/2020 I 01	1083849	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT SOIL-ALT D	19.67 TN
04/09/2020 I 01	1083851	333441 - ZIGNEGO COMPANY, INC.	ZIGT91	SW-CONT SOIL-ALT D	21.05 TN
04/09/2020 I 01	1083854	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL-ALT D	18.17 TN
04/09/2020 I 01	1083856	333441 - ZIGNEGO COMPANY, INC.	ZIGT71	SW-CONT SOIL-ALT D	18.34 TN
04/09/2020 I 01	1083861	333441 - ZIGNEGO COMPANY, INC.	ZIGT73	SW-CONT SOIL-ALT D	19.07 TN
04/09/2020 I 01	1083862	333441 - ZIGNEGO COMPANY, INC.	ZIGT91	SW-CONT SOIL-ALT D	21.95 TN
04/09/2020 I 01	1083864	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT SOIL-ALT D	18.61 TN
04/09/2020 I 01	1083865	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL-ALT D	17.97 TN
04/09/2020 I 01	1083866	333441 - ZIGNEGO COMPANY, INC.	ZIGT71	SW-CONT SOIL-ALT D	18.47 TN
04/09/2020 I 01	1083868	333441 - ZIGNEGO COMPANY, INC.	ZIGT92	SW-CONT SOIL-ALT D	21.94 TN
04/09/2020 I 01	1083869	333441 - ZIGNEGO COMPANY, INC.	ZIGT88	SW-CONT SOIL-ALT D	13.73 TN
04/09/2020 I 01	1083878	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT SOIL-ALT D	19.06 TN
04/09/2020 I 01	1083880	333441 - ZIGNEGO COMPANY, INC.	ZIGT73	SW-CONT SOIL-ALT D	19.07 TN
04/09/2020 I 01	1083881	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL-ALT D	19.14 TN
04/15/2020 I 01	1084181	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT SOIL-ALT D	18.12 TN
04/15/2020 I 01	1084182	333441 - ZIGNEGO COMPANY, INC.	ZIGT79	SW-CONT SOIL-ALT D	21.06 TN
04/15/2020 I 01	1084184	333441 - ZIGNEGO COMPANY, INC.	ZIG90	SW-CONT SOIL-ALT D	19.03 TN
04/15/2020 I 01	1084185	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL-ALT D	20.15 TN
04/15/2020 I 01	1084190	333441 - ZIGNEGO COMPANY, INC.	ZIGT71	SW-CONT SOIL-ALT D	18.86 TN
04/15/2020 I 01	1084195	333441 - ZIGNEGO COMPANY, INC.	ZIGT82	SW-CONT SOIL-ALT D	17.91 TN
04/15/2020 I 01	1084197	333441 - ZIGNEGO COMPANY, INC.	ZIGT88	SW-CONT SOIL-ALT D	19.85 TN
04/15/2020 I 01	1084199	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT SOIL-ALT D	22.15 TN
04/15/2020 I 01	1084201	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-03	SW-CONT SOIL-ALT D	21.22 TN

All Ticket Types

History and Waiting

\* - Confirmed Qty Applied to Billing

**Detail Contract Activity Report**

January 01, 2020 to December 14, 2020

Specific Contract(s) : '3063201859'

All Facilities

04/15/2020 I 01	1084204	333441 - ZIGNEGO COMPANY, INC.	ZIGT79	SW-CONT SOIL-ALT D	19.78	TN
04/15/2020 I 01	1084208	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL-ALT D	21.10	TN
04/15/2020 I 01	1084209	333441 - ZIGNEGO COMPANY, INC.	ZIG90	SW-CONT SOIL-ALT D	18.68	TN
04/15/2020 I 01	1084210	333441 - ZIGNEGO COMPANY, INC.	ZIGT71	SW-CONT SOIL-ALT D	17.90	TN
04/15/2020 I 01	1084213	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-03	SW-CONT SOIL-ALT D	21.13	TN
04/15/2020 I 01	1084214	333441 - ZIGNEGO COMPANY, INC.	ZIGT78	SW-CONT SOIL-ALT D	19.91	TN
04/24/2020 I 01	1084925	333441 - ZIGNEGO COMPANY, INC.	ZIGT74	SW-CONT SOIL-ALT D	19.33	TN
04/24/2020 I 01	1084927	333441 - ZIGNEGO COMPANY, INC.	ZIGT75	SW-CONT SOIL-ALT D	16.99	TN
04/24/2020 I 01	1084931	333441 - ZIGNEGO COMPANY, INC.	POLT6	SW-CONT SOIL-ALT D	17.15	TN
07/30/2020 I 01	1092495	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL-ALT D	24.02	TN
07/30/2020 I 01	1092497	333441 - ZIGNEGO COMPANY, INC.	ZIGT77	SW-CONT SOIL-ALT D	21.05	TN
07/30/2020 I 01	1092500	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-03	SW-CONT SOIL-ALT D	20.03	TN
07/30/2020 I 01	1092501	333441 - ZIGNEGO COMPANY, INC.	ZIGT76	SW-CONT SOIL-ALT D	17.25	TN
07/30/2020 I 01	1092503	333441 - ZIGNEGO COMPANY, INC.	ROQ09	SW-CONT SOIL-ALT D	16.81	TN
07/30/2020 I 01	1092504	333441 - ZIGNEGO COMPANY, INC.	ZIGT92	SW-CONT SOIL-ALT D	21.25	TN
07/30/2020 I 01	1092506	333441 - ZIGNEGO COMPANY, INC.	ZIGT40-04	SW-CONT SOIL-ALT D	20.79	TN
07/30/2020 I 01	1092507	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL-ALT D	19.91	TN
07/30/2020 I 01	1092508	333441 - ZIGNEGO COMPANY, INC.	Z91	SW-CONT SOIL-ALT D	21.34	TN
07/30/2020 I 01	1092509	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL-ALT D	20.83	TN
07/30/2020 I 01	1092510	333441 - ZIGNEGO COMPANY, INC.	ZIGT77	SW-CONT SOIL-ALT D	19.26	TN
07/30/2020 I 01	1092511	333441 - ZIGNEGO COMPANY, INC.	Szada23	SW-CONT SOIL-ALT D	20.11	TN
07/30/2020 I 01	1092513	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-03	SW-CONT SOIL-ALT D	19.92	TN
07/30/2020 I 01	1092514	333441 - ZIGNEGO COMPANY, INC.	RAM3	SW-CONT SOIL-ALT D	19.84	TN
07/30/2020 I 01	1092515	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-04	SW-CONT SOIL-ALT D	19.51	TN
07/30/2020 I 01	1092517	333441 - ZIGNEGO COMPANY, INC.	ZIGT76	SW-CONT SOIL-ALT D	17.42	TN
07/30/2020 I 01	1092518	333441 - ZIGNEGO COMPANY, INC.	ROQ09	SW-CONT SOIL-ALT D	19.84	TN
07/30/2020 I 01	1092520	333441 - ZIGNEGO COMPANY, INC.	ZIGT92	SW-CONT SOIL-ALT D	19.56	TN
09/24/2020 I 01	1096715	333441 - ZIGNEGO COMPANY, INC.	ZIGT40-04	SW-CONT SOIL-ALT D	20.71	TN

Tickets Reported: 66      Items Reported: 66

Material Summary	Weight		Volume		Count		Billing Quantity
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	
VI - SW-CONT SOIL-ALT DAILY COVER	1,265.16	0.00 TN	505.00	0.00 YD	0.00	0.00	1,265.16 TN

All Ticket Types

History and Waiting

\* - Confirmed Qty Applied to Billing

## Detail Contract Activity Report

January 01, 2020 to December 14, 2020

Specific Contract(s) : '3063201859'

All Facilities

---

Tickets Reported: 66      Items Reported: 66

---



# Special Waste Profile

Disposal Facility: 3063 Kestrel Hawk WI

Waste Profile #:

Sales Rep #:

## I. Generator Information

Generator Name: Wisconsin DOT (WisDOT ID 2260-07-70)

Generator Site Address: STH 11 (Durand Ave.), Kentucky St. to Kearney Ave.

City: Racine County: Racine State: Wisconsin Zip: 53405

State ID/Reg No: State Approval/Waste Code: NAICS #:

Generator Mailing Address  (if different) 141 NW Barstow

City: Waukesha County: Waukesha State: Wisconsin Zip: 53187

Generator Contact Name: Andrew Malsom Email: Andrew.Malsom@dot.wi.gov

Phone Number: 262-548-6705 Ext: Fax Number:

## II. Billing Information

Bill To: Zignego Company, Inc. Contact Name: Jeff Kuhn

Billing Address: W226 N2940 Duplainville Rd. Email: jkuhn@zignego.com

City: Waukesha State: Wisconsin Zip: 53186 Phone: 920-621-8538

## III. Waste Stream Information

Name of Waste: Petroleum contaminated soil

Process Generating Waste: Excavation for road construction near gasoline station, source is unleaded gasoline.

Type of Waste: Pollution Control Waste Physical State: Solid Method of Shipment: Other

Estimated Volume: 490 Volume Type: Tons

Frequency: One-time Event (single project) Disposal Consideration: Bioremediation

## IV. Representative Sample Certification

 No Sample Taken Sample Taken Type of Sample Grab SampleIs the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent?  Yes  No

Sample Date: May 1 &amp; 2, 2017

Sample ID Numbers or SDS:

GP-02 (2'-4'), GP-02 (6'-8'), GP-02 (14'-16'), GP-20 (2'-4'), GP-20 (6'-8'), GP-20 (14'-16'), GP-21 (2'-4'), GP-21 (6'-8')

Remember to attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.



# Special Waste Profile

## V. Physical Characteristics of Waste

Characteristic Components (must equal 100%):

1. Soil	
2.	
3.	
4.	
5.	

% By Weight (out of 100% - ranges acceptable):

100	

Color: brown Odor (describe): possible gasoline Does Waste Contain Free Liquids?  Yes  No % Solids: 100 pH: ~7 Flash Point: >176 °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

## RCRA Regulatory Questions

1. Does this waste or generating process contain regulated concentrations of the following Pesticides and/ or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?  Yes  No
2. Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm) [reference 40 CFR 261.23(a)(5)?]  Yes  No
3. Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?  Yes  No
4. Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?  Yes  No
5. Has this waste been delisted under 40 CFR 260.20 and 260.22? If yes, attach the final decision to delist the waste as published in the Federal Register.  Yes  No
6. Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations? If Yes, identify the applicable waste code and specify if the waste is hazardous as defined by Federal, State or both?
7. Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD), or any other dioxin as defined in 40 CFR 261.31?  Yes  No
8. Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?  Yes  No
9. Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?  Yes  No
10. Is this a solid waste that is not a hazardous waste in accordance with 40 CFR 261.4(b)? If yes, please provide the corresponding regulatory citation.

## Republic Services Waste Handling Questions

1. Does this waste generate heat or react when contacted with water/moisture?  Yes  No
2. Does the waste contain sulfur or sulfur by-products?  Yes  No
3. Is this waste generated at a State or Federal Superfund cleanup site subject to regulation under CERCLA?  Yes  No
- 4a. Is this waste from a TSD facility, TSD-like facility or consolidator (i.e. multiple wastes/multiple generators)?  Yes  No
- 4b. If yes to the above question, please provide clarification.

# Special Waste Profile



## VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I understand that attaching an electronic signature, I am signing this document, consent to complete this transaction and receive all related communication electronically, and agree this document will be binding as though I had physically signed it. A printout of this document may be accepted with the same authority as the original.

If electronic signature is preferred, please submit completed (unsigned) form to your Special Waste Coordinator or Special Waste Sales Executive to initiate signature process.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services.

Andrew Malsom

Environmental Engineer

Wisconsin DOT

Authorized Representative Name  
(Printed)

Title  
(Printed)

Company Name



A handwritten signature in black ink, appearing to read "AM". Below the signature, the text "Representative Signature" is printed.

February 3, 2020

Date

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-127505-1

Client Project/Site: STH 11 Kentucky to Kearney - 275788

For:

TRC Environmental Corporation.

150 N. Patrick Blvd.

Suite 180

Brookfield, Wisconsin 53045

Attn: Mr. Bryan Bergmann

Sandie Fredrick

Authorized for release by:

5/17/2017 6:05:10 PM

Sandie Fredrick, Project Manager II

(920)261-1660

[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://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
Case Narrative .....	3
Detection Summary .....	4
Method Summary .....	8
Sample Summary .....	9
Client Sample Results .....	10
Subcontract Data .....	35
Definitions .....	36
QC Association .....	37
Surrogate Summary .....	44
QC Sample Results .....	47
Chronicle .....	59
Certification Summary .....	71
Chain of Custody .....	72
Receipt Checklists .....	80

# Case Narrative

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Job ID: 500-127505-1

### Laboratory: TestAmerica Chicago

#### Narrative

#### Job Narrative 500-127505-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 5/3/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3° C and 3.9° C.

#### GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for the soil preparation batch 384046 recovered outside control limits for 12 analytes. These analytes were biased high in the preparation batch LCS, but were within limits in the analytical batch LCS; therefore, the data has been reported.

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

#### GC/MS Semi VOA

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

#### GC VOA

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

#### GC Semi VOA

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

#### Metals

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

#### General Chemistry

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

#### Subcontract non-Sister

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

#### Organic Prep

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

#### VOA Prep

Method(s) WI GRO: Methanol was added to achieve a 1:1 ratio. GP-01 (6-8) (500-127505-2), GP-02 (2-4) (500-127505-3), GP-02 (6-8) (500-127505-4), GP-02 (14-16) (500-127505-5), GP-06 (2-4) (500-127505-13), GP-06 (6-8) (500-127505-14) and GP-07 (2-4) (500-127505-15)

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

#### Subcontract Work

Method % Chlorine: This method was subcontracted to SF/Eurofins Analytical Laboratories. The subcontract laboratory certification is different from that of the facility issuing the final report.

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

### **Client Sample ID: GP-01 (0-2)**

### **Lab Sample ID: 500-127505-1**

No Detections.

### **Client Sample ID: GP-01 (6-8)**

### **Lab Sample ID: 500-127505-2**

No Detections.

### **Client Sample ID: GP-02 (2-4)**

### **Lab Sample ID: 500-127505-3**

No Detections.

### **Client Sample ID: GP-02 (6-8)**

### **Lab Sample ID: 500-127505-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2500		330	160	ug/Kg	1	⊗	WDNR	Total/NA

### **Client Sample ID: GP-02 (14-16)**

### **Lab Sample ID: 500-127505-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	270	J	280	130	ug/Kg	1	⊗	WDNR	Total/NA

### **Client Sample ID: GP-03 (2-4)**

### **Lab Sample ID: 500-127505-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	37		0.58	0.27	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-03 (6-8)**

### **Lab Sample ID: 500-127505-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.9		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-04 (2-4)**

### **Lab Sample ID: 500-127505-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.4		0.50	0.23	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-04 (6-8)**

### **Lab Sample ID: 500-127505-9**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	540		66	24	ug/Kg	50	⊗	8260B	Total/NA
Lead	11		0.53	0.24	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-05 (2-4)**

### **Lab Sample ID: 500-127505-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	20		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-05 (6-8)**

### **Lab Sample ID: 500-127505-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.6		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.34	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0020	J	0.0050	0.0020	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-05 (6-8) (Continued)

## Lab Sample ID: 500-127505-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.014	J	0.050	0.0075	mg/L	1		6010B	TCLP
Nickel	0.014	J	0.025	0.010	mg/L	1		6010B	TCLP
Flashpoint	>176		40.0	40.0	Degrees F	1		1010	Total/NA
Sulfide	6.7	J	9.8	4.6	mg/Kg	1		9034	Total/NA
pH	9.0		0.2	0.2	SU	1		9045C	Total/NA
Paint Filter	PASS			No Unit		1		9095A	Total/NA
Specific Gravity	3.1404			NONE		1		SM 2710F	Total/NA

## Client Sample ID: GP-05 (14-16)

## Lab Sample ID: 500-127505-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.50	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-06 (2-4)

## Lab Sample ID: 500-127505-13

No Detections.

## Client Sample ID: GP-06 (6-8)

## Lab Sample ID: 500-127505-14

No Detections.

## Client Sample ID: GP-07 (2-4)

## Lab Sample ID: 500-127505-15

No Detections.

## Client Sample ID: GP-07 (6-8)

## Lab Sample ID: 500-127505-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
VI Diesel Range Organics (C10-C28)	2.2	J	4.5	1.8	mg/Kg	1	⊗	WI-DRO	Total/NA
Barium	0.38	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0027	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Flashpoint	>176		40.0	40.0	Degrees F	1		1010	Total/NA
Sulfide	8.8	J	10	4.7	mg/Kg	1		9034	Total/NA
pH	9.1		0.2	0.2	SU	1		9045C	Total/NA
Paint Filter	PASS			No Unit		1		9095A	Total/NA
Specific Gravity	2.1987			NONE		1		SM 2710F	Total/NA

## Client Sample ID: GP-07 (14-16)

## Lab Sample ID: 500-127505-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	270	J	280	130	ug/Kg	1	⊗	WDNR	Total/NA
1,3,5-Trimethylbenzene	23	J	28	17	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	38	J	84	34	ug/Kg	1	⊗	WDNR	Total/NA

## Client Sample ID: GP-08 (2-4)

## Lab Sample ID: 500-127505-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.9		0.51	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-08 (6-8)

## Lab Sample ID: 500-127505-19

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-08 (6-8) (Continued)

## Lab Sample ID: 500-127505-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.3		0.53	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-09 (2-4)

## Lab Sample ID: 500-127505-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	36		30	21	ug/Kg	1	⊗	WDNR	Total/NA
Lead	13		0.54	0.25	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-09 (6-8)

## Lab Sample ID: 500-127505-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	20	J	29	17	ug/Kg	1	⊗	WDNR	Total/NA
Lead	8.0		0.55	0.25	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-10 (2-4)

## Lab Sample ID: 500-127505-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	14		0.56	0.26	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-10 (6-8)

## Lab Sample ID: 500-127505-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.9		0.53	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-11 (2-4)

## Lab Sample ID: 500-127505-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	60		28	22	ug/Kg	1	⊗	WDNR	Total/NA
1,2,4-Trimethylbenzene	31		28	17	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	110		85	34	ug/Kg	1	⊗	WDNR	Total/NA
Lead	63		0.49	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-11 (6-8)

## Lab Sample ID: 500-127505-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
WI Diesel Range Organics (C10-C28)	4.9		4.4	1.8	mg/Kg	1	⊗	WI-DRO	Total/NA
Lead	11		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.15	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0040	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Copper	0.011	J	0.025	0.010	mg/L	1		6010B	TCLP
Lead	0.034	J	0.050	0.0075	mg/L	1		6010B	TCLP
Nickel	0.024	J	0.025	0.010	mg/L	1		6010B	TCLP
Zinc	0.030	J	0.10	0.020	mg/L	1		6010B	TCLP
Flashpoint	>176		40.0	40.0	Degrees F	1		1010	Total/NA
Sulfide	6.2	J	9.7	4.6	mg/Kg	1		9034	Total/NA
pH	8.8		0.2	0.2	SU	1		9045C	Total/NA
Paint Filter	PASS				No Unit	1		9095A	Total/NA
Specific Gravity	1.1838				NONE	1		SM 2710F	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-127505-26**

No Detections.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
WI-GRO	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL CHI
9014	Cyanide	SW846	TAL CHI
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL CHI
9045C	pH	SW846	TAL CHI
9095A	Paint Filter	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL NSH
Moisture	Percent Moisture	EPA	TAL CHI
SM 2710F	Specific Gravity, Density	SM	TAL CHI
% Chlorine	General Sub Contract Method	NONE	SFAL

**Protocol References:**

EPA = US Environmental Protection Agency

NONE = NONE

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

**Laboratory References:**

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Sample Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
500-127505-1	GP-01 (0-2)	Solid	05/01/17 08:35	05/03/17 09:00	1
500-127505-2	GP-01 (6-8)	Solid	05/01/17 08:45	05/03/17 09:00	2
500-127505-3	GP-02 (2-4)	Solid	05/01/17 09:15	05/03/17 09:00	3
500-127505-4	GP-02 (6-8)	Solid	05/01/17 09:25	05/03/17 09:00	4
500-127505-5	GP-02 (14-16)	Solid	05/01/17 09:30	05/03/17 09:00	5
500-127505-6	GP-03 (2-4)	Solid	05/01/17 10:10	05/03/17 09:00	6
500-127505-7	GP-03 (6-8)	Solid	05/01/17 10:15	05/03/17 09:00	7
500-127505-8	GP-04 (2-4)	Solid	05/01/17 10:35	05/03/17 09:00	8
500-127505-9	GP-04 (6-8)	Solid	05/01/17 10:40	05/03/17 09:00	9
500-127505-10	GP-05 (2-4)	Solid	05/01/17 11:00	05/03/17 09:00	10
500-127505-11	GP-05 (6-8)	Solid	05/01/17 11:10	05/03/17 09:00	11
500-127505-12	GP-05 (14-16)	Solid	05/01/17 11:20	05/03/17 09:00	12
500-127505-13	GP-06 (2-4)	Solid	05/01/17 12:00	05/03/17 09:00	13
500-127505-14	GP-06 (6-8)	Solid	05/01/17 12:05	05/03/17 09:00	14
500-127505-15	GP-07 (2-4)	Solid	05/01/17 12:30	05/03/17 09:00	15
500-127505-16	GP-07 (6-8)	Solid	05/01/17 12:35	05/03/17 09:00	16
500-127505-17	GP-07 (14-16)	Solid	05/01/17 12:50	05/03/17 09:00	1
500-127505-18	GP-08 (2-4)	Solid	05/01/17 13:45	05/03/17 09:00	2
500-127505-19	GP-08 (6-8)	Solid	05/01/17 13:50	05/03/17 09:00	3
500-127505-20	GP-09 (2-4)	Solid	05/01/17 14:20	05/03/17 09:00	4
500-127505-21	GP-09 (6-8)	Solid	05/01/17 14:25	05/03/17 09:00	5
500-127505-22	GP-10 (2-4)	Solid	05/01/17 14:35	05/03/17 09:00	6
500-127505-23	GP-10 (6-8)	Solid	05/01/17 14:40	05/03/17 09:00	7
500-127505-24	GP-11 (2-4)	Solid	05/01/17 15:00	05/03/17 09:00	8
500-127505-25	GP-11 (6-8)	Solid	05/01/17 15:05	05/03/17 09:00	9
500-127505-26	Trip Blank	Solid	05/01/17 00:00	05/03/17 09:00	10

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-01 (0-2)

Date Collected: 05/01/17 08:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-1

Matrix: Solid

Percent Solids: 80.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		27	20	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Ethylbenzene	<21		27	21	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Methyl tert-butyl ether	<13		27	13	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Naphthalene	<130		270	130	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Toluene	<19		27	19	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
1,2,4-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
Xylenes, Total	<33		82	33	ug/Kg	⌚	05/05/17 15:52	05/09/17 23:35	1
<b>Surrogate</b>									
a,a,a-Trifluorotoluene	87			80 - 120					
							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
							05/05/17 15:52	05/09/17 23:35	1

## Client Sample ID: GP-01 (6-8)

Date Collected: 05/01/17 08:45

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-2

Matrix: Solid

Percent Solids: 85.1

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Ethylbenzene	<22		29	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Naphthalene	<140		290	140	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Toluene	<20		29	20	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
Xylenes, Total	<35		87	35	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:02	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	88			80 - 120			05/05/17 15:52	05/10/17 00:02	1

## Client Sample ID: GP-02 (2-4)

Date Collected: 05/01/17 09:15

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-3

Matrix: Solid

Percent Solids: 83.1

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		30	21	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Ethylbenzene	<23		30	23	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Naphthalene	<140		300	140	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Toluene	<20		30	20	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
Xylenes, Total	<36		89	36	ug/Kg	⌚	05/05/17 15:52	05/10/17 00:28	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91			80 - 120			05/05/17 15:52	05/10/17 00:28	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-02 (6-8)

Date Collected: 05/01/17 09:25

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-4

Matrix: Solid

Percent Solids: 78.1

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<24		33	24	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
Ethylbenzene	<25		33	25	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
Methyl tert-butyl ether	<16		33	16	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
<b>Naphthalene</b>	<b>2500</b>		330	160	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
Toluene	<23		33	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
1,2,4-Trimethylbenzene	<20		33	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
1,3,5-Trimethylbenzene	<20		33	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
Xylenes, Total	<40		100	40	ug/Kg	⊗	05/05/17 15:52	05/10/17 00:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	89			80 - 120			05/05/17 15:52	05/10/17 00:55	1

## Client Sample ID: GP-02 (14-16)

Date Collected: 05/01/17 09:30

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-5

Matrix: Solid

Percent Solids: 86.8

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
<b>Naphthalene</b>	<b>270 J</b>		280	130	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
Xylenes, Total	<34		84	34	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	92			80 - 120			05/05/17 15:52	05/10/17 08:30	1

## Client Sample ID: GP-03 (2-4)

Date Collected: 05/01/17 10:10

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-6

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<34		74	34	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1,1-Trichloroethane	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1,2,2-Tetrachloroethane	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1,2-Trichloroethane	<26		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1-Dichloroethane	<30 *		74	30	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1-Dichloroethene	<29 *		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,1-Dichloropropene	<22		74	22	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2,3-Trichlorobenzene	<34		74	34	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2,3-Trichloropropane	<30		74	30	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2,4-Trichlorobenzene	<25		74	25	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2,4-Trimethylbenzene	<26		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2-Dibromo-3-Chloropropane	<150		370	150	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2-Dibromoethane	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2-Dichlorobenzene	<25		74	25	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-03 (2-4)**

**Date Collected: 05/01/17 10:10**

**Date Received: 05/03/17 09:00**

**Lab Sample ID: 500-127505-6**

**Matrix: Solid**

**Percent Solids: 81.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,2-Dichloropropane	<32		74	32	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,3,5-Trimethylbenzene	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,3-Dichlorobenzene	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,3-Dichloropropane	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
1,4-Dichlorobenzene	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
2,2-Dichloropropane	<33		74	33	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
2-Chlorotoluene	<23		74	23	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
4-Chlorotoluene	<26		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Benzene	<11		18	11	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromobenzene	<26		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromochloromethane	<32 *		74	32	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromodichloromethane	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromoform	<36		74	36	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Bromomethane	<59		150	59	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Carbon tetrachloride	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Chlorobenzene	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Chloroethane	<37		74	37	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Chloroform	<27 *		150	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Chloromethane	<24		74	24	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
cis-1,2-Dichloroethene	<30 *		74	30	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
cis-1,3-Dichloropropene	<31		74	31	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Dibromochloromethane	<36		74	36	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Dibromomethane	<20		74	20	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Dichlorodifluoromethane	<50		150	50	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Hexachlorobutadiene	<33		74	33	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Isopropyl ether	<20		74	20	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Isopropylbenzene	<28		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Methyl tert-butyl ether	<29 *		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Methylene Chloride	<120 *		370	120	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Naphthalene	<25 *		74	25	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
n-Butylbenzene	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
N-Propylbenzene	<30		74	30	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
p-Isopropyltoluene	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
sec-Butylbenzene	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Styrene	<28 *		74	28	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
tert-Butylbenzene	<29		74	29	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Tetrachloroethene	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Toluene	<11		18	11	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
trans-1,2-Dichloroethene	<26 *		74	26	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
trans-1,3-Dichloropropene	<27		74	27	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Trichloroethene	<12		37	12	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Trichlorofluoromethane	<32 *		74	32	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Vinyl chloride	<19 *		37	19	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50
Xylenes, Total	<16		37	16	ug/Kg	⊗	05/01/17 10:10	05/15/17 12:30	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126	05/01/17 10:10	05/15/17 12:30	50
4-Bromofluorobenzene (Surr)	89		72 - 124	05/01/17 10:10	05/15/17 12:30	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-03 (2-4)**

Date Collected: 05/01/17 10:10

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-6**

Matrix: Solid

Percent Solids: 81.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	101		75 - 120	05/01/17 10:10	05/15/17 12:30	50
Toluene-d8 (Surr)	94		75 - 120	05/01/17 10:10	05/15/17 12:30	50

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37		0.58	0.27	mg/Kg	⊗	05/05/17 15:07	05/11/17 21:48	1

**Client Sample ID: GP-03 (6-8)**

Date Collected: 05/01/17 10:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-7**

Matrix: Solid

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		65	30	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,1,1-Trichloroethane	<25		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,1,2,2-Tetrachloroethane	<26		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,1,2-Trichloroethane	<23		65	23	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,1-Dichloroethane	<27 *		65	27	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,1-Dichloroethene	<26 *		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,1-Dichloropropene	<20		65	20	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,2,3-Trichlorobenzene	<30		65	30	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,2,3-Trichloropropane	<27		65	27	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,2,4-Trichlorobenzene	<22		65	22	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,2,4-Trimethylbenzene	<23		65	23	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,2-Dibromoethane	<25		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,2-Dichlorobenzene	<22		65	22	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,2-Dichloroethane	<26		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,2-Dichloropropene	<28		65	28	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,3,5-Trimethylbenzene	<25		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,3-Dichlorobenzene	<26		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,3-Dichloropropane	<24		65	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
1,4-Dichlorobenzene	<24		65	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
2,2-Dichloropropane	<29		65	29	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
2-Chlorotoluene	<21		65	21	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
4-Chlorotoluene	<23		65	23	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Benzene	<9.6		16	9.6	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Bromobenzene	<23		65	23	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Bromochloromethane	<28 *		65	28	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Bromodichloromethane	<24		65	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Bromoform	<32		65	32	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Bromomethane	<52		130	52	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Carbon tetrachloride	<25		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Chlorobenzene	<25		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Chloroethane	<33		65	33	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Chloroform	<24 *		130	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Chloromethane	<21		65	21	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
cis-1,2-Dichloroethene	<27 *		65	27	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
cis-1,3-Dichloropropene	<27		65	27	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-03 (6-8)**

Date Collected: 05/01/17 10:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-7**

Matrix: Solid

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	<32		65	32	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Dibromomethane	<18		65	18	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Dichlorodifluoromethane	<44		130	44	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Ethylbenzene	<12		16	12	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Hexachlorobutadiene	<29		65	29	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Isopropyl ether	<18		65	18	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Isopropylbenzene	<25		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Methyl tert-butyl ether	<26 *		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Methylene Chloride	<110 *		330	110	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Naphthalene	<22 *		65	22	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
n-Butylbenzene	<25		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
N-Propylbenzene	<27		65	27	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
p-Isopropyltoluene	<24		65	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
sec-Butylbenzene	<26		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Styrene	<25 *		65	25	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
tert-Butylbenzene	<26		65	26	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Tetrachloroethene	<24		65	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Toluene	<9.6		16	9.6	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
trans-1,2-Dichloroethene	<23 *		65	23	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
trans-1,3-Dichloropropene	<24		65	24	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Trichloroethene	<11		33	11	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Trichlorofluoromethane	<28 *		65	28	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Vinyl chloride	<17 *		33	17	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50
Xylenes, Total	<14		33	14	ug/Kg	⊗	05/01/17 10:15	05/15/17 12:59	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126	05/01/17 10:15	05/15/17 12:59	50
4-Bromofluorobenzene (Surr)	91		72 - 124	05/01/17 10:15	05/15/17 12:59	50
Dibromofluoromethane	100		75 - 120	05/01/17 10:15	05/15/17 12:59	50
Toluene-d8 (Surr)	94		75 - 120	05/01/17 10:15	05/15/17 12:59	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.9		0.52	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 21:52	1

**Client Sample ID: GP-04 (2-4)**

Date Collected: 05/01/17 10:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-8**

Matrix: Solid

Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<28		61	28	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1,1-Trichloroethane	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1,2,2-Tetrachloroethane	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1,2-Trichloroethane	<21		61	21	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1-Dichloroethane	<25 *		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1-Dichloroethene	<24 *		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,1-Dichloropropene	<18		61	18	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2,3-Trichlorobenzene	<28		61	28	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2,3-Trichloropropane	<25		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-04 (2-4)**

**Date Collected: 05/01/17 10:35**

**Date Received: 05/03/17 09:00**

**Lab Sample ID: 500-127505-8**

**Matrix: Solid**

**Percent Solids: 89.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<21		61	21	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2,4-Trimethylbenzene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dibromo-3-Chloropropane	<120		300	120	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dibromoethane	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dichlorobenzene	<20		61	20	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dichloroethane	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,2-Dichloropropane	<26		61	26	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,3,5-Trimethylbenzene	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,3-Dichlorobenzene	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,3-Dichloropropane	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
1,4-Dichlorobenzene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
2,2-Dichloropropane	<27		61	27	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
2-Chlorotoluene	<19		61	19	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
4-Chlorotoluene	<21		61	21	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Benzene	<8.9		15	8.9	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromobenzene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromochloromethane	<26 *		61	26	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromodichloromethane	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromoform	<29		61	29	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Bromomethane	<48		120	48	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Carbon tetrachloride	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Chlorobenzene	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Chloroethane	<31		61	31	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Chloroform	<22 *		120	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Chloromethane	<19		61	19	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
cis-1,2-Dichloroethene	<25 *		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
cis-1,3-Dichloropropene	<25		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Dibromochloromethane	<30		61	30	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Dibromomethane	<16		61	16	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Dichlorodifluoromethane	<41		120	41	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Ethylbenzene	<11		15	11	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Hexachlorobutadiene	<27		61	27	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Isopropyl ether	<17		61	17	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Isopropylbenzene	<23		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Methyl tert-butyl ether	<24 *		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Methylene Chloride	<99 *		300	99	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Naphthalene	<20 *		61	20	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
n-Butylbenzene	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
N-Propylbenzene	<25		61	25	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
p-Isopropyltoluene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
sec-Butylbenzene	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Styrene	<23 *		61	23	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
tert-Butylbenzene	<24		61	24	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Tetrachloroethene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Toluene	<8.9		15	8.9	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
trans-1,2-Dichloroethene	<21 *		61	21	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
trans-1,3-Dichloropropene	<22		61	22	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Trichloroethene	<10		30	10	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Trichlorofluoromethane	<26 *		61	26	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-04 (2-4)

Date Collected: 05/01/17 10:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-8

Matrix: Solid

Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<16	*	30	16	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
Xylenes, Total	<13		30	13	ug/Kg	⊗	05/01/17 10:35	05/15/17 13:28	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	98		75 - 126				05/01/17 10:35	05/15/17 13:28	50
4-Bromofluorobenzene (Surr)	92		72 - 124				05/01/17 10:35	05/15/17 13:28	50
Dibromofluoromethane	99		75 - 120				05/01/17 10:35	05/15/17 13:28	50
Toluene-d8 (Surr)	94		75 - 120				05/01/17 10:35	05/15/17 13:28	50

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.4		0.50	0.23	mg/Kg	⊗	05/05/17 15:07	05/11/17 21:56	1

## Client Sample ID: GP-04 (6-8)

Date Collected: 05/01/17 10:40

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-9

Matrix: Solid

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		66	30	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1,1-Trichloroethane	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1,2,2-Tetrachloroethane	<26		66	26	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1,2-Trichloroethane	<23		66	23	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1-Dichloroethane	<27	*	66	27	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1-Dichloroethene	<26	*	66	26	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,1-Dichloropropene	<20		66	20	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2,3-Trichlorobenzene	<30		66	30	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2,3-Trichloropropane	<27		66	27	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2,4-Trichlorobenzene	<22		66	22	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2,4-Trimethylbenzene	<23		66	23	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dibromoethane	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dichlorobenzene	<22		66	22	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dichloroethane	<26		66	26	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,2-Dichloropropane	<28		66	28	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,3-Dichlorobenzene	<26		66	26	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,3-Dichloropropane	<24		66	24	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
1,4-Dichlorobenzene	<24		66	24	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
2,2-Dichloropropane	<29		66	29	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
2-Chlorotoluene	<21		66	21	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
4-Chlorotoluene	<23		66	23	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Benzene	<9.6		16	9.6	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromobenzene	<23		66	23	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromochloromethane	<28	*	66	28	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromodichloromethane	<24		66	24	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromoform	<32		66	32	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Bromomethane	<52		130	52	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Carbon tetrachloride	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50
Chlorobenzene	<25		66	25	ug/Kg	⊗	05/01/17 10:40	05/15/17 13:58	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-04 (6-8)**

Date Collected: 05/01/17 10:40

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-9**

Matrix: Solid

Percent Solids: 85.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<33		66	33	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Chloroform	<24 *		130	24	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Chloromethane	<21		66	21	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
cis-1,2-Dichloroethene	<27 *		66	27	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
cis-1,3-Dichloropropene	<27		66	27	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Dibromochloromethane	<32		66	32	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Dibromomethane	<18		66	18	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Dichlorodifluoromethane	<44		130	44	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Ethylbenzene	<12		16	12	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Hexachlorobutadiene	<29		66	29	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Isopropyl ether	<18		66	18	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Isopropylbenzene	<25		66	25	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Methyl tert-butyl ether	<26 *		66	26	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Methylene Chloride	<110 *		330	110	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Naphthalene	<22 *		66	22	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
n-Butylbenzene	<25		66	25	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
N-Propylbenzene	<27		66	27	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
p-Isopropyltoluene	<24		66	24	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
sec-Butylbenzene	<26		66	26	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Styrene	<25 *		66	25	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
tert-Butylbenzene	<26		66	26	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
<b>Tetrachloroethene</b>	<b>540</b>		66	24	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Toluene	<9.6		16	9.6	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
trans-1,2-Dichloroethene	<23 *		66	23	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
trans-1,3-Dichloropropene	<24		66	24	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Trichloroethene	<11		33	11	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Trichlorofluoromethane	<28 *		66	28	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Vinyl chloride	<17 *		33	17	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
Xylenes, Total	<14		33	14	ug/Kg	⌚	05/01/17 10:40	05/15/17 13:58	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100			75 - 126			05/01/17 10:40	05/15/17 13:58	50
4-Bromofluorobenzene (Surr)	93			72 - 124			05/01/17 10:40	05/15/17 13:58	50
Dibromofluoromethane	102			75 - 120			05/01/17 10:40	05/15/17 13:58	50
Toluene-d8 (Surr)	94			75 - 120			05/01/17 10:40	05/15/17 13:58	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.53	0.24	mg/Kg	⌚	05/05/17 15:07	05/11/17 22:01	1

**Client Sample ID: GP-05 (2-4)**

Date Collected: 05/01/17 11:00

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-10**

Matrix: Solid

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		71	33	ug/Kg	⌚	05/01/17 11:00	05/15/17 14:27	50
1,1,1-Trichloroethane	<27		71	27	ug/Kg	⌚	05/01/17 11:00	05/15/17 14:27	50
1,1,2,2-Tetrachloroethane	<28		71	28	ug/Kg	⌚	05/01/17 11:00	05/15/17 14:27	50
1,1,2-Trichloroethane	<25		71	25	ug/Kg	⌚	05/01/17 11:00	05/15/17 14:27	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-05 (2-4)**

**Date Collected: 05/01/17 11:00**

**Date Received: 05/03/17 09:00**

**Lab Sample ID: 500-127505-10**

**Matrix: Solid**

**Percent Solids: 82.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<29	*	71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,1-Dichloroethene	<28	*	71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,1-Dichloropropene	<21		71	21	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2,3-Trichlorobenzene	<33		71	33	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2,3-Trichloropropane	<29		71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2,4-Trichlorobenzene	<24		71	24	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2,4-Trimethylbenzene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dibromoethane	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dichlorobenzene	<24		71	24	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dichloroethane	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,2-Dichloropropane	<30		71	30	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,3,5-Trimethylbenzene	<27		71	27	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,3-Dichlorobenzene	<29		71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,3-Dichloropropane	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
1,4-Dichlorobenzene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
2,2-Dichloropropane	<32		71	32	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
2-Chlorotoluene	<22		71	22	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
4-Chlorotoluene	<25		71	25	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Benzene	<10		18	10	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromobenzene	<25		71	25	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromochloromethane	<30	*	71	30	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromodichloromethane	<27		71	27	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromoform	<34		71	34	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Bromomethane	<57		140	57	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Carbon tetrachloride	<27		71	27	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Chlorobenzene	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Chloroethane	<36		71	36	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Chloroform	<26	*	140	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Chloromethane	<23		71	23	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
cis-1,2-Dichloroethene	<29	*	71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
cis-1,3-Dichloropropene	<30		71	30	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Dibromochloromethane	<35		71	35	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Dibromomethane	<19		71	19	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Dichlorodifluoromethane	<48		140	48	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Hexachlorobutadiene	<32		71	32	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Isopropyl ether	<20		71	20	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Isopropylbenzene	<27		71	27	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Methyl tert-butyl ether	<28	*	71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Methylene Chloride	<120	*	360	120	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Naphthalene	<24	*	71	24	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
n-Butylbenzene	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
N-Propylbenzene	<29		71	29	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
p-Isopropyltoluene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
sec-Butylbenzene	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Styrene	<28	*	71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
tert-Butylbenzene	<28		71	28	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Tetrachloroethene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-05 (2-4)**

Date Collected: 05/01/17 11:00

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-10**

Matrix: Solid

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<10		18	10	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
trans-1,2-Dichloroethene	<25 *		71	25	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
trans-1,3-Dichloropropene	<26		71	26	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Trichloroethene	<12		36	12	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Trichlorofluoromethane	<30 *		71	30	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Vinyl chloride	<19 *		36	19	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
Xylenes, Total	<16		36	16	ug/Kg	⊗	05/01/17 11:00	05/15/17 14:27	50
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	98			75 - 126			05/01/17 11:00	05/15/17 14:27	50
4-Bromofluorobenzene (Surr)	90			72 - 124			05/01/17 11:00	05/15/17 14:27	50
Dibromofluoromethane	100			75 - 120			05/01/17 11:00	05/15/17 14:27	50
Toluene-d8 (Surr)	94			75 - 120			05/01/17 11:00	05/15/17 14:27	50

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	20		0.52	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:05	1

## **Client Sample ID: GP-05 (6-8)**

## **Lab Sample ID: 500-127505-11**

Matrix: Solid

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		66	31	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1,1-Trichloroethane	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1,2,2-Tetrachloroethane	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1,2-Trichloroethane	<23		66	23	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1-Dichloroethane	<27 *		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1-Dichloroethene	<26 *		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,1-Dichloropropene	<20		66	20	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2,3-Trichlorobenzene	<30		66	30	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2,3-Trichloropropane	<27		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2,4-Trichlorobenzene	<23		66	23	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dibromoethane	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dichlorobenzene	<22		66	22	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dichloroethane	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,2-Dichloropropane	<28		66	28	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,3-Dichlorobenzene	<27		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,3-Dichloropropane	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
1,4-Dichlorobenzene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
2,2-Dichloropropane	<29		66	29	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
2-Chlorotoluene	<21		66	21	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
4-Chlorotoluene	<23		66	23	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Benzene	<9.7		17	9.7	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Bromobenzene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Bromochloromethane	<28 *		66	28	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-05 (6-8)**

Date Collected: 05/01/17 11:10

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-11**

Matrix: Solid

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Bromoform	<32		66	32	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Bromomethane	<53		130	53	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Carbon tetrachloride	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Chlorobenzene	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Chloroethane	<33		66	33	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Chloroform	<25 *		130	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Chloromethane	<21		66	21	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
cis-1,2-Dichloroethene	<27 *		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
cis-1,3-Dichloropropene	<28		66	28	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Dibromochloromethane	<32		66	32	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Dibromomethane	<18		66	18	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Dichlorodifluoromethane	<45		130	45	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Ethylbenzene	<12		17	12	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Hexachlorobutadiene	<30		66	30	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Isopropyl ether	<18		66	18	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Isopropylbenzene	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Methyl tert-butyl ether	<26 *		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Methylene Chloride	<110 *		330	110	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Naphthalene	<22 *		66	22	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
n-Butylbenzene	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
N-Propylbenzene	<27		66	27	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
p-Isopropyltoluene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
sec-Butylbenzene	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Styrene	<26 *		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
tert-Butylbenzene	<26		66	26	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Tetrachloroethene	<25		66	25	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Toluene	<9.7		17	9.7	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
trans-1,2-Dichloroethene	<23 *		66	23	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
trans-1,3-Dichloropropene	<24		66	24	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Trichloroethene	<11		33	11	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Trichlorofluoromethane	<28 *		66	28	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Vinyl chloride	<17 *		33	17	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50
Xylenes, Total	<15		33	15	ug/Kg	⊗	05/01/17 11:10	05/15/17 14:56	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		75 - 126	05/01/17 11:10	05/15/17 14:56	50
4-Bromofluorobenzene (Surr)	92		72 - 124	05/01/17 11:10	05/15/17 14:56	50
Dibromofluoromethane	99		75 - 120	05/01/17 11:10	05/15/17 14:56	50
Toluene-d8 (Surr)	95		75 - 120	05/01/17 11:10	05/15/17 14:56	50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Benzene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Chlorobenzene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Chloroform	<0.020		0.040	0.020	mg/L			05/09/17 00:42	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/09/17 00:42	20

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-05 (6-8)

Date Collected: 05/01/17 11:10

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-11

Matrix: Solid

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Trichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Vinyl chloride	<0.010		0.020	0.010	mg/L			05/09/17 00:42	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					05/09/17 00:42	20
4-Bromofluorobenzene (Surr)	110		72 - 124					05/09/17 00:42	20
Dibromofluoromethane	89		75 - 120					05/09/17 00:42	20
Toluene-d8 (Surr)	101		75 - 120					05/09/17 00:42	20

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L			05/08/17 07:42	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L			05/08/17 07:42	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L			05/08/17 07:42	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L			05/08/17 07:42	1
2-Methylphenol	<0.020		0.020	0.020	mg/L			05/08/17 07:42	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L			05/08/17 07:42	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L			05/08/17 07:42	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L			05/08/17 07:42	1
Hexachloroethane	<0.050		0.050	0.050	mg/L			05/08/17 07:42	1
Nitrobenzene	<0.010		0.010	0.010	mg/L			05/08/17 07:42	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L			05/08/17 07:42	1
Pyridine	<0.20		0.20	0.20	mg/L			05/08/17 07:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	90		40 - 145					05/08/17 07:42	1
2-Fluorobiphenyl	86		34 - 110					05/08/17 07:42	1
2-Fluorophenol (Surr)	59		27 - 110					05/08/17 07:42	1
Nitrobenzene-d5 (Surr)	95		36 - 120					05/08/17 07:42	1
Phenol-d5 (Surr)	42		20 - 100					05/08/17 07:42	1
Terphenyl-d14 (Surr)	104		40 - 145					05/08/17 07:42	1

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<660		2000	660	ug/Kg	⌚	05/01/17 11:10	05/07/17 21:31	50

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.6		19	6.6	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1221	<8.2		19	8.2	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1232	<8.1		19	8.1	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1242	<6.1		19	6.1	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1248	<7.3		19	7.3	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1254	<4.0		19	4.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
PCB-1260	<9.1		19	9.1	ug/Kg	⌚	05/09/17 16:38	05/10/17 13:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	61		49 - 129					05/09/17 16:38	1
DCB Decachlorobiphenyl	62		37 - 121					05/09/17 16:38	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-05 (6-8)

Date Collected: 05/01/17 11:10

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-11

Matrix: Solid

Percent Solids: 86.3

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.8		4.6	1.8	mg/Kg	⊗	05/04/17 11:15	05/05/17 15:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n</i> -Nonane	69		44 - 148				05/04/17 11:15	05/05/17 15:38	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.6		0.52	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:09	1

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Barium	0.34 J		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 21:40	1
Cadmium	0.0020 J		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 21:40	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Copper	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Lead	0.014 J		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 21:40	1
Nickel	0.014 J		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 21:40	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:40	1
Zinc	<0.020		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 21:40	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:12	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		40.0	40.0	Degrees F			05/11/17 16:20	1
Cyanide, Total	<0.15		0.45	0.15	mg/Kg		05/10/17 12:50	05/10/17 15:36	1
Sulfide	6.7 J		9.8	4.6	mg/Kg		05/15/17 17:36	05/15/17 21:48	1
pH	9.0		0.2	0.2	SU			05/09/17 16:02	1
Paint Filter	PASS				No Unit			05/11/17 22:39	1
Specific Gravity	3.1404				NONE			05/12/17 22:07	1

## Client Sample ID: GP-05 (14-16)

Date Collected: 05/01/17 11:20

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-12

Matrix: Solid

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		64	30	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1,2,2-Tetrachloroethane	<26		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1,2-Trichloroethane	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1-Dichloroethane	<26 *		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1-Dichloroethene	<25 *		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,1-Dichloropropene	<19		64	19	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2,3-Trichloropropane	<27		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-05 (14-16)**

**Date Collected: 05/01/17 11:20**

**Date Received: 05/03/17 09:00**

**Lab Sample ID: 500-127505-12**

**Matrix: Solid**

**Percent Solids: 87.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dibromoethane	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dichloroethane	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,2-Dichloropropane	<27		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,3-Dichlorobenzene	<26		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,3-Dichloropropane	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
2,2-Dichloropropane	<28		64	28	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
2-Chlorotoluene	<20		64	20	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
4-Chlorotoluene	<22		64	22	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Benzene	<9.4		16	9.4	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromobenzene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromochloromethane	<27 *		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromodichloromethane	<24		64	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromoform	<31		64	31	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Bromomethane	<51		130	51	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Carbon tetrachloride	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Chlorobenzene	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Chloroethane	<32		64	32	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Chloroform	<24 *		130	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Chloromethane	<21		64	21	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
cis-1,2-Dichloroethene	<26 *		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
cis-1,3-Dichloropropene	<27		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Dibromochloromethane	<31		64	31	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Dibromomethane	<17		64	17	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Dichlorodifluoromethane	<43		130	43	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Ethylbenzene	<12		16	12	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Hexachlorobutadiene	<29		64	29	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Isopropyl ether	<18		64	18	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Isopropylbenzene	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Methyl tert-butyl ether	<25 *		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Methylene Chloride	<100 *		320	100	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Naphthalene	<21 *		64	21	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
n-Butylbenzene	<25		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
N-Propylbenzene	<27		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
p-Isopropyltoluene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
sec-Butylbenzene	<26		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Styrene	<25 *		64	25	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
tert-Butylbenzene	<26		64	26	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Tetrachloroethene	<24		64	24	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Toluene	<9.4		16	9.4	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
trans-1,2-Dichloroethene	<22 *		64	22	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Trichloroethene	<11		32	11	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Trichlorofluoromethane	<27 *		64	27	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50
Vinyl chloride	<17 *		32	17	ug/Kg	⊗	05/01/17 11:20	05/15/17 15:25	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-05 (14-16)**

Date Collected: 05/01/17 11:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-12**

Matrix: Solid

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<14		32	14	ug/Kg	⌚	05/01/17 11:20	05/15/17 15:25	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>				
1,2-Dichloroethane-d4 (Surr)	98			75 - 126			05/01/17 11:20	05/15/17 15:25	50
4-Bromofluorobenzene (Surr)	92			72 - 124			05/01/17 11:20	05/15/17 15:25	50
Dibromofluoromethane	101			75 - 120			05/01/17 11:20	05/15/17 15:25	50
Toluene-d8 (Surr)	93			75 - 120			05/01/17 11:20	05/15/17 15:25	50

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		0.50	0.23	mg/Kg	⌚	05/05/17 15:07	05/11/17 22:14	1

## **Client Sample ID: GP-06 (2-4)**

Date Collected: 05/01/17 12:00

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-13**

Matrix: Solid

Percent Solids: 80.9

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		32	23	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Ethylbenzene	<24		32	24	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Methyl tert-butyl ether	<15		32	15	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Naphthalene	<150		320	150	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Toluene	<22		32	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
1,2,4-Trimethylbenzene	<19		32	19	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
1,3,5-Trimethylbenzene	<19		32	19	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
Xylenes, Total	<38		96	38	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>				
a,a,a-Trifluorotoluene	86			80 - 120			05/05/17 15:52	05/10/17 01:22	1

## **Client Sample ID: GP-06 (6-8)**

Date Collected: 05/01/17 12:05

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-14**

Matrix: Solid

Percent Solids: 84.9

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Ethylbenzene	<22		29	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Naphthalene	<140		290	140	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Toluene	<19		29	19	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
Xylenes, Total	<34		86	34	ug/Kg	⌚	05/05/17 15:52	05/10/17 01:49	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>				
a,a,a-Trifluorotoluene	91			80 - 120			05/05/17 15:52	05/10/17 01:49	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-07 (2-4)

Date Collected: 05/01/17 12:30

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-15

Matrix: Solid

Percent Solids: 79.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Methyl tert-butyl ether	<15		30	15	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Naphthalene	<150		300	150	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Toluene	<21		30	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
Xylenes, Total	<37		91	37	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:15	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	88			80 - 120			05/05/17 15:52	05/10/17 02:15	1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Benzene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Chlorobenzene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Chloroform	<0.020		0.040	0.020	mg/L			05/09/17 01:09	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/09/17 01:09	20
Tetrachloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Trichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
Vinyl chloride	<0.010		0.020	0.010	mg/L			05/09/17 01:09	20
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	104		75 - 126				05/09/17 01:09		20
4-Bromofluorobenzene (Surr)	108		72 - 124				05/09/17 01:09		20
Dibromofluoromethane	90		75 - 120				05/09/17 01:09		20
Toluene-d8 (Surr)	101		75 - 120				05/09/17 01:09		20

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 17:46	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		05/08/17 07:42	05/08/17 17:46	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 17:46	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 17:46	1
2-Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 17:46	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 17:46	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 17:46	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 17:46	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 17:46	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 17:46	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 17:46	1
Pyridine	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 17:46	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	87		40 - 145	05/08/17 07:42	05/08/17 17:46	1
2-Fluorobiphenyl	87		34 - 110	05/08/17 07:42	05/08/17 17:46	1
2-Fluorophenol (Surr)	60		27 - 110	05/08/17 07:42	05/08/17 17:46	1
Nitrobenzene-d5 (Surr)	96		36 - 120	05/08/17 07:42	05/08/17 17:46	1
Phenol-d5 (Surr)	41		20 - 100	05/08/17 07:42	05/08/17 17:46	1
Terphenyl-d14 (Surr)	103		40 - 145	05/08/17 07:42	05/08/17 17:46	1

### Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	D	05/08/17 08:10	05/08/17 21:45	1
Barium	0.38 J		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 21:45	1
Cadmium	0.0027 J		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 21:45	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:45	1
Copper	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:45	1
Lead	<0.0075		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 21:45	1
Nickel	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:45	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 21:45	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:45	1
Zinc	<0.020		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 21:45	1

### Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	D	05/08/17 13:40	05/09/17 10:13	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		40.0	40.0	Degrees F			05/11/17 18:10	1
Cyanide, Total	<0.16		0.45	0.16	mg/Kg		05/10/17 12:50	05/10/17 15:37	1
Sulfide	8.8 J		10	4.7	mg/Kg		05/15/17 17:36	05/15/17 21:49	1
pH	9.1		0.2	0.2	SU			05/09/17 16:04	1
Paint Filter	PASS				No Unit			05/11/17 22:41	1
Specific Gravity	2.1987				NONE			05/12/17 22:11	1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Percent Solids: 87.2

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Methyl tert-butyl ether	<14		28	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Naphthalene	<140		280	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Xylenes, Total	<34		84	34	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1
Wisconsin GRO	<2800		5600	2800	ug/Kg	⊗	05/05/17 15:52	05/10/17 02:42	1

### Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		80 - 120	05/05/17 15:52	05/10/17 02:42	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Percent Solids: 87.2

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		80 - 120	05/05/17 15:52	05/10/17 02:42	1

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.6		19	6.6	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1221	<8.2		19	8.2	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1232	<8.2		19	8.2	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1242	<6.1		19	6.1	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1248	<7.4		19	7.4	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1254	<4.0		19	4.0	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1
PCB-1260	<9.2		19	9.2	ug/Kg	⊗	05/09/17 16:38	05/10/17 13:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		49 - 129	05/09/17 16:38	05/10/17 13:50	1
DCB Decachlorobiphenyl	67		37 - 121	05/09/17 16:38	05/10/17 13:50	1

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	2.2	J	4.5	1.8	mg/Kg	⊗	05/04/17 11:15	05/05/17 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	77		44 - 148				05/04/17 11:15	05/05/17 16:14	1

## Client Sample ID: GP-07 (14-16)

## Lab Sample ID: 500-127505-17

Matrix: Solid

Percent Solids: 86.6

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Naphthalene	270	J	280	130	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
1,3,5-Trimethylbenzene	23	J	28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Xylenes, Total	38	J	84	34	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		80 - 120				05/05/17 15:52	05/10/17 03:09	1

## Client Sample ID: GP-08 (2-4)

## Lab Sample ID: 500-127505-18

Matrix: Solid

Percent Solids: 88.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-08 (2-4)

Date Collected: 05/01/17 13:45

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-18

Matrix: Solid

Percent Solids: 88.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<140		290	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
Toluene	<20		29	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1
Xylenes, Total	<35		87	35	ug/Kg	⊗	05/05/17 15:52	05/10/17 08:04	1

### Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		80 - 120	05/05/17 15:52	05/10/17 08:04	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.9		0.51	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:19	1

## Client Sample ID: GP-08 (6-8)

Date Collected: 05/01/17 13:50

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-19

Matrix: Solid

Percent Solids: 89.1

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Naphthalene	<130		280	130	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1
Xylenes, Total	<33		83	33	ug/Kg	⊗	05/05/17 15:52	05/10/17 03:36	1

### Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		80 - 120	05/05/17 15:52	05/10/17 03:36	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.3		0.53	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:31	1

## Client Sample ID: GP-09 (2-4)

Date Collected: 05/01/17 14:20

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-20

Matrix: Solid

Percent Solids: 85.2

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Methyl tert-butyl ether	<15		30	15	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Naphthalene	<150		300	150	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Toluene	36		30	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1
Xylenes, Total	<36		91	36	ug/Kg	⊗	05/05/17 15:52	05/10/17 05:23	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-09 (2-4)**

Date Collected: 05/01/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-20**

Matrix: Solid

Percent Solids: 85.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		80 - 120	05/05/17 15:52	05/10/17 05:23	1

## **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	13		0.54	0.25	mg/Kg	✉	05/05/17 15:07	05/11/17 22:35	1

## **Client Sample ID: GP-09 (6-8)**

Date Collected: 05/01/17 14:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-21**

Matrix: Solid

Percent Solids: 84.7

## **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Ethylbenzene	<22		29	22	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Naphthalene	<140		290	140	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Toluene	<20		29	20	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
<b>1,2,4-Trimethylbenzene</b>	<b>20</b>	<b>J</b>	29	17	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
Xylenes, Total	<35		87	35	ug/Kg	✉	05/05/17 15:52	05/10/17 05:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	90		80 - 120				05/05/17 15:52	05/10/17 05:50	1

## **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.0		0.55	0.25	mg/Kg	✉	05/05/17 15:07	05/11/17 22:40	1

## **Client Sample ID: GP-10 (2-4)**

Date Collected: 05/01/17 14:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-22**

Matrix: Solid

Percent Solids: 83.2

## **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Ethylbenzene	<23		30	23	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Methyl tert-butyl ether	<15		30	15	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Naphthalene	<150		300	150	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Toluene	<21		30	21	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
Xylenes, Total	<37		91	37	ug/Kg	✉	05/05/17 15:52	05/10/17 06:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 06:16	1

## **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14		0.56	0.26	mg/Kg	✉	05/05/17 15:07	05/11/17 22:44	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-10 (6-8)

Date Collected: 05/01/17 14:40

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-23

Matrix: Solid

Percent Solids: 84.7

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Naphthalene	<140		290	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Toluene	<20		29	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
1,2,4-Trimethylbenzene	<18		29	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
1,3,5-Trimethylbenzene	<18		29	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
Xylenes, Total	<35		88	35	ug/Kg	⊗	05/05/17 15:52	05/10/17 06:43	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91			80 - 120			05/05/17 15:52	05/10/17 06:43	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.9		0.53	0.24	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:47	1

## Client Sample ID: GP-11 (2-4)

Date Collected: 05/01/17 15:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-24

Matrix: Solid

Percent Solids: 88.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
<b>Ethylbenzene</b>	<b>60</b>		28	22	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
Methyl tert-butyl ether	<14		28	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
Naphthalene	<140		280	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
<b>1,2,4-Trimethylbenzene</b>	<b>31</b>		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
<b>Xylenes, Total</b>	<b>110</b>		85	34	ug/Kg	⊗	05/05/17 15:52	05/10/17 07:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	95			80 - 120			05/05/17 15:52	05/10/17 07:10	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	63		0.49	0.23	mg/Kg	⊗	05/05/17 15:07	05/11/17 22:50	1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Benzene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Chlorobenzene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Chloroform	<0.020		0.040	0.020	mg/L			05/09/17 01:35	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/09/17 01:35	20

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-11 (6-8)**

**Lab Sample ID: 500-127505-25**

**Matrix: Solid**

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Trichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
Vinyl chloride	<0.010		0.020	0.010	mg/L			05/09/17 01:35	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	105		75 - 126					05/09/17 01:35	20
4-Bromofluorobenzene (Surr)	114		72 - 124					05/09/17 01:35	20
Dibromofluoromethane	91		75 - 120					05/09/17 01:35	20
Toluene-d8 (Surr)	100		75 - 120					05/09/17 01:35	20

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 18:13	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		05/08/17 07:42	05/08/17 18:13	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 18:13	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 18:13	1
2-Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 18:13	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 18:13	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 18:13	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 18:13	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 18:13	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 18:13	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 18:13	1
Pyridine	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 18:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol (Surr)	86		40 - 145				05/08/17 07:42	05/08/17 18:13	1
2-Fluorobiphenyl	86		34 - 110				05/08/17 07:42	05/08/17 18:13	1
2-Fluorophenol (Surr)	57		27 - 110				05/08/17 07:42	05/08/17 18:13	1
Nitrobenzene-d5 (Surr)	93		36 - 120				05/08/17 07:42	05/08/17 18:13	1
Phenol-d5 (Surr)	40		20 - 100				05/08/17 07:42	05/08/17 18:13	1
Terphenyl-d14 (Surr)	100		40 - 145				05/08/17 07:42	05/08/17 18:13	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
<b>Barium</b>	<b>0.15 J</b>		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 21:50	1
<b>Cadmium</b>	<b>0.0040 J</b>		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 21:50	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
<b>Copper</b>	<b>0.011 J</b>		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
<b>Lead</b>	<b>0.034 J</b>		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 21:50	1
<b>Nickel</b>	<b>0.024 J</b>		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 21:50	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:50	1
<b>Zinc</b>	<b>0.030 J</b>		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 21:50	1

## Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:15	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		40.0	40.0	Degrees F			05/11/17 20:00	1
Cyanide, Total	<0.13		0.37	0.13	mg/Kg		05/10/17 12:50	05/10/17 15:37	1
Sulfide	6.2 J		9.7	4.6	mg/Kg		05/15/17 17:36	05/15/17 21:51	1
pH	8.8		0.2	0.2	SU			05/09/17 16:06	1
Paint Filter	PASS				No Unit			05/11/17 22:43	1
Specific Gravity	1.1838				NONE			05/12/17 22:15	1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

Percent Solids: 89.3

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<16		27	16	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Benzene	<19		27	19	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Ethylbenzene	<20		27	20	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Methyl tert-butyl ether	<13		27	13	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Naphthalene	<130		270	130	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Toluene	<18		27	18	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Xylenes, Total	<32		80	32	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
Wisconsin GRO	<2700		5300	2700	ug/Kg	✉	05/05/17 15:52	05/10/17 07:37	1
<hr/>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 07:37	1
a,a,a-Trifluorotoluene	96		80 - 120				05/05/17 15:52	05/10/17 07:37	1

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.5		19	6.5	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1221	<8.1		19	8.1	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1232	<8.1		19	8.1	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1242	<6.1		19	6.1	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1248	<7.3		19	7.3	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1254	<4.0		19	4.0	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
PCB-1260	<9.1		19	9.1	ug/Kg	✉	05/09/17 16:38	05/10/17 14:06	1
<hr/>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	64		49 - 129				05/09/17 16:38	05/10/17 14:06	1
DCB Decachlorobiphenyl	78		37 - 121				05/09/17 16:38	05/10/17 14:06	1

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	4.9		4.4	1.8	mg/Kg	✉	05/04/17 11:15	05/05/17 16:49	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Nonane	71		44 - 148				05/04/17 11:15	05/05/17 16:49	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

Percent Solids: 89.3

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.52	0.24	mg/Kg	⌚	05/05/17 15:07	05/11/17 22:53	1

## Client Sample ID: Trip Blank

Date Collected: 05/01/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-26

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1-Dichloroethane	<21 *		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1-Dichloroethene	<20 *		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,1-Dichloropropene	<15		50	15	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2,3-Trichloropropane	<21		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dibromoethane	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dichloroethane	<20		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,2-Dichloropropene	<21		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,3-Dichloropropane	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
2,2-Dichloropropane	<22		50	22	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
2-Chlorotoluene	<16		50	16	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
4-Chlorotoluene	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Benzene	<7.3		13	7.3	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromobenzene	<18		50	18	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromochloromethane	<21 *		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromodichloromethane	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromoform	<24		50	24	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Bromomethane	<40		100	40	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Carbon tetrachloride	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Chlorobenzene	<19		50	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Chloroethane	<25		50	25	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Chloroform	<19 *		100	19	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Chloromethane	<16		50	16	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
cis-1,2-Dichloroethene	<20 *		50	20	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Dibromochloromethane	<24		50	24	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Dibromomethane	<14		50	14	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Dichlorodifluoromethane	<34		100	34	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Ethylbenzene	<9.2		13	9.2	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Hexachlorobutadiene	<22		50	22	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50
Isopropyl ether	<14		50	14	ug/Kg	⌚	05/01/17 00:00	05/15/17 15:55	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: Trip Blank**

Date Collected: 05/01/17 00:00

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-26**

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<19		50	19	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Methyl tert-butyl ether	<20 *		50	20	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Methylene Chloride	<82 *		250	82	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Naphthalene	<17 *		50	17	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
n-Butylbenzene	<19		50	19	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
N-Propylbenzene	<21		50	21	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
p-Isopropyltoluene	<18		50	18	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
sec-Butylbenzene	<20		50	20	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Styrene	<19 *		50	19	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
tert-Butylbenzene	<20		50	20	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Tetrachloroethene	<19		50	19	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Toluene	<7.4		13	7.4	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
trans-1,2-Dichloroethene	<18 *		50	18	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Trichloroethene	<8.2		25	8.2	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Trichlorofluoromethane	<21 *		50	21	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Vinyl chloride	<13 *		25	13	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
Xylenes, Total	<11		25	11	ug/Kg	⊗	05/01/17 00:00	05/15/17 15:55	50
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)		100		75 - 126			05/01/17 00:00	05/15/17 15:55	50
4-Bromofluorobenzene (Surr)		93		72 - 124			05/01/17 00:00	05/15/17 15:55	50
Dibromofluoromethane		101		75 - 120			05/01/17 00:00	05/15/17 15:55	50
Toluene-d8 (Surr)		95		75 - 120			05/01/17 00:00	05/15/17 15:55	50

TestAmerica Chicago



# SFA Labs

**TestAmerica Laboratories, Inc.**

Attention: Sandie Fredrick

2417 Bond St  
University Park, IL 44720

Date Received: 05/05/2017

Date Reported: 05/15/17 17:06

Client Project: Soil/Waste

Client Project ID: Soil/Waste

PO# 2669273

Project #: Soil/Waste

## Certificate of Analysis

This analytical test report shall not be reproduced, except in full, without written permission from Eurofins S-F Analytical Laboratories.

All quality control samples and checks were within acceptance limits unless otherwise indicated. Test results pertain only to those items tested. All samples were in good condition when received by the laboratory unless otherwise noted. All LOD/LOQs are adjusted to reflect dilutions.

DNR #	Analyte	Result Wet Wt.	LOD Wet Wt.	Result Dry Wt.	LOD Dry Wt.	LOQ Dry Wt.	Units	Dilution Factor	Date Prepared	Date Analyzed	Method	Notes											
<b>1705123-01 GP-05 (6-8) (500-127505-11)</b>																							
<b>Date Collected: 05/01/2017</b>																							
<b>Preparation:</b> SW-846 5050 1994																							
Chlorine as Cl		0.005	0.002	0.005	0.002	0.006	% Wt.	1	5/15/17	05/15/17	ASTM D808												
Solids		Result: 85.98			% Wt.			Analyzed By: YT09			SM2540G 1997												
<b>1705123-02 GP-07 (6-8) (500-127505-16)</b>																							
<b>Date Collected: 05/01/2017</b>																							
<b>Preparation:</b> SW-846 5050 1994																							
Chlorine as Cl		0.006	0.002	0.006	0.002	0.007	% Wt.	1	5/15/17	05/15/17	ASTM D808												
Solids		Result: 86.74			% Wt.			Analyzed By: YT09			SM2540G 1997												
<b>1705123-03 GP-11 (6-8) (500-127505-25)</b>																							
<b>Date Collected: 05/01/2017</b>																							
<b>Preparation:</b> SW-846 5050 1994																							
Chlorine as Cl		0.028	0.002	0.032	0.002	0.006	% Wt.	1	5/15/17	05/15/17	ASTM D808												
Solids		Result: 89.25			% Wt.			Analyzed By: YT09			SM2540G 1997												

This report was prepared and printed by:

Josh Rhein, Chemistry Operations Manager

Page 1 of 1

| Eurofins S-F Analytical Laboratories | 2345 South 170<sup>th</sup> Street | New Berlin, WI 53151 |

| Phone: (262) 754-5300 | Fax: (262) 754-5310 | eurofinsus.com | ESFA@eurofinsus.com |

# Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC 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.

### GC 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
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F3	Duplicate RPD exceeds the control limit

### General Chemistry

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.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

☒	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)

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## GC/MS VOA

### Prep Batch: 384046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	5035	
500-127505-7	GP-03 (6-8)	Total/NA	Solid	5035	
500-127505-8	GP-04 (2-4)	Total/NA	Solid	5035	
500-127505-9	GP-04 (6-8)	Total/NA	Solid	5035	
500-127505-10	GP-05 (2-4)	Total/NA	Solid	5035	
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI GRO	
500-127505-12	GP-05 (14-16)	Total/NA	Solid	5035	
500-127505-26	Trip Blank	Total/NA	Solid	5035	

### Leach Batch: 384086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	1311	
500-127505-16	GP-07 (6-8)	TCLP	Solid	1311	
500-127505-25	GP-11 (6-8)	TCLP	Solid	1311	
LB 500-384086/1-A	Method Blank	TCLP	Solid	1311	

### Analysis Batch: 384262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	8260B	
500-127505-16	GP-07 (6-8)	TCLP	Solid	8260B	
500-127505-25	GP-11 (6-8)	TCLP	Solid	8260B	
LB 500-384086/1-A	Method Blank	TCLP	Solid	8260B	
MB 500-384262/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-384262/4	Lab Control Sample	Total/NA	Solid	8260B	

### Analysis Batch: 385134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	8260B	
500-127505-7	GP-03 (6-8)	Total/NA	Solid	8260B	
500-127505-8	GP-04 (2-4)	Total/NA	Solid	8260B	
500-127505-9	GP-04 (6-8)	Total/NA	Solid	8260B	
500-127505-10	GP-05 (2-4)	Total/NA	Solid	8260B	
500-127505-11	GP-05 (6-8)	Total/NA	Solid	8260B	
500-127505-12	GP-05 (14-16)	Total/NA	Solid	8260B	
500-127505-26	Trip Blank	Total/NA	Solid	8260B	
MB 500-385134/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-385134/4	Lab Control Sample	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	1311	
500-127505-16	GP-07 (6-8)	TCLP	Solid	1311	
500-127505-25	GP-11 (6-8)	TCLP	Solid	1311	
LB 500-383992/1-B	Method Blank	TCLP	Solid	1311	
500-127505-11 MS	GP-05 (6-8)	TCLP	Solid	1311	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 384171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	3510C	383992
500-127505-16	GP-07 (6-8)	TCLP	Solid	3510C	383992
500-127505-25	GP-11 (6-8)	TCLP	Solid	3510C	383992
LB 500-383992/1-B	Method Blank	TCLP	Solid	3510C	383992
MB 500-384171/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	3510C	
500-127505-11 MS	GP-05 (6-8)	TCLP	Solid	3510C	383992

### Analysis Batch: 384241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	8270D	384171
500-127505-16	GP-07 (6-8)	TCLP	Solid	8270D	384171
500-127505-25	GP-11 (6-8)	TCLP	Solid	8270D	384171
LB 500-383992/1-B	Method Blank	TCLP	Solid	8270D	384171
MB 500-384171/1-A	Method Blank	Total/NA	Solid	8270D	384171
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	8270D	384171
500-127505-11 MS	GP-05 (6-8)	TCLP	Solid	8270D	384171

## GC VOA

### Prep Batch: 384046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI GRO	
LB3 500-384046/21-A	Method Blank	Total/NA	Solid	5035	
LCS 500-384046/23-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 500-384046/24-A	Lab Control Sample Dup	Total/NA	Solid	5035	

### Analysis Batch: 384093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI-GRO	384046
LB3 500-384046/21-A	Method Blank	Total/NA	Solid	WI-GRO	384046
LCS 500-384046/23-A	Lab Control Sample	Total/NA	Solid	WI-GRO	384046
LCSD 500-384046/24-A	Lab Control Sample Dup	Total/NA	Solid	WI-GRO	384046

### Prep Batch: 427841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-1	GP-01 (0-2)	Total/NA	Solid	WI GRO	
500-127505-2	GP-01 (6-8)	Total/NA	Solid	WI GRO	
500-127505-3	GP-02 (2-4)	Total/NA	Solid	WI GRO	
500-127505-4	GP-02 (6-8)	Total/NA	Solid	WI GRO	
500-127505-5	GP-02 (14-16)	Total/NA	Solid	WI GRO	
500-127505-13	GP-06 (2-4)	Total/NA	Solid	WI GRO	
500-127505-14	GP-06 (6-8)	Total/NA	Solid	WI GRO	
500-127505-15	GP-07 (2-4)	Total/NA	Solid	WI GRO	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	WI GRO	
500-127505-17	GP-07 (14-16)	Total/NA	Solid	WI GRO	
500-127505-18	GP-08 (2-4)	Total/NA	Solid	WI GRO	
500-127505-19	GP-08 (6-8)	Total/NA	Solid	WI GRO	
500-127505-20	GP-09 (2-4)	Total/NA	Solid	WI GRO	
500-127505-21	GP-09 (6-8)	Total/NA	Solid	WI GRO	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## GC VOA (Continued)

### Prep Batch: 427841 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-22	GP-10 (2-4)	Total/NA	Solid	WI GRO	
500-127505-23	GP-10 (6-8)	Total/NA	Solid	WI GRO	
500-127505-24	GP-11 (2-4)	Total/NA	Solid	WI GRO	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	WI GRO	
MB 490-427841/40-A	Method Blank	Total/NA	Solid	WI GRO	
LCS 490-427841/41-A	Lab Control Sample	Total/NA	Solid	WI GRO	
LCSD 490-427841/42-A	Lab Control Sample Dup	Total/NA	Solid	WI GRO	

### Analysis Batch: 428725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-1	GP-01 (0-2)	Total/NA	Solid	WDNR	427841
500-127505-2	GP-01 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-3	GP-02 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-4	GP-02 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-5	GP-02 (14-16)	Total/NA	Solid	WDNR	427841
500-127505-13	GP-06 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-14	GP-06 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-15	GP-07 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-16	GP-07 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-17	GP-07 (14-16)	Total/NA	Solid	WDNR	427841
500-127505-18	GP-08 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-19	GP-08 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-20	GP-09 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-21	GP-09 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-22	GP-10 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-23	GP-10 (6-8)	Total/NA	Solid	WDNR	427841
500-127505-24	GP-11 (2-4)	Total/NA	Solid	WDNR	427841
500-127505-25	GP-11 (6-8)	Total/NA	Solid	WDNR	427841
MB 490-427841/40-A	Method Blank	Total/NA	Solid	WDNR	427841
LCS 490-427841/41-A	Lab Control Sample	Total/NA	Solid	WDNR	427841
LCSD 490-427841/42-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	427841

## GC Semi VOA

### Prep Batch: 383737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI DRO PREP	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	WI DRO PREP	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	WI DRO PREP	
MB 500-383737/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	
LCS 500-383737/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-383737/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

### Analysis Batch: 383957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	WI-DRO	383737
500-127505-16	GP-07 (6-8)	Total/NA	Solid	WI-DRO	383737
500-127505-25	GP-11 (6-8)	Total/NA	Solid	WI-DRO	383737
MB 500-383737/1-A	Method Blank	Total/NA	Solid	WI-DRO	383737
LCS 500-383737/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	383737

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## GC Semi VOA (Continued)

### Analysis Batch: 383957 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 500-383737/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	383737

### Prep Batch: 384456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	3541	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	3541	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	3541	
MB 500-384456/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-384456/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 384545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	8082A	384456
500-127505-16	GP-07 (6-8)	Total/NA	Solid	8082A	384456
500-127505-25	GP-11 (6-8)	Total/NA	Solid	8082A	384456
MB 500-384456/1-A	Method Blank	Total/NA	Solid	8082A	384456
LCS 500-384456/2-A	Lab Control Sample	Total/NA	Solid	8082A	384456

## Metals

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	1311	
500-127505-16	GP-07 (6-8)	TCLP	Solid	1311	
500-127505-25	GP-11 (6-8)	TCLP	Solid	1311	
LB 500-383992/1-C	Method Blank	TCLP	Solid	1311	
LB 500-383992/1-D	Method Blank	TCLP	Solid	1311	

### Prep Batch: 383993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	3050B	
500-127505-7	GP-03 (6-8)	Total/NA	Solid	3050B	
500-127505-8	GP-04 (2-4)	Total/NA	Solid	3050B	
500-127505-9	GP-04 (6-8)	Total/NA	Solid	3050B	
500-127505-10	GP-05 (2-4)	Total/NA	Solid	3050B	
500-127505-11	GP-05 (6-8)	Total/NA	Solid	3050B	
500-127505-12	GP-05 (14-16)	Total/NA	Solid	3050B	
500-127505-18	GP-08 (2-4)	Total/NA	Solid	3050B	
500-127505-19	GP-08 (6-8)	Total/NA	Solid	3050B	
500-127505-20	GP-09 (2-4)	Total/NA	Solid	3050B	
500-127505-21	GP-09 (6-8)	Total/NA	Solid	3050B	
500-127505-22	GP-10 (2-4)	Total/NA	Solid	3050B	
500-127505-23	GP-10 (6-8)	Total/NA	Solid	3050B	
500-127505-24	GP-11 (2-4)	Total/NA	Solid	3050B	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	3050B	
MB 500-383993/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-383993/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-127505-25 MS	GP-11 (6-8)	Total/NA	Solid	3050B	
500-127505-25 MSD	GP-11 (6-8)	Total/NA	Solid	3050B	
500-127505-25 DU	GP-11 (6-8)	Total/NA	Solid	3050B	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Metals (Continued)

### Prep Batch: 384187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	3010A	383992
500-127505-16	GP-07 (6-8)	TCLP	Solid	3010A	383992
500-127505-25	GP-11 (6-8)	TCLP	Solid	3010A	383992
LB 500-383992/1-C	Method Blank	TCLP	Solid	3010A	383992
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Prep Batch: 384260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	7470A	383992
500-127505-16	GP-07 (6-8)	TCLP	Solid	7470A	383992
500-127505-25	GP-11 (6-8)	TCLP	Solid	7470A	383992
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	383992
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	

### Analysis Batch: 384328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	6010B	384187
500-127505-16	GP-07 (6-8)	TCLP	Solid	6010B	384187
500-127505-25	GP-11 (6-8)	TCLP	Solid	6010B	384187
LB 500-383992/1-C	Method Blank	TCLP	Solid	6010B	384187
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	6010B	384187

### Analysis Batch: 384394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	TCLP	Solid	7470A	384260
500-127505-16	GP-07 (6-8)	TCLP	Solid	7470A	384260
500-127505-25	GP-11 (6-8)	TCLP	Solid	7470A	384260
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	384260
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	384260
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	384260

### Analysis Batch: 384865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	6010B	383993
500-127505-7	GP-03 (6-8)	Total/NA	Solid	6010B	383993
500-127505-8	GP-04 (2-4)	Total/NA	Solid	6010B	383993
500-127505-9	GP-04 (6-8)	Total/NA	Solid	6010B	383993
500-127505-10	GP-05 (2-4)	Total/NA	Solid	6010B	383993
500-127505-11	GP-05 (6-8)	Total/NA	Solid	6010B	383993
500-127505-12	GP-05 (14-16)	Total/NA	Solid	6010B	383993
500-127505-18	GP-08 (2-4)	Total/NA	Solid	6010B	383993
500-127505-19	GP-08 (6-8)	Total/NA	Solid	6010B	383993
500-127505-20	GP-09 (2-4)	Total/NA	Solid	6010B	383993
500-127505-21	GP-09 (6-8)	Total/NA	Solid	6010B	383993
500-127505-22	GP-10 (2-4)	Total/NA	Solid	6010B	383993
500-127505-23	GP-10 (6-8)	Total/NA	Solid	6010B	383993
500-127505-24	GP-11 (2-4)	Total/NA	Solid	6010B	383993
500-127505-25	GP-11 (6-8)	Total/NA	Solid	6010B	383993
MB 500-383993/1-A	Method Blank	Total/NA	Solid	6010B	383993
LCS 500-383993/2-A	Lab Control Sample	Total/NA	Solid	6010B	383993

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Metals (Continued)

### Analysis Batch: 384865 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-25 MS	GP-11 (6-8)	Total/NA	Solid	6010B	383993
500-127505-25 MSD	GP-11 (6-8)	Total/NA	Solid	6010B	383993
500-127505-25 DU	GP-11 (6-8)	Total/NA	Solid	6010B	383993

## General Chemistry

### Analysis Batch: 383751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-6	GP-03 (2-4)	Total/NA	Solid	Moisture	
500-127505-7	GP-03 (6-8)	Total/NA	Solid	Moisture	
500-127505-8	GP-04 (2-4)	Total/NA	Solid	Moisture	
500-127505-9	GP-04 (6-8)	Total/NA	Solid	Moisture	
500-127505-10	GP-05 (2-4)	Total/NA	Solid	Moisture	
500-127505-11	GP-05 (6-8)	Total/NA	Solid	Moisture	
500-127505-12	GP-05 (14-16)	Total/NA	Solid	Moisture	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	Moisture	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	Moisture	
500-127505-26	Trip Blank	Total/NA	Solid	Moisture	
500-127505-8 DU	GP-04 (2-4)	Total/NA	Solid	Moisture	

### Analysis Batch: 384553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9045C	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9045C	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9045C	

### Prep Batch: 384580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9010B	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9010B	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9010B	
MB 500-384580/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-384580/2-A	Lab Control Sample	Total/NA	Solid	9010B	

### Analysis Batch: 384641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9014	384580
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9014	384580
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9014	384580
MB 500-384580/1-A	Method Blank	Total/NA	Solid	9014	384580
LCS 500-384580/2-A	Lab Control Sample	Total/NA	Solid	9014	384580

### Analysis Batch: 384855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9095A	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9095A	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9095A	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## General Chemistry (Continued)

### Analysis Batch: 384856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	1010	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	1010	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	1010	

### Analysis Batch: 385047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	SM 2710F	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	SM 2710F	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	SM 2710F	

### Prep Batch: 385245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9030B	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9030B	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9030B	
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9030B	

### Analysis Batch: 385402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-11	GP-05 (6-8)	Total/NA	Solid	9034	
500-127505-16	GP-07 (6-8)	Total/NA	Solid	9034	
500-127505-25	GP-11 (6-8)	Total/NA	Solid	9034	
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9034	
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9034	

### Analysis Batch: 427523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-1	GP-01 (0-2)	Total/NA	Solid	Moisture	
500-127505-2	GP-01 (6-8)	Total/NA	Solid	Moisture	
500-127505-3	GP-02 (2-4)	Total/NA	Solid	Moisture	
500-127505-4	GP-02 (6-8)	Total/NA	Solid	Moisture	
500-127505-5	GP-02 (14-16)	Total/NA	Solid	Moisture	
500-127505-13	GP-06 (2-4)	Total/NA	Solid	Moisture	
500-127505-14	GP-06 (6-8)	Total/NA	Solid	Moisture	
500-127505-15	GP-07 (2-4)	Total/NA	Solid	Moisture	
500-127505-17	GP-07 (14-16)	Total/NA	Solid	Moisture	
500-127505-18	GP-08 (2-4)	Total/NA	Solid	Moisture	
500-127505-19	GP-08 (6-8)	Total/NA	Solid	Moisture	
500-127505-20	GP-09 (2-4)	Total/NA	Solid	Moisture	
500-127505-21	GP-09 (6-8)	Total/NA	Solid	Moisture	
500-127505-22	GP-10 (2-4)	Total/NA	Solid	Moisture	
500-127505-4 DU	GP-02 (6-8)	Total/NA	Solid	Moisture	

### Analysis Batch: 427540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127505-23	GP-10 (6-8)	Total/NA	Solid	Moisture	
500-127505-24	GP-11 (2-4)	Total/NA	Solid	Moisture	
500-127505-23 DU	GP-10 (6-8)	Total/NA	Solid	Moisture	
500-127505-24 DU	GP-11 (2-4)	Total/NA	Solid	Moisture	

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127505-6	GP-03 (2-4)	97	89	101	94
500-127505-7	GP-03 (6-8)	97	91	100	94
500-127505-8	GP-04 (2-4)	98	92	99	94
500-127505-9	GP-04 (6-8)	100	93	102	94
500-127505-10	GP-05 (2-4)	98	90	100	94
500-127505-11	GP-05 (6-8)	97	92	99	95
500-127505-12	GP-05 (14-16)	98	92	101	93
500-127505-26	Trip Blank	100	93	101	95
LCS 500-384262/4	Lab Control Sample	103	109	93	102
LCS 500-385134/4	Lab Control Sample	87	90	94	96
MB 500-384262/6	Method Blank	105	114	89	100
MB 500-385134/6	Method Blank	91	94	97	96

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127505-11	GP-05 (6-8)	103	110	89	101
500-127505-16	GP-07 (6-8)	104	108	90	101
500-127505-25	GP-11 (6-8)	105	114	91	100
LB 500-384086/1-A	Method Blank	104	110	89	97

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
LCS 500-384171/2-A	Lab Control Sample	98	87	61	92	44	103
MB 500-384171/1-A	Method Blank	90	90	65	97	43	107

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

PHL = Phenol-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
500-127505-11	GP-05 (6-8)	90	86	59	95	42	104
500-127505-11 MS	GP-05 (6-8)	96	83	58	90	40	104
500-127505-16	GP-07 (6-8)	87	87	60	96	41	103
500-127505-25	GP-11 (6-8)	86	86	57	93	40	100
LB 500-383992/1-B	Method Blank	90	84	56	94	39	104

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TFT (80-120)	TFT (80-120)				
500-127505-1	GP-01 (0-2)	87	87				
500-127505-2	GP-01 (6-8)	88	88				
500-127505-3	GP-02 (2-4)	91	91				
500-127505-4	GP-02 (6-8)	89	89				
500-127505-5	GP-02 (14-16)	92	92				
500-127505-13	GP-06 (2-4)	86	86				
500-127505-14	GP-06 (6-8)	91	91				
500-127505-15	GP-07 (2-4)	88	88				
500-127505-16	GP-07 (6-8)	91	91				
500-127505-17	GP-07 (14-16)	90	90				
500-127505-18	GP-08 (2-4)	91	91				
500-127505-19	GP-08 (6-8)	91	91				
500-127505-20	GP-09 (2-4)	90	90				
500-127505-21	GP-09 (6-8)	90	90				
500-127505-22	GP-10 (2-4)	91	91				
500-127505-23	GP-10 (6-8)	91	91				
500-127505-24	GP-11 (2-4)	95	95				
500-127505-25	GP-11 (6-8)	91	91				
LCS 490-427841/41-A	Lab Control Sample	96	96				
LCSD 490-427841/42-A	Lab Control Sample Dup	97	97				
MB 490-427841/40-A	Method Blank	88	88				

### Surrogate Legend

TFT = a,a,a-Trifluorotoluene

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (49-129)	DCB1 (37-121)
500-127505-11	GP-05 (6-8)	61	62
500-127505-16	GP-07 (6-8)	68	67
500-127505-25	GP-11 (6-8)	64	78
LCS 500-384456/2-A	Lab Control Sample	76	63
MB 500-384456/1-A	Method Blank	76	70

### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		C9 (44-148)	
500-127505-11	GP-05 (6-8)	69	
500-127505-16	GP-07 (6-8)	77	
500-127505-25	GP-11 (6-8)	71	
LCS 500-383737/2-A	Lab Control Sample	77	
LCSD 500-383737/3-A	Lab Control Sample Dup	71	
MB 500-383737/1-A	Method Blank	83	

### Surrogate Legend

C9 = n-Nonane

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID:** MB 500-384262/6

**Matrix:** Solid

**Analysis Batch:** 384262

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Methyl Ethyl Ketone	<0.0025		0.0050	0.0025	mg/L			05/08/17 22:32	1
1,2-Dichloroethane	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Benzene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Carbon tetrachloride	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Chlorobenzene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Chloroform	<0.0010		0.0020	0.0010	mg/L			05/08/17 22:32	1
Tetrachloroethylene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Trichloroethylene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Vinyl chloride	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	105		75 - 126				05/08/17 22:32	1
4-Bromofluorobenzene (Surr)	114		72 - 124				05/08/17 22:32	1
Dibromofluoromethane	89		75 - 120				05/08/17 22:32	1
Toluene-d8 (Surr)	100		75 - 120				05/08/17 22:32	1

**Lab Sample ID:** LCS 500-384262/4

**Matrix:** Solid

**Analysis Batch:** 384262

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	MB	MB	Spike Added	LCN	LCN	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene			0.0500	0.0449		mg/L		90	67 - 122
Methyl Ethyl Ketone			0.0500	0.0524		mg/L		105	53 - 141
1,2-Dichloroethane			0.0500	0.0504		mg/L		101	68 - 127
Benzene			0.0500	0.0479		mg/L		96	70 - 120
Carbon tetrachloride			0.0500	0.0453		mg/L		91	65 - 122
Chlorobenzene			0.0500	0.0500		mg/L		100	70 - 120
Chloroform			0.0500	0.0455		mg/L		91	70 - 120
Tetrachloroethylene			0.0500	0.0518		mg/L		104	70 - 128
Trichloroethylene			0.0500	0.0488		mg/L		98	70 - 125
Vinyl chloride			0.0500	0.0415		mg/L		83	64 - 126

**LCS LCS**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					
4-Bromofluorobenzene (Surr)	109		72 - 124					
Dibromofluoromethane	93		75 - 120					
Toluene-d8 (Surr)	102		75 - 120					

**Lab Sample ID:** MB 500-385134/6

**Matrix:** Solid

**Analysis Batch:** 385134

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,1,1,2-Tetrachloroethane	<0.46		1.0		0.46	ug/Kg				05/15/17 11:01	1
1,1,1-Trichloroethane	<0.38		1.0		0.38	ug/Kg				05/15/17 11:01	1
1,1,2,2-Tetrachloroethane	<0.40		1.0		0.40	ug/Kg				05/15/17 11:01	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: MB 500-385134/6**

**Matrix: Solid**

**Analysis Batch: 385134**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.35				1.0	0.35	ug/Kg			05/15/17 11:01	1
1,1-Dichloroethane	<0.41				1.0	0.41	ug/Kg			05/15/17 11:01	1
1,1-Dichloroethene	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
1,1-Dichloropropene	<0.30				1.0	0.30	ug/Kg			05/15/17 11:01	1
1,2,3-Trichlorobenzene	<0.46				1.0	0.46	ug/Kg			05/15/17 11:01	1
1,2,3-Trichloropropane	<0.41				1.0	0.41	ug/Kg			05/15/17 11:01	1
1,2,4-Trichlorobenzene	<0.34				1.0	0.34	ug/Kg			05/15/17 11:01	1
1,2,4-Trimethylbenzene	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
1,2-Dibromo-3-Chloropropane	<2.0				5.0	2.0	ug/Kg			05/15/17 11:01	1
1,2-Dibromoethane	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
1,2-Dichlorobenzene	<0.33				1.0	0.33	ug/Kg			05/15/17 11:01	1
1,2-Dichloroethane	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
1,2-Dichloropropene	<0.43				1.0	0.43	ug/Kg			05/15/17 11:01	1
1,3,5-Trimethylbenzene	<0.38				1.0	0.38	ug/Kg			05/15/17 11:01	1
1,3-Dichlorobenzene	<0.40				1.0	0.40	ug/Kg			05/15/17 11:01	1
1,3-Dichloropropane	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
1,4-Dichlorobenzene	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
2,2-Dichloropropane	<0.44				1.0	0.44	ug/Kg			05/15/17 11:01	1
2-Chlorotoluene	<0.31				1.0	0.31	ug/Kg			05/15/17 11:01	1
4-Chlorotoluene	<0.35				1.0	0.35	ug/Kg			05/15/17 11:01	1
Benzene	<0.15				0.25	0.15	ug/Kg			05/15/17 11:01	1
Bromobenzene	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
Bromochloromethane	<0.43				1.0	0.43	ug/Kg			05/15/17 11:01	1
Bromodichloromethane	<0.37				1.0	0.37	ug/Kg			05/15/17 11:01	1
Bromoform	<0.48				1.0	0.48	ug/Kg			05/15/17 11:01	1
Bromomethane	<0.80				2.0	0.80	ug/Kg			05/15/17 11:01	1
Carbon tetrachloride	<0.38				1.0	0.38	ug/Kg			05/15/17 11:01	1
Chlorobenzene	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
Chloroethane	<0.50				1.0	0.50	ug/Kg			05/15/17 11:01	1
Chloroform	<0.37				2.0	0.37	ug/Kg			05/15/17 11:01	1
Chloromethane	<0.32				1.0	0.32	ug/Kg			05/15/17 11:01	1
cis-1,2-Dichloroethene	<0.41				1.0	0.41	ug/Kg			05/15/17 11:01	1
cis-1,3-Dichloropropene	<0.42				1.0	0.42	ug/Kg			05/15/17 11:01	1
Dibromochloromethane	<0.49				1.0	0.49	ug/Kg			05/15/17 11:01	1
Dibromomethane	<0.27				1.0	0.27	ug/Kg			05/15/17 11:01	1
Dichlorodifluoromethane	<0.67				2.0	0.67	ug/Kg			05/15/17 11:01	1
Ethylbenzene	<0.18				0.25	0.18	ug/Kg			05/15/17 11:01	1
Hexachlorobutadiene	<0.45				1.0	0.45	ug/Kg			05/15/17 11:01	1
Isopropyl ether	<0.28				1.0	0.28	ug/Kg			05/15/17 11:01	1
Isopropylbenzene	<0.38				1.0	0.38	ug/Kg			05/15/17 11:01	1
Methyl tert-butyl ether	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
Methylene Chloride	<1.6				5.0	1.6	ug/Kg			05/15/17 11:01	1
Naphthalene	<0.33				1.0	0.33	ug/Kg			05/15/17 11:01	1
n-Butylbenzene	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1
N-Propylbenzene	<0.41				1.0	0.41	ug/Kg			05/15/17 11:01	1
p-Isopropyltoluene	<0.36				1.0	0.36	ug/Kg			05/15/17 11:01	1
sec-Butylbenzene	<0.40				1.0	0.40	ug/Kg			05/15/17 11:01	1
Styrene	<0.39				1.0	0.39	ug/Kg			05/15/17 11:01	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: MB 500-385134/6**

**Matrix: Solid**

**Analysis Batch: 385134**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			05/15/17 11:01	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			05/15/17 11:01	1
Toluene	<0.15		0.25	0.15	ug/Kg			05/15/17 11:01	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			05/15/17 11:01	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			05/15/17 11:01	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			05/15/17 11:01	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			05/15/17 11:01	1
Vinyl chloride	<0.26		0.50	0.26	ug/Kg			05/15/17 11:01	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			05/15/17 11:01	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	91		75 - 126		05/15/17 11:01	1
4-Bromofluorobenzene (Surr)	94		72 - 124		05/15/17 11:01	1
Dibromofluoromethane	97		75 - 120		05/15/17 11:01	1
Toluene-d8 (Surr)	96		75 - 120		05/15/17 11:01	1

**Lab Sample ID: LCS 500-385134/4**

**Matrix: Solid**

**Analysis Batch: 385134**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
1,1,1,2-Tetrachloroethane	50.0	50.0		ug/Kg		100	70 - 125	
1,1,1-Trichloroethane	50.0	41.0		ug/Kg		82	70 - 125	
1,1,2,2-Tetrachloroethane	50.0	46.1		ug/Kg		92	67 - 127	
1,1,2-Trichloroethane	50.0	48.9		ug/Kg		98	70 - 122	
1,1-Dichloroethane	50.0	42.3		ug/Kg		85	70 - 125	
1,1-Dichloroethene	50.0	39.3		ug/Kg		79	67 - 122	
1,1-Dichloropropene	50.0	42.4		ug/Kg		85	70 - 121	
1,2,3-Trichlorobenzene	50.0	41.2		ug/Kg		82	55 - 140	
1,2,3-Trichloropropane	50.0	39.9		ug/Kg		80	50 - 133	
1,2,4-Trichlorobenzene	50.0	41.1		ug/Kg		82	66 - 127	
1,2,4-Trimethylbenzene	50.0	48.3		ug/Kg		97	70 - 123	
1,2-Dibromo-3-Chloropropane	50.0	37.3		ug/Kg		75	56 - 123	
1,2-Dibromoethane	50.0	47.1		ug/Kg		94	70 - 125	
1,2-Dichlorobenzene	50.0	49.2		ug/Kg		98	70 - 125	
1,2-Dichloroethane	50.0	42.6		ug/Kg		85	68 - 127	
1,2-Dichloropropane	50.0	47.4		ug/Kg		95	67 - 130	
1,3,5-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 123	
1,3-Dichlorobenzene	50.0	49.1		ug/Kg		98	70 - 125	
1,3-Dichloropropane	50.0	46.7		ug/Kg		93	62 - 136	
1,4-Dichlorobenzene	50.0	49.2		ug/Kg		98	70 - 120	
2,2-Dichloropropane	50.0	33.2		ug/Kg		66	58 - 129	
2-Chlorotoluene	50.0	46.0		ug/Kg		92	70 - 125	
4-Chlorotoluene	50.0	45.5		ug/Kg		91	68 - 124	
Benzene	50.0	42.5		ug/Kg		85	70 - 120	
Bromobenzene	50.0	48.3		ug/Kg		97	70 - 122	
Bromochloromethane	50.0	48.0		ug/Kg		96	65 - 122	
Bromodichloromethane	50.0	42.2		ug/Kg		84	69 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: LCS 500-385134/4**

**Matrix: Solid**

**Analysis Batch: 385134**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Bromoform	50.0	51.4		ug/Kg		103	56 - 132		
Bromomethane	50.0	55.6		ug/Kg		111	40 - 130		
Carbon tetrachloride	50.0	41.9		ug/Kg		84	65 - 122		
Chlorobenzene	50.0	49.0		ug/Kg		98	70 - 120		
Chloroethane	50.0	42.1		ug/Kg		84	45 - 127		
Chloroform	50.0	42.5		ug/Kg		85	70 - 120		
Chloromethane	50.0	46.0		ug/Kg		92	54 - 147		
cis-1,2-Dichloroethene	50.0	44.5		ug/Kg		89	70 - 125		
cis-1,3-Dichloropropene	50.0	41.4		ug/Kg		83	64 - 127		
Dibromochloromethane	50.0	49.8		ug/Kg		100	68 - 125		
Dibromomethane	50.0	44.5		ug/Kg		89	70 - 120		
Dichlorodifluoromethane	50.0	35.6		ug/Kg		71	40 - 150		
Ethylbenzene	50.0	48.1		ug/Kg		96	70 - 120		
Hexachlorobutadiene	50.0	49.1		ug/Kg		98	51 - 150		
Isopropylbenzene	50.0	47.3		ug/Kg		95	70 - 126		
Methyl tert-butyl ether	50.0	34.9		ug/Kg		70	70 - 120		
Methylene Chloride	50.0	40.1		ug/Kg		80	69 - 125		
Naphthalene	50.0	37.0		ug/Kg		74	59 - 130		
n-Butylbenzene	50.0	45.8		ug/Kg		92	68 - 125		
N-Propylbenzene	50.0	46.4		ug/Kg		93	69 - 127		
p-Isopropyltoluene	50.0	47.4		ug/Kg		95	70 - 125		
sec-Butylbenzene	50.0	48.1		ug/Kg		96	70 - 123		
Styrene	50.0	48.9		ug/Kg		98	70 - 120		
tert-Butylbenzene	50.0	47.8		ug/Kg		96	70 - 121		
Tetrachloroethene	50.0	48.8		ug/Kg		98	70 - 128		
Toluene	50.0	45.1		ug/Kg		90	70 - 125		
trans-1,2-Dichloroethene	50.0	43.0		ug/Kg		86	70 - 125		
trans-1,3-Dichloropropene	50.0	40.6		ug/Kg		81	62 - 128		
Trichloroethene	50.0	48.5		ug/Kg		97	70 - 125		
Trichlorofluoromethane	50.0	41.5		ug/Kg		83	70 - 126		
Vinyl chloride	50.0	47.6		ug/Kg		95	64 - 126		
Xylenes, Total	100	91.7		ug/Kg		92	70 - 125		

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	87		75 - 126
4-Bromofluorobenzene (Surr)	90		72 - 124
Dibromofluoromethane	94		75 - 120
Toluene-d8 (Surr)	96		75 - 120

**Lab Sample ID: LB 500-384086/1-A**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/08/17 23:25	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20
Benzene	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: LB 500-384086/1-A**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20
Chlorobenzene	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20
Chloroform	<0.020		0.040		0.020	mg/L			05/08/17 23:25		20
Tetrachloroethene	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20
Trichloroethene	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20
Vinyl chloride	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20

Surrogate	LB	LB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126				05/08/17 23:25	20
4-Bromofluorobenzene (Surr)	110		72 - 124				05/08/17 23:25	20
Dibromofluoromethane	89		75 - 120				05/08/17 23:25	20
Toluene-d8 (Surr)	97		75 - 120				05/08/17 23:25	20

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

**Lab Sample ID: MB 500-384171/1-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 384171**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.0020		0.0020		0.0020	mg/L			05/08/17 07:42	05/08/17 15:01	1
2,4,5-Trichlorophenol	<0.010		0.010		0.010	mg/L			05/08/17 07:42	05/08/17 15:01	1
2,4,6-Trichlorophenol	<0.0050		0.0050		0.0050	mg/L			05/08/17 07:42	05/08/17 15:01	1
2,4-Dinitrotoluene	<0.0010		0.0010		0.0010	mg/L			05/08/17 07:42	05/08/17 15:01	1
2-Methylphenol	<0.0020		0.0020		0.0020	mg/L			05/08/17 07:42	05/08/17 15:01	1
3 & 4 Methylphenol	<0.0020		0.0020		0.0020	mg/L			05/08/17 07:42	05/08/17 15:01	1
Hexachlorobenzene	<0.00050		0.00050		0.00050	mg/L			05/08/17 07:42	05/08/17 15:01	1
Hexachlorobutadiene	<0.0050		0.0050		0.0050	mg/L			05/08/17 07:42	05/08/17 15:01	1
Hexachloroethane	<0.0050		0.0050		0.0050	mg/L			05/08/17 07:42	05/08/17 15:01	1
Nitrobenzene	<0.0010		0.0010		0.0010	mg/L			05/08/17 07:42	05/08/17 15:01	1
Pentachlorophenol	<0.020		0.020		0.020	mg/L			05/08/17 07:42	05/08/17 15:01	1
Pyridine	<0.020		0.020		0.020	mg/L			05/08/17 07:42	05/08/17 15:01	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
2,4,6-Tribromophenol (Surr)	90		40 - 145				05/08/17 07:42	05/08/17 15:01	1
2-Fluorobiphenyl	90		34 - 110				05/08/17 07:42	05/08/17 15:01	1
2-Fluorophenol (Surr)	65		27 - 110				05/08/17 07:42	05/08/17 15:01	1
Nitrobenzene-d5 (Surr)	97		36 - 120				05/08/17 07:42	05/08/17 15:01	1
Phenol-d5 (Surr)	43		20 - 100				05/08/17 07:42	05/08/17 15:01	1
Terphenyl-d14 (Surr)	107		40 - 145				05/08/17 07:42	05/08/17 15:01	1

**Lab Sample ID: LCS 500-384171/2-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 384171**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits
	Added								
1,4-Dichlorobenzene	0.0400			0.0322		mg/L	81	23 - 110	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: LCS 500-384171/2-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384171**

**%Rec.**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
2,4,5-Trichlorophenol	0.0400	0.0388		mg/L		97	63 - 120
2,4,6-Trichlorophenol	0.0400	0.0393		mg/L		98	62 - 110
2,4-Dinitrotoluene	0.0400	0.0432		mg/L		108	63 - 122
2-Methylphenol	0.0400	0.0342		mg/L		86	53 - 110
3 & 4 Methylphenol	0.0400	0.0329		mg/L		82	53 - 110
Hexachlorobenzene	0.0400	0.0375		mg/L		94	61 - 120
Hexachlorobutadiene	0.0400	0.0315		mg/L		79	20 - 100
Hexachloroethane	0.0400	0.0314		mg/L		79	20 - 100
Nitrobenzene	0.0400	0.0359		mg/L		90	53 - 110
Pentachlorophenol	0.0800	0.0779		mg/L		97	23 - 129
Pyridine	0.0400	0.0259		mg/L		65	15 - 110

Surrogate	LCS	LCS	<b>Limits</b>
	<b>%Recovery</b>	<b>Qualifier</b>	
2,4,6-Tribromophenol (Surr)	98		40 - 145
2-Fluorobiphenyl	87		34 - 110
2-Fluorophenol (Surr)	61		27 - 110
Nitrobenzene-d5 (Surr)	92		36 - 120
Phenol-d5 (Surr)	44		20 - 100
Terphenyl-d14 (Surr)	103		40 - 145

**Lab Sample ID: LB 500-383992/1-B**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384171**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 14:34	1
2-Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 14:34	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 14:34	1
Pyridine	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 14:34	1

Surrogate	LB	LB	<b>Limits</b>	Prepared	Analyzed	Dil Fac
	<b>%Recovery</b>	<b>Qualifier</b>		Prepared	Analyzed	
2,4,6-Tribromophenol (Surr)	90		40 - 145	05/08/17 07:42	05/08/17 14:34	1
2-Fluorobiphenyl	84		34 - 110	05/08/17 07:42	05/08/17 14:34	1
2-Fluorophenol (Surr)	56		27 - 110	05/08/17 07:42	05/08/17 14:34	1
Nitrobenzene-d5 (Surr)	94		36 - 120	05/08/17 07:42	05/08/17 14:34	1
Phenol-d5 (Surr)	39		20 - 100	05/08/17 07:42	05/08/17 14:34	1
Terphenyl-d14 (Surr)	104		40 - 145	05/08/17 07:42	05/08/17 14:34	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

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

**Lab Sample ID: 500-127505-11 MS**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: GP-05 (6-8)**

**Prep Type: TCLP**

**Prep Batch: 384171**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,4-Dichlorobenzene	<0.020		0.400	0.325		mg/L	81	23 - 110	
2,4,5-Trichlorophenol	<0.10		0.400	0.399		mg/L	100	63 - 120	
2,4,6-Trichlorophenol	<0.050		0.400	0.383		mg/L	96	62 - 110	
2,4-Dinitrotoluene	<0.010		0.400	0.431		mg/L	108	63 - 122	
2-Methylphenol	<0.020		0.400	0.339		mg/L	85	53 - 110	
3 & 4 Methylphenol	<0.020		0.400	0.316		mg/L	79	53 - 110	
Hexachlorobenzene	<0.0050		0.400	0.375		mg/L	94	61 - 120	
Hexachlorobutadiene	<0.050		0.400	0.313		mg/L	78	20 - 100	
Hexachloroethane	<0.050		0.400	0.319		mg/L	80	20 - 100	
Nitrobenzene	<0.010		0.400	0.366		mg/L	91	53 - 110	
Pentachlorophenol	<0.20		0.800	0.777		mg/L	97	23 - 129	
Pyridine	<0.20		0.400	0.252		mg/L	63	15 - 110	
<b>Surrogate</b>		<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>					
2,4,6-Tribromophenol (Sur)	96			40 - 145					
2-Fluorobiphenyl	83			34 - 110					
2-Fluorophenol (Sur)	58			27 - 110					
Nitrobenzene-d5 (Sur)	90			36 - 120					
Phenol-d5 (Sur)	40			20 - 100					
Terphenyl-d14 (Sur)	104			40 - 145					

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID: MB 490-427841/40-A**

**Matrix: Solid**

**Analysis Batch: 428725**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<18		25	18	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Ethylbenzene	<19		25	19	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Naphthalene	<120		250	120	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Toluene	<17		25	17	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Xylenes, Total	<30		75	30	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
Wisconsin GRO	<2500		5000	2500	ug/Kg		05/06/17 12:45	05/09/17 23:08	1
<b>Surrogate</b>		<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>					
a,a,a-Trifluorotoluene	88			80 - 120					
a,a,a-Trifluorotoluene	98			80 - 120					

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID: LCS 490-427841/41-A**

**Matrix: Solid**

**Analysis Batch: 428725**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Benzene	5000	4490		ug/Kg		90	76 - 120	
Ethylbenzene	5000	4530		ug/Kg		91	77 - 120	
Methyl tert-butyl ether	5000	5200		ug/Kg		104	73 - 120	
1,2,4-Trimethylbenzene	5000	4540		ug/Kg		91	60 - 140	
Naphthalene	5000	5460		ug/Kg		109	74 - 127	
1,3,5-Trimethylbenzene	5000	4580		ug/Kg		92	74 - 133	
Toluene	5000	4540		ug/Kg		91	79 - 120	
Wisconsin GRO	50000	52600		ug/Kg		105	80 - 120	
<b>Surrogate</b>		<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
a,a,a-Trifluorotoluene		96		80 - 120				
a,a,a-Trifluorotoluene		102		80 - 120				

**Lab Sample ID: LCSD 490-427841/42-A**

**Matrix: Solid**

**Analysis Batch: 428725**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
Benzene	5000	4750		ug/Kg		95	76 - 120	6	27
Ethylbenzene	5000	4630		ug/Kg		93	77 - 120	2	49
Methyl tert-butyl ether	5000	5360		ug/Kg		107	73 - 120	3	31
1,2,4-Trimethylbenzene	5000	4700		ug/Kg		94	60 - 140	3	50
Naphthalene	5000	5190		ug/Kg		104	74 - 127	5	50
1,3,5-Trimethylbenzene	5000	4740		ug/Kg		95	74 - 133	4	42
Toluene	5000	4780		ug/Kg		96	79 - 120	5	37
Wisconsin GRO	50000	53700		ug/Kg		107	80 - 120	2	20
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>					
a,a,a-Trifluorotoluene		97		80 - 120					
a,a,a-Trifluorotoluene		99		80 - 120					

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID: LB3 500-384046/21-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<500		1500	500	ug/Kg		05/06/17 01:30	05/07/17 20:24	50

**Lab Sample ID: LCS 500-384046/23-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
WI Gasoline Range Organics (C5-C10)	20000	22800		ug/Kg		114	80 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Lab Sample ID: LCSD 500-384046/24-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD RPD	RPD Limit
WI Gasoline Range Organics (C5-C10)	20000	22900		ug/Kg		114	80 - 120	0	20

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 500-384456/1-A**

**Matrix: Solid**

**Analysis Batch: 3844545**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1221	<7.3		17	7.3	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1232	<7.3		17	7.3	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1242	<5.5		17	5.5	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1248	<6.6		17	6.6	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1254	<3.6		17	3.6	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1260	<8.2		17	8.2	ug/Kg		05/09/17 16:38	05/10/17 11:02	1

### MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		49 - 129	05/09/17 16:38	05/10/17 11:02	1
DCB Decachlorobiphenyl	70		37 - 121	05/09/17 16:38	05/10/17 11:02	1

**Lab Sample ID: LCS 500-384456/2-A**

**Matrix: Solid**

**Analysis Batch: 3844545**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	Dil Fac
PCB-1016	167	135		ug/Kg		81	57 - 120	
PCB-1260	167	130		ug/Kg		78	61 - 125	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	76		49 - 129
DCB Decachlorobiphenyl	63		37 - 121

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

**Lab Sample ID: MB 500-383737/1-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.6	4.0		mg/Kg		05/04/17 11:15	05/05/17 14:27	1
n-Nonane	83	44 - 148				05/04/17 11:15	05/05/17 14:27	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC) (Continued)

**Lab Sample ID: LCS 500-383737/2-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
WI Diesel Range Organics (C10-C28)	20.0	14.9		mg/Kg	75	70 - 120	
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
n-Nonane	77		44 - 148				

**Lab Sample ID: LCSD 500-383737/3-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD
WI Diesel Range Organics (C10-C28)	20.0	16.3		mg/Kg	81	70 - 120		9
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>					
n-Nonane	71		44 - 148					

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 500-383993/1-A**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 383993**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.23		0.50	0.23	mg/Kg	0	05/05/17 15:07	05/11/17 21:41	1

**Lab Sample ID: LCS 500-383993/2-A**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 383993**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Lead	10.0	8.59		mg/Kg	86	80 - 120	

**Lab Sample ID: 500-127505-25 MS**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: GP-11 (6-8)**

**Prep Type: Total/NA**

**Prep Batch: 383993**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Lead	11		10.1	20.6		mg/Kg	0	90	75 - 125

**Lab Sample ID: 500-127505-25 MSD**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: GP-11 (6-8)**

**Prep Type: Total/NA**

**Prep Batch: 383993**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Lead	11		10.2	24.1		mg/Kg	0	124	75 - 125	16

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-127505-25 DU**

**Matrix: Solid**

**Analysis Batch: 384865**

**Client Sample ID: GP-11 (6-8)**

**Prep Type: Total/NA**

**Prep Batch: 383993**

**RPD**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Lead	11		21.6	F3	mg/Kg	※	61	20

**Lab Sample ID: LCS 500-384187/2-A**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384187**

**%Rec.**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Arsenic	0.100	0.0958		mg/L	96	80 - 120	
Barium	0.500	0.514		mg/L	103	80 - 120	
Cadmium	0.0500	0.0503		mg/L	101	80 - 120	
Chromium	0.200	0.194		mg/L	97	80 - 120	
Copper	0.250	0.254		mg/L	102	80 - 120	
Lead	0.100	0.0943		mg/L	94	80 - 120	
Nickel	0.500	0.486		mg/L	97	80 - 120	
Selenium	0.100	0.0946		mg/L	95	80 - 120	
Silver	0.0500	0.0473		mg/L	95	80 - 120	
Zinc	0.500	0.457		mg/L	91	80 - 120	

**Lab Sample ID: LB 500-383992/1-C**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384187**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.010		0.050	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Barium	<0.050		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 20:33	1
Cadmium	<0.0020		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 20:33	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Copper	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Lead	<0.0075		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 20:33	1
Nickel	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 20:33	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Zinc	<0.020		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 20:33	1

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-384260/12-A**

**Matrix: Solid**

**Analysis Batch: 384394**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384260**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:03	1

**Lab Sample ID: LCS 500-384260/13-A**

**Matrix: Solid**

**Analysis Batch: 384394**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384260**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Mercury	0.00200	0.00212		mg/L	106	80 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Lab Sample ID: LB 500-383992/1-D**

**Matrix: Solid**

**Analysis Batch: 384394**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384260**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	D	05/08/17 13:40	05/09/17 10:06	1

## Method: 9014 - Cyanide

**Lab Sample ID: MB 500-384580/1-A**

**Matrix: Solid**

**Analysis Batch: 384641**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384580**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.17		0.50	0.17	mg/Kg	D	05/10/17 12:50	05/10/17 15:33	1

**Lab Sample ID: LCS 500-384580/2-A**

**Matrix: Solid**

**Analysis Batch: 384641**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384580**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Cyanide, Total	5.00	5.00		mg/Kg	D	100	80 - 120

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

**Lab Sample ID: MB 500-385245/1-A**

**Matrix: Solid**

**Analysis Batch: 385402**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 385245**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<4.7		10	4.7	mg/Kg	D	05/15/17 17:36	05/15/17 21:39	1

**Lab Sample ID: LCS 500-385245/2-A**

**Matrix: Solid**

**Analysis Batch: 385402**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 385245**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfide	338	335		mg/Kg	D	99	80 - 120

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

**Client Sample ID: GP-01 (0-2)**

Date Collected: 05/01/17 08:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

**Client Sample ID: GP-01 (0-2)**

Date Collected: 05/01/17 08:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-1**

Matrix: Solid

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/09/17 23:35	FKG	TAL NSH

**Client Sample ID: GP-01 (6-8)**

Date Collected: 05/01/17 08:45

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

**Client Sample ID: GP-01 (6-8)**

Date Collected: 05/01/17 08:45

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-2**

Matrix: Solid

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 00:02	FKG	TAL NSH

**Client Sample ID: GP-02 (2-4)**

Date Collected: 05/01/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

**Client Sample ID: GP-02 (2-4)**

Date Collected: 05/01/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-3**

Matrix: Solid

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 00:28	FKG	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-02 (6-8)**

Date Collected: 05/01/17 09:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-02 (6-8)**

Date Collected: 05/01/17 09:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-4**

Matrix: Solid

Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 00:55	FKG	TAL NSH

## **Client Sample ID: GP-02 (14-16)**

Date Collected: 05/01/17 09:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-5**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-02 (14-16)**

Date Collected: 05/01/17 09:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-5**

Matrix: Solid

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 08:30	FKG	TAL NSH

## **Client Sample ID: GP-03 (2-4)**

Date Collected: 05/01/17 10:10

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-6**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-03 (2-4)**

Date Collected: 05/01/17 10:10

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-6**

Matrix: Solid

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 10:10	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 12:30	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 21:48	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-03 (6-8)**

**Date Collected:** 05/01/17 10:15  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-7**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-03 (6-8)**

**Date Collected:** 05/01/17 10:15  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-7**

**Matrix:** Solid  
**Percent Solids:** 87.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 10:15	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 12:59	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 21:52	PJ1	TAL CHI

## **Client Sample ID: GP-04 (2-4)**

**Date Collected:** 05/01/17 10:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-8**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-04 (2-4)**

**Date Collected:** 05/01/17 10:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-8**

**Matrix:** Solid  
**Percent Solids:** 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 10:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 13:28	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 21:56	PJ1	TAL CHI

## **Client Sample ID: GP-04 (6-8)**

**Date Collected:** 05/01/17 10:40  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-9**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-04 (6-8)**

**Date Collected:** 05/01/17 10:40  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-9**

**Matrix:** Solid  
**Percent Solids:** 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 10:40	WRE	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-04 (6-8)

Date Collected: 05/01/17 10:40  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-9

Matrix: Solid  
Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	385134	05/15/17 13:58	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:01	PJ1	TAL CHI

## Client Sample ID: GP-05 (2-4)

Date Collected: 05/01/17 11:00  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## Client Sample ID: GP-05 (2-4)

Date Collected: 05/01/17 11:00  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-10

Matrix: Solid  
Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 11:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 14:27	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:05	PJ1	TAL CHI

## Client Sample ID: GP-05 (6-8)

Date Collected: 05/01/17 11:10  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			384086	05/06/17 13:35	RMP	TAL CHI
TCLP	Analysis	8260B		20	384262	05/09/17 00:42	JMP	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3510C			384171	05/08/17 07:42	JJH	TAL CHI
TCLP	Analysis	8270D		1	384241	05/08/17 15:28	GES	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3010A			384187	05/08/17 08:10	JEF	TAL CHI
TCLP	Analysis	6010B		1	384328	05/08/17 21:40	PJ1	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	7470A			384260	05/08/17 13:40	MJD	TAL CHI
TCLP	Analysis	7470A		1	384394	05/09/17 10:12	MJD	TAL CHI
Total/NA	Analysis	1010		1	384856		ADK	TAL CHI
					(Start) 05/11/17 16:20			
					(End) 05/11/17 18:10			
Total/NA	Prep	9010B			384580	05/10/17 12:50	MAN	TAL CHI
Total/NA	Analysis	9014		1	384641		MAN	TAL CHI
					(Start) 05/10/17 15:36			
					(End) 05/10/17 15:37			

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			385245	05/15/17 17:36	JBJ	TAL CHI
Total/NA	Analysis	9034		1	385402	05/15/17 21:48	JBJ	TAL CHI
Total/NA	Analysis	9045C		1	384553	(Start) 05/09/17 16:02	SMO	TAL CHI
						(End) 05/09/17 16:04		
Total/NA	Analysis	9095A		1	384855		ADK	TAL CHI
						(Start) 05/11/17 22:39		
						(End) 05/11/17 22:41		
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI
Total/NA	Analysis	SM 2710F		1	385047	(Start) 05/12/17 22:07	ADK	TAL CHI
						(End) 05/12/17 22:11		

**Client Sample ID: GP-05 (6-8)**

Date Collected: 05/01/17 11:10

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-11**

Matrix: Solid

Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			384046	05/01/17 11:10	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 14:56	TCT	TAL CHI
Total/NA	Prep	WI GRO			384046	05/01/17 11:10	WRE	TAL CHI
Total/NA	Analysis	WI-GRO		50	384093	05/07/17 21:31	WRE	TAL CHI
Total/NA	Prep	3541			384456	05/09/17 16:38	JP1	TAL CHI
Total/NA	Analysis	8082A		1	384545	05/10/17 13:35	BJH	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 15:38	SAW	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:09	PJ1	TAL CHI

**Client Sample ID: GP-05 (14-16)**

Date Collected: 05/01/17 11:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-12**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

**Client Sample ID: GP-05 (14-16)**

Date Collected: 05/01/17 11:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127505-12**

Matrix: Solid

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 11:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 15:25	TCT	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:14	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-06 (2-4)**

**Date Collected:** 05/01/17 12:00  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-13**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-06 (2-4)**

**Date Collected:** 05/01/17 12:00  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-13**

**Matrix:** Solid

**Percent Solids:** 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 01:22	FKG	TAL NSH

## **Client Sample ID: GP-06 (6-8)**

**Date Collected:** 05/01/17 12:05  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-14**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-06 (6-8)**

**Date Collected:** 05/01/17 12:05  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-14**

**Matrix:** Solid

**Percent Solids:** 84.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 01:49	FKG	TAL NSH

## **Client Sample ID: GP-07 (2-4)**

**Date Collected:** 05/01/17 12:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-15**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-07 (2-4)**

**Date Collected:** 05/01/17 12:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-15**

**Matrix:** Solid

**Percent Solids:** 79.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 02:15	FKG	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			384086	05/06/17 13:35	RMP	TAL CHI
TCLP	Analysis	8260B		20	384262	05/09/17 01:09	JMP	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3510C			384171	05/08/17 07:42	JJH	TAL CHI
TCLP	Analysis	8270D		1	384241	05/08/17 17:46	GES	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3010A			384187	05/08/17 08:10	JEF	TAL CHI
TCLP	Analysis	6010B		1	384328	05/08/17 21:45	PJ1	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	7470A			384260	05/08/17 13:40	MJD	TAL CHI
TCLP	Analysis	7470A		1	384394	05/09/17 10:13	MJD	TAL CHI
Total/NA	Analysis	1010		1	384856		ADK	TAL CHI
					(Start) 05/11/17 18:10			
					(End) 05/11/17 20:00			
Total/NA	Prep	9010B			384580	05/10/17 12:50	MAN	TAL CHI
Total/NA	Analysis	9014		1	384641		MAN	TAL CHI
					(Start) 05/10/17 15:37			
					(End) 05/10/17 15:37			
Total/NA	Prep	9030B			385245	05/15/17 17:36	JBJ	TAL CHI
Total/NA	Analysis	9034		1	385402	05/15/17 21:49	JBJ	TAL CHI
Total/NA	Analysis	9045C		1	384553		SMO	TAL CHI
					(Start) 05/09/17 16:04			
					(End) 05/09/17 16:06			
Total/NA	Analysis	9095A		1	384855		ADK	TAL CHI
					(Start) 05/11/17 22:41			
					(End) 05/11/17 22:43			
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI
Total/NA	Analysis	SM 2710F		1	385047		ADK	TAL CHI
					(Start) 05/12/17 22:11			
					(End) 05/12/17 22:15			

## Client Sample ID: GP-07 (6-8)

Date Collected: 05/01/17 12:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-16

Matrix: Solid

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 02:42	FKG	TAL NSH
Total/NA	Prep	3541			384456	05/09/17 16:38	JP1	TAL CHI
Total/NA	Analysis	8082A		1	384545	05/10/17 13:50	BJH	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 16:14	SAW	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-07 (14-16)**

**Date Collected:** 05/01/17 12:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-17**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-07 (14-16)**

**Date Collected:** 05/01/17 12:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-17**

**Matrix:** Solid

**Percent Solids:** 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 03:09	FKG	TAL NSH

## **Client Sample ID: GP-08 (2-4)**

**Date Collected:** 05/01/17 13:45  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-18**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-08 (2-4)**

**Date Collected:** 05/01/17 13:45  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-18**

**Matrix:** Solid

**Percent Solids:** 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 08:04	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:19	PJ1	TAL CHI

## **Client Sample ID: GP-08 (6-8)**

**Date Collected:** 05/01/17 13:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-19**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-08 (6-8)**

**Date Collected:** 05/01/17 13:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127505-19**

**Matrix:** Solid

**Percent Solids:** 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 03:36	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-08 (6-8)**

Date Collected: 05/01/17 13:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-19**

Matrix: Solid

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	384865	05/11/17 22:31	PJ1	TAL CHI

## **Client Sample ID: GP-09 (2-4)**

Date Collected: 05/01/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-20**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-09 (2-4)**

Date Collected: 05/01/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-20**

Matrix: Solid

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 05:23	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:35	PJ1	TAL CHI

## **Client Sample ID: GP-09 (6-8)**

Date Collected: 05/01/17 14:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-21**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

## **Client Sample ID: GP-09 (6-8)**

Date Collected: 05/01/17 14:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-21**

Matrix: Solid

Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 05:50	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:40	PJ1	TAL CHI

## **Client Sample ID: GP-10 (2-4)**

Date Collected: 05/01/17 14:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-22**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427523	05/04/17 14:50	BAA	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## **Client Sample ID: GP-10 (2-4)**

Date Collected: 05/01/17 14:35  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-22**

Matrix: Solid  
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 06:16	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:44	PJ1	TAL CHI

## **Client Sample ID: GP-10 (6-8)**

Date Collected: 05/01/17 14:40  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-23**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-10 (6-8)**

Date Collected: 05/01/17 14:40  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-23**

Matrix: Solid  
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 06:43	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:47	PJ1	TAL CHI

## **Client Sample ID: GP-11 (2-4)**

Date Collected: 05/01/17 15:00  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-24**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-11 (2-4)**

Date Collected: 05/01/17 15:00  
Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127505-24**

Matrix: Solid  
Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 07:10	FKG	TAL NSH
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:50	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			384086	05/06/17 13:35	RMP	TAL CHI
TCLP	Analysis	8260B		20	384262	05/09/17 01:35	JMP	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3510C			384171	05/08/17 07:42	JJH	TAL CHI
TCLP	Analysis	8270D		1	384241	05/08/17 18:13	GES	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3010A			384187	05/08/17 08:10	JEF	TAL CHI
TCLP	Analysis	6010B		1	384328	05/08/17 21:50	PJ1	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	7470A			384260	05/08/17 13:40	MJD	TAL CHI
TCLP	Analysis	7470A		1	384394	05/09/17 10:15	MJD	TAL CHI
Total/NA	Analysis	1010		1	384856		ADK	TAL CHI
					(Start) 05/11/17 20:00			
					(End) 05/11/17 21:50			
Total/NA	Prep	9010B			384580	05/10/17 12:50	MAN	TAL CHI
Total/NA	Analysis	9014		1	384641		MAN	TAL CHI
					(Start) 05/10/17 15:37			
					(End) 05/10/17 15:37			
Total/NA	Prep	9030B			385245	05/15/17 17:36	JBJ	TAL CHI
Total/NA	Analysis	9034		1	385402	05/15/17 21:51	JBJ	TAL CHI
Total/NA	Analysis	9045C		1	384553		SMO	TAL CHI
					(Start) 05/09/17 16:06			
					(End) 05/09/17 16:08			
Total/NA	Analysis	9095A		1	384855		ADK	TAL CHI
					(Start) 05/11/17 22:43			
					(End) 05/11/17 22:45			
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI
Total/NA	Analysis	SM 2710F		1	385047		ADK	TAL CHI
					(Start) 05/12/17 22:15			
					(End) 05/12/17 22:19			

## Client Sample ID: GP-11 (6-8)

Date Collected: 05/01/17 15:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-25

Matrix: Solid

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428725	05/10/17 07:37	FKG	TAL NSH
Total/NA	Prep	3541			384456	05/09/17 16:38	JP1	TAL CHI
Total/NA	Analysis	8082A		1	384545	05/10/17 14:06	BJH	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 16:49	SAW	TAL CHI
Total/NA	Prep	3050B			383993	05/05/17 15:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384865	05/11/17 22:53	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

## Client Sample ID: Trip Blank

Date Collected: 05/01/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## Client Sample ID: Trip Blank

Date Collected: 05/01/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127505-26

Matrix: Solid

Percent Solids: 100.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/01/17 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385134	05/15/17 15:55	TCT	TAL CHI

### Laboratory References:

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

## Accreditation/Certification Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127505-1

### Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

### Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998020430	08-31-17

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To	(optional)
Contact:	
Company:	
Address:	
Address:	
Phone:	
Fax:	
E-Mail:	

Bill To	(optional)
Contact:	
Company:	
Address:	
Address:	
Phone:	
Fax:	
PO#/Reference#	

## Chain of Custody Record

Lab Job #: 500-127505

Chain of Custody Number:

Page 1 of 3

Temperature °C of Cooler: (3.9)(3.3)

Client TRC	Client Project # BSI 275788	Preservative	1	1	8									Preservative Key 1. HCl, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
			Parameter												
Project Name STH 11 Kentucky to Kearney	Project Location/State Fracine, WI	Lab Project #													
Sampler M. Kehrlas	Lab PM														
														Comments	
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Process Step	Vol/s	Lead						
1		GP-01 (0-2)	5/1	835	2	S	X								
2		GP-01 (6-8)		845	2		X								
3		GP-02 (2-4)		915	2		X								
4		GP-02 (6-8)		925	2		X								
5		GP-02 (14-16)		930	2		X								
6		GP-03 (2-4)		1010	3		X		X						
7		GP-03 (6-8)		1015	3		X		X						
8		GP-04 (2-4)		1035	3		X		X						
9		GP-04 (6-8)		1040	3		X		X						
10		GP-05 (2-4)		1100	3		X		X						

Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company TRC	Date 5/01/17	Time 1630	Received By 	Company TA	Date 05/03/17	Time 0900	Lab Courier <input type="checkbox"/>
Relinquished By 	Company	Date	Time	Received By 	Company	Date	Time	Shipped <input type="checkbox"/>
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered <input type="checkbox"/>

Matrix Key  
WW - Wastewater  
W - Water  
S - Soil  
SL - Sludge  
MS - Miscellaneous  
OL - Oil  
A - Air  
SE - Sediment  
SO - Soil  
L - Leachate  
WI - Wipe  
DW - Drinking Water  
O - Other

Client Comments

Lab Comments:



500-127505 COC

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To  Contact:  Company:  Address:  Address:  Phone:  Fax:  E-Mail:	(optional)	Bill To  Contact:  Company:  Address:  Address:  Phone:  Fax:  PO#/Reference#	(optional)
<b>Chain of Custody Record</b>			
Lab Job #: <u>500-127505</u>			
Chain of Custody Number: _____			
Page <u>2</u> of <u>3</u>			
Temperature °C of Cooler: _____			

## **Chain of Custody Record**

Lab Job #: 500-127505

Chain of Custody Number: \_\_\_\_\_

Page 2 of 3

Temperature °C of Cooler: \_\_\_\_\_

Client	Client Project #	Preservative	1	1	8	1	8	8				Preservative Key	
TRL	275788											1. HCl, Cool to 4°	
Project Name	STH II - Kentucky to Kearney	Parameter										2. H2SO4, Cool to 4°	
Project Location/State	Racine, WI	Lab Project #										3. HNO3, Cool to 4°	
Sampler	M. Venitius	Lab PM										4. NaOH, Cool to 4°	
Lab ID	MS/MSD	Sample ID	Date	Time	# of Containers	Matrix	Process	Vapors	Load	GPO	Deco	Protocol B	Comments
11		GP-05 (6-3)	5/01	1110	4	S	X	X	X	X	X	X	
12		GP-05 (14-16)		1120	3		X	X	X				
13		GP-06 (2-4)		1200	2		X	X					
14		GP-06 (6-8)		1205	2		X	X					
15		GP-07 (2-4)		1230	2		X	X					
16		GP-07 (6-8)		1235	4		X	X		X	X	X	
17		GP-07 (14-16)		1250	2		X	X					
18		GP-08 (2-4)		1345	3		X	X	X				
19		GP-08 (6-8)		1350	3		X	X	X				
20		GP-09 (2-4)	↓	1420	3	↓	X	X					

### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
Requested Due Date

## Sample Disposal

[Return to Client](#)

### Disposal by Lab

Archive for \_\_\_\_\_ Month

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company TRC	Date 5/01/17	Time 1630	Received By 	Company TA	Date 05/03/17	Time 0900	Lab Courier <input type="checkbox"/>
Relinquished By 	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By 	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Shipped <input type="checkbox"/>
Relinquished By 	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By 	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Hand Delivered <input type="checkbox"/>

Matrix Key	Client Comments	Lab Comments:
WW – Wastewater	SE – Sediment	
W – Water	SO – Soil	
S – Soil	L – Leachate	
SL – Sludge	WI – Wipe	
MS – Miscellaneous	DW – Drinking Water	
OL – Oil	O – Other	
A – Air		

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To Contact: _____	(optional)
Company: _____	Bill To Contact: _____
Address: _____	Company: _____
Address: _____	Address: _____
Phone: _____	Address: _____
Fax: _____	Phone: _____
E-Mail: _____	Fax: _____
	PO#/Reference# _____

## ***Chain of Custody Record***

Lab Job #: 500-127505

Chain of Custody Number:

Page 3 of 3

Temperature °C of Cooler:

#### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
Requested Due Date

## Sample Disposal

Return to Client  Disposal by Lab  Archive for Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company TRE	Date 5/01/17	Time 1630	Received By 	Company TA	Date 05/03/17	Time 0900	Lab Courier <input type="text"/>
Relinquished By 	Company <input type="text"/>	Date <input type="text"/>	Time <input type="text"/>	Received By 	Company <input type="text"/>	Date <input type="text"/>	Time <input type="text"/>	Shipped <input type="text"/>
Relinquished By 	Company <input type="text"/>	Date <input type="text"/>	Time <input type="text"/>	Received By 	Company <input type="text"/>	Date <input type="text"/>	Time <input type="text"/>	Hand Delivered <input type="text"/>

Matrix Key	
WW - Wastewater	SE - Sediment
W - Water	SO - Soil
S - Soil	L - Leachate
SL - Sludge	WI - Wipe
MS - Miscellaneous	DW - Drinking Wat
OL - Oil	O - Other
A - Air	

## **Client Comments**

**Lab Comments:**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16

PRINT USING THIS PAGE

ORIGIN/ARRLIA (262) 901-2153  
MIRANDA KARRIAS  
TRC ENVIRONMENTAL  
150 N PATRICK BLVD, SUITE 180  
BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DATE: 01 MAY 17  
ACT/NGT: 25.00 LB  
CAD: 110326482/NET3850  
BILL RECIPIENT

ORIGIN/ARRLIA (262) 901-2153  
MIRANDA KARRIAS  
TRC ENVIRONMENTAL  
150 N PATRICK BLVD, SUITE 180  
BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DATE: 01 MAY 17  
ACT/NGT: 25.00 LB  
CAD: 110326482/NET3850  
BILL RECIPIENT

TO ATTN: SAMPLE RECEIVING  
TEST AMERICA - CHICAGO

2417 BOND ST



546J1873453C1

UNIVERSITY PARK IL 60484  
(708) 534-5200  
REF: 500-127505 Waybill  
PO: DEPT:



J171117021401uv

UNIVERSITY PARK IL 60484  
(708) 534-5200  
REF: 500-127505 Waybill  
PO: DEPT:



J171117021401uv

546J1873453C1

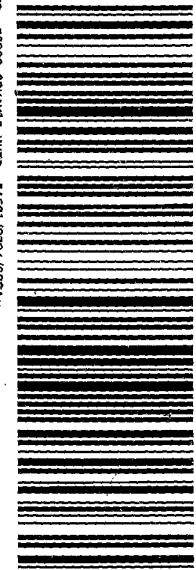
TUE - 02 MAY 10:30A  
1 of 2  
PRIORITY OVERNIGHT

FedEx

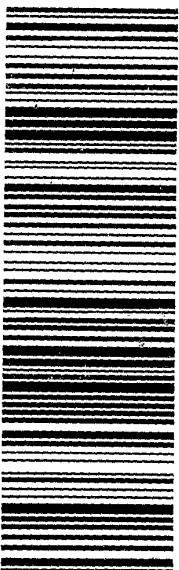
TUE - 02 MAY 10:30A  
TRK# 7790 3027 5856  
[0201]

MPS# 0263 7790 3027 6782  
Mstr# 7790 3027 5856  
[0201]

79 JOTA  
60484  
IL-US  
ORD



FID 76300 02MAY17 MKER 546C1/8734/08284



TUE - 02 MAY 10:30A  
2 of 2  
PRIORITY OVERNIGHT

60484  
IL-US  
ORD



THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN

## COOLER RECEIPT FORM



Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 13:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front / back

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) HG

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 # \_\_\_\_\_

I certify that I unloaded the cooler and answered questions 7-14 (initial) SJ

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) SJ

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) SJ

I certify that I attached a label with the unique LIMS number to each container (initial) SJ

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES  NO # \_\_\_\_\_





THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN



500-127505-02 Chain of Custody

## COOLER RECEIPT FORM

Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 13:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front/back

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) HG

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 # B

I certify that I unloaded the cooler and answered questions 7-14 (initial) B

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) B

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) B

I certify that I attached a label with the unique LIMS number to each container (initial) B

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO # \_\_\_\_\_

TestAmerica Chicago

2417 Bond Street  
University Park, IL 60484

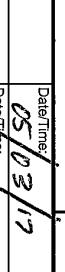
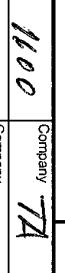
## Chain of Custody Record

Loc: 500  
**127505**

**TestAmerica**

THE LEANER ENVIRONMENT: TESTING

Phone (708) 534-5200 Fax (708) 534-5211

Client Information (Sub Contract Lab)		Sampler:		Lab P/M:		COC No:	
Client Contact: TestAmerica Laboratories, Inc		Phone:		Fredrick, Sandie J		500-867-08-2	
Shipping/Receiving Address:		Email:		State Program - Wisconsin		Page:	
2960 Foster Creighton Drive, Nashville TN, 37204		sandie.frederick@testamericainc.com		Accreditations Required (See note): State Program - Wisconsin		2 of 2	
Phone:		Project Name: STH 11 Kentucky to Kearney - 275788 Site:					
Site:							
Analysis Requested							
Field Filtered Sample (Yes or No)							
Perform MS/MSD (Yes or No)							
Moisture/ Percent Moisture/Solids							
WI_GRO/WIGRO_P_FM PVOC+NAP							
Total Number of containers							
Special Instructions>Note:							
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=water, S=solid, O=organic), Br=Trace, Ac=Acetone	Preservation Code:	
GP-07 (14-16) (500-127505-17)		5/1/17	12:50	Solid		X	X
GP-08 (2-4) (500-127505-18)		5/1/17	13:45	Solid		X	X
GP-08 (6-8) (500-127505-19)		5/1/17	13:50	Solid		X	X
GP-09 (2-4) (500-127505-20)		5/1/17	14:20	Solid		X	X
GP-09 (6-8) (500-127505-21)		5/1/17	14:25	Solid		X	X
GP-10 (2-4) (500-127505-22)		5/1/17	14:35	Solid		X	X
GP-10 (6-8) (500-127505-23)		5/1/17	14:40	Solid		X	X
GP-11 (2-4) (500-127505-24)		5/1/17	15:00	Solid		X	X
GP-11 (6-8) (500-127505-25)		5/1/17	15:05	Solid		X	X
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc places the ownership of method, analysis & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I							
Possible Hazard Identification Unconfirmed		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					
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2		Special Instructions/QC Requirements:			
Empty Kit Relinquished by: 		Date:	Time:	Method of Shipment:			
Relinquished by: 		Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by: 		Date/Time:	Company	Received by:	Date/Time:	Company	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: S. 417 2045 141			

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

### Possible Hazard Identification

### Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:

Relinquished by:

Relinquished by

卷之三

- 1 -

Custody Seals Intact: Custody Seal No.:

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127505-1

**Login Number:** 127505

**List Source:** TestAmerica Chicago

**List Number:** 1

**Creator:** Kelsey, Shawn M

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True		6
The cooler's custody seal, if present, is intact.	True		7
Sample custody seals, if present, are intact.	True		8
The cooler or samples do not appear to have been compromised or tampered with.	True		9
Samples were received on ice.	True		10
Cooler Temperature is acceptable.	True		11
Cooler Temperature is recorded.	True	(3.9)(3.3)c	12
COC is present.	True		13
COC is filled out in ink and legible.	True		14
COC is filled out with all pertinent information.	True		15
Is the Field Sampler's name present on COC?	True		16
There are no discrepancies between the containers received and the COC.	True		
Samples are received within Holding Time (excluding tests with immediate HTs)	True		
Sample containers have legible labels.	True		
Containers are not broken or leaking.	True		
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	True		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127505-1

**Login Number:** 127505

**List Number:** 2

**Creator:** Shaw, Rashard M

**List Source:** TestAmerica Nashville

**List Creation:** 05/04/17 02:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127505-1

**Login Number:** 127505

**List Number:** 3

**Creator:** Shaw, Rashard M

**List Source:** TestAmerica Nashville

**List Creation:** 05/04/17 02:20 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-127508-1

Client Project/Site: STH 11 Kentucky to Kearney - 275788

For:

TRC Environmental Corporation.

150 N. Patrick Blvd.

Suite 180

Brookfield, Wisconsin 53045

Attn: Mr. Bryan Bergmann

Sandie Fredrick

Authorized for release by:

5/17/2017 4:26:59 PM

Sandie Fredrick, Project Manager II

(920)261-1660

[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://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
Case Narrative .....	3
Detection Summary .....	4
Method Summary .....	8
Sample Summary .....	9
Client Sample Results .....	10
Subcontract Data .....	35
Definitions .....	36
QC Association .....	37
Surrogate Summary .....	45
QC Sample Results .....	48
Chronicle .....	62
Certification Summary .....	75
Chain of Custody .....	76
Receipt Checklists .....	87

# Case Narrative

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Job ID: 500-127508-1

### Laboratory: TestAmerica Chicago

#### Narrative

##### Job Narrative 500-127508-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 5/3/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.2° C and 5.4° C.

#### GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for the soil preparation batch 384046 recovered outside control limits for 12 analytes. These analytes were biased high in the preparation batch LCS, but were within limits in the analytical batch LCS; therefore, the data has been reported.

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

#### GC/MS Semi VOA

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

#### GC VOA

Method(s) WI-GRO: The continuing calibration verification (CCV) associated with batch 490-428992 recovered above the upper control limit for Naphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCV 490-428992/15).

Method(s) WI-GRO: Surrogate recovery for the following sample was outside control limits: GP-21 (6-8) (500-127508-21). Evidence of matrix interference is present; 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.

#### GC Semi VOA

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

#### Metals

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

#### General Chemistry

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

#### Subcontract non-Sister

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

#### Organic Prep

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

#### VOA Prep

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

#### Subcontract Work

Method % Chlorine: This method was subcontracted to SF Analytical Laboratories. The subcontract laboratory certification is different from that of the facility issuing the final report.

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-12 (2-4)

## Lab Sample ID: 500-127508-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	19	F1	0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-12 (6-8)

## Lab Sample ID: 500-127508-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	36		31	18	ug/Kg	1	⊗	WDNR	Total/NA
Lead	9.7		0.57	0.26	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-13 (2-4)

## Lab Sample ID: 500-127508-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	16		0.58	0.27	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-13 (6-8)

## Lab Sample ID: 500-127508-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-14 (2-4)

## Lab Sample ID: 500-127508-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	51		18	11	ug/Kg	50	⊗	8260B	Total/NA
Lead	15		0.58	0.27	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-14 (6-8)

## Lab Sample ID: 500-127508-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	16		0.65	0.30	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-15 (2-4)

## Lab Sample ID: 500-127508-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.8		0.49	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-15 (6-8)

## Lab Sample ID: 500-127508-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.5		0.51	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-16 (2-4)

## Lab Sample ID: 500-127508-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	22	J	30	18	ug/Kg	1	⊗	WDNR	Total/NA
Lead	16		0.56	0.26	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-16 (6-8)

## Lab Sample ID: 500-127508-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.5		0.56	0.26	mg/Kg	1	⊗	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-17 (2-4)

## Lab Sample ID: 500-127508-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.1		0.51	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-17 (6-8)

## Lab Sample ID: 500-127508-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.6		0.57	0.27	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-18 (2-4)

## Lab Sample ID: 500-127508-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	10		0.48	0.22	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-18 (6-8)

## Lab Sample ID: 500-127508-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	7.3		0.51	0.24	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-19 (2-4)

## Lab Sample ID: 500-127508-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	23		0.45	0.21	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-19 (6-8)

## Lab Sample ID: 500-127508-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		0.58	0.27	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-20 (2-4)

## Lab Sample ID: 500-127508-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	16	J	27	16	ug/Kg	1	⊗	WDNR	Total/NA

## Client Sample ID: GP-20 (6-8)

## Lab Sample ID: 500-127508-18

No Detections.

## Client Sample ID: GP-20 (14-16)

## Lab Sample ID: 500-127508-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	79		30	21	ug/Kg	1	⊗	WDNR	Total/NA
Naphthalene	440		300	140	ug/Kg	1	⊗	WDNR	Total/NA
1,3,5-Trimethylbenzene	25	J	30	18	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	36	J	89	36	ug/Kg	1	⊗	WDNR	Total/NA

## Client Sample ID: GP-21 (2-4)

## Lab Sample ID: 500-127508-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	94		31	22	ug/Kg	1	⊗	WDNR	Total/NA
Ethylbenzene	35		31	24	ug/Kg	1	⊗	WDNR	Total/NA
Methyl tert-butyl ether	160		31	15	ug/Kg	1	⊗	WDNR	Total/NA
Naphthalene	510		310	150	ug/Kg	1	⊗	WDNR	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-21 (2-4) (Continued)

## Lab Sample ID: 500-127508-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	25	J	31	21	ug/Kg	1	⊗	WDNR	Total/NA
1,2,4-Trimethylbenzene	62		31	19	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	61	J	94	37	ug/Kg	1	⊗	WDNR	Total/NA

## Client Sample ID: GP-21 (6-8)

## Lab Sample ID: 500-127508-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2600		31	19	ug/Kg	1	⊗	WDNR	Total/NA
1,3,5-Trimethylbenzene	1000		31	19	ug/Kg	1	⊗	WDNR	Total/NA
Benzene	610		31	23	ug/Kg	1	⊗	WDNR	Total/NA
Ethylbenzene	7200		31	24	ug/Kg	1	⊗	WDNR	Total/NA
Methyl tert-butyl ether	17	J	31	15	ug/Kg	1	⊗	WDNR	Total/NA
Naphthalene	55000		6300	3000	ug/Kg	20	⊗	WDNR	Total/NA
Toluene	590		31	21	ug/Kg	1	⊗	WDNR	Total/NA
Xylenes, Total	2500		94	38	ug/Kg	1	⊗	WDNR	Total/NA
Wisconsin GRO	2000000		130000	63000	ug/Kg	20	⊗	WDNR	Total/NA

## Client Sample ID: GP-22 (2-4)

## Lab Sample ID: 500-127508-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	91		33	20	ug/Kg	1	⊗	WDNR	Total/NA
Lead	44		0.50	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-22 (6-8)

## Lab Sample ID: 500-127508-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.4		0.48	0.22	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-23 (2-4)

## Lab Sample ID: 500-127508-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.9		0.51	0.23	mg/Kg	1	⊗	6010B	Total/NA

## Client Sample ID: GP-23 (6-8)

## Lab Sample ID: 500-127508-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	170	J	290	140	ug/Kg	1	⊗	WDNR	Total/NA
Lead	7.7		0.50	0.23	mg/Kg	1	⊗	6010B	Total/NA
Barium	0.44	J	0.50	0.050	mg/L	1		6010B	TCLP
Nickel	0.022	J	0.025	0.010	mg/L	1		6010B	TCLP
Flashpoint	>176		40.0	40.0	Degrees F	1		1010	Total/NA
Cyanide, Total	0.28	J	0.41	0.14	mg/Kg	1		9014	Total/NA
pH	9.0		0.2	0.2	SU	1		9045C	Total/NA
Paint Filter	PASS				No Unit	1		9095A	Total/NA
Specific Gravity	2.2442				NONE	1		SM 2710F	Total/NA

## Client Sample ID: GP-24 (2-4)

## Lab Sample ID: 500-127508-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	27	V F1	0.54	0.25	mg/Kg	1	⊗	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

### **Client Sample ID: GP-24 (6-8)**

### **Lab Sample ID: 500-127508-27**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		0.53	0.25	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-25 (2-4)**

### **Lab Sample ID: 500-127508-28**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	15		0.52	0.24	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: GP-25 (6-8)**

### **Lab Sample ID: 500-127508-29**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	120		72	28	ug/Kg	50	⊗	8260B	Total/NA
Naphthalene	150	*	72	24	ug/Kg	50	⊗	8260B	Total/NA
N-Propylbenzene	620		72	30	ug/Kg	50	⊗	8260B	Total/NA
WI Gasoline Range Organics (C5-C10)	350000		43000	14000	ug/Kg	1000	⊗	WI-GRO	Total/NA
WI Diesel Range Organics (C10-C28)	22		7.0	2.8	mg/Kg	1	⊗	WI-DRO	Total/NA
Lead	26		0.55	0.26	mg/Kg	1	⊗	6010B	Total/NA

### **Client Sample ID: Trip Blank**

### **Lab Sample ID: 500-127508-30**

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
WI-GRO	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL CHI
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL CHI
9014	Cyanide	SW846	TAL CHI
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL CHI
9045C	pH	SW846	TAL CHI
9095A	Paint Filter	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL NSH
Moisture	Percent Moisture	EPA	TAL CHI
SM 2710F	Specific Gravity, Density	SM	TAL CHI
% Chlorine	General Sub Contract Method	NONE	SFAL

**Protocol References:**

EPA = US Environmental Protection Agency

NONE = NONE

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

**Laboratory References:**

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Sample Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
500-127508-1	GP-12 (2-4)	Solid	05/02/17 08:25	05/03/17 09:00	1
500-127508-2	GP-12 (6-8)	Solid	05/02/17 08:30	05/03/17 09:00	2
500-127508-3	GP-13 (2-4)	Solid	05/02/17 09:15	05/03/17 09:00	3
500-127508-4	GP-13 (6-8)	Solid	05/02/17 09:20	05/03/17 09:00	4
500-127508-5	GP-14 (2-4)	Solid	05/02/17 09:30	05/03/17 09:00	5
500-127508-6	GP-14 (6-8)	Solid	05/02/17 09:35	05/03/17 09:00	6
500-127508-7	GP-15 (2-4)	Solid	05/02/17 09:55	05/03/17 09:00	7
500-127508-8	GP-15 (6-8)	Solid	05/02/17 10:00	05/03/17 09:00	8
500-127508-9	GP-16 (2-4)	Solid	05/02/17 10:30	05/03/17 09:00	9
500-127508-10	GP-16 (6-8)	Solid	05/02/17 10:35	05/03/17 09:00	10
500-127508-11	GP-17 (2-4)	Solid	05/02/17 10:50	05/03/17 09:00	11
500-127508-12	GP-17 (6-8)	Solid	05/02/17 10:55	05/03/17 09:00	12
500-127508-13	GP-18 (2-4)	Solid	05/02/17 11:25	05/03/17 09:00	13
500-127508-14	GP-18 (6-8)	Solid	05/02/17 11:30	05/03/17 09:00	14
500-127508-15	GP-19 (2-4)	Solid	05/02/17 11:50	05/03/17 09:00	15
500-127508-16	GP-19 (6-8)	Solid	05/02/17 11:55	05/03/17 09:00	16
500-127508-17	GP-20 (2-4)	Solid	05/02/17 12:20	05/03/17 09:00	17
500-127508-18	GP-20 (6-8)	Solid	05/02/17 12:25	05/03/17 09:00	18
500-127508-19	GP-20 (14-16)	Solid	05/02/17 12:30	05/03/17 09:00	19
500-127508-20	GP-21 (2-4)	Solid	05/02/17 12:50	05/03/17 09:00	20
500-127508-21	GP-21 (6-8)	Solid	05/02/17 12:55	05/03/17 09:00	21
500-127508-22	GP-22 (2-4)	Solid	05/02/17 13:35	05/03/17 09:00	22
500-127508-23	GP-22 (6-8)	Solid	05/02/17 13:40	05/03/17 09:00	23
500-127508-24	GP-23 (2-4)	Solid	05/02/17 13:50	05/03/17 09:00	24
500-127508-25	GP-23 (6-8)	Solid	05/02/17 13:05	05/03/17 09:00	25
500-127508-26	GP-24 (2-4)	Solid	05/02/17 14:15	05/03/17 09:00	26
500-127508-27	GP-24 (6-8)	Solid	05/02/17 14:20	05/03/17 09:00	27
500-127508-28	GP-25 (2-4)	Solid	05/02/17 14:35	05/03/17 09:00	28
500-127508-29	GP-25 (6-8)	Solid	05/02/17 14:40	05/03/17 09:00	29
500-127508-30	Trip Blank	Solid	05/02/17 00:00	05/03/17 09:00	30

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-12 (2-4)

Date Collected: 05/02/17 08:25

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-1

Matrix: Solid

Percent Solids: 86.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Ethylbenzene	<22		29	22	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Naphthalene	<140		290	140	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Toluene	<20		29	20	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
1,2,4-Trimethylbenzene	<18		29	18	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
1,3,5-Trimethylbenzene	<18		29	18	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
Xylenes, Total	<35		88	35	ug/Kg	✉	05/05/17 15:52	05/10/17 17:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 17:34	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19	F1	0.52	0.24	mg/Kg	✉	05/06/17 11:05	05/11/17 03:14	1

## Client Sample ID: GP-12 (6-8)

Date Collected: 05/02/17 08:30

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-2

Matrix: Solid

Percent Solids: 83.8

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		31	22	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Ethylbenzene	<23		31	23	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Methyl tert-butyl ether	<15		31	15	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Naphthalene	<150		310	150	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Toluene	<21		31	21	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
<b>1,2,4-Trimethylbenzene</b>	<b>36</b>		31	18	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
1,3,5-Trimethylbenzene	<18		31	18	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
Xylenes, Total	<37		92	37	ug/Kg	✉	05/05/17 15:52	05/10/17 18:01	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 18:01	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.7		0.57	0.26	mg/Kg	✉	05/06/17 11:05	05/11/17 03:32	1

## Client Sample ID: GP-13 (2-4)

Date Collected: 05/02/17 09:15

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-3

Matrix: Solid

Percent Solids: 81.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<34		74	34	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1,1-Trichloroethane	<28		74	28	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1,2,2-Tetrachloroethane	<29		74	29	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1,2-Trichloroethane	<26		74	26	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1-Dichloroethane	<30 *		74	30	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1-Dichloroethene	<29 *		74	29	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50
1,1-Dichloropropene	<22		74	22	ug/Kg	✉	05/02/17 09:15	05/16/17 04:52	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-13 (2-4)**

Date Collected: 05/02/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-3**

Matrix: Solid

Percent Solids: 81.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<34		74	34	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2,3-Trichloropropane	<31		74	31	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2,4-Trichlorobenzene	<25		74	25	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2,4-Trimethylbenzene	<26		74	26	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dibromo-3-Chloropropane	<150		370	150	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dibromoethane	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dichlorobenzene	<25		74	25	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dichloroethane	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,2-Dichloropropane	<32		74	32	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,3,5-Trimethylbenzene	<28		74	28	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,3-Dichlorobenzene	<30		74	30	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,3-Dichloropropane	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
1,4-Dichlorobenzene	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
2,2-Dichloropropane	<33		74	33	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
2-Chlorotoluene	<23		74	23	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
4-Chlorotoluene	<26		74	26	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Benzene	<11		18	11	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromobenzene	<26		74	26	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromochloromethane	<32 *		74	32	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromodichloromethane	<28		74	28	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromoform	<36		74	36	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Bromomethane	<59		150	59	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Carbon tetrachloride	<28		74	28	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Chlorobenzene	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Chloroethane	<37		74	37	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Chloroform	<27 *		150	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Chloromethane	<24		74	24	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
cis-1,2-Dichloroethene	<30 *		74	30	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
cis-1,3-Dichloropropene	<31		74	31	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Dibromochloromethane	<36		74	36	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Dibromomethane	<20		74	20	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Dichlorodifluoromethane	<50		150	50	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Ethylbenzene	<14		18	14	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Hexachlorobutadiene	<33		74	33	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Isopropyl ether	<20		74	20	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Isopropylbenzene	<28		74	28	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Methyl tert-butyl ether	<29 *		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Methylene Chloride	<120 *		370	120	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Naphthalene	<25 *		74	25	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
n-Butylbenzene	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
N-Propylbenzene	<31		74	31	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
p-Isopropyltoluene	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
sec-Butylbenzene	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Styrene	<29 *		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
tert-Butylbenzene	<29		74	29	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Tetrachloroethene	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
Toluene	<11		18	11	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
trans-1,2-Dichloroethene	<26 *		74	26	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50
trans-1,3-Dichloropropene	<27		74	27	ug/Kg	⊗	05/02/17 09:15	05/16/17 04:52	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-13 (2-4)**

Date Collected: 05/02/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-3**

Matrix: Solid

Percent Solids: 81.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<12		37	12	ug/Kg	⌚	05/02/17 09:15	05/16/17 04:52	50
Trichlorofluoromethane	<32 *		74	32	ug/Kg	⌚	05/02/17 09:15	05/16/17 04:52	50
Vinyl chloride	<19 *		37	19	ug/Kg	⌚	05/02/17 09:15	05/16/17 04:52	50
Xylenes, Total	<16		37	16	ug/Kg	⌚	05/02/17 09:15	05/16/17 04:52	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		75 - 126				05/02/17 09:15	05/16/17 04:52	50
4-Bromofluorobenzene (Surr)	106		72 - 124				05/02/17 09:15	05/16/17 04:52	50
Dibromofluoromethane	89		75 - 120				05/02/17 09:15	05/16/17 04:52	50
Toluene-d8 (Surr)	92		75 - 120				05/02/17 09:15	05/16/17 04:52	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		0.58	0.27	mg/Kg	⌚	05/06/17 11:05	05/11/17 03:38	1

**Client Sample ID: GP-13 (6-8)**

Date Collected: 05/02/17 09:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-4**

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<34		73	34	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1,1-Trichloroethane	<28		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1,2,2-Tetrachloroethane	<29		73	29	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1,2-Trichloroethane	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1-Dichloroethane	<30 *		73	30	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1-Dichloroethene	<28 *		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,1-Dichloropropene	<22		73	22	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2,3-Trichlorobenzene	<33		73	33	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2,3-Trichloropropane	<30		73	30	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2,4-Trichlorobenzene	<25		73	25	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2,4-Trimethylbenzene	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dibromoethane	<28		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dichlorobenzene	<24		73	24	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dichloroethane	<28		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,2-Dichloropropene	<31		73	31	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,3,5-Trimethylbenzene	<28		73	28	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,3-Dichlorobenzene	<29		73	29	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,3-Dichloropropane	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
1,4-Dichlorobenzene	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
2,2-Dichloropropane	<32		73	32	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
2-Chlorotoluene	<23		73	23	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
4-Chlorotoluene	<25		73	25	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Benzene	<11		18	11	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromobenzene	<26		73	26	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromochloromethane	<31 *		73	31	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromodichloromethane	<27		73	27	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromoform	<35		73	35	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50
Bromomethane	<58		150	58	ug/Kg	⌚	05/02/17 09:20	05/16/17 05:18	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-13 (6-8)**

Date Collected: 05/02/17 09:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-4**

Matrix: Solid

Percent Solids: 81.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<28		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Chlorobenzene	<28		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Chloroethane	<37		73	37	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Chloroform	<27 *		150	27	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Chloromethane	<23		73	23	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
cis-1,2-Dichloroethene	<30 *		73	30	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
cis-1,3-Dichloropropene	<30		73	30	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Dibromochloromethane	<35		73	35	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Dibromomethane	<20		73	20	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Dichlorodifluoromethane	<49		150	49	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Hexachlorobutadiene	<32		73	32	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Isopropyl ether	<20		73	20	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Isopropylbenzene	<28		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Methyl tert-butyl ether	<29 *		73	29	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Methylene Chloride	<120 *		360	120	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Naphthalene	<24 *		73	24	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
n-Butylbenzene	<28		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
N-Propylbenzene	<30		73	30	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
p-Isopropyltoluene	<26		73	26	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
sec-Butylbenzene	<29		73	29	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Styrene	<28 *		73	28	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
tert-Butylbenzene	<29		73	29	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Tetrachloroethene	<27		73	27	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Toluene	<11		18	11	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
trans-1,2-Dichloroethene	<25 *		73	25	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
trans-1,3-Dichloropropene	<26		73	26	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Trichloroethene	<12		36	12	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Trichlorofluoromethane	<31 *		73	31	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Vinyl chloride	<19 *		36	19	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
Xylenes, Total	<16		36	16	ug/Kg	⊗	05/02/17 09:20	05/16/17 05:18	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100			75 - 126			05/02/17 09:20	05/16/17 05:18	50
4-Bromofluorobenzene (Surr)	108			72 - 124			05/02/17 09:20	05/16/17 05:18	50
Dibromofluoromethane	89			75 - 120			05/02/17 09:20	05/16/17 05:18	50
Toluene-d8 (Surr)	93			75 - 120			05/02/17 09:20	05/16/17 05:18	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.52	0.24	mg/Kg	⊗	05/06/17 11:05	05/11/17 03:48	1

**Client Sample ID: GP-14 (2-4)**

Date Collected: 05/02/17 09:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-5**

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		72	33	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50
1,1,1-Trichloroethane	<27		72	27	ug/Kg	⊗	05/02/17 09:30	05/16/17 05:44	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-14 (2-4)**

Date Collected: 05/02/17 09:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-5**

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<29		72	29	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,1,2-Trichloroethane	<25		72	25	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,1-Dichloroethane	<30 *		72	30	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,1-Dichloroethene	<28 *		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,1-Dichloropropene	<22		72	22	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2,3-Trichlorobenzene	<33		72	33	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2,3-Trichloropropane	<30		72	30	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2,4-Trichlorobenzene	<25		72	25	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2,4-Trimethylbenzene	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dibromoethane	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dichlorobenzene	<24		72	24	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dichloroethane	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,2-Dichloropropane	<31		72	31	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,3,5-Trimethylbenzene	<27		72	27	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,3-Dichlorobenzene	<29		72	29	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,3-Dichloropropane	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
1,4-Dichlorobenzene	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
2,2-Dichloropropane	<32		72	32	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
2-Chlorotoluene	<23		72	23	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
4-Chlorotoluene	<25		72	25	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
<b>Benzene</b>	<b>51</b>		18	11	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromobenzene	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromochloromethane	<31 *		72	31	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromodichloromethane	<27		72	27	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromoform	<35		72	35	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Bromomethane	<58		140	58	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Carbon tetrachloride	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Chlorobenzene	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Chloroethane	<36		72	36	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Chloroform	<27 *		140	27	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Chloromethane	<23		72	23	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
cis-1,2-Dichloroethene	<29 *		72	29	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
cis-1,3-Dichloropropene	<30		72	30	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Dibromochloromethane	<35		72	35	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Dibromomethane	<20		72	20	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Dichlorodifluoromethane	<49		140	49	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Ethylbenzene	<13		18	13	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Hexachlorobutadiene	<32		72	32	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Isopropyl ether	<20		72	20	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Isopropylbenzene	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Methyl tert-butyl ether	<28 *		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Methylene Chloride	<120 *		360	120	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Naphthalene	<24 *		72	24	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
n-Butylbenzene	<28		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
N-Propylbenzene	<30		72	30	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
p-Isopropyltoluene	<26		72	26	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
sec-Butylbenzene	<29		72	29	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50
Styrene	<28 *		72	28	ug/Kg	⌚	05/02/17 09:30	05/16/17 05:44	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-14 (2-4)**

Date Collected: 05/02/17 09:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-5**

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	<29		72	29	ug/Kg	✉	05/02/17 09:30	05/16/17 05:44	50
Tetrachloroethene	<27		72	27	ug/Kg	✉	05/02/17 09:30	05/16/17 05:44	50
Toluene	<11		18	11	ug/Kg	✉	05/02/17 09:30	05/16/17 05:44	50
trans-1,2-Dichloroethene	<25 *		72	25	ug/Kg	✉	05/02/17 09:30	05/16/17 05:44	50
trans-1,3-Dichloropropene	<26		72	26	ug/Kg	✉	05/02/17 09:30	05/16/17 05:44	50
Trichloroethene	<12		36	12	ug/Kg	✉	05/02/17 09:30	05/16/17 05:44	50
Trichlorofluoromethane	<31 *		72	31	ug/Kg	✉	05/02/17 09:30	05/16/17 05:44	50
Vinyl chloride	<19 *		36	19	ug/Kg	✉	05/02/17 09:30	05/16/17 05:44	50
Xylenes, Total	<16		36	16	ug/Kg	✉	05/02/17 09:30	05/16/17 05:44	50
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>		<b>Prepared</b>		<b>Analyzed</b>	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103			75 - 126		05/02/17 09:30		05/16/17 05:44	50
4-Bromofluorobenzene (Surr)	105			72 - 124		05/02/17 09:30		05/16/17 05:44	50
Dibromofluoromethane	88			75 - 120		05/02/17 09:30		05/16/17 05:44	50
Toluene-d8 (Surr)	94			75 - 120		05/02/17 09:30		05/16/17 05:44	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	15		0.58	0.27	mg/Kg	✉	05/06/17 11:05	05/11/17 03:51	1

**Client Sample ID: GP-14 (6-8)**

Date Collected: 05/02/17 09:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-6**

Matrix: Solid

Percent Solids: 73.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<40		87	40	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,1,1-Trichloroethane	<33		87	33	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,1,2,2-Tetrachloroethane	<34		87	34	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,1,2-Trichloroethane	<31		87	31	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,1-Dichloroethane	<36 *		87	36	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,1-Dichloroethene	<34 *		87	34	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,1-Dichloropropene	<26		87	26	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,2,3-Trichlorobenzene	<40		87	40	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,2,3-Trichloropropane	<36		87	36	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,2,4-Trichlorobenzene	<30		87	30	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,2,4-Trimethylbenzene	<31		87	31	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,2-Dibromo-3-Chloropropane	<170		430	170	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,2-Dibromoethane	<33		87	33	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,2-Dichlorobenzene	<29		87	29	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,2-Dichloroethane	<34		87	34	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,2-Dichloropropane	<37		87	37	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,3,5-Trimethylbenzene	<33		87	33	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,3-Dichlorobenzene	<35		87	35	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,3-Dichloropropane	<31		87	31	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
1,4-Dichlorobenzene	<32		87	32	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
2,2-Dichloropropane	<38		87	38	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
2-Chlorotoluene	<27		87	27	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
4-Chlorotoluene	<30		87	30	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50
Benzene	<13		22	13	ug/Kg	✉	05/02/17 09:35	05/16/17 06:11	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-14 (6-8)**

Date Collected: 05/02/17 09:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-6**

Matrix: Solid

Percent Solids: 73.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<31		87	31	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Bromoform	<37 *		87	37	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Bromochloromethane	<32		87	32	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Bromodichloromethane	<42		87	42	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Bromomethane	<69		170	69	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Carbon tetrachloride	<33		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Chlorobenzene	<33		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Chloroethane	<44		87	44	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Chloroform	<32 *		170	32	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Chloromethane	<28		87	28	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
cis-1,2-Dichloroethene	<35 *		87	35	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
cis-1,3-Dichloropropene	<36		87	36	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Dibromochloromethane	<42		87	42	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Dibromomethane	<23		87	23	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Dichlorodifluoromethane	<58		170	58	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Ethylbenzene	<16		22	16	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Hexachlorobutadiene	<39		87	39	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Isopropyl ether	<24		87	24	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Isopropylbenzene	<33		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Methyl tert-butyl ether	<34 *		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Methylene Chloride	<140 *		430	140	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Naphthalene	<29 *		87	29	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
n-Butylbenzene	<34		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
N-Propylbenzene	<36		87	36	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
p-Isopropyltoluene	<31		87	31	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
sec-Butylbenzene	<34		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Styrene	<33 *		87	33	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
tert-Butylbenzene	<34		87	34	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Tetrachloroethene	<32		87	32	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Toluene	<13		22	13	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
trans-1,2-Dichloroethene	<30 *		87	30	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
trans-1,3-Dichloropropene	<31		87	31	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Trichloroethene	<14		43	14	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Trichlorofluoromethane	<37 *		87	37	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Vinyl chloride	<23 *		43	23	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50
Xylenes, Total	<19		43	19	ug/Kg	⊗	05/02/17 09:35	05/16/17 06:11	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126	05/02/17 09:35	05/16/17 06:11	50
4-Bromofluorobenzene (Surr)	106		72 - 124	05/02/17 09:35	05/16/17 06:11	50
Dibromofluoromethane	89		75 - 120	05/02/17 09:35	05/16/17 06:11	50
Toluene-d8 (Surr)	93		75 - 120	05/02/17 09:35	05/16/17 06:11	50

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		0.65	0.30	mg/Kg	⊗	05/06/17 11:05	05/11/17 03:54	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-15 (2-4)

Date Collected: 05/02/17 09:55

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-7

Matrix: Solid

Percent Solids: 92.0

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Naphthalene	<130		280	130	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Toluene	<19		28	19	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
Xylenes, Total	<33		84	33	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:28	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	90			80 - 120			05/05/17 15:52	05/10/17 18:28	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.8		0.49	0.23	mg/Kg	⊗	05/06/17 11:05	05/11/17 03:58	1

## Client Sample ID: GP-15 (6-8)

Date Collected: 05/02/17 10:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-8

Matrix: Solid

Percent Solids: 85.0

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		30	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Naphthalene	<140		300	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Toluene	<20		30	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
Xylenes, Total	<36		89	36	ug/Kg	⊗	05/05/17 15:52	05/10/17 18:55	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	89			80 - 120			05/05/17 15:52	05/10/17 18:55	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.5		0.51	0.23	mg/Kg	⊗	05/06/17 11:05	05/11/17 04:02	1

## Client Sample ID: GP-16 (2-4)

Date Collected: 05/02/17 10:30

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-9

Matrix: Solid

Percent Solids: 81.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		30	21	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
Naphthalene	<140		300	140	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
Toluene	<20		30	20	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
<b>1,2,4-Trimethylbenzene</b>	<b>22 J</b>		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/10/17 19:22	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-16 (2-4)

Date Collected: 05/02/17 10:30

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-9

Matrix: Solid

Percent Solids: 81.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<36		89	36	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 19:22	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	16		0.56	0.26	mg/Kg	⌚	05/06/17 11:05	05/11/17 04:06	1

## Client Sample ID: GP-16 (6-8)

Date Collected: 05/02/17 10:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-10

Matrix: Solid

Percent Solids: 83.9

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Ethylbenzene	<23		30	23	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Methyl tert-butyl ether	<15		30	15	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Naphthalene	<150		300	150	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Toluene	<21		30	21	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
Xylenes, Total	<36		91	36	ug/Kg	⌚	05/05/17 15:52	05/10/17 19:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 19:48	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.5		0.56	0.26	mg/Kg	⌚	05/06/17 11:05	05/11/17 04:10	1

## Client Sample ID: GP-17 (2-4)

Date Collected: 05/02/17 10:50

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-11

Matrix: Solid

Percent Solids: 91.5

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Ethylbenzene	<22		28	22	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Methyl tert-butyl ether	<14		28	14	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Naphthalene	<140		280	140	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Toluene	<19		28	19	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
Xylenes, Total	<34		85	34	ug/Kg	⌚	05/05/17 15:52	05/10/17 20:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91		80 - 120				05/05/17 15:52	05/10/17 20:15	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-17 (2-4)**

Date Collected: 05/02/17 10:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-11**

Matrix: Solid

Percent Solids: 91.5

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.1		0.51	0.24	mg/Kg	✉	05/06/17 11:05	05/11/17 04:15	1

## **Client Sample ID: GP-17 (6-8)**

Date Collected: 05/02/17 10:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-12**

Matrix: Solid

Percent Solids: 79.8

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<23		32	23	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Ethylbenzene	<24		32	24	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Methyl tert-butyl ether	<15		32	15	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Naphthalene	<150		320	150	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Toluene	<22		32	22	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
1,2,4-Trimethylbenzene	<19		32	19	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
1,3,5-Trimethylbenzene	<19		32	19	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
Xylenes, Total	<39		97	39	ug/Kg	✉	05/05/17 15:52	05/10/17 20:42	1
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>		<b>Prepared</b>		<b>Analyzed</b>	Dil Fac
a,a,a-Trifluorotoluene		90		80 - 120		05/05/17 15:52		05/10/17 20:42	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.6		0.57	0.27	mg/Kg	✉	05/06/17 11:05	05/11/17 13:32	1

## **Client Sample ID: GP-18 (2-4)**

Date Collected: 05/02/17 11:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-13**

Matrix: Solid

Percent Solids: 94.0

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<14		24	14	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
1,3,5-Trimethylbenzene	<14		24	14	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Benzene	<17		24	17	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Ethylbenzene	<18		24	18	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Methyl tert-butyl ether	<11		24	11	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Naphthalene	<110		240	110	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Toluene	<16		24	16	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Xylenes, Total	<28		71	28	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
Wisconsin GRO	<2400		4700	2400	ug/Kg	✉	05/05/17 15:52	05/10/17 21:09	1
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>		<b>Prepared</b>		<b>Analyzed</b>	Dil Fac
a,a,a-Trifluorotoluene		91		80 - 120		05/05/17 15:52		05/10/17 21:09	1
a,a,a-Trifluorotoluene		101		80 - 120		05/05/17 15:52		05/10/17 21:09	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10		0.48	0.22	mg/Kg	✉	05/06/17 11:05	05/11/17 04:23	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-18 (6-8)**

Date Collected: 05/02/17 11:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-14**

Matrix: Solid

Percent Solids: 93.5

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Ethylbenzene	<21		28	21	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Naphthalene	<130		280	130	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Toluene	<19		28	19	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
Xylenes, Total	<33		83	33	ug/Kg	✉	05/05/17 15:52	05/10/17 21:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	91			80 - 120			05/05/17 15:52	05/10/17 21:36	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.3		0.51	0.24	mg/Kg	✉	05/06/17 11:05	05/11/17 04:35	1

## **Client Sample ID: GP-19 (2-4)**

Date Collected: 05/02/17 11:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-15**

Matrix: Solid

Percent Solids: 95.2

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<17		24	17	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Ethylbenzene	<18		24	18	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Methyl tert-butyl ether	<11		24	11	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Naphthalene	<110		240	110	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Toluene	<16		24	16	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
1,2,4-Trimethylbenzene	<14		24	14	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
1,3,5-Trimethylbenzene	<14		24	14	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
Xylenes, Total	<28		71	28	ug/Kg	✉	05/05/17 15:52	05/10/17 23:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	89			80 - 120			05/05/17 15:52	05/10/17 23:23	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	23		0.45	0.21	mg/Kg	✉	05/06/17 11:05	05/11/17 04:39	1

## **Client Sample ID: GP-19 (6-8)**

Date Collected: 05/02/17 11:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-16**

Matrix: Solid

Percent Solids: 82.1

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		30	21	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
Ethylbenzene	<23		30	23	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
Naphthalene	<140		300	140	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
Toluene	<20		30	20	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	✉	05/05/17 15:52	05/10/17 23:50	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-19 (6-8)**

Date Collected: 05/02/17 11:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-16**

Matrix: Solid

Percent Solids: 82.1

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<36		89	36	ug/Kg	⌚	05/05/17 15:52	05/10/17 23:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	90		80 - 120				05/05/17 15:52	05/10/17 23:50	1

### **Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.58	0.27	mg/Kg	⌚	05/06/17 11:05	05/11/17 04:50	1

## **Client Sample ID: GP-20 (2-4)**

Date Collected: 05/02/17 12:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-17**

Matrix: Solid

Percent Solids: 91.3

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<19		27	19	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Ethylbenzene	<20		27	20	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Methyl tert-butyl ether	<13		27	13	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Naphthalene	<130		270	130	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Toluene	<18		27	18	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
<b>1,2,4-Trimethylbenzene</b>	<b>16 J</b>		27	16	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
Xylenes, Total	<32		80	32	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	90		80 - 120				05/05/17 15:52	05/11/17 00:17	1

## **Client Sample ID: GP-20 (6-8)**

Date Collected: 05/02/17 12:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-18**

Matrix: Solid

Percent Solids: 90.1

### **Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		27	20	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Ethylbenzene	<21		27	21	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Methyl tert-butyl ether	<13		27	13	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Naphthalene	<130		270	130	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Toluene	<19		27	19	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
1,2,4-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
1,3,5-Trimethylbenzene	<16		27	16	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
Xylenes, Total	<33		82	33	ug/Kg	⌚	05/05/17 15:52	05/11/17 00:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	88		80 - 120				05/05/17 15:52	05/11/17 00:44	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-20 (14-16)**

Date Collected: 05/02/17 12:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-19**

Matrix: Solid

Percent Solids: 86.6

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	79		30	21	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Naphthalene	440		300	140	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Toluene	<20		30	20	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
1,3,5-Trimethylbenzene	25 J		30	18	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
Xylenes, Total	36 J		89	36	ug/Kg	⊗	05/05/17 15:52	05/11/17 12:11	1
<i>Surrogate</i>	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86			80 - 120			05/05/17 15:52	05/11/17 12:11	1

**Client Sample ID: GP-21 (2-4)**

Date Collected: 05/02/17 12:50

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-20**

Matrix: Solid

Percent Solids: 80.8

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	94		31	22	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Ethylbenzene	35		31	24	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Methyl tert-butyl ether	160		31	15	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Naphthalene	510		310	150	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Toluene	25 J		31	21	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
1,2,4-Trimethylbenzene	62		31	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
1,3,5-Trimethylbenzene	<19		31	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
Xylenes, Total	61 J		94	37	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:30	1
<i>Surrogate</i>	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98			80 - 120			05/05/17 15:52	05/11/17 09:30	1

**Client Sample ID: GP-21 (6-8)**

Date Collected: 05/02/17 12:55

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-21**

Matrix: Solid

Percent Solids: 81.1

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2600		31	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
1,3,5-Trimethylbenzene	1000		31	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Benzene	610		31	23	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Ethylbenzene	7200		31	24	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Methyl tert-butyl ether	17 J		31	15	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Naphthalene	55000		6300	3000	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:24	20
Toluene	590		31	21	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Xylenes, Total	2500		94	38	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:51	1
Wisconsin GRO	2000000		130000	63000	ug/Kg	⊗	05/05/17 15:52	05/11/17 10:24	20
<i>Surrogate</i>	%Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	125 X		80 - 120				05/05/17 15:52	05/11/17 10:24	20
a,a,a-Trifluorotoluene	88		80 - 120				05/05/17 15:52	05/11/17 10:24	20
a,a,a-Trifluorotoluene	173 X		80 - 120				05/05/17 15:52	05/11/17 10:51	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-22 (2-4)**

Date Collected: 05/02/17 13:35

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-22**

Matrix: Solid

Percent Solids: 85.9

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<24		33	24	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
Ethylbenzene	<25		33	25	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
Methyl tert-butyl ether	<16		33	16	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
Naphthalene	<160		330	160	ug/Kg	⊗	05/05/17 15:52	05/11/17 09:57	1
Toluene	<22		33	22	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
<b>1,2,4-Trimethylbenzene</b>	<b>91</b>		33	20	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
1,3,5-Trimethylbenzene	<20		33	20	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
Xylenes, Total	<40		99	40	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:31	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	81		80 - 120				05/05/17 15:52	05/11/17 02:31	1
a,a,a-Trifluorotoluene	89		80 - 120				05/05/17 15:52	05/11/17 09:57	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	44		0.50	0.23	mg/Kg	⊗	05/06/17 11:05	05/11/17 04:54	1

**Client Sample ID: GP-22 (6-8)**

**Lab Sample ID: 500-127508-23**

Matrix: Solid

Percent Solids: 93.6

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<17		23	17	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Ethylbenzene	<18		23	18	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Methyl tert-butyl ether	<11		23	11	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Naphthalene	<110		230	110	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Toluene	<16		23	16	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
1,2,4-Trimethylbenzene	<14		23	14	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
1,3,5-Trimethylbenzene	<14		23	14	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
Xylenes, Total	<28		70	28	ug/Kg	⊗	05/05/17 15:52	05/11/17 02:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	88		80 - 120				05/05/17 15:52	05/11/17 02:58	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.4		0.48	0.22	mg/Kg	⊗	05/06/17 11:05	05/11/17 04:57	1

**Client Sample ID: GP-23 (2-4)**

**Lab Sample ID: 500-127508-24**

Matrix: Solid

Percent Solids: 89.0

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
Naphthalene	<140		290	140	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
Toluene	<19		29	19	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/05/17 15:52	05/11/17 03:25	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-23 (2-4)

Date Collected: 05/02/17 13:50

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-24

Matrix: Solid

Percent Solids: 89.0

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⌚	05/05/17 15:52	05/11/17 03:25	1
Xylenes, Total	<34		86	34	ug/Kg	⌚	05/05/17 15:52	05/11/17 03:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	87		80 - 120				05/05/17 15:52	05/11/17 03:25	1

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.9		0.51	0.23	mg/Kg	⌚	05/06/17 11:05	05/11/17 05:01	1

## Client Sample ID: GP-23 (6-8)

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-25

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Benzene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Chlorobenzene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Chloroform	<0.020		0.040	0.020	mg/L			05/09/17 02:01	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/09/17 02:01	20
Tetrachloroethene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Trichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
Vinyl chloride	<0.010		0.020	0.010	mg/L			05/09/17 02:01	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100		75 - 126					05/09/17 02:01	20
4-Bromofluorobenzene (Surr)	109		72 - 124					05/09/17 02:01	20
Dibromofluoromethane	84		75 - 120					05/09/17 02:01	20
Toluene-d8 (Surr)	103		75 - 120					05/09/17 02:01	20

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
2-Methylphenol	<0.020		0.020	0.020	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Hexachloroethane	<0.050		0.050	0.050	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Nitrobenzene	<0.010		0.010	0.010	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
Pyridine	<0.20		0.20	0.20	mg/L	⌚	05/08/17 07:42	05/08/17 18:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol (Surr)	91		40 - 145					05/08/17 07:42	1
2-Fluorobiphenyl	90		34 - 110					05/08/17 07:42	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-25**

Matrix: Solid

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	62		27 - 110	05/08/17 07:42	05/08/17 18:41	1
Nitrobenzene-d5 (Surr)	99		36 - 120	05/08/17 07:42	05/08/17 18:41	1
Phenol-d5 (Surr)	43		20 - 100	05/08/17 07:42	05/08/17 18:41	1
Terphenyl-d14 (Surr)	108		40 - 145	05/08/17 07:42	05/08/17 18:41	1

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
<b>Barium</b>	<b>0.44 J</b>		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 21:55	1
Cadmium	<0.0020		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 21:55	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
Copper	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
Lead	<0.0075		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 21:55	1
<b>Nickel</b>	<b>0.022 J</b>		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 21:55	1
Silver	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 21:55	1
Zinc	<0.020		0.10	0.020	mg/L		05/08/17 08:10	05/08/17 21:55	1

## Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:16	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Flashpoint</b>	<b>&gt;176</b>		40.0	40.0	Degrees F			05/15/17 14:30	1
<b>Cyanide, Total</b>	<b>0.28 J</b>		0.41	0.14	mg/Kg		05/15/17 17:10	05/15/17 20:21	1
Sulfide	<4.6		9.8	4.6	mg/Kg		05/15/17 17:36	05/15/17 21:53	1
pH	<b>9.0</b>		0.2	0.2	SU			05/09/17 16:08	1
Paint Filter	<b>PASS</b>				No Unit			05/15/17 21:43	1
Specific Gravity	<b>2.2442</b>				NONE			05/12/17 22:19	1

**Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-25**

Matrix: Solid

Percent Solids: 85.3

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Benzene	<21		29	21	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Ethylbenzene	<22		29	22	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
<b>Naphthalene</b>	<b>170 J</b>		290	140	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Toluene	<20		29	20	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Xylenes, Total	<35		87	35	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1
Wisconsin GRO	<2900		5800	2900	ug/Kg	✉	05/05/17 15:52	05/11/17 06:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	87		80 - 120	05/05/17 15:52	05/11/17 06:59	1
a,a,a-Trifluorotoluene	97		80 - 120	05/05/17 15:52	05/11/17 06:59	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-25**

Matrix: Solid

Percent Solids: 86.8

**Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.5		18	6.5	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1221	<8.0		18	8.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1232	<8.0		18	8.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1242	<6.0		18	6.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1248	<7.2		18	7.2	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1254	<3.9		18	3.9	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
PCB-1260	<9.0		18	9.0	ug/Kg	⌚	05/09/17 16:38	05/10/17 14:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	67		49 - 129				05/09/17 16:38	05/10/17 14:21	1
DCB Decachlorobiphenyl	71		37 - 121				05/09/17 16:38	05/10/17 14:21	1

**Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.8		4.5	1.8	mg/Kg	⌚	05/04/17 11:15	05/05/17 17:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Nonane	76		44 - 148				05/04/17 11:15	05/05/17 17:25	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7.7		0.50	0.23	mg/Kg	⌚	05/06/17 11:05	05/11/17 05:06	1

**Client Sample ID: GP-24 (2-4)**

**Lab Sample ID: 500-127508-26**

Matrix: Solid

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		66	30	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1,1-Trichloroethane	<25		66	25	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1,2,2-Tetrachloroethane	<26		66	26	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1,2-Trichloroethane	<23		66	23	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1-Dichloroethane	<27 *		66	27	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1-Dichloroethene	<26 *		66	26	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,1-Dichloropropene	<20		66	20	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2,3-Trichlorobenzene	<30		66	30	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2,3-Trichloropropane	<27		66	27	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2,4-Trichlorobenzene	<23		66	23	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dibromoethane	<25		66	25	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dichlorobenzene	<22		66	22	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dichloroethane	<26		66	26	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,2-Dichloropropane	<28		66	28	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,3-Dichlorobenzene	<26		66	26	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,3-Dichloropropane	<24		66	24	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
1,4-Dichlorobenzene	<24		66	24	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
2,2-Dichloropropane	<29		66	29	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50
2-Chlorotoluene	<21		66	21	ug/Kg	⌚	05/02/17 14:15	05/16/17 06:37	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-24 (2-4)

Date Collected: 05/02/17 14:15

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-26

Matrix: Solid

Percent Solids: 86.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<23		66	23	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Benzene	<9.6		16	9.6	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromobenzene	<23		66	23	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromochloromethane	<28 *		66	28	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromodichloromethane	<25		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromoform	<32		66	32	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Bromomethane	<52		130	52	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Carbon tetrachloride	<25		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Chlorobenzene	<25		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Chloroethane	<33		66	33	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Chloroform	<24 *		130	24	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Chloromethane	<21		66	21	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
cis-1,2-Dichloroethene	<27 *		66	27	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
cis-1,3-Dichloropropene	<27		66	27	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Dibromochloromethane	<32		66	32	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Dibromomethane	<18		66	18	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Dichlorodifluoromethane	<44		130	44	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Ethylbenzene	<12		16	12	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Hexachlorobutadiene	<29		66	29	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Isopropyl ether	<18		66	18	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Isopropylbenzene	<25		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Methyl tert-butyl ether	<26 *		66	26	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Methylene Chloride	<110 *		330	110	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Naphthalene	<22 *		66	22	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
n-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
N-Propylbenzene	<27		66	27	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
p-Isopropyltoluene	<24		66	24	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
sec-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Styrene	<25 *		66	25	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
tert-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Tetrachloroethene	<24		66	24	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Toluene	<9.7		16	9.7	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
trans-1,2-Dichloroethene	<23 *		66	23	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
trans-1,3-Dichloropropene	<24		66	24	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Trichloroethene	<11		33	11	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Trichlorofluoromethane	<28 *		66	28	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Vinyl chloride	<17 *		33	17	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
Xylenes, Total	<15		33	15	ug/Kg	⊗	05/02/17 14:15	05/16/17 06:37	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	103			75 - 126			05/02/17 14:15	05/16/17 06:37	50
4-Bromofluorobenzene (Surr)	107			72 - 124			05/02/17 14:15	05/16/17 06:37	50
Dibromofluoromethane	88			75 - 120			05/02/17 14:15	05/16/17 06:37	50
Toluene-d8 (Surr)	93			75 - 120			05/02/17 14:15	05/16/17 06:37	50

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	27	V F1	0.54	0.25	mg/Kg	⊗	05/06/17 11:07	05/10/17 18:27	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-24 (6-8)**

Date Collected: 05/02/17 14:20

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-27**

Matrix: Solid

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		67	31	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1,1-Trichloroethane	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1,2,2-Tetrachloroethane	<27		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1,2-Trichloroethane	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1-Dichloroethane	<28 *		67	28	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1-Dichloroethene	<26 *		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,1-Dichloropropene	<20		67	20	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2,3-Trichlorobenzene	<31		67	31	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2,3-Trichloropropane	<28		67	28	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2,4-Trichlorobenzene	<23		67	23	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2,4-Trimethylbenzene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dibromo-3-Chloropropane	<130		340	130	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dibromoethane	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dichlorobenzene	<23		67	23	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dichloroethane	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,2-Dichloropropene	<29		67	29	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,3,5-Trimethylbenzene	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,3-Dichlorobenzene	<27		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,3-Dichloropropane	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
1,4-Dichlorobenzene	<25		67	25	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
2,2-Dichloropropane	<30		67	30	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
2-Chlorotoluene	<21		67	21	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
4-Chlorotoluene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Benzene	<9.8		17	9.8	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromobenzene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromochloromethane	<29 *		67	29	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromodichloromethane	<25		67	25	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromoform	<33		67	33	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Bromomethane	<54		130	54	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Carbon tetrachloride	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Chlorobenzene	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Chloroethane	<34		67	34	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Chloroform	<25 *		130	25	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Chloromethane	<22		67	22	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
cis-1,2-Dichloroethene	<27 *		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
cis-1,3-Dichloropropene	<28		67	28	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Dibromochloromethane	<33		67	33	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Dibromomethane	<18		67	18	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Dichlorodifluoromethane	<45		130	45	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Ethylbenzene	<12		17	12	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Hexachlorobutadiene	<30		67	30	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Isopropyl ether	<19		67	19	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Isopropylbenzene	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Methyl tert-butyl ether	<27 *		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Methylene Chloride	<110 *		340	110	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Naphthalene	<23 *		67	23	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
n-Butylbenzene	<26		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
N-Propylbenzene	<28		67	28	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
p-Isopropyltoluene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-24 (6-8)

Date Collected: 05/02/17 14:20

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-27

Matrix: Solid

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<27		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Styrene	<26 *		67	26	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
tert-Butylbenzene	<27		67	27	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Tetrachloroethene	<25		67	25	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Toluene	<9.9		17	9.9	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
trans-1,2-Dichloroethene	<24 *		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
trans-1,3-Dichloropropene	<24		67	24	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Trichloroethene	<11		34	11	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Trichlorofluoromethane	<29 *		67	29	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Vinyl chloride	<18 *		34	18	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
Xylenes, Total	<15		34	15	ug/Kg	⊗	05/02/17 14:20	05/16/17 07:03	50
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)		105		75 - 126			05/02/17 14:20	05/16/17 07:03	50
4-Bromofluorobenzene (Surr)		106		72 - 124			05/02/17 14:20	05/16/17 07:03	50
Dibromofluoromethane		90		75 - 120			05/02/17 14:20	05/16/17 07:03	50
Toluene-d8 (Surr)		93		75 - 120			05/02/17 14:20	05/16/17 07:03	50

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.53	0.25	mg/Kg	⊗	05/06/17 11:07	05/10/17 18:54	1

## Client Sample ID: GP-25 (2-4)

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-28

Matrix: Solid

Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<31		66	31	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1,1-Trichloroethane	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1,2,2-Tetrachloroethane	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1,2-Trichloroethane	<23		66	23	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1-Dichloroethane	<27 *		66	27	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1-Dichloroethene	<26 *		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,1-Dichloropropene	<20		66	20	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2,3-Trichlorobenzene	<30		66	30	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2,3-Trichloropropane	<27		66	27	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2,4-Trichlorobenzene	<23		66	23	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2,4-Trimethylbenzene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dibromoethane	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dichlorobenzene	<22		66	22	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dichloroethane	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,2-Dichloropropane	<28		66	28	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,3,5-Trimethylbenzene	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,3-Dichlorobenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,3-Dichloropropane	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
1,4-Dichlorobenzene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
2,2-Dichloropropane	<29		66	29	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
2-Chlorotoluene	<21		66	21	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-25 (2-4)

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-28

Matrix: Solid

Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<23		66	23	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Benzene	<9.7		17	9.7	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromobenzene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromochloromethane	<28 *		66	28	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromodichloromethane	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromoform	<32		66	32	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Bromomethane	<53		130	53	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Carbon tetrachloride	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Chlorobenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Chloroethane	<33		66	33	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Chloroform	<24 *		130	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Chloromethane	<21		66	21	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
cis-1,2-Dichloroethene	<27 *		66	27	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
cis-1,3-Dichloropropene	<28		66	28	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Dibromochloromethane	<32		66	32	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Dibromomethane	<18		66	18	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Dichlorodifluoromethane	<45		130	45	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Ethylbenzene	<12		17	12	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Hexachlorobutadiene	<30		66	30	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Isopropyl ether	<18		66	18	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Isopropylbenzene	<25		66	25	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Methyl tert-butyl ether	<26 *		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Methylene Chloride	<110 *		330	110	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Naphthalene	<22 *		66	22	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
n-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
N-Propylbenzene	<27		66	27	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
p-Isopropyltoluene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
sec-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Styrene	<26 *		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
tert-Butylbenzene	<26		66	26	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Tetrachloroethene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Toluene	<9.7		17	9.7	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
trans-1,2-Dichloroethene	<23 *		66	23	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
trans-1,3-Dichloropropene	<24		66	24	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Trichloroethene	<11		33	11	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Trichlorofluoromethane	<28 *		66	28	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Vinyl chloride	<17 *		33	17	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
Xylenes, Total	<15		33	15	ug/Kg	⊗	05/02/17 14:35	05/16/17 07:29	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	100			75 - 126			05/02/17 14:35	05/16/17 07:29	50
4-Bromofluorobenzene (Surr)	106			72 - 124			05/02/17 14:35	05/16/17 07:29	50
Dibromofluoromethane	88			75 - 120			05/02/17 14:35	05/16/17 07:29	50
Toluene-d8 (Surr)	92			75 - 120			05/02/17 14:35	05/16/17 07:29	50

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	15		0.52	0.24	mg/Kg	⊗	05/06/17 11:07	05/10/17 18:59	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-25 (6-8)**

Date Collected: 05/02/17 14:40

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-29**

Matrix: Solid

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		72	33	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1,1-Trichloroethane	<27		72	27	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1,2,2-Tetrachloroethane	<29		72	29	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1,2-Trichloroethane	<25		72	25	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1-Dichloroethane	<29 *		72	29	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1-Dichloroethene	<28 *		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,1-Dichloropropene	<21		72	21	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2,3-Trichlorobenzene	<33		72	33	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2,3-Trichloropropane	<30		72	30	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2,4-Trichlorobenzene	<25		72	25	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2,4-Trimethylbenzene	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dibromoethane	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dichlorobenzene	<24		72	24	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dichloroethane	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,2-Dichloropropene	<31		72	31	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,3,5-Trimethylbenzene	<27		72	27	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,3-Dichlorobenzene	<29		72	29	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,3-Dichloropropane	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
1,4-Dichlorobenzene	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
2,2-Dichloropropane	<32		72	32	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
2-Chlorotoluene	<23		72	23	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
4-Chlorotoluene	<25		72	25	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Benzene	<10		18	10	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromobenzene	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromochloromethane	<31 *		72	31	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromodichloromethane	<27		72	27	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromoform	<35		72	35	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Bromomethane	<57		140	57	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Carbon tetrachloride	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Chlorobenzene	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Chloroethane	<36		72	36	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Chloroform	<27 *		140	27	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Chloromethane	<23		72	23	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
cis-1,2-Dichloroethene	<29 *		72	29	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
cis-1,3-Dichloropropene	<30		72	30	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Dibromochloromethane	<35		72	35	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Dibromomethane	<19		72	19	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Dichlorodifluoromethane	<48		140	48	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Hexachlorobutadiene	<32		72	32	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Isopropyl ether	<20		72	20	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
<b>Isopropylbenzene</b>	<b>120</b>		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Methyl tert-butyl ether	<28 *		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
Methylene Chloride	<120 *		360	120	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
<b>Naphthalene</b>	<b>150 *</b>		72	24	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
n-Butylbenzene	<28		72	28	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
<b>N-Propylbenzene</b>	<b>620</b>		72	30	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50
p-Isopropyltoluene	<26		72	26	ug/Kg	⊗	05/02/17 14:40	05/16/17 07:55	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-25 (6-8)**

Date Collected: 05/02/17 14:40

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-29**

Matrix: Solid

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<29		72	29	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Styrene	<28 *		72	28	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
tert-Butylbenzene	<29		72	29	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Tetrachloroethene	<27		72	27	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Toluene	<11		18	11	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
trans-1,2-Dichloroethene	<25 *		72	25	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
trans-1,3-Dichloropropene	<26		72	26	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Trichloroethene	<12		36	12	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Trichlorofluoromethane	<31 *		72	31	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Vinyl chloride	<19 *		36	19	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50
Xylenes, Total	<16		36	16	ug/Kg	✉	05/02/17 14:40	05/16/17 07:55	50

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		75 - 126	05/02/17 14:40	05/16/17 07:55	50
4-Bromofluorobenzene (Surr)	103		72 - 124	05/02/17 14:40	05/16/17 07:55	50
Dibromofluoromethane	90		75 - 120	05/02/17 14:40	05/16/17 07:55	50
Toluene-d8 (Surr)	95		75 - 120	05/02/17 14:40	05/16/17 07:55	50

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	350000		43000	14000	ug/Kg	✉	05/02/17 14:40	05/07/17 22:05	1000

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	22		7.0	2.8	mg/Kg	✉	05/04/17 11:15	05/05/17 18:01	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	86		44 - 148	05/04/17 11:15	05/05/17 18:01	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	26		0.55	0.26	mg/Kg	✉	05/06/17 11:07	05/10/17 19:03	1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 500-127508-30**

Date Collected: 05/02/17 00:00 Matrix: Solid

Date Received: 05/03/17 09:00 Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1-Dichloroethane	<21 *		50	21	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1-Dichloroethene	<20 *		50	20	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,1-Dichloropropene	<15		50	15	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,2,3-Trichloropropane	<21		50	21	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	✉	05/02/17 00:00	05/16/17 01:22	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: Trip Blank

Date Collected: 05/02/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-30

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dibromoethane	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dichloroethane	<20		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,2-Dichloropropane	<21		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,3-Dichloropropane	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
2,2-Dichloropropane	<22		50	22	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
2-Chlorotoluene	<16		50	16	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
4-Chlorotoluene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Benzene	<7.3		13	7.3	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromobenzene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromochloromethane	<21 *		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromodichloromethane	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromoform	<24		50	24	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Bromomethane	<40		100	40	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Carbon tetrachloride	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Chlorobenzene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Chloroethane	<25		50	25	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Chloroform	<19 *		100	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Chloromethane	<16		50	16	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
cis-1,2-Dichloroethene	<20 *		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Dibromochloromethane	<24		50	24	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Dibromomethane	<14		50	14	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Dichlorodifluoromethane	<34		100	34	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Ethylbenzene	<9.2		13	9.2	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Hexachlorobutadiene	<22		50	22	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Isopropyl ether	<14		50	14	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Isopropylbenzene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Methyl tert-butyl ether	<20 *		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Methylene Chloride	<82 *		250	82	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Naphthalene	<17 *		50	17	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
n-Butylbenzene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
N-Propylbenzene	<21		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
p-Isopropyltoluene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
sec-Butylbenzene	<20		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Styrene	<19 *		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
tert-Butylbenzene	<20		50	20	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Tetrachloroethene	<19		50	19	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Toluene	<7.4		13	7.4	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
trans-1,2-Dichloroethene	<18 *		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Trichloroethene	<8.2		25	8.2	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Trichlorofluoromethane	<21 *		50	21	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
Vinyl chloride	<13 *		25	13	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: Trip Blank**

Date Collected: 05/02/17 00:00

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-30**

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<11		25	11	ug/Kg	⊗	05/02/17 00:00	05/16/17 01:22	50
<b>Surrogate</b>									
1,2-Dichloroethane-d4 (Surr)	102		75 - 126				05/02/17 00:00	05/16/17 01:22	50
4-Bromofluorobenzene (Surr)	103		72 - 124				05/02/17 00:00	05/16/17 01:22	50
Dibromofluoromethane	88		75 - 120				05/02/17 00:00	05/16/17 01:22	50
Toluene-d8 (Surr)	92		75 - 120				05/02/17 00:00	05/16/17 01:22	50



SFA Labs

**TestAmerica Laboratories, Inc.**  
Attention: Sandie Fredrick  
2417 Bond St  
University Park, IL 44720

**Date Received:** 05/05/2017  
**Date Reported:** 05/15/17 17:07  
**Client Project:** Soil/Waste  
**Client Project ID:** Soil/Waste  
**PO#** 2669273  
**Project #:** Soil/Waste

## **Certificate of Analysis**

This analytical test report shall not be reproduced, except in full, without written permission from Eurofins S-F Analytical Laboratories. All quality control samples and checks were within acceptance limits unless otherwise indicated. Test results pertain only to those items tested. All samples were in good condition when received by the laboratory unless otherwise noted. All LOD/LOQs are adjusted to reflect dilutions.

This report was prepared and printed by:

Page 1 of 1

---

Josh Rhein, Chemistry Operations Manager

**Eurofins S-F Analytical Laboratories | 2345 South 170<sup>th</sup> Street | New Berlin, WI 53151**

Phone: (262) 754-5300 | Fax: (262) 754-5310 | [eurofinsus.com](http://eurofinsus.com) | [ESFA@eurofinsus.com](mailto:ESFA@eurofinsus.com)

# Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

### GC 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.
X	Surrogate is outside control limits

### Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
V	Serial Dilution exceeds the control limits

### General Chemistry

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.

## Glossary

### Abbreviation

These commonly used abbreviations may or may not be present in this report.

□	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)

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## GC/MS VOA

### Prep Batch: 384046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-3	GP-13 (2-4)	Total/NA	Solid	5035	5
500-127508-4	GP-13 (6-8)	Total/NA	Solid	5035	6
500-127508-5	GP-14 (2-4)	Total/NA	Solid	5035	7
500-127508-6	GP-14 (6-8)	Total/NA	Solid	5035	8
500-127508-26	GP-24 (2-4)	Total/NA	Solid	5035	9
500-127508-27	GP-24 (6-8)	Total/NA	Solid	5035	10
500-127508-28	GP-25 (2-4)	Total/NA	Solid	5035	11
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI GRO	12
500-127508-30	Trip Blank	Total/NA	Solid	5035	13

### Leach Batch: 384086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	1311	10
LB 500-384086/1-A	Method Blank	TCLP	Solid	1311	11

### Analysis Batch: 384262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	8260B	384086
LB 500-384086/1-A	Method Blank	TCLP	Solid	8260B	384086
MB 500-384262/6	Method Blank	Total/NA	Solid	8260B	13
LCS 500-384262/4	Lab Control Sample	Total/NA	Solid	8260B	14

### Analysis Batch: 385282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-3	GP-13 (2-4)	Total/NA	Solid	8260B	384046
500-127508-4	GP-13 (6-8)	Total/NA	Solid	8260B	384046
500-127508-5	GP-14 (2-4)	Total/NA	Solid	8260B	384046
500-127508-6	GP-14 (6-8)	Total/NA	Solid	8260B	384046
500-127508-26	GP-24 (2-4)	Total/NA	Solid	8260B	384046
500-127508-27	GP-24 (6-8)	Total/NA	Solid	8260B	384046
500-127508-28	GP-25 (2-4)	Total/NA	Solid	8260B	384046
500-127508-29	GP-25 (6-8)	Total/NA	Solid	8260B	384046
500-127508-30	Trip Blank	Total/NA	Solid	8260B	384046
MB 500-385282/6	Method Blank	Total/NA	Solid	8260B	15
LCS 500-385282/4	Lab Control Sample	Total/NA	Solid	8260B	16

## GC/MS Semi VOA

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	1311	13
LB 500-383992/1-B	Method Blank	TCLP	Solid	1311	14

### Prep Batch: 384171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	3510C	383992
LB 500-383992/1-B	Method Blank	TCLP	Solid	3510C	383992
MB 500-384171/1-A	Method Blank	Total/NA	Solid	3510C	15
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	3510C	16

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 384241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	8270D	384171
LB 500-383992/1-B	Method Blank	TCLP	Solid	8270D	384171
MB 500-384171/1-A	Method Blank	Total/NA	Solid	8270D	384171
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	8270D	384171

## GC VOA

### Prep Batch: 384046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI GRO	9
LB3 500-384046/21-A	Method Blank	Total/NA	Solid	5035	10
LCS 500-384046/23-A	Lab Control Sample	Total/NA	Solid	5035	11
LCSD 500-384046/24-A	Lab Control Sample Dup	Total/NA	Solid	5035	12

### Analysis Batch: 384093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI-GRO	384046
LB3 500-384046/21-A	Method Blank	Total/NA	Solid	WI-GRO	13
LCS 500-384046/23-A	Lab Control Sample	Total/NA	Solid	WI-GRO	14
LCSD 500-384046/24-A	Lab Control Sample Dup	Total/NA	Solid	WI-GRO	15

### Prep Batch: 427841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	WI GRO	16
500-127508-2	GP-12 (6-8)	Total/NA	Solid	WI GRO	
500-127508-7	GP-15 (2-4)	Total/NA	Solid	WI GRO	
500-127508-8	GP-15 (6-8)	Total/NA	Solid	WI GRO	
500-127508-9	GP-16 (2-4)	Total/NA	Solid	WI GRO	
500-127508-10	GP-16 (6-8)	Total/NA	Solid	WI GRO	
500-127508-11	GP-17 (2-4)	Total/NA	Solid	WI GRO	
500-127508-12	GP-17 (6-8)	Total/NA	Solid	WI GRO	
500-127508-13	GP-18 (2-4)	Total/NA	Solid	WI GRO	
500-127508-14	GP-18 (6-8)	Total/NA	Solid	WI GRO	
500-127508-15	GP-19 (2-4)	Total/NA	Solid	WI GRO	
500-127508-16	GP-19 (6-8)	Total/NA	Solid	WI GRO	
500-127508-17	GP-20 (2-4)	Total/NA	Solid	WI GRO	
500-127508-18	GP-20 (6-8)	Total/NA	Solid	WI GRO	
500-127508-19	GP-20 (14-16)	Total/NA	Solid	WI GRO	
500-127508-20	GP-21 (2-4)	Total/NA	Solid	WI GRO	
500-127508-21	GP-21 (6-8)	Total/NA	Solid	WI GRO	
500-127508-22	GP-22 (2-4)	Total/NA	Solid	WI GRO	
500-127508-23	GP-22 (6-8)	Total/NA	Solid	WI GRO	
500-127508-24	GP-23 (2-4)	Total/NA	Solid	WI GRO	
500-127508-25	GP-23 (6-8)	Total/NA	Solid	WI GRO	
MB 490-427841/43-A	Method Blank	Total/NA	Solid	WI GRO	
LCS 490-427841/44-A	Lab Control Sample	Total/NA	Solid	WI GRO	
LCSD 490-427841/45-A	Lab Control Sample Dup	Total/NA	Solid	WI GRO	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## GC VOA (Continued)

### Analysis Batch: 428992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-2	GP-12 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-7	GP-15 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-8	GP-15 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-9	GP-16 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-10	GP-16 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-11	GP-17 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-12	GP-17 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-13	GP-18 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-14	GP-18 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-15	GP-19 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-16	GP-19 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-17	GP-20 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-18	GP-20 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-19	GP-20 (14-16)	Total/NA	Solid	WDNR	427841
500-127508-20	GP-21 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-21	GP-21 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-21	GP-21 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-22	GP-22 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-22	GP-22 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-23	GP-22 (6-8)	Total/NA	Solid	WDNR	427841
500-127508-24	GP-23 (2-4)	Total/NA	Solid	WDNR	427841
500-127508-25	GP-23 (6-8)	Total/NA	Solid	WDNR	427841
MB 490-427841/43-A	Method Blank	Total/NA	Solid	WDNR	427841
MB 490-427841/43-A	Method Blank	Total/NA	Solid	WDNR	427841
LCS 490-427841/44-A	Lab Control Sample	Total/NA	Solid	WDNR	427841
LCS 490-427841/44-A	Lab Control Sample	Total/NA	Solid	WDNR	427841
LCSD 490-427841/45-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	427841
LCSD 490-427841/45-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	427841

## GC Semi VOA

### Prep Batch: 383737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	WI DRO PREP	
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI DRO PREP	
MB 500-383737/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	
LCS 500-383737/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-383737/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

### Analysis Batch: 383957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	WI-DRO	383737
500-127508-29	GP-25 (6-8)	Total/NA	Solid	WI-DRO	383737
MB 500-383737/1-A	Method Blank	Total/NA	Solid	WI-DRO	383737
LCS 500-383737/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	383737
LCSD 500-383737/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	383737

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## GC Semi VOA (Continued)

### Prep Batch: 384456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	3541	
MB 500-384456/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-384456/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 384545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	8082A	384456
MB 500-384456/1-A	Method Blank	Total/NA	Solid	8082A	384456
LCS 500-384456/2-A	Lab Control Sample	Total/NA	Solid	8082A	384456

## Metals

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	1311	
LB 500-383992/1-C	Method Blank	TCLP	Solid	1311	
LB 500-383992/1-D	Method Blank	TCLP	Solid	1311	

### Prep Batch: 384019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	3050B	
500-127508-2	GP-12 (6-8)	Total/NA	Solid	3050B	
500-127508-3	GP-13 (2-4)	Total/NA	Solid	3050B	
500-127508-4	GP-13 (6-8)	Total/NA	Solid	3050B	
500-127508-5	GP-14 (2-4)	Total/NA	Solid	3050B	
500-127508-6	GP-14 (6-8)	Total/NA	Solid	3050B	
500-127508-7	GP-15 (2-4)	Total/NA	Solid	3050B	
500-127508-8	GP-15 (6-8)	Total/NA	Solid	3050B	
500-127508-9	GP-16 (2-4)	Total/NA	Solid	3050B	
500-127508-10	GP-16 (6-8)	Total/NA	Solid	3050B	
500-127508-11	GP-17 (2-4)	Total/NA	Solid	3050B	
500-127508-12	GP-17 (6-8)	Total/NA	Solid	3050B	
500-127508-13	GP-18 (2-4)	Total/NA	Solid	3050B	
500-127508-14	GP-18 (6-8)	Total/NA	Solid	3050B	
500-127508-15	GP-19 (2-4)	Total/NA	Solid	3050B	
500-127508-16	GP-19 (6-8)	Total/NA	Solid	3050B	
500-127508-22	GP-22 (2-4)	Total/NA	Solid	3050B	
500-127508-23	GP-22 (6-8)	Total/NA	Solid	3050B	
500-127508-24	GP-23 (2-4)	Total/NA	Solid	3050B	
500-127508-25	GP-23 (6-8)	Total/NA	Solid	3050B	
MB 500-384019/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-384019/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-127508-1 MS	GP-12 (2-4)	Total/NA	Solid	3050B	
500-127508-1 MSD	GP-12 (2-4)	Total/NA	Solid	3050B	
500-127508-1 DU	GP-12 (2-4)	Total/NA	Solid	3050B	

### Prep Batch: 384021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-26	GP-24 (2-4)	Total/NA	Solid	3050B	
500-127508-27	GP-24 (6-8)	Total/NA	Solid	3050B	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Metals (Continued)

### Prep Batch: 384021 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-28	GP-25 (2-4)	Total/NA	Solid	3050B	
500-127508-29	GP-25 (6-8)	Total/NA	Solid	3050B	
MB 500-384021/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 500-384021/2-A	Lab Control Sample	Total/NA	Solid	3050B	
500-127508-26 MS	GP-24 (2-4)	Total/NA	Solid	3050B	
500-127508-26 MSD	GP-24 (2-4)	Total/NA	Solid	3050B	
500-127508-26 DU	GP-24 (2-4)	Total/NA	Solid	3050B	

### Prep Batch: 384187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	3010A	383992
LB 500-383992/1-C	Method Blank	TCLP	Solid	3010A	383992
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Prep Batch: 384260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	7470A	383992
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	383992
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	

### Analysis Batch: 384328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	6010B	384187
LB 500-383992/1-C	Method Blank	TCLP	Solid	6010B	384187
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	6010B	384187

### Analysis Batch: 384394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	TCLP	Solid	7470A	384260
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	384260
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	384260
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	384260

### Analysis Batch: 384719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-26	GP-24 (2-4)	Total/NA	Solid	6010B	384021
500-127508-27	GP-24 (6-8)	Total/NA	Solid	6010B	384021
500-127508-28	GP-25 (2-4)	Total/NA	Solid	6010B	384021
500-127508-29	GP-25 (6-8)	Total/NA	Solid	6010B	384021
MB 500-384021/1-A	Method Blank	Total/NA	Solid	6010B	384021
LCS 500-384021/2-A	Lab Control Sample	Total/NA	Solid	6010B	384021
500-127508-26 MS	GP-24 (2-4)	Total/NA	Solid	6010B	384021
500-127508-26 MSD	GP-24 (2-4)	Total/NA	Solid	6010B	384021
500-127508-26 DU	GP-24 (2-4)	Total/NA	Solid	6010B	384021

### Analysis Batch: 384724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	6010B	384019
500-127508-2	GP-12 (6-8)	Total/NA	Solid	6010B	384019
500-127508-3	GP-13 (2-4)	Total/NA	Solid	6010B	384019

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Metals (Continued)

### Analysis Batch: 384724 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-4	GP-13 (6-8)	Total/NA	Solid	6010B	384019
500-127508-5	GP-14 (2-4)	Total/NA	Solid	6010B	384019
500-127508-6	GP-14 (6-8)	Total/NA	Solid	6010B	384019
500-127508-7	GP-15 (2-4)	Total/NA	Solid	6010B	384019
500-127508-8	GP-15 (6-8)	Total/NA	Solid	6010B	384019
500-127508-9	GP-16 (2-4)	Total/NA	Solid	6010B	384019
500-127508-10	GP-16 (6-8)	Total/NA	Solid	6010B	384019
500-127508-11	GP-17 (2-4)	Total/NA	Solid	6010B	384019
500-127508-13	GP-18 (2-4)	Total/NA	Solid	6010B	384019
500-127508-14	GP-18 (6-8)	Total/NA	Solid	6010B	384019
500-127508-15	GP-19 (2-4)	Total/NA	Solid	6010B	384019
500-127508-16	GP-19 (6-8)	Total/NA	Solid	6010B	384019
500-127508-22	GP-22 (2-4)	Total/NA	Solid	6010B	384019
500-127508-23	GP-22 (6-8)	Total/NA	Solid	6010B	384019
500-127508-24	GP-23 (2-4)	Total/NA	Solid	6010B	384019
500-127508-25	GP-23 (6-8)	Total/NA	Solid	6010B	384019
MB 500-384019/1-A	Method Blank	Total/NA	Solid	6010B	384019
LCS 500-384019/2-A	Lab Control Sample	Total/NA	Solid	6010B	384019
500-127508-1 MS	GP-12 (2-4)	Total/NA	Solid	6010B	384019
500-127508-1 MSD	GP-12 (2-4)	Total/NA	Solid	6010B	384019
500-127508-1 DU	GP-12 (2-4)	Total/NA	Solid	6010B	384019

### Analysis Batch: 384827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-12	GP-17 (6-8)	Total/NA	Solid	6010B	384019

## General Chemistry

### Analysis Batch: 383751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-3	GP-13 (2-4)	Total/NA	Solid	Moisture	
500-127508-4	GP-13 (6-8)	Total/NA	Solid	Moisture	
500-127508-5	GP-14 (2-4)	Total/NA	Solid	Moisture	
500-127508-6	GP-14 (6-8)	Total/NA	Solid	Moisture	
500-127508-25	GP-23 (6-8)	Total/NA	Solid	Moisture	
500-127508-26	GP-24 (2-4)	Total/NA	Solid	Moisture	
500-127508-27	GP-24 (6-8)	Total/NA	Solid	Moisture	
500-127508-28	GP-25 (2-4)	Total/NA	Solid	Moisture	
500-127508-29	GP-25 (6-8)	Total/NA	Solid	Moisture	
500-127508-30	Trip Blank	Total/NA	Solid	Moisture	

### Analysis Batch: 384553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9045C	

### Analysis Batch: 384965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-22	GP-22 (2-4)	Total/NA	Solid	Moisture	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## General Chemistry (Continued)

### Analysis Batch: 385047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	SM 2710F	

### Prep Batch: 385217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9010B	
MB 500-385217/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-385217/2-A	Lab Control Sample	Total/NA	Solid	9010B	

### Prep Batch: 385245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9030B	
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9030B	

### Analysis Batch: 385286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9095A	

### Analysis Batch: 385288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	1010	

### Analysis Batch: 385342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9014	385217
MB 500-385217/1-A	Method Blank	Total/NA	Solid	9014	385217
LCS 500-385217/2-A	Lab Control Sample	Total/NA	Solid	9014	385217

### Analysis Batch: 385402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-25	GP-23 (6-8)	Total/NA	Solid	9034	385245
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9034	385245
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9034	385245

### Analysis Batch: 427540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-1	GP-12 (2-4)	Total/NA	Solid	Moisture	
500-127508-2	GP-12 (6-8)	Total/NA	Solid	Moisture	
500-127508-7	GP-15 (2-4)	Total/NA	Solid	Moisture	
500-127508-8	GP-15 (6-8)	Total/NA	Solid	Moisture	
500-127508-9	GP-16 (2-4)	Total/NA	Solid	Moisture	
500-127508-10	GP-16 (6-8)	Total/NA	Solid	Moisture	
500-127508-11	GP-17 (2-4)	Total/NA	Solid	Moisture	
500-127508-12	GP-17 (6-8)	Total/NA	Solid	Moisture	
500-127508-13	GP-18 (2-4)	Total/NA	Solid	Moisture	
500-127508-14	GP-18 (6-8)	Total/NA	Solid	Moisture	
500-127508-15	GP-19 (2-4)	Total/NA	Solid	Moisture	
500-127508-16	GP-19 (6-8)	Total/NA	Solid	Moisture	
500-127508-17	GP-20 (2-4)	Total/NA	Solid	Moisture	
500-127508-18	GP-20 (6-8)	Total/NA	Solid	Moisture	
500-127508-19	GP-20 (14-16)	Total/NA	Solid	Moisture	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## General Chemistry (Continued)

### Analysis Batch: 427540 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127508-20	GP-21 (2-4)	Total/NA	Solid	Moisture	5
500-127508-21	GP-21 (6-8)	Total/NA	Solid	Moisture	6
500-127508-23	GP-22 (6-8)	Total/NA	Solid	Moisture	7
500-127508-24	GP-23 (2-4)	Total/NA	Solid	Moisture	8
500-127508-25	GP-23 (6-8)	Total/NA	Solid	Moisture	9

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127508-3	GP-13 (2-4)	102	106	89	92
500-127508-4	GP-13 (6-8)	100	108	89	93
500-127508-5	GP-14 (2-4)	103	105	88	94
500-127508-6	GP-14 (6-8)	103	106	89	93
500-127508-26	GP-24 (2-4)	103	107	88	93
500-127508-27	GP-24 (6-8)	105	106	90	93
500-127508-28	GP-25 (2-4)	100	106	88	92
500-127508-29	GP-25 (6-8)	103	103	90	95
500-127508-30	Trip Blank	102	103	88	92
LCS 500-384262/4	Lab Control Sample	103	109	93	102
LCS 500-385282/4	Lab Control Sample	97	100	90	91
MB 500-384262/6	Method Blank	105	114	89	100
MB 500-385282/6	Method Blank	98	107	89	92

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127508-25	GP-23 (6-8)	100	109	84	103
LB 500-384086/1-A	Method Blank	104	110	89	97

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
LCS 500-384171/2-A	Lab Control Sample	98	87	61	92	44	103
MB 500-384171/1-A	Method Blank	90	90	65	97	43	107

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

TPH = Terphenyl-d14 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
500-127508-25	GP-23 (6-8)	91	90	62	99	43	108
LB 500-383992/1-B	Method Blank	90	84	56	94	39	104

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TFT (80-120)	TFT (80-120)
500-127508-1	GP-12 (2-4)	91	91
500-127508-2	GP-12 (6-8)	91	91
500-127508-7	GP-15 (2-4)	90	90
500-127508-8	GP-15 (6-8)	89	89
500-127508-9	GP-16 (2-4)	91	91
500-127508-10	GP-16 (6-8)	91	91
500-127508-11	GP-17 (2-4)	91	91
500-127508-12	GP-17 (6-8)	90	90
500-127508-13	GP-18 (2-4)	91	91
500-127508-14	GP-18 (6-8)	91	91
500-127508-15	GP-19 (2-4)	89	89
500-127508-16	GP-19 (6-8)	90	90
500-127508-17	GP-20 (2-4)	90	90
500-127508-18	GP-20 (6-8)	88	88
500-127508-19	GP-20 (14-16)	86	86
500-127508-20	GP-21 (2-4)	98	98
500-127508-21	GP-21 (6-8)	125 X	125 X
500-127508-21	GP-21 (6-8)	173 X	173 X
500-127508-22	GP-22 (2-4)	81	81
500-127508-22	GP-22 (2-4)	89	89
500-127508-23	GP-22 (6-8)	88	88
500-127508-24	GP-23 (2-4)	87	87
500-127508-25	GP-23 (6-8)	87	87
LCS 490-427841/44-A	Lab Control Sample	95	95
LCS 490-427841/44-A	Lab Control Sample	93	93
LCSD 490-427841/45-A	Lab Control Sample Dup	95	95
LCSD 490-427841/45-A	Lab Control Sample Dup	91	91
MB 490-427841/43-A	Method Blank	86	86
MB 490-427841/43-A	Method Blank	89	89

### Surrogate Legend

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

TFT = a,a,a-Trifluorotoluene

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (49-129)	DCB1 (37-121)
500-127508-25	GP-23 (6-8)	67	71
LCS 500-384456/2-A	Lab Control Sample	76	63
MB 500-384456/1-A	Method Blank	76	70

### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		C9 (44-148)	
500-127508-25	GP-23 (6-8)	76	
500-127508-29	GP-25 (6-8)	86	
LCS 500-383737/2-A	Lab Control Sample	77	
LCSD 500-383737/3-A	Lab Control Sample Dup	71	
MB 500-383737/1-A	Method Blank	83	

### Surrogate Legend

C9 = n-Nonane

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID:** MB 500-384262/6

**Matrix:** Solid

**Analysis Batch:** 384262

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Methyl Ethyl Ketone	<0.0025		0.0050	0.0025	mg/L			05/08/17 22:32	1
1,2-Dichloroethane	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Benzene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Carbon tetrachloride	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Chlorobenzene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Chloroform	<0.0010		0.0020	0.0010	mg/L			05/08/17 22:32	1
Tetrachloroethylene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Trichloroethylene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Vinyl chloride	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1

**MB MB**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	105		75 - 126				05/08/17 22:32	1
4-Bromofluorobenzene (Surr)	114		72 - 124				05/08/17 22:32	1
Dibromofluoromethane	89		75 - 120				05/08/17 22:32	1
Toluene-d8 (Surr)	100		75 - 120				05/08/17 22:32	1

**Lab Sample ID:** LCS 500-384262/4

**Matrix:** Solid

**Analysis Batch:** 384262

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA

Analyte	MB	MB	Spike Added	LCN	LCN	Unit	D	%Rec	%Rec.
	Result	Qualifier		Result	Qualifier				
1,1-Dichloroethene			0.0500	0.0449		mg/L		90	67 - 122
Methyl Ethyl Ketone			0.0500	0.0524		mg/L		105	53 - 141
1,2-Dichloroethane			0.0500	0.0504		mg/L		101	68 - 127
Benzene			0.0500	0.0479		mg/L		96	70 - 120
Carbon tetrachloride			0.0500	0.0453		mg/L		91	65 - 122
Chlorobenzene			0.0500	0.0500		mg/L		100	70 - 120
Chloroform			0.0500	0.0455		mg/L		91	70 - 120
Tetrachloroethylene			0.0500	0.0518		mg/L		104	70 - 128
Trichloroethylene			0.0500	0.0488		mg/L		98	70 - 125
Vinyl chloride			0.0500	0.0415		mg/L		83	64 - 126

**LCS LCS**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					
4-Bromofluorobenzene (Surr)	109		72 - 124					
Dibromofluoromethane	93		75 - 120					
Toluene-d8 (Surr)	102		75 - 120					

**Lab Sample ID:** MB 500-385282/6

**Matrix:** Solid

**Analysis Batch:** 385282

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,1,1,2-Tetrachloroethane	<0.46		1.0		0.46	ug/Kg				05/16/17 00:56	1
1,1,1-Trichloroethane	<0.38		1.0		0.38	ug/Kg				05/16/17 00:56	1
1,1,2,2-Tetrachloroethane	<0.40		1.0		0.40	ug/Kg				05/16/17 00:56	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: MB 500-385282/6**

**Matrix: Solid**

**Analysis Batch: 385282**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.35				1.0	0.35	ug/Kg			05/16/17 00:56	1
1,1-Dichloroethane	<0.41				1.0	0.41	ug/Kg			05/16/17 00:56	1
1,1-Dichloroethene	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
1,1-Dichloropropene	<0.30				1.0	0.30	ug/Kg			05/16/17 00:56	1
1,2,3-Trichlorobenzene	<0.46				1.0	0.46	ug/Kg			05/16/17 00:56	1
1,2,3-Trichloropropane	<0.41				1.0	0.41	ug/Kg			05/16/17 00:56	1
1,2,4-Trichlorobenzene	<0.34				1.0	0.34	ug/Kg			05/16/17 00:56	1
1,2,4-Trimethylbenzene	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
1,2-Dibromo-3-Chloropropane	<2.0				5.0	2.0	ug/Kg			05/16/17 00:56	1
1,2-Dibromoethane	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
1,2-Dichlorobenzene	<0.33				1.0	0.33	ug/Kg			05/16/17 00:56	1
1,2-Dichloroethane	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
1,2-Dichloropropene	<0.43				1.0	0.43	ug/Kg			05/16/17 00:56	1
1,3,5-Trimethylbenzene	<0.38				1.0	0.38	ug/Kg			05/16/17 00:56	1
1,3-Dichlorobenzene	<0.40				1.0	0.40	ug/Kg			05/16/17 00:56	1
1,3-Dichloropropane	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
1,4-Dichlorobenzene	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
2,2-Dichloropropane	<0.44				1.0	0.44	ug/Kg			05/16/17 00:56	1
2-Chlorotoluene	<0.31				1.0	0.31	ug/Kg			05/16/17 00:56	1
4-Chlorotoluene	<0.35				1.0	0.35	ug/Kg			05/16/17 00:56	1
Benzene	<0.15				0.25	0.15	ug/Kg			05/16/17 00:56	1
Bromobenzene	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
Bromochloromethane	<0.43				1.0	0.43	ug/Kg			05/16/17 00:56	1
Bromodichloromethane	<0.37				1.0	0.37	ug/Kg			05/16/17 00:56	1
Bromoform	<0.48				1.0	0.48	ug/Kg			05/16/17 00:56	1
Bromomethane	<0.80				2.0	0.80	ug/Kg			05/16/17 00:56	1
Carbon tetrachloride	<0.38				1.0	0.38	ug/Kg			05/16/17 00:56	1
Chlorobenzene	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
Chloroethane	<0.50				1.0	0.50	ug/Kg			05/16/17 00:56	1
Chloroform	<0.37				2.0	0.37	ug/Kg			05/16/17 00:56	1
Chloromethane	<0.32				1.0	0.32	ug/Kg			05/16/17 00:56	1
cis-1,2-Dichloroethene	<0.41				1.0	0.41	ug/Kg			05/16/17 00:56	1
cis-1,3-Dichloropropene	<0.42				1.0	0.42	ug/Kg			05/16/17 00:56	1
Dibromochloromethane	<0.49				1.0	0.49	ug/Kg			05/16/17 00:56	1
Dibromomethane	<0.27				1.0	0.27	ug/Kg			05/16/17 00:56	1
Dichlorodifluoromethane	<0.67				2.0	0.67	ug/Kg			05/16/17 00:56	1
Ethylbenzene	<0.18				0.25	0.18	ug/Kg			05/16/17 00:56	1
Hexachlorobutadiene	<0.45				1.0	0.45	ug/Kg			05/16/17 00:56	1
Isopropyl ether	<0.28				1.0	0.28	ug/Kg			05/16/17 00:56	1
Isopropylbenzene	<0.38				1.0	0.38	ug/Kg			05/16/17 00:56	1
Methyl tert-butyl ether	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
Methylene Chloride	<1.6				5.0	1.6	ug/Kg			05/16/17 00:56	1
Naphthalene	<0.33				1.0	0.33	ug/Kg			05/16/17 00:56	1
n-Butylbenzene	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1
N-Propylbenzene	<0.41				1.0	0.41	ug/Kg			05/16/17 00:56	1
p-Isopropyltoluene	<0.36				1.0	0.36	ug/Kg			05/16/17 00:56	1
sec-Butylbenzene	<0.40				1.0	0.40	ug/Kg			05/16/17 00:56	1
Styrene	<0.39				1.0	0.39	ug/Kg			05/16/17 00:56	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: MB 500-385282/6**

**Matrix: Solid**

**Analysis Batch: 385282**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			05/16/17 00:56	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			05/16/17 00:56	1
Toluene	<0.15		0.25	0.15	ug/Kg			05/16/17 00:56	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			05/16/17 00:56	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			05/16/17 00:56	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			05/16/17 00:56	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			05/16/17 00:56	1
Vinyl chloride	<0.26		0.50	0.26	ug/Kg			05/16/17 00:56	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			05/16/17 00:56	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	98		75 - 126		05/16/17 00:56	1
4-Bromofluorobenzene (Surr)	107		72 - 124		05/16/17 00:56	1
Dibromofluoromethane	89		75 - 120		05/16/17 00:56	1
Toluene-d8 (Surr)	92		75 - 120		05/16/17 00:56	1

**Lab Sample ID: LCS 500-385282/4**

**Matrix: Solid**

**Analysis Batch: 385282**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
1,1,1,2-Tetrachloroethane	50.0	50.8		ug/Kg		102	70 - 125	
1,1,1-Trichloroethane	50.0	48.8		ug/Kg		98	70 - 125	
1,1,2,2-Tetrachloroethane	50.0	47.9		ug/Kg		96	67 - 127	
1,1,2-Trichloroethane	50.0	51.0		ug/Kg		102	70 - 122	
1,1-Dichloroethane	50.0	58.6		ug/Kg		117	70 - 125	
1,1-Dichloroethene	50.0	48.0		ug/Kg		96	67 - 122	
1,1-Dichloropropene	50.0	51.2		ug/Kg		102	70 - 121	
1,2,3-Trichlorobenzene	50.0	41.3		ug/Kg		83	55 - 140	
1,2,3-Trichloropropane	50.0	47.2		ug/Kg		94	50 - 133	
1,2,4-Trichlorobenzene	50.0	48.8		ug/Kg		98	66 - 127	
1,2,4-Trimethylbenzene	50.0	54.4		ug/Kg		109	70 - 123	
1,2-Dibromo-3-Chloropropane	50.0	41.2		ug/Kg		82	56 - 123	
1,2-Dibromoethane	50.0	48.7		ug/Kg		97	70 - 125	
1,2-Dichlorobenzene	50.0	52.5		ug/Kg		105	70 - 125	
1,2-Dichloroethane	50.0	57.8		ug/Kg		116	68 - 127	
1,2-Dichloropropane	50.0	64.7		ug/Kg		129	67 - 130	
1,3,5-Trimethylbenzene	50.0	54.3		ug/Kg		109	70 - 123	
1,3-Dichlorobenzene	50.0	54.6		ug/Kg		109	70 - 125	
1,3-Dichloropropane	50.0	51.0		ug/Kg		102	62 - 136	
1,4-Dichlorobenzene	50.0	51.6		ug/Kg		103	70 - 120	
2,2-Dichloropropane	50.0	48.9		ug/Kg		98	58 - 129	
2-Chlorotoluene	50.0	54.0		ug/Kg		108	70 - 125	
4-Chlorotoluene	50.0	52.1		ug/Kg		104	68 - 124	
Benzene	50.0	53.0		ug/Kg		106	70 - 120	
Bromobenzene	50.0	56.7		ug/Kg		113	70 - 122	
Bromochloromethane	50.0	50.1		ug/Kg		100	65 - 122	
Bromodichloromethane	50.0	49.3		ug/Kg		99	69 - 120	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: LCS 500-385282/4**

**Matrix: Solid**

**Analysis Batch: 385282**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Bromoform	50.0	54.5		ug/Kg		109	56 - 132	
Bromomethane	50.0	37.3		ug/Kg		75	40 - 130	
Carbon tetrachloride	50.0	51.0		ug/Kg		102	65 - 122	
Chlorobenzene	50.0	51.6		ug/Kg		103	70 - 120	
Chloroethane	50.0	39.2		ug/Kg		78	45 - 127	
Chloroform	50.0	48.6		ug/Kg		97	70 - 120	
Chloromethane	50.0	70.6		ug/Kg		141	54 - 147	
cis-1,2-Dichloroethene	50.0	52.0		ug/Kg		104	70 - 125	
cis-1,3-Dichloropropene	50.0	50.5		ug/Kg		101	64 - 127	
Dibromochloromethane	50.0	49.5		ug/Kg		99	68 - 125	
Dibromomethane	50.0	49.0		ug/Kg		98	70 - 120	
Dichlorodifluoromethane	50.0	51.5		ug/Kg		103	40 - 150	
Ethylbenzene	50.0	52.3		ug/Kg		105	70 - 120	
Hexachlorobutadiene	50.0	63.4		ug/Kg		127	51 - 150	
Isopropylbenzene	50.0	56.9		ug/Kg		114	70 - 126	
Methyl tert-butyl ether	50.0	45.4		ug/Kg		91	70 - 120	
Methylene Chloride	50.0	46.5		ug/Kg		93	69 - 125	
Naphthalene	50.0	38.9		ug/Kg		78	59 - 130	
n-Butylbenzene	50.0	52.7		ug/Kg		105	68 - 125	
N-Propylbenzene	50.0	54.3		ug/Kg		109	69 - 127	
p-Isopropyltoluene	50.0	54.3		ug/Kg		109	70 - 125	
sec-Butylbenzene	50.0	54.2		ug/Kg		108	70 - 123	
Styrene	50.0	50.3		ug/Kg		101	70 - 120	
tert-Butylbenzene	50.0	56.5		ug/Kg		113	70 - 121	
Tetrachloroethene	50.0	59.9		ug/Kg		120	70 - 128	
Toluene	50.0	51.8		ug/Kg		104	70 - 125	
trans-1,2-Dichloroethene	50.0	49.5		ug/Kg		99	70 - 125	
trans-1,3-Dichloropropene	50.0	48.2		ug/Kg		96	62 - 128	
Trichloroethene	50.0	57.9		ug/Kg		116	70 - 125	
Trichlorofluoromethane	50.0	48.1		ug/Kg		96	70 - 126	
Vinyl chloride	50.0	61.3		ug/Kg		123	64 - 126	
Xylenes, Total	100	101		ug/Kg		101	70 - 125	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		75 - 126
4-Bromofluorobenzene (Surr)	100		72 - 124
Dibromofluoromethane	90		75 - 120
Toluene-d8 (Surr)	91		75 - 120

**Lab Sample ID: LB 500-384086/1-A**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/08/17 23:25	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20
Benzene	<0.010		0.020	0.010	mg/L			05/08/17 23:25	20

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: LB 500-384086/1-A**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20
Chlorobenzene	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20
Chloroform	<0.020		0.040		0.020	mg/L			05/08/17 23:25		20
Tetrachloroethene	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20
Trichloroethene	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20
Vinyl chloride	<0.010		0.020		0.010	mg/L			05/08/17 23:25		20

Surrogate	LB	LB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		75 - 126				05/08/17 23:25	20
4-Bromofluorobenzene (Surr)	110		72 - 124				05/08/17 23:25	20
Dibromofluoromethane	89		75 - 120				05/08/17 23:25	20
Toluene-d8 (Surr)	97		75 - 120				05/08/17 23:25	20

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

**Lab Sample ID: MB 500-384171/1-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 384171**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.0020		0.0020		0.0020	mg/L			05/08/17 07:42	05/08/17 15:01	1
2,4,5-Trichlorophenol	<0.010		0.010		0.010	mg/L			05/08/17 07:42	05/08/17 15:01	1
2,4,6-Trichlorophenol	<0.0050		0.0050		0.0050	mg/L			05/08/17 07:42	05/08/17 15:01	1
2,4-Dinitrotoluene	<0.0010		0.0010		0.0010	mg/L			05/08/17 07:42	05/08/17 15:01	1
2-Methylphenol	<0.0020		0.0020		0.0020	mg/L			05/08/17 07:42	05/08/17 15:01	1
3 & 4 Methylphenol	<0.0020		0.0020		0.0020	mg/L			05/08/17 07:42	05/08/17 15:01	1
Hexachlorobenzene	<0.00050		0.00050		0.00050	mg/L			05/08/17 07:42	05/08/17 15:01	1
Hexachlorobutadiene	<0.0050		0.0050		0.0050	mg/L			05/08/17 07:42	05/08/17 15:01	1
Hexachloroethane	<0.0050		0.0050		0.0050	mg/L			05/08/17 07:42	05/08/17 15:01	1
Nitrobenzene	<0.0010		0.0010		0.0010	mg/L			05/08/17 07:42	05/08/17 15:01	1
Pentachlorophenol	<0.020		0.020		0.020	mg/L			05/08/17 07:42	05/08/17 15:01	1
Pyridine	<0.020		0.020		0.020	mg/L			05/08/17 07:42	05/08/17 15:01	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
2,4,6-Tribromophenol (Surr)	90		40 - 145				05/08/17 07:42	05/08/17 15:01	1
2-Fluorobiphenyl	90		34 - 110				05/08/17 07:42	05/08/17 15:01	1
2-Fluorophenol (Surr)	65		27 - 110				05/08/17 07:42	05/08/17 15:01	1
Nitrobenzene-d5 (Surr)	97		36 - 120				05/08/17 07:42	05/08/17 15:01	1
Phenol-d5 (Surr)	43		20 - 100				05/08/17 07:42	05/08/17 15:01	1
Terphenyl-d14 (Surr)	107		40 - 145				05/08/17 07:42	05/08/17 15:01	1

**Lab Sample ID: LCS 500-384171/2-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 384171**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits
	Added								
1,4-Dichlorobenzene	0.0400			0.0322		mg/L	81	23 - 110	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

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

**Lab Sample ID: LCS 500-384171/2-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384171**

**%Rec.**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
2,4,5-Trichlorophenol	0.0400	0.0388		mg/L		97	63 - 120
2,4,6-Trichlorophenol	0.0400	0.0393		mg/L		98	62 - 110
2,4-Dinitrotoluene	0.0400	0.0432		mg/L		108	63 - 122
2-Methylphenol	0.0400	0.0342		mg/L		86	53 - 110
3 & 4 Methylphenol	0.0400	0.0329		mg/L		82	53 - 110
Hexachlorobenzene	0.0400	0.0375		mg/L		94	61 - 120
Hexachlorobutadiene	0.0400	0.0315		mg/L		79	20 - 100
Hexachloroethane	0.0400	0.0314		mg/L		79	20 - 100
Nitrobenzene	0.0400	0.0359		mg/L		90	53 - 110
Pentachlorophenol	0.0800	0.0779		mg/L		97	23 - 129
Pyridine	0.0400	0.0259		mg/L		65	15 - 110

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	98		40 - 145
2-Fluorobiphenyl	87		34 - 110
2-Fluorophenol (Surr)	61		27 - 110
Nitrobenzene-d5 (Surr)	92		36 - 120
Phenol-d5 (Surr)	44		20 - 100
Terphenyl-d14 (Surr)	103		40 - 145

**Lab Sample ID: LB 500-383992/1-B**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384171**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 14:34	1
2-Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Hexachloroethane	<0.050		0.050	0.050	mg/L		05/08/17 07:42	05/08/17 14:34	1
Nitrobenzene	<0.010		0.010	0.010	mg/L		05/08/17 07:42	05/08/17 14:34	1
Pentachlorophenol	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 14:34	1
Pyridine	<0.20		0.20	0.20	mg/L		05/08/17 07:42	05/08/17 14:34	1

Surrogate	LB	LB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier		Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	90		40 - 145	05/08/17 07:42	05/08/17 14:34	1
2-Fluorobiphenyl	84		34 - 110	05/08/17 07:42	05/08/17 14:34	1
2-Fluorophenol (Surr)	56		27 - 110	05/08/17 07:42	05/08/17 14:34	1
Nitrobenzene-d5 (Surr)	94		36 - 120	05/08/17 07:42	05/08/17 14:34	1
Phenol-d5 (Surr)	39		20 - 100	05/08/17 07:42	05/08/17 14:34	1
Terphenyl-d14 (Surr)	104		40 - 145	05/08/17 07:42	05/08/17 14:34	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID:** MB 490-427841/43-A

**Matrix:** Solid

**Analysis Batch:** 428992

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 427841

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<18		25	18	ug/Kg	05/06/17 12:45	05/10/17 17:07		1
Ethylbenzene	<19		25	19	ug/Kg	05/06/17 12:45	05/10/17 17:07		1
Methyl tert-butyl ether	<12		25	12	ug/Kg	05/06/17 12:45	05/10/17 17:07		1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg	05/06/17 12:45	05/10/17 17:07		1
Naphthalene	<120		250	120	ug/Kg	05/06/17 12:45	05/10/17 17:07		1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg	05/06/17 12:45	05/10/17 17:07		1
Toluene	<17		25	17	ug/Kg	05/06/17 12:45	05/10/17 17:07		1
Xylenes, Total	<30		75	30	ug/Kg	05/06/17 12:45	05/10/17 17:07		1
Wisconsin GRO	<2500		5000	2500	ug/Kg	05/06/17 12:45	05/10/17 17:07		1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
a,a,a-Trifluorotoluene	89		80 - 120	05/06/17 12:45	05/10/17 17:07	1
a,a,a-Trifluorotoluene	102		80 - 120	05/06/17 12:45	05/10/17 17:07	1

**Lab Sample ID:** MB 490-427841/43-A

**Matrix:** Solid

**Analysis Batch:** 428992

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 427841

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<18		25	18	ug/Kg	05/06/17 12:45	05/11/17 06:32		1
Ethylbenzene	<19		25	19	ug/Kg	05/06/17 12:45	05/11/17 06:32		1
Methyl tert-butyl ether	<12		25	12	ug/Kg	05/06/17 12:45	05/11/17 06:32		1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg	05/06/17 12:45	05/11/17 06:32		1
Naphthalene	<120		250	120	ug/Kg	05/06/17 12:45	05/11/17 06:32		1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg	05/06/17 12:45	05/11/17 06:32		1
Toluene	<17		25	17	ug/Kg	05/06/17 12:45	05/11/17 06:32		1
Xylenes, Total	<30		75	30	ug/Kg	05/06/17 12:45	05/11/17 06:32		1
Wisconsin GRO	<2500		5000	2500	ug/Kg	05/06/17 12:45	05/11/17 06:32		1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
a,a,a-Trifluorotoluene	86		80 - 120	05/06/17 12:45	05/11/17 06:32	1
a,a,a-Trifluorotoluene	96		80 - 120	05/06/17 12:45	05/11/17 06:32	1

**Lab Sample ID:** LCS 490-427841/44-A

**Matrix:** Solid

**Analysis Batch:** 428992

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 427841

Analyte	Spike Added	LCS	LCS	D	%Rec	Limits
		Result	Qualifier			
Benzene	5000	4940		ug/Kg	99	76 - 120
Ethylbenzene	5000	4820		ug/Kg	96	77 - 120
Methyl tert-butyl ether	5000	5520		ug/Kg	110	73 - 120
1,2,4-Trimethylbenzene	5000	4880		ug/Kg	98	60 - 140
Naphthalene	5000	5720		ug/Kg	114	74 - 127
1,3,5-Trimethylbenzene	5000	4900		ug/Kg	98	74 - 133
Toluene	5000	4920		ug/Kg	98	79 - 120
Wisconsin GRO	50000	58100		ug/Kg	116	80 - 120

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID: LCS 490-427841/44-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	95		80 - 120
a,a,a-Trifluorotoluene	104		80 - 120

**Lab Sample ID: LCS 490-427841/44-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Benzene	5000	4930		ug/Kg		99	76 - 120	
Ethylbenzene	5000	4910		ug/Kg		98	77 - 120	
Methyl tert-butyl ether	5000	5530		ug/Kg		111	73 - 120	
1,2,4-Trimethylbenzene	5000	4910		ug/Kg		98	60 - 140	
Naphthalene	5000	5600		ug/Kg		112	74 - 127	
1,3,5-Trimethylbenzene	5000	4950		ug/Kg		99	74 - 133	
Toluene	5000	4970		ug/Kg		99	79 - 120	
Wisconsin GRO	50000	57900		ug/Kg		116	80 - 120	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	93		80 - 120
a,a,a-Trifluorotoluene	101		80 - 120

**Lab Sample ID: LCSD 490-427841/45-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Benzene	5000	4810		ug/Kg		96	76 - 120	3	27	
Ethylbenzene	5000	4710		ug/Kg		94	77 - 120	2	49	
Methyl tert-butyl ether	5000	5560		ug/Kg		111	73 - 120	1	31	
1,2,4-Trimethylbenzene	5000	4750		ug/Kg		95	60 - 140	3	50	
Naphthalene	5000	5470		ug/Kg		109	74 - 127	5	50	
1,3,5-Trimethylbenzene	5000	4790		ug/Kg		96	74 - 133	2	42	
Toluene	5000	4820		ug/Kg		96	79 - 120	2	37	
Wisconsin GRO	50000	56100		ug/Kg		112	80 - 120	3	20	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	95		80 - 120
a,a,a-Trifluorotoluene	101		80 - 120

**Lab Sample ID: LCSD 490-427841/45-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 427841**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Benzene	5000	4890		ug/Kg		98	76 - 120	1	27	
Ethylbenzene	5000	4780		ug/Kg		96	77 - 120	3	49	
Methyl tert-butyl ether	5000	5730		ug/Kg		115	73 - 120	3	31	

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID: LCSD 490-427841/45-A**

**Matrix: Solid**

**Analysis Batch: 428992**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 427841**

**%Rec.**

**RPD**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2,4-Trimethylbenzene	5000	4820		ug/Kg		96	60 - 140	2	50
Naphthalene	5000	5760		ug/Kg		115	74 - 127	3	50
1,3,5-Trimethylbenzene	5000	4860		ug/Kg		97	74 - 133	2	42
Toluene	5000	4900		ug/Kg		98	79 - 120	2	37
Wisconsin GRO	50000	59200		ug/Kg		118	80 - 120	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	91		80 - 120
a,a,a-Trifluorotoluene	101		80 - 120

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID: LB3 500-384046/21-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Gasoline Range Organics (C5-C10)	<500		1500	500	ug/Kg		05/06/17 01:30	05/07/17 20:24	50

**Lab Sample ID: LCS 500-384046/23-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
WI Gasoline Range Organics (C5-C10)	20000	22800		ug/Kg		114	80 - 120

**Lab Sample ID: LCSD 500-384046/24-A**

**Matrix: Solid**

**Analysis Batch: 384093**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 384046**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
WI Gasoline Range Organics (C5-C10)	20000	22900		ug/Kg		114	80 - 120	0	20

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 500-384456/1-A**

**Matrix: Solid**

**Analysis Batch: 384455**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1221	<7.3		17	7.3	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1232	<7.3		17	7.3	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1242	<5.5		17	5.5	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1248	<6.6		17	6.6	ug/Kg		05/09/17 16:38	05/10/17 11:02	1
PCB-1254	<3.6		17	3.6	ug/Kg		05/09/17 16:38	05/10/17 11:02	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: MB 500-384456/1-A**

**Matrix: Solid**

**Analysis Batch: 384545**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	MB		RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed		
PCB-1260	<8.2		17	8.2	ug/Kg	D	05/09/17 16:38	05/10/17 11:02		1
<b>Surrogate</b>										
Tetrachloro-m-xylene	76		49 - 129				Prepared	Analyzed		
DCB Decachlorobiphenyl	70		37 - 121				05/09/17 16:38	05/10/17 11:02		1

**Lab Sample ID: LCS 500-384456/2-A**

**Matrix: Solid**

**Analysis Batch: 384545**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384456**

Analyte	MB		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier								
PCB-1016			167	135		ug/Kg	D	81	57 - 120	
PCB-1260			167	130		ug/Kg		78	61 - 125	
<b>Surrogate</b>										
Tetrachloro-m-xylene	76		49 - 129				Prepared	Analyzed		
DCB Decachlorobiphenyl	63		37 - 121				05/09/17 16:38	05/10/17 11:02		1

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

**Lab Sample ID: MB 500-383737/1-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	MB		RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed		
WI Diesel Range Organics (C10-C28)	<1.6		4.0	1.6	mg/Kg	D	05/04/17 11:15	05/05/17 14:27		1
<b>Surrogate</b>										
n-Nonane	83		44 - 148				Prepared	Analyzed		

**Lab Sample ID: LCS 500-383737/2-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	MB		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier								
WI Diesel Range Organics (C10-C28)			20.0	14.9		mg/Kg	D	75	70 - 120	
<b>Surrogate</b>										
n-Nonane	77		44 - 148				Prepared	Analyzed		

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC) (Continued)

**Lab Sample ID: LCSD 500-383737/3-A**

**Matrix: Solid**

**Analysis Batch: 383957**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 383737**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
WI Diesel Range Organics (C10-C28)	20.0	16.3		mg/Kg		81	70 - 120	9		20
<i>Surrogate</i>										
		LCSD %Recovery	LCSD Qualifier	Limits						
<i>n</i> -Nonane	71			44 - 148						

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 500-384019/1-A**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.23		0.50	0.23	mg/Kg		05/06/17 11:05	05/11/17 03:07	1

**Lab Sample ID: LCS 500-384019/2-A**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits	
Lead	10.0	8.72		mg/Kg		87	80 - 120		

**Lab Sample ID: 500-127508-1 MS**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: GP-12 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	Limits
Lead	19	F1	10.1	22.7	F1	mg/Kg	⊗	39	75 - 125	

**Lab Sample ID: 500-127508-1 MSD**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: GP-12 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Lead	19	F1	10.2	23.0	F1	mg/Kg	⊗	42	75 - 125	1

**Lab Sample ID: 500-127508-1 DU**

**Matrix: Solid**

**Analysis Batch: 384724**

**Client Sample ID: GP-12 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384019**

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	RPD	RPD	Limit
Lead	19	F1	10.2	17.4		mg/Kg	⊗			7

**Lab Sample ID: MB 500-384021/1-A**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.23		0.50	0.23	mg/Kg		05/06/17 11:07	05/10/17 18:20	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Lab Sample ID: LCS 500-384021/2-A**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Lead	10.0	8.43		mg/Kg	84	80 - 120	

**Lab Sample ID: 500-127508-26 MS**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: GP-24 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Lead	27	V F1	10.2	37.2		mg/Kg	⊗	103	75 - 125

**Lab Sample ID: 500-127508-26 MSD**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: GP-24 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Lead	27	V F1	10.7	34.0	F1	mg/Kg	⊗	69	75 - 125

**Lab Sample ID: 500-127508-26 DU**

**Matrix: Solid**

**Analysis Batch: 384719**

**Client Sample ID: GP-24 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384021**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD
Lead	27	V F1	23.2		mg/Kg	⊗	14	20

**Lab Sample ID: LCS 500-384187/2-A**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384187**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.100	0.0958		mg/L	96	80 - 120	
Barium	0.500	0.514		mg/L	103	80 - 120	
Cadmium	0.0500	0.0503		mg/L	101	80 - 120	
Chromium	0.200	0.194		mg/L	97	80 - 120	
Copper	0.250	0.254		mg/L	102	80 - 120	
Lead	0.100	0.0943		mg/L	94	80 - 120	
Nickel	0.500	0.486		mg/L	97	80 - 120	
Selenium	0.100	0.0946		mg/L	95	80 - 120	
Silver	0.0500	0.0473		mg/L	95	80 - 120	
Zinc	0.500	0.457		mg/L	91	80 - 120	

**Lab Sample ID: LB 500-383992/1-C**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384187**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	05/08/17 08:10	05/08/17 20:33		1
Barium	<0.050		0.50	0.050	mg/L	05/08/17 08:10	05/08/17 20:33		1
Cadmium	<0.0020		0.0050	0.0020	mg/L	05/08/17 08:10	05/08/17 20:33		1
Chromium	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 20:33		1
Copper	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 20:33		1
Lead	<0.0075		0.050	0.0075	mg/L	05/08/17 08:10	05/08/17 20:33		1
Nickel	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 20:33		1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID:** LB 500-383992/1-C

**Matrix:** Solid

**Analysis Batch:** 384328

**Client Sample ID:** Method Blank

**Prep Type:** TCLP

**Prep Batch:** 384187

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.020		0.050		0.020	mg/L		05/08/17 08:10	05/08/17 20:33		1
Silver	<0.010		0.025		0.010	mg/L		05/08/17 08:10	05/08/17 20:33		1
Zinc	<0.020		0.10		0.020	mg/L		05/08/17 08:10	05/08/17 20:33		1

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID:** MB 500-384260/12-A

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 384260

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		0.00020	mg/L		05/08/17 13:40	05/09/17 10:03		1

**Lab Sample ID:** LCS 500-384260/13-A

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 384260

Analyte	Spike		LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	
	Added										
Mercury	0.00200		0.00212		0.00200		mg/L	106	80 - 120		

**Lab Sample ID:** LB 500-383992/1-D

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** Method Blank

**Prep Type:** TCLP

**Prep Batch:** 384260

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		0.00020	mg/L		05/08/17 13:40	05/09/17 10:06		1

## Method: 9014 - Cyanide

**Lab Sample ID:** MB 500-385217/1-A

**Matrix:** Solid

**Analysis Batch:** 385342

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 385217

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.17		0.50		0.17	mg/Kg		05/15/17 17:10	05/15/17 20:20		1

**Lab Sample ID:** LCS 500-385217/2-A

**Matrix:** Solid

**Analysis Batch:** 385342

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 385217

Analyte	Spike		LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	
	Added										
Cyanide, Total	5.00		4.75		5.00		mg/Kg	95	80 - 120		

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 500-385245/1-A

Matrix: Solid

Analysis Batch: 385402

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 385245

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<4.7		10	4.7	mg/Kg		05/15/17 17:36	05/15/17 21:39	1

Lab Sample ID: LCS 500-385245/2-A

Matrix: Solid

Analysis Batch: 385402

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 385245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfide	338	335		mg/Kg		99	80 - 120

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

**Client Sample ID: GP-12 (2-4)**

Date Collected: 05/02/17 08:25

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

**Client Sample ID: GP-12 (2-4)**

Date Collected: 05/02/17 08:25

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-1**

Matrix: Solid

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 17:34	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:14	PJ1	TAL CHI

**Client Sample ID: GP-12 (6-8)**

Date Collected: 05/02/17 08:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

**Client Sample ID: GP-12 (6-8)**

Date Collected: 05/02/17 08:30

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-2**

Matrix: Solid

Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 18:01	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:32	PJ1	TAL CHI

**Client Sample ID: GP-13 (2-4)**

Date Collected: 05/02/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

**Client Sample ID: GP-13 (2-4)**

Date Collected: 05/02/17 09:15

Date Received: 05/03/17 09:00

**Lab Sample ID: 500-127508-3**

Matrix: Solid

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 09:15	WRE	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-13 (2-4)**

**Date Collected:** 05/02/17 09:15  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-3**

**Matrix:** Solid  
**Percent Solids:** 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	385282	05/16/17 04:52	TCT	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:38	PJ1	TAL CHI

## **Client Sample ID: GP-13 (6-8)**

**Date Collected:** 05/02/17 09:20  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-4**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-13 (6-8)**

**Date Collected:** 05/02/17 09:20  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-4**

**Matrix:** Solid  
**Percent Solids:** 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 09:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 05:18	TCT	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:48	PJ1	TAL CHI

## **Client Sample ID: GP-14 (2-4)**

**Date Collected:** 05/02/17 09:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-5**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-14 (2-4)**

**Date Collected:** 05/02/17 09:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-5**

**Matrix:** Solid  
**Percent Solids:** 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 09:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 05:44	TCT	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:51	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-14 (6-8)**

**Date Collected:** 05/02/17 09:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-6**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-14 (6-8)**

**Date Collected:** 05/02/17 09:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-6**

**Matrix:** Solid

**Percent Solids:** 73.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 09:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 06:11	TCT	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:54	PJ1	TAL CHI

## **Client Sample ID: GP-15 (2-4)**

**Date Collected:** 05/02/17 09:55  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-7**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-15 (2-4)**

**Date Collected:** 05/02/17 09:55  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-7**

**Matrix:** Solid

**Percent Solids:** 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 18:28	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 03:58	PJ1	TAL CHI

## **Client Sample ID: GP-15 (6-8)**

**Date Collected:** 05/02/17 10:00  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-8**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-15 (6-8)**

**Date Collected:** 05/02/17 10:00  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-8**

**Matrix:** Solid

**Percent Solids:** 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-15 (6-8)**

**Date Collected:** 05/02/17 10:00  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-8**

**Matrix:** Solid  
**Percent Solids:** 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	428992	05/10/17 18:55	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:02	PJ1	TAL CHI

## **Client Sample ID: GP-16 (2-4)**

**Date Collected:** 05/02/17 10:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-9**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-16 (2-4)**

**Date Collected:** 05/02/17 10:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-9**

**Matrix:** Solid  
**Percent Solids:** 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 19:22	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:06	PJ1	TAL CHI

## **Client Sample ID: GP-16 (6-8)**

**Date Collected:** 05/02/17 10:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-10**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-16 (6-8)**

**Date Collected:** 05/02/17 10:35  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-10**

**Matrix:** Solid  
**Percent Solids:** 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 19:48	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:10	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-17 (2-4)

Date Collected: 05/02/17 10:50  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## Client Sample ID: GP-17 (2-4)

Date Collected: 05/02/17 10:50  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-11

Matrix: Solid  
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 20:15	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:15	PJ1	TAL CHI

## Client Sample ID: GP-17 (6-8)

Date Collected: 05/02/17 10:55  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## Client Sample ID: GP-17 (6-8)

Date Collected: 05/02/17 10:55  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-12

Matrix: Solid  
Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 20:42	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384827	05/11/17 13:32	PJ1	TAL CHI

## Client Sample ID: GP-18 (2-4)

Date Collected: 05/02/17 11:25  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## Client Sample ID: GP-18 (2-4)

Date Collected: 05/02/17 11:25  
Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-13

Matrix: Solid  
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-18 (2-4)**

**Date Collected:** 05/02/17 11:25  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-13**

**Matrix:** Solid  
**Percent Solids:** 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	428992	05/10/17 21:09	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:23	PJ1	TAL CHI

## **Client Sample ID: GP-18 (6-8)**

**Date Collected:** 05/02/17 11:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-14**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-18 (6-8)**

**Date Collected:** 05/02/17 11:30  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-14**

**Matrix:** Solid  
**Percent Solids:** 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 21:36	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:35	PJ1	TAL CHI

## **Client Sample ID: GP-19 (2-4)**

**Date Collected:** 05/02/17 11:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-15**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-19 (2-4)**

**Date Collected:** 05/02/17 11:50  
**Date Received:** 05/03/17 09:00

## **Lab Sample ID: 500-127508-15**

**Matrix:** Solid  
**Percent Solids:** 95.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 23:23	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:39	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-19 (6-8)**

Date Collected: 05/02/17 11:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-16**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-19 (6-8)**

Date Collected: 05/02/17 11:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-16**

Matrix: Solid

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/10/17 23:50	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:50	PJ1	TAL CHI

## **Client Sample ID: GP-20 (2-4)**

Date Collected: 05/02/17 12:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-17**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-20 (2-4)**

Date Collected: 05/02/17 12:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-17**

Matrix: Solid

Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 00:17	A1B	TAL NSH

## **Client Sample ID: GP-20 (6-8)**

Date Collected: 05/02/17 12:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-18**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-20 (6-8)**

Date Collected: 05/02/17 12:25

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-18**

Matrix: Solid

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 00:44	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-20 (14-16)**

Date Collected: 05/02/17 12:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-19**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-20 (14-16)**

Date Collected: 05/02/17 12:30

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-19**

Matrix: Solid

Percent Solids: 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 12:11	A1B	TAL NSH

## **Client Sample ID: GP-21 (2-4)**

Date Collected: 05/02/17 12:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-20**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-21 (2-4)**

Date Collected: 05/02/17 12:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-20**

Matrix: Solid

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 09:30	A1B	TAL NSH

## **Client Sample ID: GP-21 (6-8)**

Date Collected: 05/02/17 12:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-21**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-21 (6-8)**

Date Collected: 05/02/17 12:55

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-21**

Matrix: Solid

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		20	428992	05/11/17 10:24	A1B	TAL NSH
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 10:51	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-22 (2-4)**

Date Collected: 05/02/17 13:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-22**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	384965	05/12/17 14:00	LWN	TAL CHI

## **Client Sample ID: GP-22 (2-4)**

Date Collected: 05/02/17 13:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-22**

Matrix: Solid

Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 02:31	A1B	TAL NSH
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 09:57	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:54	PJ1	TAL CHI

## **Client Sample ID: GP-22 (6-8)**

Date Collected: 05/02/17 13:40

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-23**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

## **Client Sample ID: GP-22 (6-8)**

Date Collected: 05/02/17 13:40

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-23**

Matrix: Solid

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 02:58	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 04:57	PJ1	TAL CHI

## **Client Sample ID: GP-23 (2-4)**

Date Collected: 05/02/17 13:50

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-24**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: GP-23 (2-4)

Date Collected: 05/02/17 13:50

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-24

Matrix: Solid

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 03:25	A1B	TAL NSH
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 05:01	PJ1	TAL CHI

## Client Sample ID: GP-23 (6-8)

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			384086	05/06/17 13:35	RMP	TAL CHI
TCLP	Analysis	8260B		20	384262	05/09/17 02:01	JMP	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3510C			384171	05/08/17 07:42	JJH	TAL CHI
TCLP	Analysis	8270D		1	384241	05/08/17 18:41	GES	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3010A			384187	05/08/17 08:10	JEF	TAL CHI
TCLP	Analysis	6010B		1	384328	05/08/17 21:55	PJ1	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	7470A			384260	05/08/17 13:40	MJD	TAL CHI
TCLP	Analysis	7470A		1	384394	05/09/17 10:16	MJD	TAL CHI
Total/NA	Analysis	1010		1	385288		ADK	TAL CHI
					(Start) 05/15/17 14:30			
					(End) 05/15/17 16:22			
Total/NA	Prep	9010B			385217	05/15/17 17:10	MAN	TAL CHI
Total/NA	Analysis	9014		1	385342		MAN	TAL CHI
					(Start) 05/15/17 20:21			
					(End) 05/15/17 20:22			
Total/NA	Prep	9030B			385245	05/15/17 17:36	JB	TAL CHI
Total/NA	Analysis	9034		1	385402	05/15/17 21:53	JB	TAL CHI
Total/NA	Analysis	9045C		1	384553		SMO	TAL CHI
					(Start) 05/09/17 16:08			
					(End) 05/09/17 16:10			
Total/NA	Analysis	9095A		1	385286		ADK	TAL CHI
					(Start) 05/15/17 21:43			
					(End) 05/15/17 21:46			
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI
Total/NA	Analysis	Moisture		1	427540	05/04/17 15:20	BAA	TAL NSH
Total/NA	Analysis	SM 2710F		1	385047		ADK	TAL CHI
					(Start) 05/12/17 22:19			
					(End) 05/12/17 22:24			

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-25**

Matrix: Solid

Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			427841	05/05/17 15:52	CU	TAL NSH
Total/NA	Analysis	WDNR		1	428992	05/11/17 06:59	A1B	TAL NSH

## **Client Sample ID: GP-23 (6-8)**

Date Collected: 05/02/17 13:05

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-25**

Matrix: Solid

Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			384456	05/09/17 16:38	JP1	TAL CHI
Total/NA	Analysis	8082A		1	384545	05/10/17 14:21	BJH	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 17:25	SAW	TAL CHI
Total/NA	Prep	3050B			384019	05/06/17 11:05	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384724	05/11/17 05:06	PJ1	TAL CHI

## **Client Sample ID: GP-24 (2-4)**

Date Collected: 05/02/17 14:15

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-26**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-24 (2-4)**

Date Collected: 05/02/17 14:15

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-26**

Matrix: Solid

Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 14:15	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 06:37	TCT	TAL CHI
Total/NA	Prep	3050B			384021	05/06/17 11:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384719	05/10/17 18:27	PJ1	TAL CHI

## **Client Sample ID: GP-24 (6-8)**

Date Collected: 05/02/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-27**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## **Client Sample ID: GP-24 (6-8)**

Date Collected: 05/02/17 14:20

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-27**

Matrix: Solid

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 14:20	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 07:03	TCT	TAL CHI
Total/NA	Prep	3050B			384021	05/06/17 11:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384719	05/10/17 18:54	PJ1	TAL CHI

## **Client Sample ID: GP-25 (2-4)**

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-28**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-25 (2-4)**

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-28**

Matrix: Solid

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 14:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 07:29	TCT	TAL CHI
Total/NA	Prep	3050B			384021	05/06/17 11:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384719	05/10/17 18:59	PJ1	TAL CHI

## **Client Sample ID: GP-25 (6-8)**

Date Collected: 05/02/17 14:40

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-29**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## **Client Sample ID: GP-25 (6-8)**

Date Collected: 05/02/17 14:40

Date Received: 05/03/17 09:00

## **Lab Sample ID: 500-127508-29**

Matrix: Solid

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			384046	05/02/17 14:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 07:55	TCT	TAL CHI
Total/NA	Prep	WI GRO			384046	05/02/17 14:40	WRE	TAL CHI
Total/NA	Analysis	WI-GRO		1000	384093	05/07/17 22:05	WRE	TAL CHI
Total/NA	Prep	WI DRO PREP			383737	05/04/17 11:15	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	383957	05/05/17 18:01	SAW	TAL CHI
Total/NA	Prep	3050B			384021	05/06/17 11:07	JNH	TAL CHI
Total/NA	Analysis	6010B		1	384719	05/10/17 19:03	PJ1	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

## Client Sample ID: Trip Blank

Date Collected: 05/02/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383751	05/04/17 12:11	LWN	TAL CHI

## Client Sample ID: Trip Blank

Date Collected: 05/02/17 00:00

Date Received: 05/03/17 09:00

## Lab Sample ID: 500-127508-30

Matrix: Solid

Percent Solids: 100.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384046	05/02/17 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385282	05/16/17 01:22	TCT	TAL CHI

### Laboratory References:

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

## Accreditation/Certification Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127508-1

### Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

### Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998020430	08-31-17

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

<p>Report To <span style="float: right;">(optional)</span></p> <p>Contact: _____</p> <p>Company: _____</p> <p>Address: _____</p> <p>Address: _____</p> <p>Phone: _____</p> <p>Fax: _____</p> <p>E-Mail: _____</p>	<p>Bill To <span style="float: right;">(optional)</span></p> <p>Contact: _____</p> <p>Company: _____</p> <p>Address: _____</p> <p>Address: _____</p> <p>Phone: _____</p> <p>Fax: _____</p> <p>PO#/Reference#: _____</p>
---	---

## ***Chain of Custody Record***

Lab Job #: 500-127508

Chain of Custody Number:

Page \_\_\_\_\_ of \_\_\_\_\_

Temperature °C of Cooler: (9.2)(3.4)

#### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other

## Sample Disposal

[Return to Client](#)

#### **Disposal by Lab**

Archive for  
Manuscripts

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Lab Courier
	TR	5/02	1630		TA	05/03/17	0900	
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped

	Matrix Key
WW - Wastewater	SE - Sediment
W - Water	SO - Soil
S - Soil	L - Leachate
SL - Sludge	WI - Wipe
MS - Miscellaneous	DW - Drinking Water
OL - Oil	O - Other
A - Air	

### **Client Comments**

**Lab Comments:**



500-127508 COC

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To	(optional)	Bill To	(optional)
Contact:		Contact:	
Company:		Company:	
Address:		Address:	
Address:		Address:	
Phone:		Phone:	
Fax:		Fax:	
E-Mail:		PO#/Reference#	

#### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  
Requested Due Date:

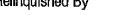
## Sample Disposal

[Return to Client](#)

Disposal by Lab

Archive for Months

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company TRE	Date 5/02	Time 1630	Received By 	Company TA	Date 05/03/17	Time 0900	Lab Courier <input type="checkbox"/>
Relinquished By 	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By 	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Shipped <input type="checkbox"/>
Relinquished By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Hand Delivered <input type="checkbox"/>
Matrix Key WW - Wastewater W - Water S - Soil SL - Sediment	SE - Sediment SO - Soil L - Leachate	Client Comments			Lab Comments:			

# TestAmerica

**THE LEADER IN ENVIRONMENTAL TESTING**

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

<p>Report To <span style="float: right;">(optional)</span></p> <p>Contact: _____</p> <p>Company: _____</p> <p>Address: _____</p> <p>Address: _____</p> <p>Phone: _____</p> <p>Fax: _____</p> <p>E-Mail: _____</p>	<p>Bill To <span style="float: right;">(optional)</span></p> <p>Contact: _____</p> <p>Company: _____</p> <p>Address: _____</p> <p>Address: _____</p> <p>Phone: _____</p> <p>Fax: _____</p> <p>PO#/Reference# _____</p>
---	--

## ***Chain of Custody Record***

Lab Job #: 500-127508

Chain of Custody Number:

Page 3 of 3

Temperature °C of Cooler:

Client		Client Project #	Compliance Reference							Preservative Key 1. HCl, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other	
Project Name	TRC	855-275738	Preservative	1	1	8	8	1	8		
Project Location/State	St. M - Kentucky to Kerney	Parameter									
Kentucky		Lab Project #									
Sampler	M-Kenmare	Lab PM									
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Protocol A				
			Date	Time	S	S	1	2	3	4	Comments
21		GP-21 (6-B)	5/02	1255	2	S	X	X	X	X	
22		GP-22 (2-4)		1335	1	S	X	X	X	X	
23		GP-22 (6-B)		1340	1	S	X	X	X	X	
24		GP-23 (2-4)		1350	1	S	X	X	X	X	
25		GP-23 (6-B)		1355	1	S	X	X	X	X	
26		GP-24 (2-4)		1415	1	S	X	X	X	X	
27		GP-24 (6-B)		1420	1	S	X	X	X	X	
28		GP-25 (2-4)		1435	1	S	X	X	X	X	
29		GP-25 (6-B)		1440	1	S	X	X	X	X	
30		TRIP BLANK			2	-					

#### Turnaround Time Required (Business Days)

### Sample Disposal

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other

Relinquished By 	Company TRE	Date 5/02/17	Time 1630	Received By 	Company TA	Date 05/03/17	Time 0900
Relinquished By 	Company 	Date 	Time 	Received By 	Company 	Date 	Time 
Relinquished By 	Company 	Date 	Time 	Received By 	Company 	Date 	Time 

Lab Courier

Shipped

Hand Delivered

Matrix Key	Client Comments	Lab Comments:
WW – Wastewater	SE – Sediment	
W – Water	SO – Soil	
S – Soil	L – Leachate	
SL – Sludge	WI – Wipe	
MS – Miscellaneous	DW – Drinking Water	
OL – Oil	O – Other	
A – Air		

**Fredrick, Sandie**

---

**From:** Kahrilas, Miranda <MKahrilas@trcsolutions.com>  
**Sent:** Wednesday, May 03, 2017 4:38 PM  
**To:** Fredrick, Sandie; Bergmann, Bryan  
**Subject:** RE: TestAmerica Sample Login Confirmation files from 500-127508 STH 11 Kentucky to Kearney - 275788

Sandie,

Please add GRO to the sample analysis for Lab ID 29, Sample ID GP-25 (6-8). I believe you would be able to take this from the methanol kit that was already included, but please let me know if you need me to send over another.

Thanks!  
Miranda

**From:** Fredrick, Sandie [<mailto:sandie.fredrick@testamericainc.com>]  
**Sent:** Wednesday, May 03, 2017 1:45 PM  
**To:** Bergmann, Bryan <[BBergmann@trcsolutions.com](mailto:BBergmann@trcsolutions.com)>; Kahrilas, Miranda <[MKahrilas@trcsolutions.com](mailto:MKahrilas@trcsolutions.com)>  
**Subject:** TestAmerica Sample Login Confirmation files from 500-127508 STH 11 Kentucky to Kearney - 275788

Hello Bryan/Miranda,

Attached, please find the Sample Confirmation files for job 500-127508; STH 11 Kentucky to Kearney - 275788

Please feel free to contact me if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: [Project Feedback](#)

**SANDIE J FREDRICK**  
Project Manager II

**TestAmerica Chicago**  
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 920.261.1660  
[www.testamericainc.com](http://www.testamericainc.com)

Reference: [336983]  
Attachments: 3

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16

ORIGIN ID: RRIA (262) 901-2153  
MIRANDA KAHNLAS  
TRC ENVIRONMENTAL  
150 N PATRICK BLVD, SUITE 180  
BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DATE: 02 MAY 17  
ACT WGT: 25.00 LB  
ACWGT: 25.00 LB  
CAD: 1103264820/NET: 3850  
BILL RECIPIENT

ORIGIN ID: RRIA (262) 901-2153  
MIRANDA KAHNLAS  
TRC ENVIRONMENTAL  
150 N PATRICK BLVD, SUITE 180  
BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DAT  
ACT WGT  
CAD: 110  
BILL REC

TO ATTN: SAMPLE RECEIVING  
TEST AMERICA - CHICAGO  
2417 BOND ST

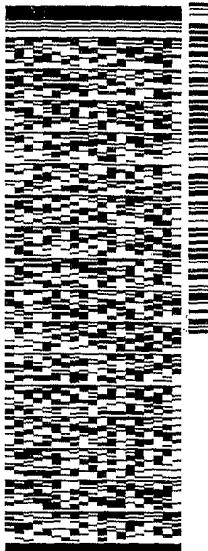


UNIVERSITY PARK IL 60484

500-127508 Waybill

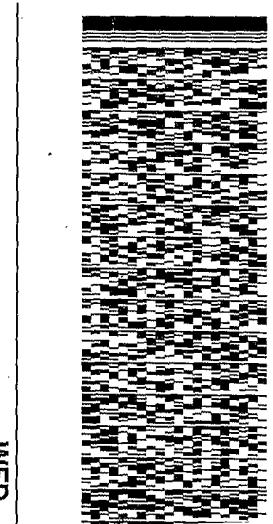
UNIVERSITY PARK IL 60484  
(708) 534-5200  
REF: J171117021401uv  
PO: DEPT:

RT 510  
ST 2



J171117021401uv

546.J1873463C1



2 of 2

WED -  
PRIORITY

MPS# 7790 4639 2081  
0263  
Master# 7790 4639 2173  
0201

79 JOTA



1 of 2  
TRK# 0201  
## MASTER ##

7790 4639 2173

60484

IL-US  
ORD



THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN

## COOLER RECEIPT FORM



Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 13:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front/back

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) HG

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 # 8

I certify that I unloaded the cooler and answered questions 7-14 (initial) S

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) S

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) S

I certify that I attached a label with the unique LIMS number to each container (initial) S

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#





THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN

## COOLER RECEIPT FORM



Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 13:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx \_\_\_\_\_

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front/back

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) HG

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 # S

I certify that I unloaded the cooler and answered questions 7-14 (initial) S

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) S

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) S

I certify that I attached a label with the unique LIMS number to each container (initial) S

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# \_\_\_\_\_

**TestAmerica Chicago**  
2417 Bond Street  
University Park || 60484

2417 Bond Street  
University Park, IL 60484  
Phone (708) 534-5200 Fax (708) 534-5211

## Chain of Custody Record

Loc: 500  
**127508**

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information (Sub Contract Lab)</b>		Sampler:	Lab P#: Fredrick, Sandie J																																																																																																																																																																																																																																																																														
Client Contact: Shipping/Receiving		Phone:	500-867092																																																																																																																																																																																																																																																																														
Company: TestAmerica Laboratories, Inc		Sandie.Fredrick@testamericainc.com	Page 2 of 3																																																																																																																																																																																																																																																																														
Address: 2060 Foster Creighton Drive, ,		TAT Requested (days): 5/4/2017	Accredited Programs Required (See note): State Program - Wisconsin																																																																																																																																																																																																																																																																														
City: Nashville State, Zip: TN, 37204		PO #:	Job #: 500-127508-1																																																																																																																																																																																																																																																																														
Phone: 615-726-0177(Tel) 615-726-3404(Fax)		WQ #:	COC No: 500-867092																																																																																																																																																																																																																																																																														
Email: Project Name: STH 11 Kentucky to Kearney - 275788		Project #: 50010540	Page:																																																																																																																																																																																																																																																																														
Site:		SSOW#:	Month:																																																																																																																																																																																																																																																																														
			Year:																																																																																																																																																																																																																																																																														
<p><b>Analysis Requested</b></p> <table border="1"> <thead> <tr> <th colspan="2">Sample Identification - Client ID (Lab ID)</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=Grab), B=Blanks, O=water/soil, S=septic, W=waste/water, A=air)</th> <th>Matrix (W=water, S=septic, O=water/soil, B=Blanks,A=air)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>Total Number of containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">GP-18 (6-8) (500-127508-14)</td> <td>5/2/17</td> <td>11:30</td> <td>Solid</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>A - HCl</td> </tr> <tr> <td colspan="2">GP-19 (2-4) (500-127508-15)</td> <td>5/2/17</td> <td>11:50</td> <td>Solid</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>B - NaOH</td> </tr> <tr> <td colspan="2">GP-19 (6-8) (500-127508-16)</td> <td>5/2/17</td> <td>11:55</td> <td>Solid</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>C - Cr Acetate</td> </tr> <tr> <td colspan="2">GP-20 (2-4) (500-127508-17)</td> <td>5/2/17</td> <td>12:20</td> <td>Solid</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>D - Nitric Acid</td> </tr> <tr> <td colspan="2">GP-20 (6-8) (500-127508-18)</td> <td>5/2/17</td> <td>12:25</td> <td>Solid</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>E - NaHSO4</td> </tr> <tr> <td colspan="2">GP-20 (14-16) (500-127508-19)</td> <td>5/2/17</td> <td>12:30</td> <td>Solid</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>F - MeOH</td> </tr> <tr> <td colspan="2">GP-21 (2-4) (500-127508-20)</td> <td>5/2/17</td> <td>12:50</td> <td>Solid</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>G - Ammonium</td> </tr> <tr> <td colspan="2">GP-21 (6-8) (500-127508-21)</td> <td>5/2/17</td> <td>12:55</td> <td>Solid</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>H - Ascorbic Acid</td> </tr> <tr> <td colspan="2">GP-22 (2-4) (500-127508-22)</td> <td>5/2/17</td> <td>13:35</td> <td>Solid</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>I - ice</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>J - DI Water</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>K - EDTA</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>L - EDA</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>M - Hexane</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>N - None</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>O - AstaO2</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>P - NaO4S</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Q - Na2SO3</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>R - Na2S2O3</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>S - H2SO4</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>T - TSP/boratehydrate</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>U - Acetone</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>V - MCA</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>W - H4-5</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Z - other (specify)</td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Other:</td> </tr> </tbody> </table>				Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab), B=Blanks, O=water/soil, S=septic, W=waste/water, A=air)	Matrix (W=water, S=septic, O=water/soil, B=Blanks,A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:											GP-18 (6-8) (500-127508-14)		5/2/17	11:30	Solid	X	X			A - HCl	GP-19 (2-4) (500-127508-15)		5/2/17	11:50	Solid	X	X			B - NaOH	GP-19 (6-8) (500-127508-16)		5/2/17	11:55	Solid	X	X			C - Cr Acetate	GP-20 (2-4) (500-127508-17)		5/2/17	12:20	Solid	X	X			D - Nitric Acid	GP-20 (6-8) (500-127508-18)		5/2/17	12:25	Solid	X	X			E - NaHSO4	GP-20 (14-16) (500-127508-19)		5/2/17	12:30	Solid	X	X			F - MeOH	GP-21 (2-4) (500-127508-20)		5/2/17	12:50	Solid	X	X			G - Ammonium	GP-21 (6-8) (500-127508-21)		5/2/17	12:55	Solid	X	X			H - Ascorbic Acid	GP-22 (2-4) (500-127508-22)		5/2/17	13:35	Solid	X	X			I - ice										J - DI Water										K - EDTA										L - EDA										M - Hexane										N - None										O - AstaO2										P - NaO4S										Q - Na2SO3										R - Na2S2O3										S - H2SO4										T - TSP/boratehydrate										U - Acetone										V - MCA										W - H4-5										Z - other (specify)										Other:
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab), B=Blanks, O=water/soil, S=septic, W=waste/water, A=air)	Matrix (W=water, S=septic, O=water/soil, B=Blanks,A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note:																																																																																																																																																																																																																																																																								
GP-18 (6-8) (500-127508-14)		5/2/17	11:30	Solid	X	X			A - HCl																																																																																																																																																																																																																																																																								
GP-19 (2-4) (500-127508-15)		5/2/17	11:50	Solid	X	X			B - NaOH																																																																																																																																																																																																																																																																								
GP-19 (6-8) (500-127508-16)		5/2/17	11:55	Solid	X	X			C - Cr Acetate																																																																																																																																																																																																																																																																								
GP-20 (2-4) (500-127508-17)		5/2/17	12:20	Solid	X	X			D - Nitric Acid																																																																																																																																																																																																																																																																								
GP-20 (6-8) (500-127508-18)		5/2/17	12:25	Solid	X	X			E - NaHSO4																																																																																																																																																																																																																																																																								
GP-20 (14-16) (500-127508-19)		5/2/17	12:30	Solid	X	X			F - MeOH																																																																																																																																																																																																																																																																								
GP-21 (2-4) (500-127508-20)		5/2/17	12:50	Solid	X	X			G - Ammonium																																																																																																																																																																																																																																																																								
GP-21 (6-8) (500-127508-21)		5/2/17	12:55	Solid	X	X			H - Ascorbic Acid																																																																																																																																																																																																																																																																								
GP-22 (2-4) (500-127508-22)		5/2/17	13:35	Solid	X	X			I - ice																																																																																																																																																																																																																																																																								
									J - DI Water																																																																																																																																																																																																																																																																								
									K - EDTA																																																																																																																																																																																																																																																																								
									L - EDA																																																																																																																																																																																																																																																																								
									M - Hexane																																																																																																																																																																																																																																																																								
									N - None																																																																																																																																																																																																																																																																								
									O - AstaO2																																																																																																																																																																																																																																																																								
									P - NaO4S																																																																																																																																																																																																																																																																								
									Q - Na2SO3																																																																																																																																																																																																																																																																								
									R - Na2S2O3																																																																																																																																																																																																																																																																								
									S - H2SO4																																																																																																																																																																																																																																																																								
									T - TSP/boratehydrate																																																																																																																																																																																																																																																																								
									U - Acetone																																																																																																																																																																																																																																																																								
									V - MCA																																																																																																																																																																																																																																																																								
									W - H4-5																																																																																																																																																																																																																																																																								
									Z - other (specify)																																																																																																																																																																																																																																																																								
									Other:																																																																																																																																																																																																																																																																								

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

## Possible Hazard Identification

### *Unconfirmed*

**Deliverable Requested:** I, II, III, IV, Other (specify) \_\_\_\_\_

卷之三

Empty Kit Relinquished by:

卷之三

Relinquished by:

11

Bellahs  
Bk. 1

కెంపాల

卷之三

Relinquished by:

1

Glycated Seals Impact:

Custody seals intact.

Yes  No



THE LEADER IN ENVIRONMENTAL TESTING  
Nashville, TN

## COOLER RECEIPT FORM



500-127508-03 Chain of Custody

Cooler Received/Opened On 5/4/2017 @ 0945

Time Samples Removed From Cooler 15:50 Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 3984 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 160656843 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_

2. Temperature of rep. sample or temp blank when opened: 27 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: 2 front / back

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) HG

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 # 23

I certify that I unloaded the cooler and answered questions 7-14 (initial) 23

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) 23

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) 23

I certify that I attached a label with the unique LIMS number to each container (initial) 23

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# \_\_\_\_\_



## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127508-1

**Login Number:** 127508

**List Source:** TestAmerica Chicago

**List Number:** 1

**Creator:** Kelsey, Shawn M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	(4.2)(5.4)c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127508-1

**Login Number:** 127508

**List Number:** 2

**Creator:** Shaw, Rashard M

**List Source:** TestAmerica Nashville

**List Creation:** 05/04/17 02:20 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

All Ticket Types  
History and Waiting  
\* - Confirmed Qty Applied to Billing

## Detail Contract Activity Report

January 01, 2020 to December 14, 2020  
Specific Contract(s) : '3063201603'

All Facilities

3063201603

Ticket Date	Facility & Ticket Number			Customer	Truck	Material	Billing Quantity
04/27/2020 I 01	1085008	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT W/FUEL	18.53 TN		
04/27/2020 I 01	1085010	333441 - ZIGNEGO COMPANY, INC.	ZIGT78	SW-CONT W/FUEL	17.39 TN		
04/27/2020 I 01	1085012	333441 - ZIGNEGO COMPANY, INC.	ZIGT79	SW-CONT W/FUEL	18.35 TN		
04/27/2020 I 01	1085015	333441 - ZIGNEGO COMPANY, INC.	ZIGT91	SW-CONT W/FUEL	20.36 TN		
04/27/2020 I 01	1085017	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT W/FUEL	16.40 TN		
04/27/2020 I 01	1085025	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT W/FUEL	16.05 TN		
04/27/2020 I 01	1085028	333441 - ZIGNEGO COMPANY, INC.	SZA13	SW-CONT W/FUEL	17.10 TN		
04/27/2020 I 01	1085029	333441 - ZIGNEGO COMPANY, INC.	ZIGT78	SW-CONT W/FUEL	17.04 TN		
04/27/2020 I 01	1085030	333441 - ZIGNEGO COMPANY, INC.	ZIGT79	SW-CONT W/FUEL	16.77 TN		
04/27/2020 I 01	1085031	333441 - ZIGNEGO COMPANY, INC.	ROQ09	SW-CONT W/FUEL	17.39 TN		
04/27/2020 I 01	1085032	333441 - ZIGNEGO COMPANY, INC.	ZIGT91	SW-CONT W/FUEL	18.84 TN		
04/27/2020 I 01	1085033	333441 - ZIGNEGO COMPANY, INC.	SZA44	SW-CONT W/FUEL	19.04 TN		
04/27/2020 I 01	1085035	333441 - ZIGNEGO COMPANY, INC.	SZA13	SW-CONT W/FUEL	20.48 TN		
04/27/2020 I 01	1085037	333441 - ZIGNEGO COMPANY, INC.	ROQ09	SW-CONT W/FUEL	20.55 TN		
04/27/2020 I 01	1085038	333441 - ZIGNEGO COMPANY, INC.	SZA44	SW-CONT W/FUEL	20.44 TN		
04/27/2020 I 01	1085042	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT W/FUEL	18.22 TN		
04/27/2020 I 01	1085043	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT W/FUEL	19.31 TN		
04/27/2020 I 01	1085045	333441 - ZIGNEGO COMPANY, INC.	ZIGT78	SW-CONT W/FUEL	17.05 TN		
04/27/2020 I 01	1085047	333441 - ZIGNEGO COMPANY, INC.	ZIGT79	SW-CONT W/FUEL	17.28 TN		
04/27/2020 I 01	1085050	333441 - ZIGNEGO COMPANY, INC.	ZIGT91	SW-CONT W/FUEL	16.75 TN		
04/27/2020 I 01	1085052	333441 - ZIGNEGO COMPANY, INC.	SZA13	SW-CONT W/FUEL	16.28 TN		
04/27/2020 I 01	1085054	333441 - ZIGNEGO COMPANY, INC.	ROQ09	SW-CONT W/FUEL	12.59 TN		
04/27/2020 I 01	1085061	333441 - ZIGNEGO COMPANY, INC.	SZA44	SW-CONT W/FUEL	19.03 TN		
06/08/2020 I 01	1088331	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-03	SW-CONT W/FUEL	19.37 TN		
06/08/2020 I 01	1088353	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-03	SW-CONT W/FUEL	8.87 TN		
10/01/2020 I 01	1097242	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-04	SW-CONT W/FUEL	17.32 TN		
10/20/2020 I 01	1099141	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT W/FUEL	14.41 TN		

Tickets Reported: 27 Items Reported: 27

Material Summary	Weight		Volume		Count		Billing Quantity
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	
VH - SW-CONT W/FUEL	471.21	0.00 TN	195.00	0.00 YD	0.00	0.00	471.21 TN

All Ticket Types  
History and Waiting  
\* - Confirmed Qty Applied to Billing

## Detail Contract Activity Report

January 01, 2020 to December 14, 2020

Specific Contract(s) : '3063201603'

All Facilities

---

Tickets Reported: 27      Items Reported: 27

---



# Special Waste Profile

Disposal Facility: 3063 Kestrel Hawk WI

Waste Profile #:

Sales Rep #:

## I. Generator Information

Generator Name: Wisconsin DOT (WisDOT ID 2260-07-70)

Generator Site Address: STH 11 (Durand Ave.), Kentucky St. to Kearney Ave.

City: Racine County: Racine State: Wisconsin Zip: 53405

State ID/Reg No: State Approval/Waste Code: NAICS #:

Generator Mailing Address  (if different) 141 NW Barstow

City: Waukesha County: Waukesha State: Wisconsin Zip: 53187

Generator Contact Name: Andrew Malsom Email: Andrew.Malsom@dot.wi.gov

Phone Number: 262-548-6705 Ext: Fax Number:

## II. Billing Information

Bill To: Zignego Company, Inc. Contact Name: Jeff Kuhn

Billing Address: W226 N2940 Duplainville Rd. Email: jkuhn@zignego.com

City: Waukesha State: Wisconsin Zip: 53186 Phone: 920-621-8538

## III. Waste Stream Information

Name of Waste: CVOCS-contaminated soil

Process Generating Waste: Excavation for road construction near dry cleaning facility

Type of Waste: Pollution Control Waste Physical State: Solid Method of Shipment: Other

Estimated Volume: 1,112 Volume Type: Tons

Frequency: One-time Event (single project) Disposal Consideration: Landfill

## IV. Representative Sample Certification

 No Sample Taken Sample Taken Type of Sample Grab SampleIs the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA 40 CFR 261.20(c) guidelines or equivalent?  Yes  No

Sample Date: May 3, 2017

Sample ID  
Numbers  
or SDS:GP-30 (2'-4'), GP-30 (6'-8'), GP-30 (14'-16'), GP-31 (2'-4'), GP-31 (6'-8'),  
GP-32 (2'-4'), GP-32 (6'-8'), GP-32 (14'-16'), GP-33 (2'-4'), GP-33 (6'-8')Remember to attach Laboratory Analytical Report (and/or Material Safety Data Sheet)  
including Chain of Custody and required parameters provided for this profile.



# Special Waste Profile

## V. Physical Characteristics of Waste

Characteristic Components (must equal 100%):

1. Soil	
2.	
3.	
4.	
5.	

% By Weight (out of 100% - ranges acceptable):

100	

Color: brown Odor (describe): none Does Waste Contain Free Liquids?  Yes  No % Solids: 100 pH: ~7 Flash Point: >176 °F

Attach Laboratory Analytical Report (and/or Material Safety Data Sheet) including Chain of Custody and required parameters provided for this profile.

## RCRA Regulatory Questions

1. Does this waste or generating process contain regulated concentrations of the following Pesticides and/ or Herbicides: Chlordane, Endrin, Heptachlor (and its epoxides), Lindane, Methoxychlor, Toxaphene, 2,4-D, or 2,4,5-TP Silvex as defined in 40 CFR 261.33?  Yes  No
2. Does this waste contain reactive sulfides (greater than 500 ppm) or reactive cyanide (greater than 250 ppm) [reference 40 CFR 261.23(a)(5)]?  Yes  No
3. Does this waste contain regulated concentrations of Polychlorinated Biphenyls (PCBs) as defined in 40 CFR Part 761?  Yes  No
4. Does this waste contain concentrations of listed hazardous wastes defined in 40 CFR 261.31, 261.32, 261.33, including RCRA F-Listed Solvents?  Yes  No
5. Has this waste been delisted under 40 CFR 260.20 and 260.22? If yes, attach the final decision to delist the waste as published in the Federal Register.  Yes  No
6. Does this waste exhibit a Hazardous Characteristic as defined by Federal and/or State regulations? If Yes, identify the applicable waste code and specify if the waste is hazardous as defined by Federal, State or both?
7. Does this waste contain regulated concentrations of 2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD), or any other dioxin as defined in 40 CFR 261.31?  Yes  No
8. Is this a regulated Medical or Infectious Waste as defined by Federal and/or State regulations?  Yes  No
9. Is this a regulated Radioactive Waste as defined by Federal and/or State regulations?  Yes  No
10. Is this a solid waste that is not a hazardous waste in accordance with 40 CFR 261.4(b)? If yes, please provide the corresponding regulatory citation.  Yes  No

## Republic Services Waste Handling Questions

1. Does this waste generate heat or react when contacted with water/moisture?  Yes  No
2. Does the waste contain sulfur or sulfur by-products?  Yes  No
3. Is this waste generated at a State or Federal Superfund cleanup site subject to regulation under CERCLA?  Yes  No
- 4a. Is this waste from a TSD facility, TSD-like facility or consolidator (i.e. multiple wastes/multiple generators)?  Yes  No
- 4b. If yes to the above question, please provide clarification.

# Special Waste Profile



## VI. Certification

I hereby certify that to the best of my knowledge and belief, the information contained herein is a true, complete and accurate description of the waste material being offered for disposal and all known or suspected hazards have been disclosed. All Analytical Results/Material Safety Data Sheets submitted are truthful and complete and are representative of the waste.

I further certify that by utilizing this profile, neither myself nor any other employee of the company will deliver for disposal or attempt to deliver for disposal any waste which is classified as toxic waste, hazardous waste or infectious waste, or any other waste material this facility is prohibited from accepting by law. I shall immediately give written notice of any change or condition pertaining to the waste not provided herein. Our company hereby agrees to fully indemnify this disposal facility against any damages resulting from this certification being inaccurate or untrue.

I understand that attaching an electronic signature, I am signing this document, consent to complete this transaction and receive all related communication electronically, and agree this document will be binding as though I had physically signed it. A printout of this document may be accepted with the same authority as the original.

If electronic signature is preferred, please submit completed (unsigned) form to your Special Waste Coordinator or Special Waste Sales Executive to initiate signature process.

I further certify that the company has not altered the form or content of this profile sheet as provided by Republic Services.

Andrew Malsom

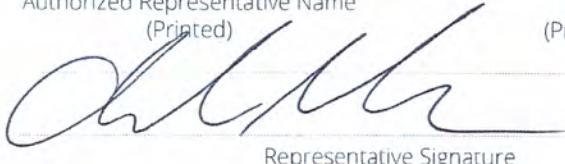
Environmental Engineer

Wisconsin DOT

Authorized Representative Name  
(Printed)

Title  
(Printed)

Company Name



A handwritten signature in black ink, appearing to read "AM".

Representative Signature

February 3, 2020

Date

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-127625-1

Client Project/Site: STH 11 Kentucky to Kearney - 275788

For:

TRC Environmental Corporation.

150 N. Patrick Blvd.

Suite 180

Brookfield, Wisconsin 53045

Attn: Mr. Bryan Bergmann

Sandie Fredrick

Authorized for release by:

5/18/2017 2:51:46 PM

Sandie Fredrick, Project Manager II

(920)261-1660

[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://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
Case Narrative .....	3
Detection Summary .....	4
Method Summary .....	6
Sample Summary .....	7
Client Sample Results .....	8
Subcontract Data .....	30
Definitions .....	31
QC Association .....	32
Surrogate Summary .....	37
QC Sample Results .....	40
Chronicle .....	54
Certification Summary .....	63
Chain of Custody .....	64
Receipt Checklists .....	71

# Case Narrative

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Job ID: 500-127625-1**

**Laboratory: TestAmerica Chicago**

## Narrative

**Job Narrative  
500-127625-1**

## Comments

No additional comments.

## Receipt

The samples were received on 5/4/2017 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

## GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for batch 381094 recovered outside control limits for trichlorofluoromethane. This analyte was biased high in the LCS and was not detected in the associated samples: GP-30 (2-4) (500-127625-11), GP-30 (6-8) (500-127625-12), GP-30 (14-16) (500-127625-13), GP-31 (2-4) (500-127625-14), GP-31 (6-8) (500-127625-15), GP-32 (2-4) (500-127625-16), GP-32 (6-8) (500-127625-17), GP-32 (14-16) (500-127625-18), GP-33 (2-4) (500-127625-19), GP-33 (6-8) (500-127625-20) and Trip Blank (500-127625-21); therefore, the data has been reported.

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

## GC/MS Semi VOA

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

## GC VOA

Method(s) WI-GRO: The laboratory control sample (LCS) for preparation batch 490-428058 and analytical batch 490-429747 recovered outside control limits for the following analytes: C6-C10 WI. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) WI-GRO: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 490-428058 and analytical batch 490-429747.

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

## GC Semi VOA

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

## Metals

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

## General Chemistry

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

## Subcontract non-Sister

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

## Organic Prep

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

## VOA Prep

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

## Subcontract Work

Method % Chlorine: This method was subcontracted to SF/Eurofins Analytical Laboratories. The subcontract laboratory certification is different from that of the facility issuing the final report.

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

### **Client Sample ID: GP-26 (2-4)**

### **Lab Sample ID: 500-127625-1**

No Detections.

### **Client Sample ID: GP-26 (6-8)**

### **Lab Sample ID: 500-127625-2**

No Detections.

### **Client Sample ID: GP-27 (2-4)**

### **Lab Sample ID: 500-127625-3**

No Detections.

### **Client Sample ID: GP-27 (6-8)**

### **Lab Sample ID: 500-127625-4**

No Detections.

### **Client Sample ID: GP-28 (2-4)**

### **Lab Sample ID: 500-127625-5**

No Detections.

### **Client Sample ID: GP-28 (6-8)**

### **Lab Sample ID: 500-127625-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.35	J	0.50	0.050	mg/L	1		6010B	TCLP
Cadmium	0.0022	J	0.0050	0.0020	mg/L	1		6010B	TCLP
Flashpoint	>176		40.0	40.0	Degrees F	1		1010	Total/NA
pH	8.9		0.2	0.2	SU	1		9045C	Total/NA
Paint Filter	PASS				No Unit	1		9095A	Total/NA
Specific Gravity	2.1848				NONE	1		SM 2710F	Total/NA

### **Client Sample ID: GP-28 (14-16)**

### **Lab Sample ID: 500-127625-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	260	J	280	130	ug/Kg	1	⊗	WDNR	Total/NA
1,3,5-Trimethylbenzene	19	J	28	17	ug/Kg	1	⊗	WDNR	Total/NA

### **Client Sample ID: GP-29 (2-4)**

### **Lab Sample ID: 500-127625-8**

No Detections.

### **Client Sample ID: GP-29 (6-8)**

### **Lab Sample ID: 500-127625-9**

No Detections.

### **Client Sample ID: GP-29 (14-16)**

### **Lab Sample ID: 500-127625-10**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	220	J	290	140	ug/Kg	1	⊗	WDNR	Total/NA

### **Client Sample ID: GP-30 (2-4)**

### **Lab Sample ID: 500-127625-11**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	710	F1	71	29	ug/Kg	50	⊗	8260B	Total/NA
Trichloroethene	1100	F1	35	12	ug/Kg	50	⊗	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

### Client Sample ID: GP-30 (6-8)

### Lab Sample ID: 500-127625-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	29		18	10	ug/Kg	50	⊗	8260B	Total/NA
Trichloroethene	380		36	12	ug/Kg	50	⊗	8260B	Total/NA

### Client Sample ID: GP-30 (14-16)

### Lab Sample ID: 500-127625-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	210		31	10	ug/Kg	50	⊗	8260B	Total/NA

### Client Sample ID: GP-31 (2-4)

### Lab Sample ID: 500-127625-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	81		34	11	ug/Kg	50	⊗	8260B	Total/NA

### Client Sample ID: GP-31 (6-8)

### Lab Sample ID: 500-127625-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	55		35	12	ug/Kg	50	⊗	8260B	Total/NA

### Client Sample ID: GP-32 (2-4)

### Lab Sample ID: 500-127625-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	16		16	9.6	ug/Kg	50	⊗	8260B	Total/NA

### Client Sample ID: GP-32 (6-8)

### Lab Sample ID: 500-127625-17

No Detections.

### Client Sample ID: GP-32 (14-16)

### Lab Sample ID: 500-127625-18

No Detections.

### Client Sample ID: GP-33 (2-4)

### Lab Sample ID: 500-127625-19

No Detections.

### Client Sample ID: GP-33 (6-8)

### Lab Sample ID: 500-127625-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	5400		69	26	ug/Kg	50	⊗	8260B	Total/NA
Trichloroethene	100		35	11	ug/Kg	50	⊗	8260B	Total/NA

### Client Sample ID: Trip Blank

### Lab Sample ID: 500-127625-21

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

# Method Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL CHI
9014	Cyanide	SW846	TAL CHI
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL CHI
9045C	pH	SW846	TAL CHI
9095A	Paint Filter	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL NSH
Moisture	Percent Moisture	EPA	TAL CHI
SM 2710F	Specific Gravity, Density	SM	TAL CHI
% Chlorine	General Sub Contract Method	NONE	SFAL

## Protocol References:

EPA = US Environmental Protection Agency

NONE = NONE

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

## Laboratory References:

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

## Sample Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
500-127625-1	GP-26 (2-4)	Solid	05/03/17 08:25	05/04/17 10:20	1
500-127625-2	GP-26 (6-8)	Solid	05/03/17 08:30	05/04/17 10:20	2
500-127625-3	GP-27 (2-4)	Solid	05/03/17 08:40	05/04/17 10:20	3
500-127625-4	GP-27 (6-8)	Solid	05/03/17 08:45	05/04/17 10:20	4
500-127625-5	GP-28 (2-4)	Solid	05/03/17 09:05	05/04/17 10:20	5
500-127625-6	GP-28 (6-8)	Solid	05/03/17 09:10	05/04/17 10:20	6
500-127625-7	GP-28 (14-16)	Solid	05/03/17 09:20	05/04/17 10:20	7
500-127625-8	GP-29 (2-4)	Solid	05/03/17 09:45	05/04/17 10:20	8
500-127625-9	GP-29 (6-8)	Solid	05/03/17 09:50	05/04/17 10:20	9
500-127625-10	GP-29 (14-16)	Solid	05/03/17 10:00	05/04/17 10:20	10
500-127625-11	GP-30 (2-4)	Solid	05/03/17 10:25	05/04/17 10:20	11
500-127625-12	GP-30 (6-8)	Solid	05/03/17 10:30	05/04/17 10:20	12
500-127625-13	GP-30 (14-16)	Solid	05/03/17 10:40	05/04/17 10:20	13
500-127625-14	GP-31 (2-4)	Solid	05/03/17 11:00	05/04/17 10:20	14
500-127625-15	GP-31 (6-8)	Solid	05/03/17 11:05	05/04/17 10:20	15
500-127625-16	GP-32 (2-4)	Solid	05/03/17 11:25	05/04/17 10:20	16
500-127625-17	GP-32 (6-8)	Solid	05/03/17 11:30	05/04/17 10:20	
500-127625-18	GP-32 (14-16)	Solid	05/03/17 11:35	05/04/17 10:20	
500-127625-19	GP-33 (2-4)	Solid	05/03/17 11:50	05/04/17 10:20	
500-127625-20	GP-33 (6-8)	Solid	05/03/17 11:55	05/04/17 10:20	
500-127625-21	Trip Blank	Solid	05/03/17 00:00	05/04/17 10:20	

TestAmerica Chicago

## **Client Sample Results**

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-26 (2-4)**

Date Collected: 05/03/17 08:25

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-1**

## **Matrix: Solid**

## Percent Solids: 84.3

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⌚	05/07/17 11:20	05/13/17 12:44	1
Ethylbenzene	<22		29	22	ug/Kg	⌚	05/07/17 11:20	05/13/17 12:44	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⌚	05/07/17 11:20	05/13/17 12:44	1
Naphthalene	<140		290	140	ug/Kg	⌚	05/07/17 11:20	05/13/17 12:44	1
Toluene	<20		29	20	ug/Kg	⌚	05/07/17 11:20	05/13/17 12:44	1
1,2,4-Trimethylbenzene	<18		29	18	ug/Kg	⌚	05/07/17 11:20	05/13/17 12:44	1
1,3,5-Trimethylbenzene	<18		29	18	ug/Kg	⌚	05/07/17 11:20	05/13/17 12:44	1
Xylenes, Total	<35		88	35	ug/Kg	⌚	05/07/17 11:20	05/13/17 12:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a- <i>Trifluorotoluene</i>	84		80 - 120				05/07/17 11:20	05/13/17 12:44	1

**Client Sample ID: GP-26 (6-8)**

Date Collected: 05/03/17 08:30

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-2**

## **Matrix: Solid**

**Percent Solids: 86.3**

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		30	21	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:11	1
Ethylbenzene	<22		30	22	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:11	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:11	1
Naphthalene	<140		300	140	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:11	1
Toluene	<20		30	20	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:11	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:11	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:11	1
Xylenes, Total	<35		89	35	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	86		80 - 120				05/07/17 11:20	05/13/17 13:11	1

**Client Sample ID: GP-27 (2-4)**

**Date Collected:** 05/03/17 08:40

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-3**

## **Matrix: Solid**

## Percent Solids: 76.1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<24		34	24	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:37	1
Ethylbenzene	<26		34	26	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:37	1
Methyl tert-butyl ether	<16		34	16	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:37	1
Naphthalene	<160		340	160	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:37	1
Toluene	<23		34	23	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:37	1
1,2,4-Trimethylbenzene	<20		34	20	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:37	1
1,3,5-Trimethylbenzene	<20		34	20	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:37	1
Xylenes, Total	<41		100	41	ug/Kg	⊗	05/07/17 11:20	05/13/17 13:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	87		80 - 120				05/07/17 11:20	05/13/17 13:37	1

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-27 (6-8)**

Date Collected: 05/03/17 08:45

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-4**

Matrix: Solid

Percent Solids: 86.6

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:04	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:04	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:04	1
Naphthalene	<140		290	140	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:04	1
Toluene	<20		29	20	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:04	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:04	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:04	1
Xylenes, Total	<35		86	35	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	87			80 - 120			05/07/17 11:20	05/13/17 14:04	1

**Client Sample ID: GP-28 (2-4)**

Date Collected: 05/03/17 09:05

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-5**

Matrix: Solid

Percent Solids: 85.1

**Method: WDNR - Wisconsin - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<22		30	22	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:31	1
Ethylbenzene	<23		30	23	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:31	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:31	1
Naphthalene	<140		300	140	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:31	1
Toluene	<20		30	20	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:31	1
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:31	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:31	1
Xylenes, Total	<36		90	36	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:31	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	87			80 - 120			05/07/17 11:20	05/13/17 14:31	1

**Client Sample ID: GP-28 (6-8)**

Date Collected: 05/03/17 09:10

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-6**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L			05/09/17 03:19	20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L			05/09/17 03:19	20
Benzene	<0.010		0.020	0.010	mg/L			05/09/17 03:19	20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L			05/09/17 03:19	20
Chlorobenzene	<0.010		0.020	0.010	mg/L			05/09/17 03:19	20
Chloroform	<0.020		0.040	0.020	mg/L			05/09/17 03:19	20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L			05/09/17 03:19	20
Tetrachloroethylene	<0.010		0.020	0.010	mg/L			05/09/17 03:19	20
Trichloroethylene	<0.010		0.020	0.010	mg/L			05/09/17 03:19	20
Vinyl chloride	<0.010		0.020	0.010	mg/L			05/09/17 03:19	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	98			75 - 126			05/09/17 03:19		20
4-Bromofluorobenzene (Surr)	111			72 - 124			05/09/17 03:19		20
Dibromofluoromethane	87			75 - 120			05/09/17 03:19		20

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-28 (6-8)**

**Lab Sample ID: 500-127625-6**

**Matrix: Solid**

Date Collected: 05/03/17 09:10

Date Received: 05/04/17 10:20

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

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
	103		75 - 120	05/09/17 03:19			

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L	05/08/17 07:42	05/08/17 20:04	1	1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L	05/08/17 07:42	05/08/17 20:04	1	8
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L	05/08/17 07:42	05/08/17 20:04	1	9
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L	05/08/17 07:42	05/08/17 20:04	1	10
2-Methylphenol	<0.020		0.020	0.020	mg/L	05/08/17 07:42	05/08/17 20:04	1	11
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L	05/08/17 07:42	05/08/17 20:04	1	12
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L	05/08/17 07:42	05/08/17 20:04	1	13
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L	05/08/17 07:42	05/08/17 20:04	1	14
Hexachloroethane	<0.050		0.050	0.050	mg/L	05/08/17 07:42	05/08/17 20:04	1	15
Nitrobenzene	<0.010		0.010	0.010	mg/L	05/08/17 07:42	05/08/17 20:04	1	16
Pentachlorophenol	<0.20		0.20	0.20	mg/L	05/08/17 07:42	05/08/17 20:04	1	17
Pyridine	<0.20		0.20	0.20	mg/L	05/08/17 07:42	05/08/17 20:04	1	18
Surrogate	%Recovery	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		40 - 145			05/08/17 07:42	05/08/17 20:04	1	19
2-Fluorobiphenyl	85		34 - 110			05/08/17 07:42	05/08/17 20:04	1	20
2-Fluorophenol (Surr)	58		27 - 110			05/08/17 07:42	05/08/17 20:04	1	21
Nitrobenzene-d5 (Surr)	91		36 - 120			05/08/17 07:42	05/08/17 20:04	1	22
Phenol-d5 (Surr)	39		20 - 100			05/08/17 07:42	05/08/17 20:04	1	23
Terphenyl-d14 (Surr)	103		40 - 145			05/08/17 07:42	05/08/17 20:04	1	24

## Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.050	0.010	mg/L	05/08/17 08:10	05/08/17 22:34	1	1
Barium	0.35 J		0.50	0.050	mg/L	05/08/17 08:10	05/08/17 22:34	1	2
Cadmium	0.0022 J		0.0050	0.0020	mg/L	05/08/17 08:10	05/08/17 22:34	1	3
Chromium	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 22:34	1	4
Copper	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 22:34	1	5
Lead	<0.0075		0.050	0.0075	mg/L	05/08/17 08:10	05/08/17 22:34	1	6
Nickel	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 22:34	1	7
Selenium	<0.020		0.050	0.020	mg/L	05/08/17 08:10	05/08/17 22:34	1	8
Silver	<0.010		0.025	0.010	mg/L	05/08/17 08:10	05/08/17 22:34	1	9
Zinc	<0.020		0.10	0.020	mg/L	05/08/17 08:10	05/08/17 22:34	1	10

## Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L	05/08/17 13:40	05/09/17 10:27	1	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>176		40.0	40.0	Degrees F			05/15/17 18:15	1
Cyanide, Total	<0.17		0.49	0.17	mg/Kg	05/15/17 17:10	05/15/17 20:21	1	2
Sulfide	<4.7		9.9	4.7	mg/Kg	05/15/17 17:36	05/15/17 21:55	1	3
pH	8.9		0.2	0.2	SU		05/09/17 17:01	1	4
Paint Filter	PASS				No Unit		05/15/17 21:41	1	5
Specific Gravity	2.1848				NONE		05/12/17 22:24	1	6

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Client Sample ID: GP-28 (6-8)

Date Collected: 05/03/17 09:10

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-6

Matrix: Solid

Percent Solids: 86.1

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.6		19	6.6	ug/Kg	⊗	05/11/17 18:50	05/12/17 13:06	1
PCB-1221	<8.3		19	8.3	ug/Kg	⊗	05/11/17 18:50	05/12/17 13:06	1
PCB-1232	<8.2		19	8.2	ug/Kg	⊗	05/11/17 18:50	05/12/17 13:06	1
PCB-1242	<6.2		19	6.2	ug/Kg	⊗	05/11/17 18:50	05/12/17 13:06	1
PCB-1248	<7.4		19	7.4	ug/Kg	⊗	05/11/17 18:50	05/12/17 13:06	1
PCB-1254	<4.0		19	4.0	ug/Kg	⊗	05/11/17 18:50	05/12/17 13:06	1
PCB-1260	<9.2		19	9.2	ug/Kg	⊗	05/11/17 18:50	05/12/17 13:06	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	77			49 - 129			05/11/17 18:50	05/12/17 13:06	1
DCB Decachlorobiphenyl	90			37 - 121			05/11/17 18:50	05/12/17 13:06	1

## Client Sample ID: GP-28 (6-8)

Date Collected: 05/03/17 09:10

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-6

Matrix: Solid

Percent Solids: 87.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:58	1
1,3,5-Trimethylbenzene	<18		30	18	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:58	1
Benzene	<21		30	21	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:58	1
Ethylbenzene	<22		30	22	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:58	1
Methyl tert-butyl ether	<14		30	14	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:58	1
Naphthalene	<140		300	140	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:58	1
Toluene	<20		30	20	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:58	1
Xylenes, Total	<35		89	35	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:58	1
Wisconsin GRO	<3000 *		5900	3000	ug/Kg	⊗	05/07/17 11:20	05/13/17 14:58	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene	87			80 - 120			05/07/17 11:20	05/13/17 14:58	1
a,a,a-Trifluorotoluene	96			80 - 120			05/07/17 11:20	05/13/17 14:58	1

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.8		4.5	1.8	mg/Kg	⊗	05/10/17 10:11	05/10/17 16:46	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Nonane	73			44 - 148			05/10/17 10:11	05/10/17 16:46	1

## Client Sample ID: GP-28 (14-16)

Date Collected: 05/03/17 09:20

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-7

Matrix: Solid

Percent Solids: 88.8

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:24	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:24	1
Methyl tert-butyl ether	<13		28	13	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:24	1
<b>Naphthalene</b>	<b>260 J</b>		280	130	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:24	1
Toluene	<19		28	19	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:24	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:24	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Client Sample ID: GP-28 (14-16)

Date Collected: 05/03/17 09:20

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-7

Matrix: Solid

Percent Solids: 88.8

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	19	J	28	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:24	1
Xylenes, Total	<33		83	33	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:24	1
<b>Surrogate</b>									
a,a,a-Trifluorotoluene	86			80 - 120					

## Client Sample ID: GP-29 (2-4)

Date Collected: 05/03/17 09:45

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-8

Matrix: Solid

Percent Solids: 87.4

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:51	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:51	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:51	1
Naphthalene	<140		290	140	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:51	1
Toluene	<20		29	20	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:51	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:51	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:51	1
Xylenes, Total	<35		87	35	ug/Kg	⊗	05/07/17 11:20	05/13/17 15:51	1
<b>Surrogate</b>									
a,a,a-Trifluorotoluene	87			80 - 120					

## Client Sample ID: GP-29 (6-8)

Date Collected: 05/03/17 09:50

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-9

Matrix: Solid

Percent Solids: 85.7

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<20		28	20	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:18	1
Ethylbenzene	<21		28	21	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:18	1
Methyl tert-butyl ether	<14		28	14	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:18	1
Naphthalene	<140		280	140	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:18	1
Toluene	<19		28	19	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:18	1
1,2,4-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:18	1
1,3,5-Trimethylbenzene	<17		28	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:18	1
Xylenes, Total	<34		85	34	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:18	1
<b>Surrogate</b>									
a,a,a-Trifluorotoluene	87			80 - 120					

## Client Sample ID: GP-29 (14-16)

Date Collected: 05/03/17 10:00

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-10

Matrix: Solid

Percent Solids: 87.8

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<21		29	21	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:45	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:45	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:45	1

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Client Sample ID: GP-29 (14-16)

Date Collected: 05/03/17 10:00

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-10

Matrix: Solid

Percent Solids: 87.8

### Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	220	J	290	140	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:45	1
Toluene	<19		29	19	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:45	1
1,2,4-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:45	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:45	1
Xylenes, Total	<34		86	34	ug/Kg	⊗	05/07/17 11:20	05/13/17 16:45	1
<b>Surrogate</b>		<b>%Recovery</b>		<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
a,a,a-Trifluorotoluene		86			80 - 120		05/07/17 11:20	05/13/17 16:45	1

## Client Sample ID: GP-30 (2-4)

Date Collected: 05/03/17 10:25

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-11

Matrix: Solid

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		71	33	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,1,1-Trichloroethane	<27		71	27	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,1,2,2-Tetrachloroethane	<28		71	28	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,1,2-Trichloroethane	<25		71	25	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,1-Dichloroethane	<29		71	29	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,1-Dichloroethene	<27		71	27	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,1-Dichloropropene	<21		71	21	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,2,3-Trichlorobenzene	<32		71	32	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,2,3-Trichloropropane	<29		71	29	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,2,4-Trichlorobenzene	<24		71	24	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,2,4-Trimethylbenzene	<25		71	25	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,2-Dibromoethane	<27		71	27	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,2-Dichlorobenzene	<24		71	24	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,2-Dichloroethane	<28		71	28	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,2-Dichloropropane	<30		71	30	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,3,5-Trimethylbenzene	<27		71	27	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,3-Dichlorobenzene	<28		71	28	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,3-Dichloropropane	<26		71	26	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
1,4-Dichlorobenzene	<26		71	26	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
2,2-Dichloropropane	<31		71	31	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
2-Chlorotoluene	<22		71	22	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
4-Chlorotoluene	<25		71	25	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Benzene	<10		18	10	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Bromobenzene	<25		71	25	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Bromochloromethane	<30		71	30	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Bromodichloromethane	<26		71	26	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Bromoform	<34		71	34	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Bromomethane	<56		140	56	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Carbon tetrachloride	<27		71	27	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Chlorobenzene	<27		71	27	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Chloroethane	<36		71	36	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Chloroform	<26		140	26	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Chloromethane	<23		71	23	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
<b>cis-1,2-Dichloroethene</b>	<b>710</b>	<b>F1</b>	71	29	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Client Sample ID: GP-30 (2-4)

Date Collected: 05/03/17 10:25

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-11

Matrix: Solid

Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	<29		71	29	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Dibromochloromethane	<34		71	34	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Dibromomethane	<19		71	19	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Dichlorodifluoromethane	<48		140	48	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Hexachlorobutadiene	<31		71	31	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Isopropyl ether	<19		71	19	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Isopropylbenzene	<27		71	27	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Methyl tert-butyl ether	<28		71	28	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Methylene Chloride	<110		350	110	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Naphthalene	<24		71	24	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
n-Butylbenzene	<27		71	27	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
N-Propylbenzene	<29		71	29	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
p-Isopropyltoluene	<26		71	26	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
sec-Butylbenzene	<28		71	28	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Styrene	<27		71	27	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
tert-Butylbenzene	<28		71	28	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Tetrachloroethene	<26		71	26	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Toluene	<10		18	10	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
trans-1,2-Dichloroethene	<25		71	25	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
trans-1,3-Dichloropropene	<26		71	26	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
<b>Trichloroethene</b>	<b>1100 F1</b>		35	12	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Trichlorofluoromethane	<30 *		71	30	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Vinyl chloride	<18		35	18	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50
Xylenes, Total	<16		35	16	ug/Kg	⊗	05/03/17 10:25	05/17/17 11:21	50

### Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		75 - 126	05/03/17 10:25	05/17/17 11:21	50
4-Bromofluorobenzene (Surr)	111		72 - 124	05/03/17 10:25	05/17/17 11:21	50
Dibromofluoromethane	92		75 - 120	05/03/17 10:25	05/17/17 11:21	50
Toluene-d8 (Surr)	100		75 - 120	05/03/17 10:25	05/17/17 11:21	50

## Client Sample ID: GP-30 (6-8)

Date Collected: 05/03/17 10:30

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-12

Matrix: Solid

Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		72	33	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,1,1-Trichloroethane	<27		72	27	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,1,2,2-Tetrachloroethane	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,1,2-Trichloroethane	<25		72	25	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,1-Dichloroethane	<29		72	29	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,1-Dichloroethene	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,1-Dichloropropene	<21		72	21	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,2,3-Trichlorobenzene	<33		72	33	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,2,3-Trichloropropane	<30		72	30	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,2,4-Trichlorobenzene	<24		72	24	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,2,4-Trimethylbenzene	<26		72	26	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,2-Dibromo-3-Chloropropane	<140		360	140	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-30 (6-8)**

Date Collected: 05/03/17 10:30

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-12**

Matrix: Solid

Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,2-Dichlorobenzene	<24		72	24	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,2-Dichloroethane	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,2-Dichloropropane	<31		72	31	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,3,5-Trimethylbenzene	<27		72	27	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,3-Dichlorobenzene	<29		72	29	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,3-Dichloropropane	<26		72	26	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
1,4-Dichlorobenzene	<26		72	26	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
2,2-Dichloropropane	<32		72	32	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
2-Chlorotoluene	<22		72	22	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
4-Chlorotoluene	<25		72	25	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
<b>Benzene</b>	<b>29</b>		18	10	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Bromobenzene	<25		72	25	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Bromochloromethane	<31		72	31	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Bromodichloromethane	<27		72	27	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Bromoform	<35		72	35	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Bromomethane	<57		140	57	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Carbon tetrachloride	<27		72	27	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Chlorobenzene	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Chloroethane	<36		72	36	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Chloroform	<26		140	26	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Chloromethane	<23		72	23	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
cis-1,2-Dichloroethene	<29		72	29	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
cis-1,3-Dichloropropene	<30		72	30	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Dibromochloromethane	<35		72	35	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Dibromomethane	<19		72	19	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Dichlorodifluoromethane	<48		140	48	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Hexachlorobutadiene	<32		72	32	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Isopropyl ether	<20		72	20	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Isopropylbenzene	<27		72	27	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Methyl tert-butyl ether	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Methylene Chloride	<120		360	120	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Naphthalene	<24		72	24	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
n-Butylbenzene	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
N-Propylbenzene	<30		72	30	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
p-Isopropyltoluene	<26		72	26	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
sec-Butylbenzene	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Styrene	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
tert-Butylbenzene	<28		72	28	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Tetrachloroethene	<26		72	26	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Toluene	<11		18	11	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
trans-1,2-Dichloroethene	<25		72	25	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
trans-1,3-Dichloropropene	<26		72	26	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
<b>Trichloroethene</b>	<b>380</b>		36	12	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Trichlorofluoromethane	<31 *		72	31	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Vinyl chloride	<19		36	19	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50
Xylenes, Total	<16		36	16	ug/Kg	⊗	05/03/17 10:30	05/17/17 11:48	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Client Sample ID: GP-30 (6-8)

Date Collected: 05/03/17 10:30

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-12

Matrix: Solid

Percent Solids: 81.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		75 - 126	05/03/17 10:30	05/17/17 11:48	50
4-Bromofluorobenzene (Surr)	115		72 - 124	05/03/17 10:30	05/17/17 11:48	50
Dibromofluoromethane	94		75 - 120	05/03/17 10:30	05/17/17 11:48	50
Toluene-d8 (Surr)	102		75 - 120	05/03/17 10:30	05/17/17 11:48	50

## Client Sample ID: GP-30 (14-16)

Date Collected: 05/03/17 10:40

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-13

Matrix: Solid

Percent Solids: 88.7

Method: 8260B - Volatile Organic Compounds (GC/MS)	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<29		63	29	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,1,1-Trichloroethane	<24		63	24	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,1,2,2-Tetrachloroethane	<25		63	25	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,1,2-Trichloroethane	<22		63	22	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,1-Dichloroethane	<26		63	26	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,1-Dichloroethene	<25		63	25	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,1-Dichloropropene	<19		63	19	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,2,3-Trichlorobenzene	<29		63	29	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,2,3-Trichloropropane	<26		63	26	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,2,4-Trichlorobenzene	<22		63	22	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,2,4-Trimethylbenzene	<23		63	23	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,2-Dibromo-3-Chloropropane	<130		310	130	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,2-Dibromoethane	<24		63	24	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,2-Dichlorobenzene	<21		63	21	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,2-Dichloroethane	<25		63	25	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,2-Dichloropropene	<27		63	27	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,3,5-Trimethylbenzene	<24		63	24	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,3-Dichlorobenzene	<25		63	25	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,3-Dichloropropane	<23		63	23	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
1,4-Dichlorobenzene	<23		63	23	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
2,2-Dichloropropane	<28		63	28	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
2-Chlorotoluene	<20		63	20	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
4-Chlorotoluene	<22		63	22	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Benzene	<9.2		16	9.2	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Bromobenzene	<22		63	22	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Bromochloromethane	<27		63	27	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Bromodichloromethane	<23		63	23	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Bromoform	<30		63	30	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Bromomethane	<50		130	50	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Carbon tetrachloride	<24		63	24	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Chlorobenzene	<24		63	24	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Chloroethane	<32		63	32	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Chloroform	<23		130	23	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Chloromethane	<20		63	20	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
cis-1,2-Dichloroethene	<26		63	26	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
cis-1,3-Dichloropropene	<26		63	26	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Dibromochloromethane	<31		63	31	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Dibromomethane	<17		63	17	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Dichlorodifluoromethane	<42		130	42	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-30 (14-16)**

Date Collected: 05/03/17 10:40

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-13**

Matrix: Solid

Percent Solids: 88.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<12		16	12	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Hexachlorobutadiene	<28		63	28	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Isopropyl ether	<17		63	17	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Isopropylbenzene	<24		63	24	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Methyl tert-butyl ether	<25		63	25	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Methylene Chloride	<100		310	100	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Naphthalene	<21		63	21	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
n-Butylbenzene	<24		63	24	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
N-Propylbenzene	<26		63	26	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
p-Isopropyltoluene	<23		63	23	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
sec-Butylbenzene	<25		63	25	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Styrene	<24		63	24	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
tert-Butylbenzene	<25		63	25	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Tetrachloroethene	<23		63	23	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Toluene	<9.2		16	9.2	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
trans-1,2-Dichloroethene	<22		63	22	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
trans-1,3-Dichloropropene	<23		63	23	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
<b>Trichloroethene</b>	<b>210</b>		31	10	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Trichlorofluoromethane	<27 *		63	27	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Vinyl chloride	<16		31	16	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
Xylenes, Total	<14		31	14	ug/Kg	⊗	05/03/17 10:40	05/17/17 12:42	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	118			75 - 126			05/03/17 10:40	05/17/17 12:42	50
4-Bromofluorobenzene (Surr)	116			72 - 124			05/03/17 10:40	05/17/17 12:42	50
Dibromofluoromethane	97			75 - 120			05/03/17 10:40	05/17/17 12:42	50
Toluene-d8 (Surr)	101			75 - 120			05/03/17 10:40	05/17/17 12:42	50

**Client Sample ID: GP-31 (2-4)**

Date Collected: 05/03/17 11:00

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-14**

Matrix: Solid

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<32		69	32	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,1,1-Trichloroethane	<26		69	26	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,1,2,2-Tetrachloroethane	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,1,2-Trichloroethane	<24		69	24	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,1-Dichloroethane	<28		69	28	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,1-Dichloroethene	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,1-Dichloropropene	<20		69	20	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,2,3-Trichlorobenzene	<31		69	31	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,2,3-Trichloropropane	<28		69	28	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,2,4-Trichlorobenzene	<23		69	23	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,2,4-Trimethylbenzene	<25		69	25	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,2-Dibromo-3-Chloropropane	<140		340	140	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,2-Dibromoethane	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,2-Dichlorobenzene	<23		69	23	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,2-Dichloroethane	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,2-Dichloropropane	<29		69	29	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-31 (2-4)**

Date Collected: 05/03/17 11:00

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-14**

Matrix: Solid

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	<26		69	26	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,3-Dichlorobenzene	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,3-Dichloropropane	<25		69	25	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
1,4-Dichlorobenzene	<25		69	25	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
2,2-Dichloropropane	<30		69	30	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
2-Chlorotoluene	<22		69	22	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
4-Chlorotoluene	<24		69	24	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Benzene	<10		17	10	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Bromobenzene	<24		69	24	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Bromo(chloromethane)	<29		69	29	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Bromodichloromethane	<26		69	26	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Bromoform	<33		69	33	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Bromomethane	<55		140	55	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Carbon tetrachloride	<26		69	26	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Chlorobenzene	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Chloroethane	<35		69	35	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Chloroform	<25		140	25	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Chloromethane	<22		69	22	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
cis-1,2-Dichloroethene	<28		69	28	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
cis-1,3-Dichloropropene	<29		69	29	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Dibromochloromethane	<34		69	34	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Dibromomethane	<19		69	19	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Dichlorodifluoromethane	<46		140	46	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Ethylbenzene	<13		17	13	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Hexachlorobutadiene	<31		69	31	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Isopropyl ether	<19		69	19	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Isopropylbenzene	<26		69	26	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Methyl tert-butyl ether	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Methylene Chloride	<110		340	110	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Naphthalene	<23		69	23	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
n-Butylbenzene	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
N-Propylbenzene	<28		69	28	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
p-Isopropyltoluene	<25		69	25	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
sec-Butylbenzene	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Styrene	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
tert-Butylbenzene	<27		69	27	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Tetrachloroethene	<25		69	25	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Toluene	<10		17	10	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
trans-1,2-Dichloroethene	<24		69	24	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
trans-1,3-Dichloropropene	<25		69	25	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
<b>Trichloroethene</b>	<b>81</b>		34	11	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Trichlorofluoromethane	<29	*	69	29	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Vinyl chloride	<18		34	18	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50
Xylenes, Total	<15		34	15	ug/Kg	⊗	05/03/17 11:00	05/17/17 13:09	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		75 - 126	05/03/17 11:00	05/17/17 13:09	50
4-Bromofluorobenzene (Surr)	113		72 - 124	05/03/17 11:00	05/17/17 13:09	50
Dibromofluoromethane	93		75 - 120	05/03/17 11:00	05/17/17 13:09	50
Toluene-d8 (Surr)	99		75 - 120	05/03/17 11:00	05/17/17 13:09	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Client Sample ID: GP-31 (6-8)

Date Collected: 05/03/17 11:05

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-15

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		71	33	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,1,1-Trichloroethane	<27		71	27	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,1,2,2-Tetrachloroethane	<28		71	28	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,1,2-Trichloroethane	<25		71	25	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,1-Dichloroethane	<29		71	29	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,1-Dichloroethene	<28		71	28	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,1-Dichloropropene	<21		71	21	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,2,3-Trichlorobenzene	<32		71	32	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,2,3-Trichloropropane	<29		71	29	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,2,4-Trichlorobenzene	<24		71	24	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,2,4-Trimethylbenzene	<25		71	25	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,2-Dibromoethane	<27		71	27	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,2-Dichlorobenzene	<24		71	24	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,2-Dichloroethane	<28		71	28	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,2-Dichloropropane	<30		71	30	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,3,5-Trimethylbenzene	<27		71	27	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,3-Dichlorobenzene	<28		71	28	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,3-Dichloropropane	<26		71	26	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
1,4-Dichlorobenzene	<26		71	26	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
2,2-Dichloropropane	<31		71	31	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
2-Chlorotoluene	<22		71	22	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
4-Chlorotoluene	<25		71	25	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Benzene	<10		18	10	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Bromobenzene	<25		71	25	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Bromo(chloromethane)	<30		71	30	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Bromodichloromethane	<26		71	26	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Bromoform	<34		71	34	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Bromomethane	<56		140	56	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Carbon tetrachloride	<27		71	27	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Chlorobenzene	<27		71	27	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Chloroethane	<36		71	36	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Chloroform	<26		140	26	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Chloromethane	<23		71	23	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
cis-1,2-Dichloroethene	<29		71	29	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
cis-1,3-Dichloropropene	<29		71	29	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Dibromochloromethane	<35		71	35	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Dibromomethane	<19		71	19	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Dichlorodifluoromethane	<48		140	48	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Hexachlorobutadiene	<32		71	32	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Isopropyl ether	<20		71	20	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Isopropylbenzene	<27		71	27	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Methyl tert-butyl ether	<28		71	28	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Methylene Chloride	<120		350	120	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Naphthalene	<24		71	24	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
n-Butylbenzene	<27		71	27	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
N-Propylbenzene	<29		71	29	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
p-Isopropyltoluene	<26		71	26	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-31 (6-8)**

Date Collected: 05/03/17 11:05

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-15**

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<28		71	28	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Styrene	<27		71	27	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
tert-Butylbenzene	<28		71	28	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Tetrachloroethene	<26		71	26	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Toluene	<10		18	10	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
trans-1,2-Dichloroethene	<25		71	25	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
trans-1,3-Dichloropropene	<26		71	26	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
<b>Trichloroethene</b>	<b>55</b>		35	12	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Trichlorofluoromethane	<30 *		71	30	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Vinyl chloride	<19		35	19	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
Xylenes, Total	<16		35	16	ug/Kg	⊗	05/03/17 11:05	05/17/17 13:35	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	115			75 - 126			05/03/17 11:05	05/17/17 13:35	50
4-Bromofluorobenzene (Surr)	115			72 - 124			05/03/17 11:05	05/17/17 13:35	50
Dibromofluoromethane	95			75 - 120			05/03/17 11:05	05/17/17 13:35	50
Toluene-d8 (Surr)	101			75 - 120			05/03/17 11:05	05/17/17 13:35	50

**Client Sample ID: GP-32 (2-4)**

Date Collected: 05/03/17 11:25

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-16**

Matrix: Solid

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<30		65	30	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,1,1-Trichloroethane	<25		65	25	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,1,2,2-Tetrachloroethane	<26		65	26	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,1,2-Trichloroethane	<23		65	23	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,1-Dichloroethane	<27		65	27	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,1-Dichloroethene	<26		65	26	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,1-Dichloropropene	<20		65	20	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,2,3-Trichlorobenzene	<30		65	30	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,2,3-Trichloropropane	<27		65	27	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,2,4-Trichlorobenzene	<22		65	22	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,2,4-Trimethylbenzene	<23		65	23	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,2-Dibromo-3-Chloropropane	<130		330	130	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,2-Dibromoethane	<25		65	25	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,2-Dichlorobenzene	<22		65	22	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,2-Dichloroethane	<26		65	26	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,2-Dichloropropane	<28		65	28	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,3,5-Trimethylbenzene	<25		65	25	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,3-Dichlorobenzene	<26		65	26	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,3-Dichloropropane	<24		65	24	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
1,4-Dichlorobenzene	<24		65	24	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
2,2-Dichloropropane	<29		65	29	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
2-Chlorotoluene	<21		65	21	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
4-Chlorotoluene	<23		65	23	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
<b>Benzene</b>	<b>16</b>		16	9.6	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Bromobenzene	<23		65	23	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Bromochloromethane	<28		65	28	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Client Sample ID: GP-32 (2-4)

Date Collected: 05/03/17 11:25

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-16

Matrix: Solid

Percent Solids: 86.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	<24		65	24	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Bromoform	<32		65	32	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Bromomethane	<52		130	52	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Carbon tetrachloride	<25		65	25	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Chlorobenzene	<25		65	25	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Chloroethane	<33		65	33	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Chloroform	<24		130	24	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Chloromethane	<21		65	21	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
cis-1,2-Dichloroethene	<27		65	27	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
cis-1,3-Dichloropropene	<27		65	27	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Dibromochloromethane	<32		65	32	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Dibromomethane	<18		65	18	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Dichlorodifluoromethane	<44		130	44	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Ethylbenzene	<12		16	12	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Hexachlorobutadiene	<29		65	29	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Isopropyl ether	<18		65	18	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Isopropylbenzene	<25		65	25	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Methyl tert-butyl ether	<26		65	26	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Methylene Chloride	<110		330	110	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Naphthalene	<22		65	22	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
n-Butylbenzene	<25		65	25	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
N-Propylbenzene	<27		65	27	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
p-Isopropyltoluene	<24		65	24	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
sec-Butylbenzene	<26		65	26	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Styrene	<25		65	25	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
tert-Butylbenzene	<26		65	26	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Tetrachloroethene	<24		65	24	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Toluene	<9.6		16	9.6	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
trans-1,2-Dichloroethene	<23		65	23	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
trans-1,3-Dichloropropene	<24		65	24	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Trichloroethene	<11		33	11	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Trichlorofluoromethane	<28 *		65	28	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Vinyl chloride	<17		33	17	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
Xylenes, Total	<14		33	14	ug/Kg	⊗	05/03/17 11:25	05/17/17 14:02	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	115			75 - 126			05/03/17 11:25	05/17/17 14:02	50
4-Bromofluorobenzene (Surr)	116			72 - 124			05/03/17 11:25	05/17/17 14:02	50
Dibromofluoromethane	94			75 - 120			05/03/17 11:25	05/17/17 14:02	50
Toluene-d8 (Surr)	100			75 - 120			05/03/17 11:25	05/17/17 14:02	50

## Client Sample ID: GP-32 (6-8)

Date Collected: 05/03/17 11:30

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-17

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<33		71	33	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,1,1-Trichloroethane	<27		71	27	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,1,2,2-Tetrachloroethane	<28		71	28	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-32 (6-8)**

**Date Collected: 05/03/17 11:30**

**Date Received: 05/04/17 10:20**

**Lab Sample ID: 500-127625-17**

**Matrix: Solid**

**Percent Solids: 82.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<25		71	25	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,1-Dichloroethane	<29		71	29	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,1-Dichloroethene	<28		71	28	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,1-Dichloropropene	<21		71	21	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,2,3-Trichlorobenzene	<32		71	32	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,2,3-Trichloropropane	<29		71	29	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,2,4-Trichlorobenzene	<24		71	24	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,2,4-Trimethylbenzene	<25		71	25	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,2-Dibromoethane	<27		71	27	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,2-Dichlorobenzene	<24		71	24	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,2-Dichloroethane	<28		71	28	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,2-Dichloropropane	<30		71	30	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,3,5-Trimethylbenzene	<27		71	27	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,3-Dichlorobenzene	<28		71	28	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,3-Dichloropropane	<26		71	26	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
1,4-Dichlorobenzene	<26		71	26	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
2,2-Dichloropropane	<31		71	31	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
2-Chlorotoluene	<22		71	22	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
4-Chlorotoluene	<25		71	25	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Benzene	<10		18	10	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Bromobenzene	<25		71	25	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Bromochloromethane	<30		71	30	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Bromodichloromethane	<26		71	26	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Bromoform	<34		71	34	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Bromomethane	<56		140	56	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Carbon tetrachloride	<27		71	27	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Chlorobenzene	<27		71	27	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Chloroethane	<36		71	36	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Chloroform	<26		140	26	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Chloromethane	<23		71	23	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
cis-1,2-Dichloroethene	<29		71	29	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
cis-1,3-Dichloropropene	<30		71	30	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Dibromochloromethane	<35		71	35	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Dibromomethane	<19		71	19	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Dichlorodifluoromethane	<48		140	48	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Hexachlorobutadiene	<32		71	32	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Isopropyl ether	<20		71	20	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Isopropylbenzene	<27		71	27	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Methyl tert-butyl ether	<28		71	28	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Methylene Chloride	<120		350	120	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Naphthalene	<24		71	24	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
n-Butylbenzene	<28		71	28	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
N-Propylbenzene	<29		71	29	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
p-Isopropyltoluene	<26		71	26	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
sec-Butylbenzene	<28		71	28	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Styrene	<27		71	27	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
tert-Butylbenzene	<28		71	28	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Client Sample ID: GP-32 (6-8)

Date Collected: 05/03/17 11:30

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-17

Matrix: Solid

Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<26		71	26	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Toluene	<10		18	10	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
trans-1,2-Dichloroethene	<25		71	25	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
trans-1,3-Dichloropropene	<26		71	26	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Trichloroethene	<12		35	12	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Trichlorofluoromethane	<30 *		71	30	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Vinyl chloride	<19		35	19	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
Xylenes, Total	<16		35	16	ug/Kg	⊗	05/03/17 11:30	05/17/17 14:29	50
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	114			75 - 126			05/03/17 11:30	05/17/17 14:29	50
4-Bromofluorobenzene (Surr)	115			72 - 124			05/03/17 11:30	05/17/17 14:29	50
Dibromofluoromethane	95			75 - 120			05/03/17 11:30	05/17/17 14:29	50
Toluene-d8 (Surr)	100			75 - 120			05/03/17 11:30	05/17/17 14:29	50

## Client Sample ID: GP-32 (14-16)

Date Collected: 05/03/17 11:35

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-18

Matrix: Solid

Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Tetrachloroethane	<30		64	30	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,1,1-Trichloroethane	<24		64	24	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,1,2,2-Tetrachloroethane	<25		64	25	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,1,2-Trichloroethane	<22		64	22	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,1-Dichloroethane	<26		64	26	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,1-Dichloroethene	<25		64	25	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,1-Dichloropropene	<19		64	19	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,2,3-Trichlorobenzene	<29		64	29	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,2,3-Trichloropropane	<26		64	26	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,2,4-Trichlorobenzene	<22		64	22	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,2,4-Trimethylbenzene	<23		64	23	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,2-Dibromo-3-Chloropropane	<130		320	130	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,2-Dibromoethane	<25		64	25	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,2-Dichlorobenzene	<21		64	21	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,2-Dichloroethane	<25		64	25	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,2-Dichloropropane	<27		64	27	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,3,5-Trimethylbenzene	<24		64	24	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,3-Dichlorobenzene	<26		64	26	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,3-Dichloropropane	<23		64	23	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
1,4-Dichlorobenzene	<23		64	23	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
2,2-Dichloropropane	<28		64	28	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
2-Chlorotoluene	<20		64	20	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
4-Chlorotoluene	<22		64	22	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
Benzene	<9.3		16	9.3	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
Bromobenzene	<23		64	23	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
Bromochloromethane	<27		64	27	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
Bromodichloromethane	<24		64	24	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
Bromoform	<31		64	31	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50
Bromomethane	<51		130	51	ug/Kg	⊗	05/03/17 11:35	05/17/17 14:56	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-32 (14-16)**

Date Collected: 05/03/17 11:35

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-18**

Matrix: Solid

Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<25		64	25	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Chlorobenzene	<25		64	25	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Chloroethane	<32		64	32	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Chloroform	<24		130	24	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Chloromethane	<20		64	20	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
cis-1,2-Dichloroethene	<26		64	26	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
cis-1,3-Dichloropropene	<27		64	27	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Dibromochloromethane	<31		64	31	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Dibromomethane	<17		64	17	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Dichlorodifluoromethane	<43		130	43	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Ethylbenzene	<12		16	12	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Hexachlorobutadiene	<28		64	28	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Isopropyl ether	<18		64	18	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Isopropylbenzene	<25		64	25	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Methyl tert-butyl ether	<25		64	25	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Methylene Chloride	<100		320	100	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Naphthalene	<21		64	21	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
n-Butylbenzene	<25		64	25	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
N-Propylbenzene	<26		64	26	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
p-Isopropyltoluene	<23		64	23	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
sec-Butylbenzene	<25		64	25	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Styrene	<25		64	25	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
tert-Butylbenzene	<25		64	25	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Tetrachloroethene	<24		64	24	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Toluene	<9.4		16	9.4	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
trans-1,2-Dichloroethene	<22		64	22	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
trans-1,3-Dichloropropene	<23		64	23	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Trichloroethene	<10		32	10	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Trichlorofluoromethane	<27 *		64	27	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Vinyl chloride	<17		32	17	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
Xylenes, Total	<14		32	14	ug/Kg	⌚	05/03/17 11:35	05/17/17 14:56	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	114			75 - 126			05/03/17 11:35	05/17/17 14:56	50
4-Bromofluorobenzene (Surr)	116			72 - 124			05/03/17 11:35	05/17/17 14:56	50
Dibromofluoromethane	96			75 - 120			05/03/17 11:35	05/17/17 14:56	50
Toluene-d8 (Surr)	99			75 - 120			05/03/17 11:35	05/17/17 14:56	50

**Client Sample ID: GP-33 (2-4)**

Date Collected: 05/03/17 11:50

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-19**

Matrix: Solid

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<34		73	34	ug/Kg	⌚	05/03/17 11:50	05/17/17 15:23	50
1,1,1-Trichloroethane	<28		73	28	ug/Kg	⌚	05/03/17 11:50	05/17/17 15:23	50
1,1,2,2-Tetrachloroethane	<29		73	29	ug/Kg	⌚	05/03/17 11:50	05/17/17 15:23	50
1,1,2-Trichloroethane	<26		73	26	ug/Kg	⌚	05/03/17 11:50	05/17/17 15:23	50
1,1-Dichloroethane	<30		73	30	ug/Kg	⌚	05/03/17 11:50	05/17/17 15:23	50
1,1-Dichloroethene	<29		73	29	ug/Kg	⌚	05/03/17 11:50	05/17/17 15:23	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-33 (2-4)**

**Date Collected: 05/03/17 11:50**

**Date Received: 05/04/17 10:20**

**Lab Sample ID: 500-127625-19**

**Matrix: Solid**

**Percent Solids: 81.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<22		73	22	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,2,3-Trichlorobenzene	<34		73	34	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,2,3-Trichloropropane	<30		73	30	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,2,4-Trichlorobenzene	<25		73	25	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,2,4-Trimethylbenzene	<26		73	26	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,2-Dibromo-3-Chloropropane	<150		370	150	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,2-Dibromoethane	<28		73	28	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,2-Dichlorobenzene	<24		73	24	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,2-Dichloroethane	<29		73	29	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,2-Dichloropropane	<31		73	31	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,3,5-Trimethylbenzene	<28		73	28	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,3-Dichlorobenzene	<29		73	29	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,3-Dichloropropane	<27		73	27	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
1,4-Dichlorobenzene	<27		73	27	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
2,2-Dichloropropane	<33		73	33	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
2-Chlorotoluene	<23		73	23	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
4-Chlorotoluene	<26		73	26	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Benzene	<11		18	11	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Bromobenzene	<26		73	26	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Bromochloromethane	<31		73	31	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Bromodichloromethane	<27		73	27	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Bromoform	<35		73	35	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Bromomethane	<58		150	58	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Carbon tetrachloride	<28		73	28	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Chlorobenzene	<28		73	28	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Chloroethane	<37		73	37	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Chloroform	<27		150	27	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Chloromethane	<23		73	23	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
cis-1,2-Dichloroethene	<30		73	30	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
cis-1,3-Dichloropropene	<30		73	30	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Dibromochloromethane	<36		73	36	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Dibromomethane	<20		73	20	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Dichlorodifluoromethane	<49		150	49	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Ethylbenzene	<13		18	13	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Hexachlorobutadiene	<33		73	33	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Isopropyl ether	<20		73	20	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Isopropylbenzene	<28		73	28	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Methyl tert-butyl ether	<29		73	29	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Methylene Chloride	<120		370	120	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Naphthalene	<24		73	24	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
n-Butylbenzene	<28		73	28	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
N-Propylbenzene	<30		73	30	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
p-Isopropyltoluene	<27		73	27	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
sec-Butylbenzene	<29		73	29	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Styrene	<28		73	28	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
tert-Butylbenzene	<29		73	29	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Tetrachloroethene	<27		73	27	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
Toluene	<11		18	11	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50
trans-1,2-Dichloroethene	<26		73	26	ug/Kg	⊗	05/03/17 11:50	05/17/17 15:23	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## **Client Sample ID: GP-33 (2-4)**

Date Collected: 05/03/17 11:50

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-19**

Matrix: Solid

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<27		73	27	ug/Kg	✉	05/03/17 11:50	05/17/17 15:23	50
Trichloroethene	<12		37	12	ug/Kg	✉	05/03/17 11:50	05/17/17 15:23	50
Trichlorofluoromethane	<31 *		73	31	ug/Kg	✉	05/03/17 11:50	05/17/17 15:23	50
Vinyl chloride	<19		37	19	ug/Kg	✉	05/03/17 11:50	05/17/17 15:23	50
Xylenes, Total	<16		37	16	ug/Kg	✉	05/03/17 11:50	05/17/17 15:23	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		75 - 126				05/03/17 11:50	05/17/17 15:23	50
4-Bromofluorobenzene (Surr)	114		72 - 124				05/03/17 11:50	05/17/17 15:23	50
Dibromofluoromethane	94		75 - 120				05/03/17 11:50	05/17/17 15:23	50
Toluene-d8 (Surr)	101		75 - 120				05/03/17 11:50	05/17/17 15:23	50

## **Client Sample ID: GP-33 (6-8)**

Date Collected: 05/03/17 11:55

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-20**

Matrix: Solid

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<32		69	32	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,1,1-Trichloroethane	<26		69	26	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,1,2,2-Tetrachloroethane	<27		69	27	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,1,2-Trichloroethane	<24		69	24	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,1-Dichloroethane	<28		69	28	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,1-Dichloroethene	<27		69	27	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,1-Dichloropropene	<21		69	21	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,2,3-Trichlorobenzene	<32		69	32	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,2,3-Trichloropropane	<29		69	29	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,2,4-Trichlorobenzene	<24		69	24	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,2,4-Trimethylbenzene	<25		69	25	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,2-Dibromo-3-Chloropropane	<140		350	140	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,2-Dibromoethane	<27		69	27	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,2-Dichlorobenzene	<23		69	23	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,2-Dichloroethane	<27		69	27	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,2-Dichloropropane	<30		69	30	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,3,5-Trimethylbenzene	<26		69	26	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,3-Dichlorobenzene	<28		69	28	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,3-Dichloropropane	<25		69	25	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
1,4-Dichlorobenzene	<25		69	25	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
2,2-Dichloropropane	<31		69	31	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
2-Chlorotoluene	<22		69	22	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
4-Chlorotoluene	<24		69	24	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
Benzene	<10		17	10	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
Bromobenzene	<25		69	25	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
Bromochloromethane	<30		69	30	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
Bromodichloromethane	<26		69	26	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
Bromoform	<33		69	33	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
Bromomethane	<55		140	55	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
Carbon tetrachloride	<27		69	27	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
Chlorobenzene	<27		69	27	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50
Chloroethane	<35		69	35	ug/Kg	✉	05/03/17 11:55	05/17/17 15:50	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-33 (6-8)**

Date Collected: 05/03/17 11:55

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-20**

Matrix: Solid

Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<26		140	26	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Chloromethane	<22		69	22	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
cis-1,2-Dichloroethene	<28		69	28	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
cis-1,3-Dichloropropene	<29		69	29	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Dibromochloromethane	<34		69	34	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Dibromomethane	<19		69	19	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Dichlorodifluoromethane	<47		140	47	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Ethylbenzene	<13		17	13	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Hexachlorobutadiene	<31		69	31	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Isopropyl ether	<19		69	19	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Isopropylbenzene	<27		69	27	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Methyl tert-butyl ether	<27		69	27	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Methylene Chloride	<110		350	110	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Naphthalene	<23		69	23	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
n-Butylbenzene	<27		69	27	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
N-Propylbenzene	<29		69	29	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
p-Isopropyltoluene	<25		69	25	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
sec-Butylbenzene	<27		69	27	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Styrene	<27		69	27	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
tert-Butylbenzene	<27		69	27	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
<b>Tetrachloroethene</b>	<b>5400</b>		69	26	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Toluene	<10		17	10	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
trans-1,2-Dichloroethene	<24		69	24	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
trans-1,3-Dichloropropene	<25		69	25	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
<b>Trichloroethene</b>	<b>100</b>		35	11	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Trichlorofluoromethane	<30 *		69	30	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Vinyl chloride	<18		35	18	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
Xylenes, Total	<15		35	15	ug/Kg	⊗	05/03/17 11:55	05/17/17 15:50	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	115		75 - 126				05/03/17 11:55	05/17/17 15:50	50
4-Bromofluorobenzene (Surr)	115		72 - 124				05/03/17 11:55	05/17/17 15:50	50
Dibromofluoromethane	93		75 - 120				05/03/17 11:55	05/17/17 15:50	50
Toluene-d8 (Surr)	98		75 - 120				05/03/17 11:55	05/17/17 15:50	50

**Client Sample ID: Trip Blank**

Date Collected: 05/03/17 00:00

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-21**

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,1-Dichloroethane	<21		50	21	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,1-Dichloroethene	<20		50	20	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,1-Dichloropropene	<15		50	15	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,2,3-Trichloropropane	<21		50	21	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Client Sample ID: Trip Blank

Date Collected: 05/03/17 00:00

Date Received: 05/04/17 10:20

## Lab Sample ID: 500-127625-21

Matrix: Solid

Percent Solids: 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,2-Dibromoethane	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,2-Dichloroethane	<20		50	20	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,2-Dichloropropane	<21		50	21	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,3-Dichloropropane	<18		50	18	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
2,2-Dichloropropane	<22		50	22	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
2-Chlorotoluene	<16		50	16	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
4-Chlorotoluene	<18		50	18	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Benzene	<7.3		13	7.3	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Bromobenzene	<18		50	18	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Bromochloromethane	<21		50	21	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Bromodichloromethane	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Bromoform	<24		50	24	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Bromomethane	<40		100	40	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Carbon tetrachloride	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Chlorobenzene	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Chloroethane	<25		50	25	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Chloroform	<19		100	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Chloromethane	<16		50	16	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Dibromochloromethane	<24		50	24	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Dibromomethane	<14		50	14	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Dichlorodifluoromethane	<34		100	34	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Ethylbenzene	<9.2		13	9.2	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Hexachlorobutadiene	<22		50	22	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Isopropyl ether	<14		50	14	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Isopropylbenzene	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Methyl tert-butyl ether	<20		50	20	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Methylene Chloride	<82		250	82	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Naphthalene	<17		50	17	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
n-Butylbenzene	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
N-Propylbenzene	<21		50	21	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
p-Isopropyltoluene	<18		50	18	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
sec-Butylbenzene	<20		50	20	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Styrene	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
tert-Butylbenzene	<20		50	20	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Tetrachloroethene	<19		50	19	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Toluene	<7.4		13	7.4	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Trichloroethene	<8.2		25	8.2	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50
Trichlorofluoromethane	<21 *		50	21	ug/Kg	⊗	05/03/17 00:00	05/17/17 16:17	50

TestAmerica Chicago

# Client Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## **Client Sample ID: Trip Blank**

**Date Collected:** 05/03/17 00:00

**Date Received:** 05/04/17 10:20

## **Lab Sample ID: 500-127625-21**

**Matrix:** Solid

**Percent Solids:** 100.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<13		25	13	ug/Kg	⌚	05/03/17 00:00	05/17/17 16:17	50
Xylenes, Total	<11		25	11	ug/Kg	⌚	05/03/17 00:00	05/17/17 16:17	50
<b>Surrogate</b>									
1,2-Dichloroethane-d4 (Surr)	114		75 - 126			⌚	05/03/17 00:00	05/17/17 16:17	50
4-Bromofluorobenzene (Surr)	115		72 - 124			⌚	05/03/17 00:00	05/17/17 16:17	50
Dibromofluoromethane	96		75 - 120			⌚	05/03/17 00:00	05/17/17 16:17	50
Toluene-d8 (Surr)	100		75 - 120			⌚	05/03/17 00:00	05/17/17 16:17	50



## SFA Labs

**TestAmerica Laboratories, Inc.**

Attention: Sandie Fredrick

2417 Bond St  
University Park, IL 44720**Date Received:** 05/05/2017**Date Reported:** 05/15/17 17:07**Client Project:** Soil/Waste**Client Project ID:** Soil/Waste

PO# 2669273

**Project #:** Soil/Waste**Certificate of Analysis**

This analytical test report shall not be reproduced, except in full, without written permission from Eurofins S-F Analytical Laboratories.

All quality control samples and checks were within acceptance limits unless otherwise indicated. Test results pertain only to those items tested. All samples were in good condition when received by the laboratory unless otherwise noted. All LOD/LOQs are adjusted to reflect dilutions.

DNR #	Analyte	Result Wet Wt.	LOD Wet Wt.	Result Dry Wt.	LOD Dry Wt.	LOQ Dry Wt.	Units	Dilution Factor	Date Prepared	Date Analyzed	Method	Notes	
1705125-01	GP-28 (6-8) (500-127625-6)								Date Collected: 05/03/2017				
									Preparation: SW-846 5050 1994	Prepared By: P84Z	Analyzed By: P84Z		
Chlorine as Cl		0.008	0.002	0.009	0.002	0.006	% Wt.	1	5/15/17	05/15/17	ASTM D808		
Solids				Result: 85.26			% Wt.			Analyzed By: YT09	5/8/17	SM2540G 1997	05/09/17

This report was prepared and printed by:

Page 1 of 1

Josh Rhein, Chemistry Operations Manager

| Eurofins S-F Analytical Laboratories | 2345 South 170<sup>th</sup> Street | New Berlin, WI 53151 |

| Phone: (262) 754-5300 | Fax: (262) 754-5310 | eurofinsus.com | ESFA@eurofinsus.com |

# Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.

### GC 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.
*	LCS or LCSD is outside acceptance limits.

### Metals

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.

## Glossary

### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

□	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)

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## GC/MS VOA

### Prep Batch: 384048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-11	GP-30 (2-4)	Total/NA	Solid	5035	5
500-127625-12	GP-30 (6-8)	Total/NA	Solid	5035	6
500-127625-13	GP-30 (14-16)	Total/NA	Solid	5035	7
500-127625-14	GP-31 (2-4)	Total/NA	Solid	5035	8
500-127625-15	GP-31 (6-8)	Total/NA	Solid	5035	9
500-127625-16	GP-32 (2-4)	Total/NA	Solid	5035	10
500-127625-17	GP-32 (6-8)	Total/NA	Solid	5035	11
500-127625-18	GP-32 (14-16)	Total/NA	Solid	5035	12
500-127625-19	GP-33 (2-4)	Total/NA	Solid	5035	13
500-127625-20	GP-33 (6-8)	Total/NA	Solid	5035	14
500-127625-21	Trip Blank	Total/NA	Solid	5035	15
500-127625-11 MS	GP-30 (2-4)	Total/NA	Solid	5035	16
500-127625-11 MSD	GP-30 (2-4)	Total/NA	Solid	5035	

### Leach Batch: 384086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	1311	12
LB 500-384086/1-A	Method Blank	TCLP	Solid	1311	13

### Analysis Batch: 384262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	8260B	384086
LB 500-384086/1-A	Method Blank	TCLP	Solid	8260B	384086
MB 500-384262/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-384262/4	Lab Control Sample	Total/NA	Solid	8260B	15

### Analysis Batch: 385468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-11	GP-30 (2-4)	Total/NA	Solid	8260B	384048
500-127625-12	GP-30 (6-8)	Total/NA	Solid	8260B	384048
500-127625-13	GP-30 (14-16)	Total/NA	Solid	8260B	384048
500-127625-14	GP-31 (2-4)	Total/NA	Solid	8260B	384048
500-127625-15	GP-31 (6-8)	Total/NA	Solid	8260B	384048
500-127625-16	GP-32 (2-4)	Total/NA	Solid	8260B	384048
500-127625-17	GP-32 (6-8)	Total/NA	Solid	8260B	384048
500-127625-18	GP-32 (14-16)	Total/NA	Solid	8260B	384048
500-127625-19	GP-33 (2-4)	Total/NA	Solid	8260B	384048
500-127625-20	GP-33 (6-8)	Total/NA	Solid	8260B	384048
500-127625-21	Trip Blank	Total/NA	Solid	8260B	384048
MB 500-385468/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-385468/4	Lab Control Sample	Total/NA	Solid	8260B	384048
500-127625-11 MS	GP-30 (2-4)	Total/NA	Solid	8260B	384048
500-127625-11 MSD	GP-30 (2-4)	Total/NA	Solid	8260B	384048

## GC/MS Semi VOA

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	1311	12
LB 500-383992/1-B	Method Blank	TCLP	Solid	1311	13

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## GC/MS Semi VOA (Continued)

### Prep Batch: 384171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	3510C	383992
LB 500-383992/1-B	Method Blank	TCLP	Solid	3510C	383992
MB 500-384171/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	3510C	

### Analysis Batch: 384241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	8270D	384171
LB 500-383992/1-B	Method Blank	TCLP	Solid	8270D	384171
MB 500-384171/1-A	Method Blank	Total/NA	Solid	8270D	384171
LCS 500-384171/2-A	Lab Control Sample	Total/NA	Solid	8270D	384171

## GC VOA

### Prep Batch: 428058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-1	GP-26 (2-4)	Total/NA	Solid	WI GRO	
500-127625-2	GP-26 (6-8)	Total/NA	Solid	WI GRO	
500-127625-3	GP-27 (2-4)	Total/NA	Solid	WI GRO	
500-127625-4	GP-27 (6-8)	Total/NA	Solid	WI GRO	
500-127625-5	GP-28 (2-4)	Total/NA	Solid	WI GRO	
500-127625-6	GP-28 (6-8)	Total/NA	Solid	WI GRO	
500-127625-7	GP-28 (14-16)	Total/NA	Solid	WI GRO	
500-127625-8	GP-29 (2-4)	Total/NA	Solid	WI GRO	
500-127625-9	GP-29 (6-8)	Total/NA	Solid	WI GRO	
500-127625-10	GP-29 (14-16)	Total/NA	Solid	WI GRO	
MB 490-428058/1-A	Method Blank	Total/NA	Solid	WI GRO	
LCS 490-428058/2-A	Lab Control Sample	Total/NA	Solid	WI GRO	
LCSD 490-428058/3-A	Lab Control Sample Dup	Total/NA	Solid	WI GRO	

### Analysis Batch: 429747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-1	GP-26 (2-4)	Total/NA	Solid	WDNR	428058
500-127625-2	GP-26 (6-8)	Total/NA	Solid	WDNR	428058
500-127625-3	GP-27 (2-4)	Total/NA	Solid	WDNR	428058
500-127625-4	GP-27 (6-8)	Total/NA	Solid	WDNR	428058
500-127625-5	GP-28 (2-4)	Total/NA	Solid	WDNR	428058
500-127625-6	GP-28 (6-8)	Total/NA	Solid	WDNR	428058
500-127625-7	GP-28 (14-16)	Total/NA	Solid	WDNR	428058
500-127625-8	GP-29 (2-4)	Total/NA	Solid	WDNR	428058
500-127625-9	GP-29 (6-8)	Total/NA	Solid	WDNR	428058
500-127625-10	GP-29 (14-16)	Total/NA	Solid	WDNR	428058
MB 490-428058/1-A	Method Blank	Total/NA	Solid	WDNR	428058
LCS 490-428058/2-A	Lab Control Sample	Total/NA	Solid	WDNR	428058
LCSD 490-428058/3-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	428058

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## GC Semi VOA

### Prep Batch: 384574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	WI DRO PREP	
MB 500-384574/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	
LCS 500-384574/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-384574/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

### Analysis Batch: 384623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	WI-DRO	384574
MB 500-384574/1-A	Method Blank	Total/NA	Solid	WI-DRO	384574
LCS 500-384574/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	384574
LCSD 500-384574/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	384574

### Prep Batch: 384839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	3541	
MB 500-384839/1-A	Method Blank	Total/NA	Solid	3541	
LCS 500-384839/2-A	Lab Control Sample	Total/NA	Solid	3541	

### Analysis Batch: 384912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	8082A	384839
MB 500-384839/1-A	Method Blank	Total/NA	Solid	8082A	384839
LCS 500-384839/2-A	Lab Control Sample	Total/NA	Solid	8082A	384839

## Metals

### Leach Batch: 383992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	1311	
LB 500-383992/1-C	Method Blank	TCLP	Solid	1311	
LB 500-383992/1-D	Method Blank	TCLP	Solid	1311	
500-127625-6 MS	GP-28 (6-8)	TCLP	Solid	1311	
500-127625-6 DU	GP-28 (6-8)	TCLP	Solid	1311	

### Prep Batch: 384187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	3010A	383992
LB 500-383992/1-C	Method Blank	TCLP	Solid	3010A	383992
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	3010A	

### Prep Batch: 384260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	7470A	383992
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	383992
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	
500-127625-6 MS	GP-28 (6-8)	TCLP	Solid	7470A	383992
500-127625-6 DU	GP-28 (6-8)	TCLP	Solid	7470A	383992

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Metals (Continued)

### Analysis Batch: 384328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	6010B	384187
LB 500-383992/1-C	Method Blank	TCLP	Solid	6010B	384187
LCS 500-384187/2-A	Lab Control Sample	Total/NA	Solid	6010B	384187

### Analysis Batch: 384394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	TCLP	Solid	7470A	384260
LB 500-383992/1-D	Method Blank	TCLP	Solid	7470A	384260
MB 500-384260/12-A	Method Blank	Total/NA	Solid	7470A	384260
LCS 500-384260/13-A	Lab Control Sample	Total/NA	Solid	7470A	384260
500-127625-6 MS	GP-28 (6-8)	TCLP	Solid	7470A	384260
500-127625-6 DU	GP-28 (6-8)	TCLP	Solid	7470A	384260

## General Chemistry

### Analysis Batch: 383924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	Moisture	
500-127625-11	GP-30 (2-4)	Total/NA	Solid	Moisture	
500-127625-12	GP-30 (6-8)	Total/NA	Solid	Moisture	
500-127625-13	GP-30 (14-16)	Total/NA	Solid	Moisture	
500-127625-14	GP-31 (2-4)	Total/NA	Solid	Moisture	
500-127625-15	GP-31 (6-8)	Total/NA	Solid	Moisture	
500-127625-16	GP-32 (2-4)	Total/NA	Solid	Moisture	
500-127625-17	GP-32 (6-8)	Total/NA	Solid	Moisture	
500-127625-18	GP-32 (14-16)	Total/NA	Solid	Moisture	
500-127625-19	GP-33 (2-4)	Total/NA	Solid	Moisture	
500-127625-20	GP-33 (6-8)	Total/NA	Solid	Moisture	
500-127625-21	Trip Blank	Total/NA	Solid	Moisture	

### Analysis Batch: 384553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	9045C	

### Analysis Batch: 385047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	SM 2710F	
500-127625-6 MS	GP-28 (6-8)	Total/NA	Solid	SM 2710F	

### Prep Batch: 385217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	9010B	
MB 500-385217/1-A	Method Blank	Total/NA	Solid	9010B	
LCS 500-385217/2-A	Lab Control Sample	Total/NA	Solid	9010B	
500-127625-6 MS	GP-28 (6-8)	Total/NA	Solid	9010B	
500-127625-6 MSD	GP-28 (6-8)	Total/NA	Solid	9010B	

### Prep Batch: 385245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	9030B	

TestAmerica Chicago

# QC Association Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## General Chemistry (Continued)

### Prep Batch: 385245 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9030B	

### Analysis Batch: 385286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	9095A	

### Analysis Batch: 385288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	1010	

### Analysis Batch: 385342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	9014	385217
MB 500-385217/1-A	Method Blank	Total/NA	Solid	9014	385217
LCS 500-385217/2-A	Lab Control Sample	Total/NA	Solid	9014	385217
500-127625-6 MS	GP-28 (6-8)	Total/NA	Solid	9014	385217
500-127625-6 MSD	GP-28 (6-8)	Total/NA	Solid	9014	385217

### Analysis Batch: 385402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-6	GP-28 (6-8)	Total/NA	Solid	9034	385245
MB 500-385245/1-A	Method Blank	Total/NA	Solid	9034	385245
LCS 500-385245/2-A	Lab Control Sample	Total/NA	Solid	9034	385245

### Analysis Batch: 428284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-127625-1	GP-26 (2-4)	Total/NA	Solid	Moisture	
500-127625-2	GP-26 (6-8)	Total/NA	Solid	Moisture	
500-127625-3	GP-27 (2-4)	Total/NA	Solid	Moisture	
500-127625-4	GP-27 (6-8)	Total/NA	Solid	Moisture	
500-127625-5	GP-28 (2-4)	Total/NA	Solid	Moisture	
500-127625-6	GP-28 (6-8)	Total/NA	Solid	Moisture	
500-127625-7	GP-28 (14-16)	Total/NA	Solid	Moisture	
500-127625-8	GP-29 (2-4)	Total/NA	Solid	Moisture	
500-127625-9	GP-29 (6-8)	Total/NA	Solid	Moisture	
500-127625-10	GP-29 (14-16)	Total/NA	Solid	Moisture	

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127625-11	GP-30 (2-4)	112	111	92	100
500-127625-11 MS	GP-30 (2-4)	117	116	100	99
500-127625-11 MSD	GP-30 (2-4)	120	116	101	99
500-127625-12	GP-30 (6-8)	115	115	94	102
500-127625-13	GP-30 (14-16)	118	116	97	101
500-127625-14	GP-31 (2-4)	114	113	93	99
500-127625-15	GP-31 (6-8)	115	115	95	101
500-127625-16	GP-32 (2-4)	115	116	94	100
500-127625-17	GP-32 (6-8)	114	115	95	100
500-127625-18	GP-32 (14-16)	114	116	96	99
500-127625-19	GP-33 (2-4)	113	114	94	101
500-127625-20	GP-33 (6-8)	115	115	93	98
500-127625-21	Trip Blank	114	115	96	100
LCS 500-384262/4	Lab Control Sample	103	109	93	102
LCS 500-385468/4	Lab Control Sample	111	114	95	103
MB 500-384262/6	Method Blank	105	114	89	100
MB 500-385468/6	Method Blank	112	116	94	103

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-126)	BFB (72-124)	DBFM (75-120)	TOL (75-120)
500-127625-6	GP-28 (6-8)	98	111	87	103
LB 500-384086/1-A	Method Blank	104	110	89	97

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
LCS 500-384171/2-A	Lab Control Sample	98	87	61	92	44	103
MB 500-384171/1-A	Method Blank	90	90	65	97	43	107

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

FBP = 2-Fluorobiphenyl  
2FP = 2-Fluorophenol (Surr)  
NBZ = Nitrobenzene-d5 (Surr)  
PHL = Phenol-d5 (Surr)  
TPH = Terphenyl-d14 (Surr)

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

Matrix: Solid

Prep Type: TCLP

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (40-145)	FBP (34-110)	2FP (27-110)	NBZ (36-120)	PHL (20-100)	TPH (40-145)
500-127625-6	GP-28 (6-8)	89	85	58	91	39	103
LB 500-383992/1-B	Method Blank	90	84	56	94	39	104

### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)  
FBP = 2-Fluorobiphenyl  
2FP = 2-Fluorophenol (Surr)  
NBZ = Nitrobenzene-d5 (Surr)  
PHL = Phenol-d5 (Surr)  
TPH = Terphenyl-d14 (Surr)

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TFT (80-120)	TFT (80-120)				
500-127625-1	GP-26 (2-4)	84	84				
500-127625-2	GP-26 (6-8)	86	86				
500-127625-3	GP-27 (2-4)	87	87				
500-127625-4	GP-27 (6-8)	87	87				
500-127625-5	GP-28 (2-4)	87	87				
500-127625-6	GP-28 (6-8)	87	87				
500-127625-7	GP-28 (14-16)	86	86				
500-127625-8	GP-29 (2-4)	87	87				
500-127625-9	GP-29 (6-8)	87	87				
500-127625-10	GP-29 (14-16)	86	86				
LCS 490-428058/2-A	Lab Control Sample	90	90				
LCSD 490-428058/3-A	Lab Control Sample Dup	86	86				
MB 490-428058/1-A	Method Blank	85	85				

### Surrogate Legend

TFT = a,a,a-Trifluorotoluene

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TCX1 (49-129)	DCB1 (37-121)				
500-127625-6	GP-28 (6-8)	77	90				
LCS 500-384839/2-A	Lab Control Sample	77	88				
MB 500-384839/1-A	Method Blank	79	89				

TestAmerica Chicago

# Surrogate Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	C9 (44-148)
500-127625-6	GP-28 (6-8)	73
LCS 500-384574/2-A	Lab Control Sample	84
LCSD 500-384574/3-A	Lab Control Sample Dup	85
MB 500-384574/1-A	Method Blank	80

## Surrogate Legend

C9 = n-Nonane

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

**Lab Sample ID: 500-127625-11 MS**

**Matrix: Solid**

**Analysis Batch: 385468**

**Client Sample ID: GP-30 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384048**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,1,1,2-Tetrachloroethane	<33		3530	2930		ug/Kg	⊗	83	70 - 125
1,1,1-Trichloroethane	<27		3530	3140		ug/Kg	⊗	89	70 - 125
1,1,2,2-Tetrachloroethane	<28		3530	3600		ug/Kg	⊗	102	67 - 127
1,1,2-Trichloroethane	<25		3530	3340		ug/Kg	⊗	95	70 - 122
1,1-Dichloroethane	<29		3530	3140		ug/Kg	⊗	89	70 - 125
1,1-Dichloroethene	<27		3530	2900		ug/Kg	⊗	82	67 - 122
1,1-Dichloropropene	<21		3530	3190		ug/Kg	⊗	90	70 - 121
1,2,3-Trichlorobenzene	<32		3530	3720		ug/Kg	⊗	106	55 - 140
1,2,3-Trichloropropane	<29		3530	3530		ug/Kg	⊗	100	50 - 133
1,2,4-Trichlorobenzene	<24		3530	3050		ug/Kg	⊗	87	66 - 127
1,2,4-Trimethylbenzene	<25		3530	3530		ug/Kg	⊗	100	70 - 123
1,2-Dibromo-3-Chloropropane	<140		3530	3490		ug/Kg	⊗	99	56 - 123
1,2-Dibromoethane	<27		3530	3360		ug/Kg	⊗	95	70 - 125
1,2-Dichlorobenzene	<24		3530	3300		ug/Kg	⊗	94	70 - 125
1,2-Dichloroethane	<28		3530	3730		ug/Kg	⊗	106	68 - 127
1,2-Dichloropropane	<30		3530	3160		ug/Kg	⊗	90	67 - 130
1,3,5-Trimethylbenzene	<27		3530	3530		ug/Kg	⊗	100	70 - 123
1,3-Dichlorobenzene	<28		3530	3200		ug/Kg	⊗	91	70 - 125
1,3-Dichloropropane	<26		3530	3620		ug/Kg	⊗	103	62 - 136
1,4-Dichlorobenzene	<26		3530	3260		ug/Kg	⊗	93	70 - 120
2,2-Dichloropropane	<31		3530	3230		ug/Kg	⊗	92	58 - 129
2-Chlorotoluene	<22		3530	3720		ug/Kg	⊗	105	70 - 125
4-Chlorotoluene	<25		3530	3640		ug/Kg	⊗	103	68 - 124
Benzene	<10		3530	3110		ug/Kg	⊗	88	70 - 120
Bromobenzene	<25		3530	3420		ug/Kg	⊗	97	70 - 122
Bromochloromethane	<30		3530	3110		ug/Kg	⊗	88	65 - 122
Bromodichloromethane	<26		3530	3250		ug/Kg	⊗	92	69 - 120
Bromoform	<34		3530	2540		ug/Kg	⊗	72	56 - 132
Bromomethane	<56		3530	2570		ug/Kg	⊗	73	40 - 130
Carbon tetrachloride	<27		3530	2890		ug/Kg	⊗	82	65 - 122
Chlorobenzene	<27		3530	3160		ug/Kg	⊗	90	70 - 120
Chloroethane	<36		3530	2410		ug/Kg	⊗	68	45 - 127
Chloroform	<26		3530	3460		ug/Kg	⊗	98	70 - 120
Chloromethane	<23		3530	2840		ug/Kg	⊗	81	54 - 147
cis-1,2-Dichloroethene	710 F1		3530	3150 F1		ug/Kg	⊗	69	70 - 125
cis-1,3-Dichloropropene	<29		3530	3240		ug/Kg	⊗	92	64 - 127
Dibromochloromethane	<34		3530	2920		ug/Kg	⊗	83	68 - 125
Dibromomethane	<19		3530	3380		ug/Kg	⊗	96	70 - 120
Dichlorodifluoromethane	<48		3530	3370		ug/Kg	⊗	96	40 - 150
Ethylbenzene	<13		3530	3240		ug/Kg	⊗	92	70 - 120
Hexachlorobutadiene	<31		3530	3070		ug/Kg	⊗	87	51 - 150
Isopropylbenzene	<27		3530	3490		ug/Kg	⊗	99	70 - 126
Methyl tert-butyl ether	<28		3530	3500		ug/Kg	⊗	99	70 - 120
Methylene Chloride	<110		3530	3220		ug/Kg	⊗	91	69 - 125
Naphthalene	<24		3530	3290		ug/Kg	⊗	93	59 - 130
n-Butylbenzene	<27		3530	3290		ug/Kg	⊗	93	68 - 125
N-Propylbenzene	<29		3530	3550		ug/Kg	⊗	101	69 - 127
p-Isopropyltoluene	<26		3530	3270		ug/Kg	⊗	93	70 - 125

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

**Lab Sample ID: 500-127625-11 MS**

**Matrix: Solid**

**Analysis Batch: 385468**

**Client Sample ID: GP-30 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384048**

**%Rec.**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
sec-Butylbenzene	<28		3530	3380		ug/Kg	⊗	96	70 - 123		
Styrene	<27		3530	3190		ug/Kg	⊗	91	70 - 120		
tert-Butylbenzene	<28		3530	3400		ug/Kg	⊗	97	70 - 121		
Tetrachloroethene	<26		3530	2750		ug/Kg	⊗	78	70 - 128		
Toluene	<10		3530	3260		ug/Kg	⊗	93	70 - 125		
trans-1,2-Dichloroethene	<25		3530	3030		ug/Kg	⊗	86	70 - 125		
trans-1,3-Dichloropropene	<26		3530	3130		ug/Kg	⊗	89	62 - 128		
Trichloroethene	1100	F1	3530	2860	F1	ug/Kg	⊗	49	70 - 125		
Trichlorofluoromethane	<30 *		3530	3970		ug/Kg	⊗	113	70 - 126		
Vinyl chloride	<18		3530	2990		ug/Kg	⊗	85	64 - 126		
Xylenes, Total	<16		7050	6510		ug/Kg	⊗	92	70 - 125		
<b>Surrogate</b>											
	MS	MS									
	%Recovery	Qualifier									
1,2-Dichloroethane-d4 (Surr)	117					75 - 126					
4-Bromofluorobenzene (Surr)	116					72 - 124					
Dibromofluoromethane	100					75 - 120					
Toluene-d8 (Surr)	99					75 - 120					

**Lab Sample ID: 500-127625-11 MSD**

**Matrix: Solid**

**Analysis Batch: 385468**

**Client Sample ID: GP-30 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384048**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	<33		3530	2960		ug/Kg	⊗	84	70 - 125	1	30
1,1,1-Trichloroethane	<27		3530	3180		ug/Kg	⊗	90	70 - 125	1	30
1,1,2,2-Tetrachloroethane	<28		3530	3650		ug/Kg	⊗	103	67 - 127	1	30
1,1,2-Trichloroethane	<25		3530	3390		ug/Kg	⊗	96	70 - 122	1	30
1,1-Dichloroethane	<29		3530	3120		ug/Kg	⊗	88	70 - 125	1	30
1,1-Dichloroethene	<27		3530	2850		ug/Kg	⊗	81	67 - 122	2	30
1,1-Dichloropropene	<21		3530	3240		ug/Kg	⊗	92	70 - 121	2	30
1,2,3-Trichlorobenzene	<32		3530	3680		ug/Kg	⊗	105	55 - 140	1	30
1,2,3-Trichloropropane	<29		3530	3410		ug/Kg	⊗	97	50 - 133	3	30
1,2,4-Trichlorobenzene	<24		3530	3010		ug/Kg	⊗	85	66 - 127	2	30
1,2,4-Trimethylbenzene	<25		3530	3450		ug/Kg	⊗	98	70 - 123	2	30
1,2-Dibromo-3-Chloropropane	<140		3530	3480		ug/Kg	⊗	99	56 - 123	0	30
1,2-Dibromoethane	<27		3530	3410		ug/Kg	⊗	97	70 - 125	1	30
1,2-Dichlorobenzene	<24		3530	3220		ug/Kg	⊗	91	70 - 125	3	30
1,2-Dichloroethane	<28		3530	3610		ug/Kg	⊗	102	68 - 127	3	30
1,2-Dichloropropane	<30		3530	3110		ug/Kg	⊗	88	67 - 130	2	30
1,3,5-Trimethylbenzene	<27		3530	3450		ug/Kg	⊗	98	70 - 123	2	30
1,3-Dichlorobenzene	<28		3530	3110		ug/Kg	⊗	88	70 - 125	3	30
1,3-Dichloropropane	<26		3530	3610		ug/Kg	⊗	102	62 - 136	0	30
1,4-Dichlorobenzene	<26		3530	3170		ug/Kg	⊗	90	70 - 120	3	30
2,2-Dichloropropane	<31		3530	3220		ug/Kg	⊗	91	58 - 129	0	30
2-Chlorotoluene	<22		3530	3600		ug/Kg	⊗	102	70 - 125	3	30
4-Chlorotoluene	<25		3530	3560		ug/Kg	⊗	101	68 - 124	2	30
Benzene	<10		3530	3090		ug/Kg	⊗	88	70 - 120	1	30
Bromobenzene	<25		3530	3380		ug/Kg	⊗	96	70 - 122	1	30

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

**Lab Sample ID: 500-127625-11 MSD**

**Matrix: Solid**

**Analysis Batch: 385468**

**Client Sample ID: GP-30 (2-4)**

**Prep Type: Total/NA**

**Prep Batch: 384048**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Bromochloromethane	<30		3530	3090		ug/Kg	⊗	88	65 - 122	1	30
Bromodichloromethane	<26		3530	3280		ug/Kg	⊗	93	69 - 120	1	30
Bromoform	<34		3530	2610		ug/Kg	⊗	74	56 - 132	3	30
Bromomethane	<56		3530	2600		ug/Kg	⊗	74	40 - 130	1	30
Carbon tetrachloride	<27		3530	2940		ug/Kg	⊗	84	65 - 122	2	30
Chlorobenzene	<27		3530	3170		ug/Kg	⊗	90	70 - 120	0	30
Chloroethane	<36		3530	2390		ug/Kg	⊗	68	45 - 127	1	30
Chloroform	<26		3530	3400		ug/Kg	⊗	96	70 - 120	2	30
Chloromethane	<23		3530	2880		ug/Kg	⊗	82	54 - 147	1	30
cis-1,2-Dichloroethene	710 F1		3530	3100 F1		ug/Kg	⊗	68	70 - 125	1	30
cis-1,3-Dichloropropene	<29		3530	3280		ug/Kg	⊗	93	64 - 127	1	30
Dibromochloromethane	<34		3530	2980		ug/Kg	⊗	85	68 - 125	2	30
Dibromomethane	<19		3530	3420		ug/Kg	⊗	97	70 - 120	1	30
Dichlorodifluoromethane	<48		3530	3380		ug/Kg	⊗	96	40 - 150	0	30
Ethylbenzene	<13		3530	3180		ug/Kg	⊗	90	70 - 120	2	30
Hexachlorobutadiene	<31		3530	3100		ug/Kg	⊗	88	51 - 150	1	30
Isopropylbenzene	<27		3530	3420		ug/Kg	⊗	97	70 - 126	2	30
Methyl tert-butyl ether	<28		3530	3510		ug/Kg	⊗	100	70 - 120	1	30
Methylene Chloride	<110		3530	3220		ug/Kg	⊗	91	69 - 125	0	30
Naphthalene	<24		3530	3300		ug/Kg	⊗	94	59 - 130	0	30
n-Butylbenzene	<27		3530	3230		ug/Kg	⊗	92	68 - 125	2	30
N-Propylbenzene	<29		3530	3500		ug/Kg	⊗	99	69 - 127	1	30
p-Isopropyltoluene	<26		3530	3200		ug/Kg	⊗	91	70 - 125	2	30
sec-Butylbenzene	<28		3530	3340		ug/Kg	⊗	95	70 - 123	1	30
Styrene	<27		3530	3230		ug/Kg	⊗	92	70 - 120	1	30
tert-Butylbenzene	<28		3530	3350		ug/Kg	⊗	95	70 - 121	2	30
Tetrachloroethene	<26		3530	2800		ug/Kg	⊗	80	70 - 128	2	30
Toluene	<10		3530	3250		ug/Kg	⊗	92	70 - 125	0	30
trans-1,2-Dichloroethene	<25		3530	3030		ug/Kg	⊗	86	70 - 125	0	30
trans-1,3-Dichloropropene	<26		3530	3170		ug/Kg	⊗	90	62 - 128	1	30
Trichloroethene	1100 F1		3530	2840 F1		ug/Kg	⊗	49	70 - 125	1	30
Trichlorofluoromethane	<30 *		3530	4210		ug/Kg	⊗	120	70 - 126	6	30
Vinyl chloride	<18		3530	3050		ug/Kg	⊗	87	64 - 126	2	30
Xylenes, Total	<16		7050	6510		ug/Kg	⊗	92	70 - 125	0	30

**MSD**    **MSD**

**Surrogate**    **%Recovery**    **Qualifier**    **Limits**

1,2-Dichloroethane-d4 (Surr)	120		75 - 126
4-Bromofluorobenzene (Surr)	116		72 - 124
Dibromofluoromethane	101		75 - 120
Toluene-d8 (Surr)	99		75 - 120

**Lab Sample ID: MB 500-384262/6**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	<0.00050		0.0010	0.00050	mg/L			05/08/17 22:32	1
Methyl Ethyl Ketone	<0.0025		0.0050	0.0025	mg/L			05/08/17 22:32	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

**Lab Sample ID: MB 500-384262/6**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,2-Dichloroethane	<0.00050		0.0010	0.00050	mg/L				05/08/17 22:32		1
Benzene	<0.00050		0.0010	0.00050	mg/L				05/08/17 22:32		1
Carbon tetrachloride	<0.00050		0.0010	0.00050	mg/L				05/08/17 22:32		1
Chlorobenzene	<0.00050		0.0010	0.00050	mg/L				05/08/17 22:32		1
Chloroform	<0.0010		0.0020	0.0010	mg/L				05/08/17 22:32		1
Tetrachloroethene	<0.00050		0.0010	0.00050	mg/L				05/08/17 22:32		1
Trichloroethene	<0.00050		0.0010	0.00050	mg/L				05/08/17 22:32		1
Vinyl chloride	<0.00050		0.0010	0.00050	mg/L				05/08/17 22:32		1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	105		75 - 126				05/08/17 22:32	1
4-Bromofluorobenzene (Surr)	114		72 - 124				05/08/17 22:32	1
Dibromofluoromethane	89		75 - 120				05/08/17 22:32	1
Toluene-d8 (Surr)	100		75 - 120				05/08/17 22:32	1

**Lab Sample ID: LCS 500-384262/4**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	MB	MB	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier										
1,1-Dichloroethene			0.0500	0.0449		mg/L		90	67 - 122			
Methyl Ethyl Ketone			0.0500	0.0524		mg/L		105	53 - 141			
1,2-Dichloroethane			0.0500	0.0504		mg/L		101	68 - 127			
Benzene			0.0500	0.0479		mg/L		96	70 - 120			
Carbon tetrachloride			0.0500	0.0453		mg/L		91	65 - 122			
Chlorobenzene			0.0500	0.0500		mg/L		100	70 - 120			
Chloroform			0.0500	0.0455		mg/L		91	70 - 120			
Tetrachloroethene			0.0500	0.0518		mg/L		104	70 - 128			
Trichloroethene			0.0500	0.0488		mg/L		98	70 - 125			
Vinyl chloride			0.0500	0.0415		mg/L		83	64 - 126			

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	103		75 - 126					
4-Bromofluorobenzene (Surr)	109		72 - 124					
Dibromofluoromethane	93		75 - 120					
Toluene-d8 (Surr)	102		75 - 120					

**Lab Sample ID: MB 500-385468/6**

**Matrix: Solid**

**Analysis Batch: 385468**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg				05/17/17 10:01		1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg				05/17/17 10:01		1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg				05/17/17 10:01		1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg				05/17/17 10:01		1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg				05/17/17 10:01		1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg				05/17/17 10:01		1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

**Lab Sample ID: MB 500-385468/6**

**Matrix: Solid**

**Analysis Batch: 385468**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<0.30				1.0	0.30	ug/Kg			05/17/17 10:01	1
1,2,3-Trichlorobenzene	<0.46				1.0	0.46	ug/Kg			05/17/17 10:01	1
1,2,3-Trichloropropane	<0.41				1.0	0.41	ug/Kg			05/17/17 10:01	1
1,2,4-Trichlorobenzene	<0.34				1.0	0.34	ug/Kg			05/17/17 10:01	1
1,2,4-Trimethylbenzene	<0.36				1.0	0.36	ug/Kg			05/17/17 10:01	1
1,2-Dibromo-3-Chloropropane	<2.0				5.0	2.0	ug/Kg			05/17/17 10:01	1
1,2-Dibromoethane	<0.39				1.0	0.39	ug/Kg			05/17/17 10:01	1
1,2-Dichlorobenzene	<0.33				1.0	0.33	ug/Kg			05/17/17 10:01	1
1,2-Dichloroethane	<0.39				1.0	0.39	ug/Kg			05/17/17 10:01	1
1,2-Dichloropropane	<0.43				1.0	0.43	ug/Kg			05/17/17 10:01	1
1,3,5-Trimethylbenzene	<0.38				1.0	0.38	ug/Kg			05/17/17 10:01	1
1,3-Dichlorobenzene	<0.40				1.0	0.40	ug/Kg			05/17/17 10:01	1
1,3-Dichloropropane	<0.36				1.0	0.36	ug/Kg			05/17/17 10:01	1
1,4-Dichlorobenzene	<0.36				1.0	0.36	ug/Kg			05/17/17 10:01	1
2,2-Dichloropropane	<0.44				1.0	0.44	ug/Kg			05/17/17 10:01	1
2-Chlorotoluene	<0.31				1.0	0.31	ug/Kg			05/17/17 10:01	1
4-Chlorotoluene	<0.35				1.0	0.35	ug/Kg			05/17/17 10:01	1
Benzene	<0.15				0.25	0.15	ug/Kg			05/17/17 10:01	1
Bromobenzene	<0.36				1.0	0.36	ug/Kg			05/17/17 10:01	1
Bromochloromethane	<0.43				1.0	0.43	ug/Kg			05/17/17 10:01	1
Bromodichloromethane	<0.37				1.0	0.37	ug/Kg			05/17/17 10:01	1
Bromoform	<0.48				1.0	0.48	ug/Kg			05/17/17 10:01	1
Bromomethane	<0.80				2.0	0.80	ug/Kg			05/17/17 10:01	1
Carbon tetrachloride	<0.38				1.0	0.38	ug/Kg			05/17/17 10:01	1
Chlorobenzene	<0.39				1.0	0.39	ug/Kg			05/17/17 10:01	1
Chloroethane	<0.50				1.0	0.50	ug/Kg			05/17/17 10:01	1
Chloroform	<0.37				2.0	0.37	ug/Kg			05/17/17 10:01	1
Chloromethane	<0.32				1.0	0.32	ug/Kg			05/17/17 10:01	1
cis-1,2-Dichloroethene	<0.41				1.0	0.41	ug/Kg			05/17/17 10:01	1
cis-1,3-Dichloropropene	<0.42				1.0	0.42	ug/Kg			05/17/17 10:01	1
Dibromochloromethane	<0.49				1.0	0.49	ug/Kg			05/17/17 10:01	1
Dibromomethane	<0.27				1.0	0.27	ug/Kg			05/17/17 10:01	1
Dichlorodifluoromethane	<0.67				2.0	0.67	ug/Kg			05/17/17 10:01	1
Ethylbenzene	<0.18				0.25	0.18	ug/Kg			05/17/17 10:01	1
Hexachlorobutadiene	<0.45				1.0	0.45	ug/Kg			05/17/17 10:01	1
Isopropyl ether	<0.28				1.0	0.28	ug/Kg			05/17/17 10:01	1
Isopropylbenzene	<0.38				1.0	0.38	ug/Kg			05/17/17 10:01	1
Methyl tert-butyl ether	<0.39				1.0	0.39	ug/Kg			05/17/17 10:01	1
Methylene Chloride	<1.6				5.0	1.6	ug/Kg			05/17/17 10:01	1
Naphthalene	<0.33				1.0	0.33	ug/Kg			05/17/17 10:01	1
n-Butylbenzene	<0.39				1.0	0.39	ug/Kg			05/17/17 10:01	1
N-Propylbenzene	<0.41				1.0	0.41	ug/Kg			05/17/17 10:01	1
p-Isopropyltoluene	<0.36				1.0	0.36	ug/Kg			05/17/17 10:01	1
sec-Butylbenzene	<0.40				1.0	0.40	ug/Kg			05/17/17 10:01	1
Styrene	<0.39				1.0	0.39	ug/Kg			05/17/17 10:01	1
tert-Butylbenzene	<0.40				1.0	0.40	ug/Kg			05/17/17 10:01	1
Tetrachloroethene	<0.37				1.0	0.37	ug/Kg			05/17/17 10:01	1
Toluene	<0.15				0.25	0.15	ug/Kg			05/17/17 10:01	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

**Lab Sample ID: MB 500-385468/6**

**Matrix: Solid**

**Analysis Batch: 385468**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			05/17/17 10:01	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			05/17/17 10:01	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			05/17/17 10:01	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			05/17/17 10:01	1
Vinyl chloride	<0.26		0.50	0.26	ug/Kg			05/17/17 10:01	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			05/17/17 10:01	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	112		75 - 126		05/17/17 10:01	1
4-Bromofluorobenzene (Surr)	116		72 - 124		05/17/17 10:01	1
Dibromofluoromethane	94		75 - 120		05/17/17 10:01	1
Toluene-d8 (Surr)	103		75 - 120		05/17/17 10:01	1

**Lab Sample ID: LCS 500-385468/4**

**Matrix: Solid**

**Analysis Batch: 385468**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	50.0	41.6		ug/Kg		83	70 - 125
1,1,1-Trichloroethane	50.0	46.7		ug/Kg		93	70 - 125
1,1,2,2-Tetrachloroethane	50.0	49.4		ug/Kg		99	67 - 127
1,1,2-Trichloroethane	50.0	46.7		ug/Kg		93	70 - 122
1,1-Dichloroethane	50.0	43.4		ug/Kg		87	70 - 125
1,1-Dichloroethene	50.0	42.5		ug/Kg		85	67 - 122
1,1-Dichloropropene	50.0	48.1		ug/Kg		96	70 - 121
1,2,3-Trichlorobenzene	50.0	54.5		ug/Kg		109	55 - 140
1,2,3-Trichloropropane	50.0	47.2		ug/Kg		94	50 - 133
1,2,4-Trichlorobenzene	50.0	47.1		ug/Kg		94	66 - 127
1,2,4-Trimethylbenzene	50.0	49.8		ug/Kg		100	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	49.4		ug/Kg		99	56 - 123
1,2-Dibromoethane	50.0	47.6		ug/Kg		95	70 - 125
1,2-Dichlorobenzene	50.0	45.5		ug/Kg		91	70 - 125
1,2-Dichloroethane	50.0	49.4		ug/Kg		99	68 - 127
1,2-Dichloropropane	50.0	42.8		ug/Kg		86	67 - 130
1,3,5-Trimethylbenzene	50.0	50.2		ug/Kg		100	70 - 123
1,3-Dichlorobenzene	50.0	45.9		ug/Kg		92	70 - 125
1,3-Dichloropropane	50.0	50.1		ug/Kg		100	62 - 136
1,4-Dichlorobenzene	50.0	45.5		ug/Kg		91	70 - 120
2,2-Dichloropropane	50.0	50.1		ug/Kg		100	58 - 129
2-Chlorotoluene	50.0	51.3		ug/Kg		103	70 - 125
4-Chlorotoluene	50.0	51.7		ug/Kg		103	68 - 124
Benzene	50.0	43.4		ug/Kg		87	70 - 120
Bromobenzene	50.0	46.9		ug/Kg		94	70 - 122
Bromochloromethane	50.0	42.2		ug/Kg		84	65 - 122
Bromodichloromethane	50.0	45.6		ug/Kg		91	69 - 120
Bromoform	50.0	36.0		ug/Kg		72	56 - 132
Bromomethane	50.0	39.7		ug/Kg		79	40 - 130
Carbon tetrachloride	50.0	44.5		ug/Kg		89	65 - 122

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

**Lab Sample ID: LCS 500-385468/4**

**Matrix: Solid**

**Analysis Batch: 385468**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Chlorobenzene	50.0	45.7		ug/Kg		91	70 - 120	
Chloroethane	50.0	41.5		ug/Kg		83	45 - 127	
Chloroform	50.0	46.5		ug/Kg		93	70 - 120	
Chloromethane	50.0	39.7		ug/Kg		79	54 - 147	
cis-1,2-Dichloroethene	50.0	42.6		ug/Kg		85	70 - 125	
cis-1,3-Dichloropropene	50.0	47.1		ug/Kg		94	64 - 127	
Dibromochloromethane	50.0	40.7		ug/Kg		81	68 - 125	
Dibromomethane	50.0	45.4		ug/Kg		91	70 - 120	
Dichlorodifluoromethane	50.0	43.7		ug/Kg		87	40 - 150	
Ethylbenzene	50.0	46.9		ug/Kg		94	70 - 120	
Hexachlorobutadiene	50.0	50.0		ug/Kg		100	51 - 150	
Isopropylbenzene	50.0	50.5		ug/Kg		101	70 - 126	
Methyl tert-butyl ether	50.0	46.4		ug/Kg		93	70 - 120	
Methylene Chloride	50.0	43.7		ug/Kg		87	69 - 125	
Naphthalene	50.0	47.7		ug/Kg		95	59 - 130	
n-Butylbenzene	50.0	50.6		ug/Kg		101	68 - 125	
N-Propylbenzene	50.0	52.9		ug/Kg		106	69 - 127	
p-Isopropyltoluene	50.0	48.0		ug/Kg		96	70 - 125	
sec-Butylbenzene	50.0	50.2		ug/Kg		100	70 - 123	
Styrene	50.0	45.5		ug/Kg		91	70 - 120	
tert-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 121	
Tetrachloroethene	50.0	42.6		ug/Kg		85	70 - 128	
Toluene	50.0	47.9		ug/Kg		96	70 - 125	
trans-1,2-Dichloroethene	50.0	43.3		ug/Kg		87	70 - 125	
trans-1,3-Dichloropropene	50.0	45.0		ug/Kg		90	62 - 128	
Trichloroethene	50.0	41.4		ug/Kg		83	70 - 125	
Trichlorofluoromethane	50.0	63.9 *		ug/Kg		128	70 - 126	
Vinyl chloride	50.0	44.4		ug/Kg		89	64 - 126	
Xylenes, Total	100	94.8		ug/Kg		95	70 - 125	

### LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	111		75 - 126
4-Bromofluorobenzene (Surr)	114		72 - 124
Dibromofluoromethane	95		75 - 120
Toluene-d8 (Surr)	103		75 - 120

**Lab Sample ID: LB 500-384086/1-A**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.010		0.020	0.010	mg/L		05/08/17 23:25		20
Methyl Ethyl Ketone	<0.050		0.10	0.050	mg/L		05/08/17 23:25		20
1,2-Dichloroethane	<0.010		0.020	0.010	mg/L		05/08/17 23:25		20
Benzene	<0.010		0.020	0.010	mg/L		05/08/17 23:25		20
Carbon tetrachloride	<0.010		0.020	0.010	mg/L		05/08/17 23:25		20
Chlorobenzene	<0.010		0.020	0.010	mg/L		05/08/17 23:25		20
Chloroform	<0.020		0.040	0.020	mg/L		05/08/17 23:25		20

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

**Lab Sample ID: LB 500-384086/1-A**

**Matrix: Solid**

**Analysis Batch: 384262**

**Client Sample ID: Method Blank**  
**Prep Type: TCLP**

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Tetrachloroethene	<0.010				0.020	0.010	mg/L			05/08/17 23:25	20
Trichloroethene	<0.010				0.020	0.010	mg/L			05/08/17 23:25	20
Vinyl chloride	<0.010				0.020	0.010	mg/L			05/08/17 23:25	20

Surrogate	LB	LB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	104				75 - 126			20
4-Bromofluorobenzene (Surr)	110				72 - 124			20
Dibromofluoromethane	89				75 - 120			20
Toluene-d8 (Surr)	97				75 - 120			20

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

**Lab Sample ID: MB 500-384171/1-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 384171**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,4-Dichlorobenzene	<0.0020				0.0020	0.0020	mg/L			05/08/17 07:42	15:01
2,4,5-Trichlorophenol	<0.010				0.010	0.010	mg/L			05/08/17 07:42	15:01
2,4,6-Trichlorophenol	<0.0050				0.0050	0.0050	mg/L			05/08/17 07:42	15:01
2,4-Dinitrotoluene	<0.0010				0.0010	0.0010	mg/L			05/08/17 07:42	15:01
2-Methylphenol	<0.0020				0.0020	0.0020	mg/L			05/08/17 07:42	15:01
3 & 4 Methylphenol	<0.0020				0.0020	0.0020	mg/L			05/08/17 07:42	15:01
Hexachlorobenzene	<0.00050				0.00050	0.00050	mg/L			05/08/17 07:42	15:01
Hexachlorobutadiene	<0.0050				0.0050	0.0050	mg/L			05/08/17 07:42	15:01
Hexachloroethane	<0.0050				0.0050	0.0050	mg/L			05/08/17 07:42	15:01
Nitrobenzene	<0.0010				0.0010	0.0010	mg/L			05/08/17 07:42	15:01
Pentachlorophenol	<0.020				0.020	0.020	mg/L			05/08/17 07:42	15:01
Pyridine	<0.020				0.020	0.020	mg/L			05/08/17 07:42	15:01

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
2,4,6-Tribromophenol (Surr)	90				40 - 145			1
2-Fluorobiphenyl	90				34 - 110			1
2-Fluorophenol (Surr)	65				27 - 110			1
Nitrobenzene-d5 (Surr)	97				36 - 120			1
Phenol-d5 (Surr)	43				20 - 100			1
Terphenyl-d14 (Surr)	107				40 - 145			1

**Lab Sample ID: LCS 500-384171/2-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 384171**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits
	Added	Result	Qualifier						
1,4-Dichlorobenzene	0.0400	0.0322				mg/L		81	23 - 110
2,4,5-Trichlorophenol	0.0400	0.0388				mg/L		97	63 - 120
2,4,6-Trichlorophenol	0.0400	0.0393				mg/L		98	62 - 110
2,4-Dinitrotoluene	0.0400	0.0432				mg/L		108	63 - 122

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

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

**Lab Sample ID: LCS 500-384171/2-A**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384171**

**%Rec.**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
2-Methylphenol	0.0400	0.0342		mg/L	86	53 - 110	
3 & 4 Methylphenol	0.0400	0.0329		mg/L	82	53 - 110	
Hexachlorobenzene	0.0400	0.0375		mg/L	94	61 - 120	
Hexachlorobutadiene	0.0400	0.0315		mg/L	79	20 - 100	
Hexachloroethane	0.0400	0.0314		mg/L	79	20 - 100	
Nitrobenzene	0.0400	0.0359		mg/L	90	53 - 110	
Pentachlorophenol	0.0800	0.0779		mg/L	97	23 - 129	
Pyridine	0.0400	0.0259		mg/L	65	15 - 110	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	98		40 - 145
2-Fluorobiphenyl	87		34 - 110
2-Fluorophenol (Surr)	61		27 - 110
Nitrobenzene-d5 (Surr)	92		36 - 120
Phenol-d5 (Surr)	44		20 - 100
Terphenyl-d14 (Surr)	103		40 - 145

**Lab Sample ID: LB 500-383992/1-B**

**Matrix: Solid**

**Analysis Batch: 384241**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384171**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,4-Dichlorobenzene	<0.020		0.020	0.020	mg/L	05/08/17 07:42	05/08/17 14:34		1
2,4,5-Trichlorophenol	<0.10		0.10	0.10	mg/L	05/08/17 07:42	05/08/17 14:34		1
2,4,6-Trichlorophenol	<0.050		0.050	0.050	mg/L	05/08/17 07:42	05/08/17 14:34		1
2,4-Dinitrotoluene	<0.010		0.010	0.010	mg/L	05/08/17 07:42	05/08/17 14:34		1
2-Methylphenol	<0.020		0.020	0.020	mg/L	05/08/17 07:42	05/08/17 14:34		1
3 & 4 Methylphenol	<0.020		0.020	0.020	mg/L	05/08/17 07:42	05/08/17 14:34		1
Hexachlorobenzene	<0.0050		0.0050	0.0050	mg/L	05/08/17 07:42	05/08/17 14:34		1
Hexachlorobutadiene	<0.050		0.050	0.050	mg/L	05/08/17 07:42	05/08/17 14:34		1
Hexachloroethane	<0.050		0.050	0.050	mg/L	05/08/17 07:42	05/08/17 14:34		1
Nitrobenzene	<0.010		0.010	0.010	mg/L	05/08/17 07:42	05/08/17 14:34		1
Pentachlorophenol	<0.20		0.20	0.20	mg/L	05/08/17 07:42	05/08/17 14:34		1
Pyridine	<0.20		0.20	0.20	mg/L	05/08/17 07:42	05/08/17 14:34		1

Surrogate	LB	LB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	90		40 - 145	05/08/17 07:42	05/08/17 14:34	1
2-Fluorobiphenyl	84		34 - 110	05/08/17 07:42	05/08/17 14:34	1
2-Fluorophenol (Surr)	56		27 - 110	05/08/17 07:42	05/08/17 14:34	1
Nitrobenzene-d5 (Surr)	94		36 - 120	05/08/17 07:42	05/08/17 14:34	1
Phenol-d5 (Surr)	39		20 - 100	05/08/17 07:42	05/08/17 14:34	1
Terphenyl-d14 (Surr)	104		40 - 145	05/08/17 07:42	05/08/17 14:34	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID:** MB 490-428058/1-A

**Matrix:** Solid

**Analysis Batch:** 429747

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 428058

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<18		25	18	ug/Kg	05/07/17 11:19	05/13/17 12:17	1	6
Ethylbenzene	<19		25	19	ug/Kg	05/07/17 11:19	05/13/17 12:17	1	7
Methyl tert-butyl ether	<12		25	12	ug/Kg	05/07/17 11:19	05/13/17 12:17	1	8
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg	05/07/17 11:19	05/13/17 12:17	1	9
Naphthalene	<120		250	120	ug/Kg	05/07/17 11:19	05/13/17 12:17	1	10
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg	05/07/17 11:19	05/13/17 12:17	1	11
Toluene	<17		25	17	ug/Kg	05/07/17 11:19	05/13/17 12:17	1	12
Xylenes, Total	<30		75	30	ug/Kg	05/07/17 11:19	05/13/17 12:17	1	13
Wisconsin GRO	<2500		5000	2500	ug/Kg	05/07/17 11:19	05/13/17 12:17	1	14

**MB**

**MB**

**Surrogate**

**%Recovery**

**Qualifier**

**Limits**

**Prepared**

**Analyzed**

**Dil Fac**

*a,a,a-Trifluorotoluene* 85 80 - 120 05/07/17 11:19 05/13/17 12:17 1

*a,a,a-Trifluorotoluene* 98 80 - 120 05/07/17 11:19 05/13/17 12:17 1

**Lab Sample ID:** LCS 490-428058/2-A

**Matrix:** Solid

**Analysis Batch:** 429747

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 428058

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Benzene	5000	5270		ug/Kg	105	76 - 120	
Ethylbenzene	5000	5210		ug/Kg	104	77 - 120	
Methyl tert-butyl ether	5000	5660		ug/Kg	113	73 - 120	
1,2,4-Trimethylbenzene	5000	5170		ug/Kg	103	60 - 140	
Naphthalene	5000	5620		ug/Kg	112	74 - 127	
1,3,5-Trimethylbenzene	5000	5220		ug/Kg	104	74 - 133	
Toluene	5000	5240		ug/Kg	105	79 - 120	
Wisconsin GRO	50000	61000 *		ug/Kg	122	80 - 120	

**LCS**

**LCS**

**Surrogate**

**%Recovery**

**Qualifier**

**Limits**

*a,a,a-Trifluorotoluene* 90 80 - 120

*a,a,a-Trifluorotoluene* 99 80 - 120

**Lab Sample ID:** LCSD 490-428058/3-A

**Matrix:** Solid

**Analysis Batch:** 429747

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 428058

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Benzene	5000	4290		ug/Kg	86	76 - 120	21	27
Ethylbenzene	5000	4260		ug/Kg	85	77 - 120	20	49
Methyl tert-butyl ether	5000	5020		ug/Kg	100	73 - 120	12	31
1,2,4-Trimethylbenzene	5000	4330		ug/Kg	87	60 - 140	18	50
Naphthalene	5000	4920		ug/Kg	98	74 - 127	13	50
1,3,5-Trimethylbenzene	5000	4360		ug/Kg	87	74 - 133	18	42
Toluene	5000	4370		ug/Kg	87	79 - 120	18	37
Wisconsin GRO	50000	51900		ug/Kg	104	80 - 120	16	20

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID:** LCSD 490-428058/3-A

**Matrix:** Solid

**Analysis Batch:** 429747

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 428058

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	86		80 - 120
a,a,a-Trifluorotoluene	98		80 - 120

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID:** MB 500-384839/1-A

**Matrix:** Solid

**Analysis Batch:** 384912

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 384839

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<5.9		17	5.9	ug/Kg		05/11/17 18:50	05/12/17 09:47	1
PCB-1221	<7.3		17	7.3	ug/Kg		05/11/17 18:50	05/12/17 09:47	1
PCB-1232	<7.3		17	7.3	ug/Kg		05/11/17 18:50	05/12/17 09:47	1
PCB-1242	<5.5		17	5.5	ug/Kg		05/11/17 18:50	05/12/17 09:47	1
PCB-1248	<6.6		17	6.6	ug/Kg		05/11/17 18:50	05/12/17 09:47	1
PCB-1254	<3.6		17	3.6	ug/Kg		05/11/17 18:50	05/12/17 09:47	1
PCB-1260	<8.2		17	8.2	ug/Kg		05/11/17 18:50	05/12/17 09:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		49 - 129	05/11/17 18:50	05/12/17 09:47	1
DCB Decachlorobiphenyl	89		37 - 121	05/11/17 18:50	05/12/17 09:47	1

**Lab Sample ID:** LCS 500-384839/2-A

**Matrix:** Solid

**Analysis Batch:** 384912

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 384839

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	167	142		ug/Kg		85	57 - 120
PCB-1260	167	158		ug/Kg		95	61 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	77		49 - 129
DCB Decachlorobiphenyl	88		37 - 121

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

**Lab Sample ID:** MB 500-384574/1-A

**Matrix:** Solid

**Analysis Batch:** 384623

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 384574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<1.6		4.0	1.6	mg/Kg		05/10/17 10:11	05/10/17 15:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	80		44 - 148	05/10/17 10:11	05/10/17 15:34	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC) (Continued)

**Lab Sample ID: LCS 500-384574/2-A**

**Matrix: Solid**

**Analysis Batch: 384623**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384574**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	
WI Diesel Range Organics (C10-C28)	20.0	18.1		mg/Kg		90	70 - 120
Surrogate	%Recovery	LCS Qualifier	Limits				
n-Nonane	84		44 - 148				

**Lab Sample ID: LCSD 500-384574/3-A**

**Matrix: Solid**

**Analysis Batch: 384623**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 384574**

**%Rec.**

**RPD**

**Limits**

**RPD**

**Limit**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec		
WI Diesel Range Organics (C10-C28)	20.0	18.8		mg/Kg		94	70 - 120	4
Surrogate	%Recovery	LCSD Qualifier	Limits					
n-Nonane	85		44 - 148					

## Method: 6010B - Metals (ICP)

**Lab Sample ID: LCS 500-384187/2-A**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 384187**

**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec		
Arsenic	0.100	0.0958		mg/L		96	80 - 120	
Barium	0.500	0.514		mg/L		103	80 - 120	
Cadmium	0.0500	0.0503		mg/L		101	80 - 120	
Chromium	0.200	0.194		mg/L		97	80 - 120	
Copper	0.250	0.254		mg/L		102	80 - 120	
Lead	0.100	0.0943		mg/L		94	80 - 120	
Nickel	0.500	0.486		mg/L		97	80 - 120	
Selenium	0.100	0.0946		mg/L		95	80 - 120	
Silver	0.0500	0.0473		mg/L		95	80 - 120	
Zinc	0.500	0.457		mg/L		91	80 - 120	

**Lab Sample ID: LB 500-383992/1-C**

**Matrix: Solid**

**Analysis Batch: 384328**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 384187**

Analyte	LB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.010		0.050	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Barium	<0.050		0.50	0.050	mg/L		05/08/17 08:10	05/08/17 20:33	1
Cadmium	<0.0020		0.0050	0.0020	mg/L		05/08/17 08:10	05/08/17 20:33	1
Chromium	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Copper	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Lead	<0.0075		0.050	0.0075	mg/L		05/08/17 08:10	05/08/17 20:33	1
Nickel	<0.010		0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Selenium	<0.020		0.050	0.020	mg/L		05/08/17 08:10	05/08/17 20:33	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID:** LB 500-383992/1-C

**Matrix:** Solid

**Analysis Batch:** 384328

**Client Sample ID:** Method Blank

**Prep Type:** TCLP

**Prep Batch:** 384187

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Silver	<0.010				0.025	0.010	mg/L		05/08/17 08:10	05/08/17 20:33	1
Zinc	<0.020				0.10	0.020	mg/L		05/08/17 08:10	05/08/17 20:33	1

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID:** MB 500-384260/12-A

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 384260

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Mercury	<0.00020				0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:03	1

**Lab Sample ID:** LCS 500-384260/13-A

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 384260

%Rec.

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	
	Added	Result	Qualifier							
Mercury	0.00200		0.00212			mg/L		106	80 - 120	

**Lab Sample ID:** LB 500-383992/1-D

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** Method Blank

**Prep Type:** TCLP

**Prep Batch:** 384260

Analyte	LB	LB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Mercury	<0.00020				0.00020	0.00020	mg/L		05/08/17 13:40	05/09/17 10:06	1

**Lab Sample ID:** 500-127625-6 MS

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** GP-28 (6-8)

**Prep Type:** TCLP

**Prep Batch:** 384260

%Rec.

Analyte	Sample	Sample	Spike	Added	MS	MS	Unit	D	%Rec	Limits	
	Result	Qualifier									
Mercury	<0.00020			0.00100		0.000978	mg/L		98	50 - 150	

**Lab Sample ID:** 500-127625-6 DU

**Matrix:** Solid

**Analysis Batch:** 384394

**Client Sample ID:** GP-28 (6-8)

**Prep Type:** TCLP

**Prep Batch:** 384260

RPD

Analyte	Sample	Sample	DU	DU	Unit	D		RPD	Limit
	Result	Qualifier							
Mercury	<0.00020			<0.00020	mg/L			NC	20

## Method: 9014 - Cyanide

**Lab Sample ID:** MB 500-385217/1-A

**Matrix:** Solid

**Analysis Batch:** 385342

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 385217

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Cyanide, Total	<0.17				0.50	0.17	mg/Kg		05/15/17 17:10	05/15/17 20:20	1

TestAmerica Chicago

# QC Sample Results

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## Method: 9014 - Cyanide (Continued)

**Lab Sample ID: LCS 500-385217/2-A**

**Matrix: Solid**

**Analysis Batch: 385342**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 385217**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec.
Cyanide, Total	5.00	4.75		mg/Kg	95	80 - 120	

**Lab Sample ID: 500-127625-6 MS**

**Matrix: Solid**

**Analysis Batch: 385342**

**Client Sample ID: GP-28 (6-8)**

**Prep Type: Total/NA**

**Prep Batch: 385217**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	%Rec.
Cyanide, Total	<0.17		1.91	2.04		mg/Kg	107	75 - 125	

**Lab Sample ID: 500-127625-6 MSD**

**Matrix: Solid**

**Analysis Batch: 385342**

**Client Sample ID: GP-28 (6-8)**

**Prep Type: Total/NA**

**Prep Batch: 385217**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Cyanide, Total	<0.17		1.54	1.71		mg/Kg	111	75 - 125	18	20

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

**Lab Sample ID: MB 500-385245/1-A**

**Matrix: Solid**

**Analysis Batch: 385402**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 385245**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<4.7		10	4.7	mg/Kg	05/15/17 17:36	05/15/17 21:39		1

**Lab Sample ID: LCS 500-385245/2-A**

**Matrix: Solid**

**Analysis Batch: 385402**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 385245**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec.
Sulfide	338	335		mg/Kg	99	80 - 120	

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

**Client Sample ID: GP-26 (2-4)**

Date Collected: 05/03/17 08:25

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	428284	05/08/17 13:36	BAA	TAL NSH

**Client Sample ID: GP-26 (2-4)**

Date Collected: 05/03/17 08:25

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-1**

Matrix: Solid

Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 12:44	A1B	TAL NSH

**Client Sample ID: GP-26 (6-8)**

Date Collected: 05/03/17 08:30

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	428284	05/08/17 13:36	BAA	TAL NSH

**Client Sample ID: GP-26 (6-8)**

Date Collected: 05/03/17 08:30

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-2**

Matrix: Solid

Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 13:11	A1B	TAL NSH

**Client Sample ID: GP-27 (2-4)**

Date Collected: 05/03/17 08:40

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	428284	05/08/17 13:36	BAA	TAL NSH

**Client Sample ID: GP-27 (2-4)**

Date Collected: 05/03/17 08:40

Date Received: 05/04/17 10:20

**Lab Sample ID: 500-127625-3**

Matrix: Solid

Percent Solids: 76.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 13:37	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## **Client Sample ID: GP-27 (6-8)**

**Date Collected:** 05/03/17 08:45  
**Date Received:** 05/04/17 10:20

## **Lab Sample ID: 500-127625-4**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	428284	05/08/17 13:36	BAA	TAL NSH

## **Client Sample ID: GP-27 (6-8)**

**Date Collected:** 05/03/17 08:45  
**Date Received:** 05/04/17 10:20

## **Lab Sample ID: 500-127625-4**

**Matrix:** Solid  
**Percent Solids:** 86.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 14:04	A1B	TAL NSH

## **Client Sample ID: GP-28 (2-4)**

**Date Collected:** 05/03/17 09:05  
**Date Received:** 05/04/17 10:20

## **Lab Sample ID: 500-127625-5**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	428284	05/08/17 13:36	BAA	TAL NSH

## **Client Sample ID: GP-28 (2-4)**

**Date Collected:** 05/03/17 09:05  
**Date Received:** 05/04/17 10:20

## **Lab Sample ID: 500-127625-5**

**Matrix:** Solid  
**Percent Solids:** 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 14:31	A1B	TAL NSH

## **Client Sample ID: GP-28 (6-8)**

**Date Collected:** 05/03/17 09:10  
**Date Received:** 05/04/17 10:20

## **Lab Sample ID: 500-127625-6**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			384086	05/06/17 13:35	RMP	TAL CHI
TCLP	Analysis	8260B		20	384262	05/09/17 03:19	JMP	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3510C			384171	05/08/17 07:42	JJH	TAL CHI
TCLP	Analysis	8270D		1	384241	05/08/17 20:04	GES	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	3010A			384187	05/08/17 08:10	JEF	TAL CHI
TCLP	Analysis	6010B		1	384328	05/08/17 22:34	PJ1	TAL CHI
TCLP	Leach	1311			383992	05/05/17 15:05	RMP	TAL CHI
TCLP	Prep	7470A			384260	05/08/17 13:40	MJD	TAL CHI
TCLP	Analysis	7470A		1	384394	05/09/17 10:27	MJD	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## **Client Sample ID: GP-28 (6-8)**

**Date Collected: 05/03/17 09:10**

**Date Received: 05/04/17 10:20**

## **Lab Sample ID: 500-127625-6**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1010		1	385288	(Start) 05/15/17 18:15 (End) 05/15/17 20:07	ADK	TAL CHI
Total/NA	Prep	9010B			385217	05/15/17 17:10	MAN	TAL CHI
Total/NA	Analysis	9014		1	385342		MAN	TAL CHI
					(Start) 05/15/17 20:21 (End) 05/15/17 20:21			
Total/NA	Prep	9030B			385245	05/15/17 17:36	JBJ	TAL CHI
Total/NA	Analysis	9034		1	385402	05/15/17 21:55	JBJ	TAL CHI
Total/NA	Analysis	9045C		1	384553		SMO	TAL CHI
					(Start) 05/09/17 17:01 (End) 05/09/17 17:03			
Total/NA	Analysis	9095A		1	385286		ADK	TAL CHI
					(Start) 05/15/17 21:41 (End) 05/15/17 21:43			
Total/NA	Analysis	Moisture			428284	05/08/17 13:36	BAA	TAL NSH
Total/NA	Analysis	Moisture			383924	05/05/17 11:19	LWN	TAL CHI
Total/NA	Analysis	SM 2710F		1	385047		ADK	TAL CHI
					(Start) 05/12/17 22:24 (End) 05/12/17 22:28			

## **Client Sample ID: GP-28 (6-8)**

**Date Collected: 05/03/17 09:10**

**Date Received: 05/04/17 10:20**

## **Lab Sample ID: 500-127625-6**

**Matrix: Solid**

**Percent Solids: 86.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			384839	05/11/17 18:50	LLH	TAL CHI
Total/NA	Analysis	8082A		1	384912	05/12/17 13:06	BJH	TAL CHI

## **Client Sample ID: GP-28 (6-8)**

**Date Collected: 05/03/17 09:10**

**Date Received: 05/04/17 10:20**

## **Lab Sample ID: 500-127625-6**

**Matrix: Solid**

**Percent Solids: 87.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 14:58	A1B	TAL NSH
Total/NA	Prep	WI DRO PREP			384574	05/10/17 10:11	LMC	TAL CHI
Total/NA	Analysis	WI-DRO		1	384623	05/10/17 16:46	SAW	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## **Client Sample ID: GP-28 (14-16)**

Date Collected: 05/03/17 09:20

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	428284	05/08/17 13:36	BAA	TAL NSH

## **Client Sample ID: GP-28 (14-16)**

Date Collected: 05/03/17 09:20

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-7**

Matrix: Solid

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 15:24	A1B	TAL NSH

## **Client Sample ID: GP-29 (2-4)**

Date Collected: 05/03/17 09:45

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-8**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	428284	05/08/17 13:36	BAA	TAL NSH

## **Client Sample ID: GP-29 (2-4)**

Date Collected: 05/03/17 09:45

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-8**

Matrix: Solid

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 15:51	A1B	TAL NSH

## **Client Sample ID: GP-29 (6-8)**

Date Collected: 05/03/17 09:50

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-9**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	428284	05/08/17 13:36	BAA	TAL NSH

## **Client Sample ID: GP-29 (6-8)**

Date Collected: 05/03/17 09:50

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-9**

Matrix: Solid

Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 16:18	A1B	TAL NSH

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## **Client Sample ID: GP-29 (14-16)**

Date Collected: 05/03/17 10:00

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-10**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	428284	05/08/17 13:36	BAA	TAL NSH

## **Client Sample ID: GP-29 (14-16)**

Date Collected: 05/03/17 10:00

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-10**

Matrix: Solid

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	WI GRO			428058	05/07/17 11:20	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	429747	05/13/17 16:45	A1B	TAL NSH

## **Client Sample ID: GP-30 (2-4)**

Date Collected: 05/03/17 10:25

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-11**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-30 (2-4)**

Date Collected: 05/03/17 10:25

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-11**

Matrix: Solid

Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 10:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 11:21	PJH	TAL CHI

## **Client Sample ID: GP-30 (6-8)**

Date Collected: 05/03/17 10:30

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-12**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-30 (6-8)**

Date Collected: 05/03/17 10:30

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-12**

Matrix: Solid

Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 10:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 11:48	PJH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## **Client Sample ID: GP-30 (14-16)**

Date Collected: 05/03/17 10:40

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-13**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-30 (14-16)**

Date Collected: 05/03/17 10:40

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-13**

Matrix: Solid

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 10:40	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 12:42	PJH	TAL CHI

## **Client Sample ID: GP-31 (2-4)**

Date Collected: 05/03/17 11:00

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-14**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-31 (2-4)**

Date Collected: 05/03/17 11:00

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-14**

Matrix: Solid

Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 11:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 13:09	PJH	TAL CHI

## **Client Sample ID: GP-31 (6-8)**

Date Collected: 05/03/17 11:05

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-15**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-31 (6-8)**

Date Collected: 05/03/17 11:05

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-15**

Matrix: Solid

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 11:05	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 13:35	PJH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## **Client Sample ID: GP-32 (2-4)**

Date Collected: 05/03/17 11:25  
Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-16**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-32 (2-4)**

Date Collected: 05/03/17 11:25  
Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-16**

Matrix: Solid

Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 11:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 14:02	PJH	TAL CHI

## **Client Sample ID: GP-32 (6-8)**

Date Collected: 05/03/17 11:30  
Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-17**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-32 (6-8)**

Date Collected: 05/03/17 11:30  
Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-17**

Matrix: Solid

Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 11:30	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 14:29	PJH	TAL CHI

## **Client Sample ID: GP-32 (14-16)**

Date Collected: 05/03/17 11:35  
Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-18**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-32 (14-16)**

Date Collected: 05/03/17 11:35  
Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-18**

Matrix: Solid

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 11:35	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 14:56	PJH	TAL CHI

TestAmerica Chicago

# Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

## **Client Sample ID: GP-33 (2-4)**

Date Collected: 05/03/17 11:50

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-19**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-33 (2-4)**

Date Collected: 05/03/17 11:50

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-19**

Matrix: Solid

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 11:50	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 15:23	PJH	TAL CHI

## **Client Sample ID: GP-33 (6-8)**

Date Collected: 05/03/17 11:55

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-20**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: GP-33 (6-8)**

Date Collected: 05/03/17 11:55

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-20**

Matrix: Solid

Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 11:55	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 15:50	PJH	TAL CHI

## **Client Sample ID: Trip Blank**

Date Collected: 05/03/17 00:00

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-21**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	383924	05/05/17 11:19	LWN	TAL CHI

## **Client Sample ID: Trip Blank**

Date Collected: 05/03/17 00:00

Date Received: 05/04/17 10:20

## **Lab Sample ID: 500-127625-21**

Matrix: Solid

Percent Solids: 100.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			384048	05/03/17 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	385468	05/17/17 16:17	PJH	TAL CHI

TestAmerica Chicago

## Lab Chronicle

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

### Laboratory References:

SFAL = SF Analytical Laboratories, 2345 South 170th Street, New Berlin, WI 53151

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

## Accreditation/Certification Summary

Client: TRC Environmental Corporation.

Project/Site: STH 11 Kentucky to Kearney - 275788

TestAmerica Job ID: 500-127625-1

### Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

### Laboratory: TestAmerica Nashville

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998020430	08-31-17

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To Contact: Company: Address: Address: Phone: Fax: E-Mail:	(optional)	Bill To Contact: Company: Address: Address: Phone: Fax: PO# Reference#	(optional)
Lab Job #: <u>500-127625</u>			
Chain of Custody Number: _____			
Page <u>1</u> of <u>2</u>			
Temperature °C of Cooler: <u>41.9</u>			

Client <u>TRL</u>	Client Project # <u>275788</u>	Preservative												Preservative Key		
														1. HCl, Cool to 4° 2. H2SO4, Cool to 4° 3. HNO3, Cool to 4° 4. NaOH, Cool to 4° 5. NaOH/Zn, Cool to 4° 6. NaHSO4 7. Cool to 4° 8. None 9. Other		
Project Name <u>STH 11 - Kentucky to Kearney</u>	Project Location/State <u>Racine, WI</u>	Lab Project #														
Sampler <u>M. Veldas</u>	Lab PM															
Lab ID	MS/MSD	Sample ID	Sampling		# of Containers	Matrix	Date	Time								Comments
1		GP-26 (2-4)	5/03	825	2	S		X								
2		GP-26 (6-8)		830				X								
3		GP-27 (2-4)		840				X								
4		GP-27 (6-8)		845				X								
5		GP-28 (2-4)		905				X								
6		GP-28 (6-8)		910	4			X		X	X	X				
7		GP-28 (14-16)		920	2			X								
8		GP-29 (2-4)		945				X								
9		GP-29 (6-8)		950				X								
10		GP-29 (14-16)		1000				X								

Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other

Requested Due Date

#### Sample Disposal

Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <u>M. V</u>	Company <u>TRL</u>	Date <u>5/03/17</u>	Time <u>1400</u>	Received By <u>Sinko</u>	Company <u>TA</u>	Date <u>05/04/17</u>	Time <u>1020</u>	Lab Courier _____
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____	Shipped <input checked="" type="checkbox"/>
Relinquished By _____	Company _____	Date _____	Time _____	Received By _____	Company _____	Date _____	Time _____	Hand Delivered _____

#### Matrix Key

#### Client Comments

#### Lab Comments:

WW - Wastewater  
W - Water  
S - Soil  
SL - Sludge  
MS - Miscellaneous  
OL - Oil  
A - Air  
SE - Sediment  
SO - Soil  
L - Leachate  
WI - Wipe  
DW - Drinking Water  
O - Other



500-127625 COC

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To Contact: Company: Address: Address: Phone: Fax: E-Mail:	(optional)	Bill To Contact: Company: Address: Address: Phone: Fax: PO#/Reference#	(optional)
<b>Chain of Custody Record</b>			
		Lab Job #: <u>500 - 127625</u>	
		Chain of Custody Number: _____	
		Page <u>7</u> of <u>7</u>	
Temperature °C of Cooler: _____			

Client		Client Project #		Preservative		Comments		Preservative Key			
Project Name		27-S7-83		Parameter				1. HCl, Cool to 4°			
Project Location/State		5TH fl - Kentucky to Kearney						2. H2SO4, Cool to 4°			
Sampler		Rawnie, WI						3. HNO3, Cool to 4°			
Lab ID	MS/MSD	Sample ID		Sampling		# of Containers	Matrix	4. NaOH, Cool to 4°			
Date	Time							5. NaOH/Zn, Cool to 4°			
								6. NaHSO4			
								7. Cool to 4°			
								8. None			
								9. Other			
11		GP-30 (2-4)		5/03	102S	2	S	X			
12		GP-30 (6-8)			1030			X			
13		GP-30 (14-16)			1040			X			
14		GP-31 (2-4)			1100			X			
15		GP-31 (6-8)			1105			X			
16		GP-32 (2-4)			1125			X			
17		GP-32 (6-8)			1130			X			
18		GP-32 (14-16)			1135			X			
19		GP-33 (2-4)			1150			X			
20		GP-33 (6-8)		↓	1155	↓	↓	X			

#### Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
Requested Due Date

## Sample Disposal

[Return to Client](#)

#### Disposal by Lab

Archive for Months

(A fee may be assessed if samples are retained longer than 1 month)

Relinquished By <i>M. K.</i>	Company TRL	Date 5/03/17	Time 1400	Received By <i>S. M. K.</i>	Company TA	Date 05/04/17	Time 1020	Lab Courier
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered

Matrix Key	Client Comments	Lab Comments:
SE - Sediment SO - Soil L - Leachate WI - Wipe DW - Drinking Water O - Other		

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

ORIGIN/DRRLA (262) 801-2153  
MIRANDA KARILAS ACT/WGT: 2000 LB  
TEC ENVIRONMENTAL CAD: 11026482/NET 3850  
150 N PATRICK BLVD, SUITE 180

BROOKFIELD, WI 53045  
UNITED STATES US

SHIP DATE: 03 MAY 17  
ACT WGT: 2000 LB  
CAD: 11026482/NET 3850

TO ATTN: SAMPLE RECEIVING  
TEST AMERICA - CHICAGO  
2417 BOND ST

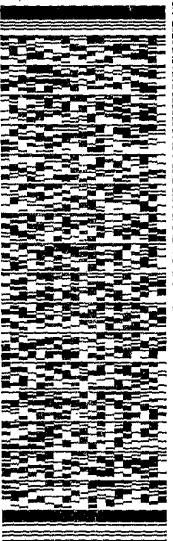


UNIVERSITY PARK IL 60484

500-127625 Waybill

(708) 534-5200  
FAX:  
PO:

REF:  
DEPT:



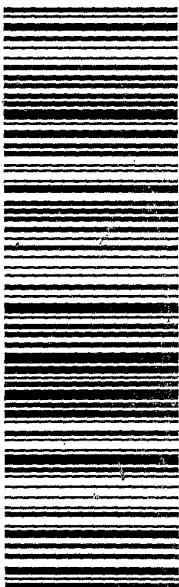
J1711170214011w

546J11873453C1

THU - 04 MAY 10:30A  
PRIORITY OVERNIGHT

TRK# 7790 5594 3934  
0201

79 JOTA 60484  
IL,US ORD



ST 19 10:30 A  
RT 519 10:30 A  
05.04  
3934

b28

## COOLER RECEIPT FORM



500-127625 Chain of Custody

Cooler Received/Opened On 05-05-2017 @ 10:05

Time Samples Removed From Cooler \_\_\_\_\_ Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 4774 (last 4 digits, FedEx) Courier: FedExIR Gun ID 31470366 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_2. Temperature of rep. sample or temp blank when opened: 26 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA4. Were custody seals on outside of cooler? YES...NO...NAIf yes, how many and where: 1 (Front)5. Were the seals intact, signed, and dated correctly? YES...NO...NA6. Were custody papers inside cooler? YES...NO...NAI certify that I opened the cooler and answered questions 1-6 (initial) KD7. 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 None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None10. Did all containers arrive in good condition (unbroken)? YES...NO...NA11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA12. Did all container labels and tags agree with custody papers? YES...NO...NA13a. 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 # BBI certify that I unloaded the cooler and answered questions 7-14 (initial) BB

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...NA16. Was residual chlorine present? YES...NO...NAI certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) BB17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA18. Did you sign the custody papers in the appropriate place? YES...NO...NA19. Were correct containers used for the analysis requested? YES...NO...NA20. Was sufficient amount of sample sent in each container? YES...NO...NAI certify that I entered this project into LIMS and answered questions 17-20 (initial) BBI certify that I attached a label with the unique LIMS number to each container (initial) BB21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

**TestAmerica Chicago**2417 Bond Street  
University Park, IL 60484  
Phone (708) 534-5200 Fax (708) 534-5211**Chain of Custody Record**

Loc: 500

TestAmerica

COC No: 500-86745.1

Page: 1 of 2

Job #: 500-127625-1

Preservation Codes:

Company: TestAmerica Laboratories, Inc	Lab P#: Fredrick, Sandie J	COC No: 500-86745.1
Address: 2960 Foster Creighton Drive, Nashville, TN, 37204	E-Mail: sandie.frederick@testamericainc.com	Page: 1 of 2
City: Nashville	State or Origin: Wisconsin	Job #: 500-127625-1
State, ZIP: TN, 37204	Phone: 615-726-0177(Tel) 615-726-3404(Fax)	Preservation Codes:
Email: sandie.frederick@testamericainc.com	PO#:	A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - FDA M - Hexane N - None O - AsNaO2 P - NaCO4S Q - Na2SC3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)
Project Name: WISDOT	WO#:	
Site:	SSOW#:	

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab, B=Resuo, A=Air)	Matrix (W=water, S=solid, C=carbonated)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)
GP-26 (2-4) (500-127625-1)	5/3/17	08:25	Central	Solid	X X	
GP-26 (6-8) (500-127625-2)	5/3/17	08:30	Central	Solid	X X	
GP-27 (2-4) (500-127625-3)	5/3/17	08:40	Central	Solid	X X	
GP-27 (6-8) (500-127625-4)	5/3/17	08:45	Central	Solid	X X	
GP-28 (2-4) (500-127625-5)	5/3/17	09:05	Central	Solid	X X	
GP-28 (6-8) (500-127625-6)	5/3/17	09:10	Central	Solid	X X	
GP-28 (14-16) (500-127625-7)	5/3/17	09:20	Central	Solid	X X	
GP-29 (2-4) (500-127625-8)	5/3/17	09:45	Central	Solid	X X	
GP-29 (6-8) (500-127625-9)	5/3/17	09:50	Central	Solid	X X	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analytic & accreditation compliance upon our subcontract laboratories. This sample's shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the state of origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

**Possible Hazard Identification**

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Archive For Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: <i>Sandie J</i>	Date: <b>05/04/17</b>	Time: <b>11:07</b>	Received by: <i>TK</i>	Method of Shipment:
Relinquished by: <i>Sandie J</i>	Date/Time: <b>05/04/17</b>	Company: <b>TK</b>	Received by: <i>TK</i>	Date/Time: <b>05/04/17</b>
Relinquished by: <i>Sandie J</i>	Date/Time: <b>05/04/17</b>	Company: <b>TK</b>	Received by: <i>TK</i>	Date/Time: <b>05/04/17</b>
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.: <b>5-S-17 0345 TK</b>			



500-127625 Chain of Custody

## COOLER RECEIPT FORM

Cooler Received/Opened On 05-05-2017 @ 10:05

Time Samples Removed From Cooler \_\_\_\_\_ Time Samples Placed In Storage \_\_\_\_\_ (2 Hour Window)

1. Tracking # 4774 (last 4 digits, FedEx) Courier: FedExIR Gun ID 31470366 pH Strip Lot \_\_\_\_\_ Chlorine Strip Lot \_\_\_\_\_2. Temperature of rep. sample or temp blank when opened: 26 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) KD7. 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 None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None YES...NO...NA

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 # 3I certify that I unloaded the cooler and answered questions 7-14 (initial) D

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) S

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) SI certify that I attached a label with the unique LIMS number to each container (initial) D21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# NO



## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127625-1

**Login Number:** 127625

**List Source:** TestAmerica Chicago

**List Number:** 1

**Creator:** Kelsey, Shawn M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.9c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-127625-1

**Login Number:** 127625

**List Number:** 2

**Creator:** Shaw, Rashard M

**List Source:** TestAmerica Nashville

**List Creation:** 05/05/17 04:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

All Ticket Types  
History and Waiting  
\* - Confirmed Qty Applied to Billing

## Detail Contract Activity Report

January 01, 2020 to December 14, 2020

Specific Contract(s) : '3063202272'

All Facilities

3063202272

Ticket Date	Facility & Ticket Number	Customer	Truck	Material	Billing Quantity
03/20/2020 I 01	1082543	333441 - ZIGNEGO COMPANY, INC.	JMT5	SW-CONT SOIL	18.72 TN
03/20/2020 I 01	1082549	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL	21.72 TN
03/20/2020 I 01	1082572	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL	15.47 TN
04/06/2020 I 01	1083592	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT SOIL	20.06 TN
04/06/2020 I 01	1083593	333441 - ZIGNEGO COMPANY, INC.	ZIGT79	SW-CONT SOIL	16.71 TN
04/06/2020 I 01	1083594	333441 - ZIGNEGO COMPANY, INC.	ZIG90	SW-CONT SOIL	15.22 TN
04/06/2020 I 01	1083595	333441 - ZIGNEGO COMPANY, INC.	ZIGT73	SW-CONT SOIL	18.11 TN
04/06/2020 I 01	1083600	333441 - ZIGNEGO COMPANY, INC.	SZA66	SW-CONT SOIL	19.28 TN
04/06/2020 I 01	1083602	333441 - ZIGNEGO COMPANY, INC.	ZIGT76	SW-CONT SOIL	16.71 TN
04/06/2020 I 01	1083604	333441 - ZIGNEGO COMPANY, INC.	SZA82	SW-CONT SOIL	18.72 TN
04/06/2020 I 01	1083605	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL	17.50 TN
04/06/2020 I 01	1083607	333441 - ZIGNEGO COMPANY, INC.	ZIGT77	SW-CONT SOIL	15.12 TN
04/06/2020 I 01	1083613	333441 - ZIGNEGO COMPANY, INC.	ZIGT72	SW-CONT SOIL	20.33 TN
04/06/2020 I 01	1083614	333441 - ZIGNEGO COMPANY, INC.	ZIGT79	SW-CONT SOIL	19.69 TN
04/06/2020 I 01	1083617	333441 - ZIGNEGO COMPANY, INC.	ZIG90	SW-CONT SOIL	20.08 TN
04/06/2020 I 01	1083618	333441 - ZIGNEGO COMPANY, INC.	ZIGT73	SW-CONT SOIL	19.23 TN
04/06/2020 I 01	1083622	333441 - ZIGNEGO COMPANY, INC.	SZA66	SW-CONT SOIL	20.04 TN
04/06/2020 I 01	1083623	333441 - ZIGNEGO COMPANY, INC.	ZIGT73	SW-CONT SOIL	13.83 TN
04/06/2020 I 01	1083624	333441 - ZIGNEGO COMPANY, INC.	SZA82	SW-CONT SOIL	20.38 TN
04/06/2020 I 01	1083625	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL	19.95 TN
04/06/2020 I 01	1083626	333441 - ZIGNEGO COMPANY, INC.	ZIGT77	SW-CONT SOIL	19.64 TN
04/06/2020 I 01	1083627	333441 - ZIGNEGO COMPANY, INC.	ZIGT76	SW-CONT SOIL	21.63 TN
04/24/2020 I 01	1084891	333441 - ZIGNEGO COMPANY, INC.	ZAV65	SW-CONT SOIL	18.53 TN
04/24/2020 I 01	1084892	333441 - ZIGNEGO COMPANY, INC.	ZIGT91	SW-CONT SOIL	17.32 TN
04/24/2020 I 01	1084893	333441 - ZIGNEGO COMPANY, INC.	ZIGT74	SW-CONT SOIL	18.66 TN
04/24/2020 I 01	1084898	333441 - ZIGNEGO COMPANY, INC.	ZIGT79	SW-CONT SOIL	20.23 TN
04/24/2020 I 01	1084900	333441 - ZIGNEGO COMPANY, INC.	POLT6	SW-CONT SOIL	20.26 TN
06/01/2020 I 01	1087738	333441 - ZIGNEGO COMPANY, INC.	ZIGT76	SW-CONT SOIL	19.90 TN
06/01/2020 I 01	1087746	333441 - ZIGNEGO COMPANY, INC.	ZIGT79	SW-CONT SOIL	19.32 TN
06/01/2020 I 01	1087753	333441 - ZIGNEGO COMPANY, INC.	ZIGT88	SW-CONT SOIL	20.29 TN
06/01/2020 I 01	1087761	333441 - ZIGNEGO COMPANY, INC.	ZIGT76	SW-CONT SOIL	11.65 TN
06/10/2020 I 01	1088562	333441 - ZIGNEGO COMPANY, INC.	ZIGT92	SW-CONT SOIL	20.83 TN
06/10/2020 I 01	1088592	333441 - ZIGNEGO COMPANY, INC.	ZIGT92	SW-CONT SOIL	13.52 TN
08/04/2020 I 01	1092790	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL	22.84 TN
08/04/2020 I 01	1092793	333441 - ZIGNEGO COMPANY, INC.	ZIGT78	SW-CONT SOIL	21.45 TN
08/04/2020 I 01	1092795	333441 - ZIGNEGO COMPANY, INC.	ZIGT77	SW-CONT SOIL	20.47 TN
08/04/2020 I 01	1092799	333441 - ZIGNEGO COMPANY, INC.	ROQ09	SW-CONT SOIL	20.68 TN
08/04/2020 I 01	1092803	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL	20.94 TN

All Ticket Types

History and Waiting

\* - Confirmed Qty Applied to Billing

**Detail Contract Activity Report**

January 01, 2020 to December 14, 2020

Specific Contract(s) : '3063202272'

All Facilities

08/04/2020 I 01	1092805	333441 - ZIGNEGO COMPANY, INC.	MAL48	SW-CONT SOIL	19.27	TN
08/04/2020 I 01	1092806	333441 - ZIGNEGO COMPANY, INC.	Szada23	SW-CONT SOIL	22.03	TN
08/04/2020 I 01	1092808	333441 - ZIGNEGO COMPANY, INC.	ZIGT78	SW-CONT SOIL	22.45	TN
08/04/2020 I 01	1092809	333441 - ZIGNEGO COMPANY, INC.	LIB77	SW-CONT SOIL	23.11	TN
08/04/2020 I 01	1092810	333441 - ZIGNEGO COMPANY, INC.	ZIGT80	SW-CONT SOIL	20.41	TN
08/04/2020 I 01	1092811	333441 - ZIGNEGO COMPANY, INC.	P86	SW-CONT SOIL	24.03	TN
08/04/2020 I 01	1092812	333441 - ZIGNEGO COMPANY, INC.	ZIGT77	SW-CONT SOIL	21.80	TN
08/04/2020 I 01	1092815	333441 - ZIGNEGO COMPANY, INC.	ROQ09	SW-CONT SOIL	22.70	TN
08/04/2020 I 01	1092817	333441 - ZIGNEGO COMPANY, INC.	MAL48	SW-CONT SOIL	22.64	TN
08/04/2020 I 01	1092819	333441 - ZIGNEGO COMPANY, INC.	Szada23	SW-CONT SOIL	22.10	TN
08/04/2020 I 01	1092824	333441 - ZIGNEGO COMPANY, INC.	LIB77	SW-CONT SOIL	17.59	TN
08/04/2020 I 01	1092825	333441 - ZIGNEGO COMPANY, INC.	P86	SW-CONT SOIL	20.05	TN
08/04/2020 I 01	1092827	333441 - ZIGNEGO COMPANY, INC.	AAS98	SW-CONT SOIL	20.58	TN
08/04/2020 I 01	1092828	333441 - ZIGNEGO COMPANY, INC.	ZIGT78	SW-CONT SOIL	22.03	TN
08/04/2020 I 01	1092831	333441 - ZIGNEGO COMPANY, INC.	SZA33	SW-CONT SOIL	24.01	TN
08/18/2020 I 01	1093916	333441 - ZIGNEGO COMPANY, INC.	J90	SW-CONT SOIL	11.92	TN
08/18/2020 I 01	1093919	333441 - ZIGNEGO COMPANY, INC.	BJ31	SW-CONT SOIL	11.44	TN
09/24/2020 I 01	1096673	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-04	SW-CONT SOIL	21.56	TN
09/24/2020 I 01	1096674	333441 - ZIGNEGO COMPANY, INC.	ZIGT82	SW-CONT SOIL	20.97	TN
09/24/2020 I 01	1096677	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-02	SW-CONT SOIL	23.99	TN
09/24/2020 I 01	1096682	333441 - ZIGNEGO COMPANY, INC.	ZIGT91	SW-CONT SOIL	21.92	TN
09/24/2020 I 01	1096683	333441 - ZIGNEGO COMPANY, INC.	ZIGT83	SW-CONT SOIL	21.73	TN
09/24/2020 I 01	1096686	333441 - ZIGNEGO COMPANY, INC.	ZIGT74	SW-CONT SOIL	21.25	TN
09/24/2020 I 01	1096687	333441 - ZIGNEGO COMPANY, INC.	ZIGT82	SW-CONT SOIL	20.97	TN
09/24/2020 I 01	1096690	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-04	SW-CONT SOIL	18.53	TN
09/24/2020 I 01	1096691	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-02	SW-CONT SOIL	20.53	TN
09/24/2020 I 01	1096696	333441 - ZIGNEGO COMPANY, INC.	ZIGT83	SW-CONT SOIL	16.86	TN
09/24/2020 I 01	1096699	333441 - ZIGNEGO COMPANY, INC.	ZIGT74	SW-CONT SOIL	17.55	TN
09/24/2020 I 01	1096702	333441 - ZIGNEGO COMPANY, INC.	ZIGT91	SW-CONT SOIL	19.45	TN
09/24/2020 I 01	1096708	333441 - ZIGNEGO COMPANY, INC.	ZIGT82	SW-CONT SOIL	17.84	TN
09/24/2020 I 01	1096718	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-02	SW-CONT SOIL	16.72	TN
09/24/2020 I 01	1096721	333441 - ZIGNEGO COMPANY, INC.	ZIGT83	SW-CONT SOIL	9.19	TN
09/29/2020 I 01	1097046	333441 - ZIGNEGO COMPANY, INC.	ZIGT70-03	SW-CONT SOIL	13.78	TN

Tickets Reported:

71

Items Reported:

71

All Ticket Types  
History and Waiting  
\* - Confirmed Qty Applied to Billing

## Detail Contract Activity Report

January 01, 2020 to December 14, 2020

Specific Contract(s) : '3063202272'

All Facilities

Material Summary	Weight		Volume		Count		Billing Quantity
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	
VG - SW-CONT SOIL	1,366.03	0.00 TN	410.00	0.00 YD	0.00	0.00	1,366.03 TN

---

Tickets Reported: 71      Items Reported: 71

---

## Appendix C: Photographic Log

## Photographic Log

Client Name:		Site Location:	Project No.:
Wisconsin Department of Transportation		Durand Ave. (STH 11) Racine, Wisconsin	WisDOT ID #2260-07-70 TRC #358418
Photo No.	Date		
1	3/23/2020	<p><b>Description</b>                      Installation of storm sewer at Station 114+00. Contaminated soil generated at this location was landfilled under the daily cover profile.                      Photo facing southeast.</p> 	
Photo No.	Date	<p>2</p> <p><b>Description</b>                      Excavating and removing contaminated soil for storm sewer installation near Station 113+50. The contaminated soil was landfilled under the daily cover profile                      Photo facing west.</p> 	

## Photographic Log

Client Name:		Site Location:	Project No.:
Wisconsin Department of Transportation		Durand Ave. (STH 11) Racine, Wisconsin	WisDOT ID #2260-07-70 TRC #358418
Photo No.	Date		
3	4/6/2020	<p><b>Description</b>            Grading and excavating CVOOC-contaminated soil from Station 122+00 to 123+00. The contaminated soil was landfilled under the solid waste profile.</p> <p>Photo facing west.</p>	
			

Photo No.	Date	
4	4/24/2020	
<p><b>Description</b>            Excavation and grading near Station 113+50.            Contaminated soil generated at this location was landfilled under the daily cover profile.</p> <p>Photo facing southwest.</p>		

## Photographic Log

Client Name:		Site Location:	Project No.:	
Wisconsin Department of Transportation		Durand Ave. (STH 11) Racine, Wisconsin	WisDOT ID #2260-07-70 TRC #358418	
Photo No.	Date			
5	4/27/2020			
<b>Description</b> Excavating and grading of contaminated soil near Station 85+40. The contaminated soil was landfilled under the bioremediation profile.  Photo facing southwest.				

Photo No.	Date		
6	5/29/2020		
<b>Description</b> Abandonment of air sparging well AS-1 with bentonite chips during Phase 4 activities. The air sparing well was located at 3818 Durand Ave. (WDNR BRRTS No. 03-52-000202).			

## Photographic Log

Client Name:		Site Location:	Project No.:
Wisconsin Department of Transportation		Durand Ave. (STH 11) Racine, Wisconsin	WisDOT ID #2260-07-70 TRC #358418
Photo No.	Date		
7	5/29/2020		
<p><b>Description</b>            Inside of MW-1 well cover at 3818 Durand Ave. (WDNR BRRTS No. 03-52-000202). The PVC well casing appeared to have been cut and previously filled with bentonite.         </p>			
Photo No.	Date		
8	5/29/2020		
<p><b>Description</b>            Inside of MW-7 well cover at 3818 Durand Ave. (WDNR BRRTS No. 03-52-000202). The well appeared to have been previously abandoned.         </p>			

## Photographic Log

Client Name:		Site Location:	Project No.:
Wisconsin Department of Transportation		Durand Ave. (STH 11) Racine, Wisconsin	WisDOT ID #2260-07-70 TRC #358418
Photo No.	Date		
9	6/8/2020	<p><b>Description</b>            Monotube installation on the NW corner of STH 11 and Lathrop Avenue (~Station 87+00). Contaminated soil from this location was landfilled under the bioremediation profile.</p> <p>Photo facing south.</p>	
			

Photo No.	Date	
10	6/10/2020	
<p><b>Description</b>            Monotube installation on the NW corner of Drexel Ave. and STH 11 near Station 122+60. CVOC - contaminated soil generated at this location was landfilled under the solid waste profile.</p> <p>Photo facing west.</p>		

## Photographic Log

Client Name:		Site Location:	Project No.:	
Wisconsin Department of Transportation		Durand Ave. (STH 11) Racine, Wisconsin	WisDOT ID #2260-07-70 TRC #358418	
Photo No.	Date			
11	7/30/2020	<p><b>Description</b>            Excavating and grading between Station 105+00 and 105+80. Contaminated soil generated at this location was landfilled under the daily cover profile.</p> <p>Photo facing west.</p>		
				
Photo No.	Date	<p>12      8/4/2020</p> <p><b>Description</b>            Excavation of CVOC-contaminated soil near Station 121+50. Contaminated soil generated at this location was landfilled under the solid waste profile.</p> <p>Photo facing northeast.</p> <td data-kind="ghost"></td> <td data-kind="ghost"></td>		
				

## Photographic Log

Client Name:		Site Location:	Project No.:
Wisconsin Department of Transportation		Durand Ave. (STH 11) Racine, Wisconsin	WisDOT ID #2260-07-70 TRC #358418
Photo No.	Date		
13	8/18/2020	<p><b>Description</b>            Storm sewer inlet on the SW corner of Drexel Ave. and STH 11 near Station 122+50. CVOC-contaminated soil excavated from this location was landfilled under the solid waste profile.</p> <p>Photo facing southwest.</p> 	
14	9/24/2020	<p><b>Description</b>            GRADALL filling dump truck with CVOC-contaminated soil at intersection of Drexel Ave. and STH 11. Contaminated soil generated at this location was landfilled under the solid waste profile</p> <p>Photo facing south.</p> 	



---

## Appendix D: AS-1 Abandonment Information

NO.	REVISIONS	DATE	BY	CHKD



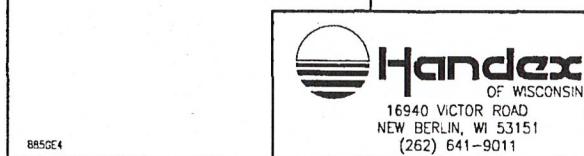
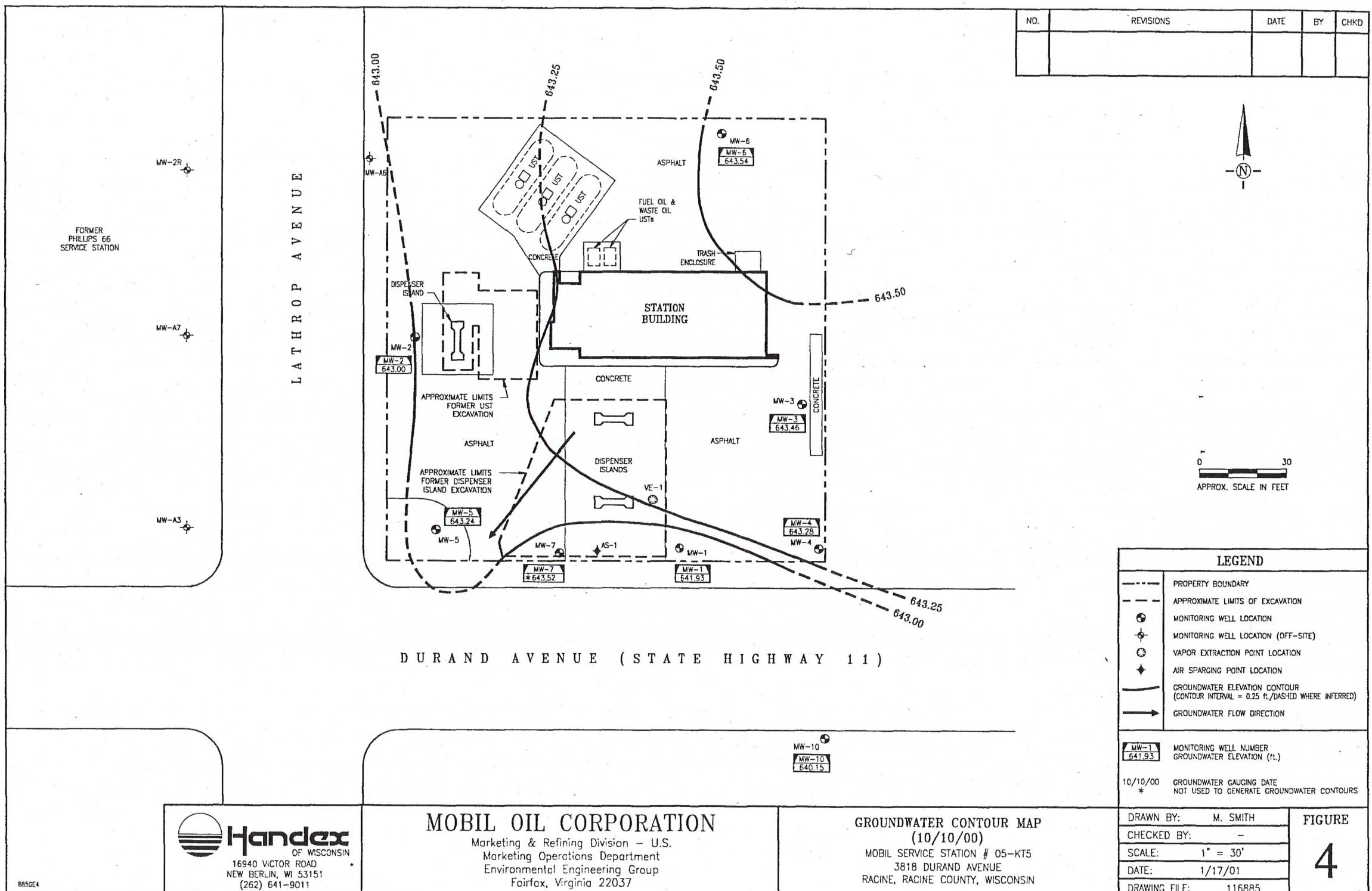
0 30  
APPROX. SCALE IN FEET

#### LEGEND

- PROPERTY BOUNDARY
- APPROXIMATE LIMITS OF EXCAVATION
- MONITORING WELL LOCATION
- MONITORING WELL LOCATION (OFF-SITE)
- ◎ VAPOR EXTRACTION POINT LOCATION
- ◆ AIR SPARGING POINT LOCATION
- GROUNDWATER ELEVATION CONTOUR (CONTOUR INTERVAL = 0.25 ft./DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

MW-1 641.93 MONITORING WELL NUMBER  
MW-10 640.15 GROUNDWATER ELEVATION (ft.)  
10/10/00 \* GROUNDWATER GAUGING DATE  
NOT USED TO GENERATE GROUNDWATER CONTOURS

DRAWN BY: M. SMITH FIGURE  
CHECKED BY: - 4  
SCALE: 1" = 30'  
DATE: 1/17/01  
DRAWING FILE: 116885

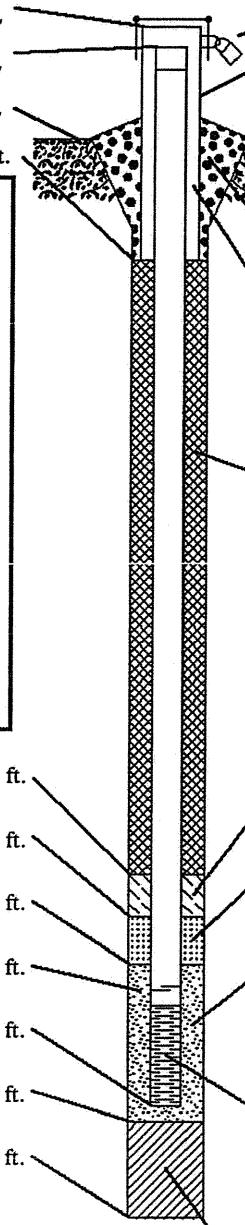


MOBIL OIL CORPORATION

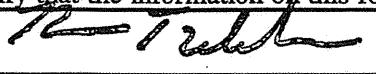
Marketing & Refining Division - U.S.  
Marketing Operations Department  
Environmental Engineering Group  
Fairfax, Virginia 22037

GROUNDWATER CONTOUR MAP  
(10/10/00)  
MOBIL SERVICE STATION # 05-KT5  
3818 DURAND AVENUE  
RACINE, RACINE COUNTY, WISCONSIN

Facility/Project Name <b>Mobil Station #05-KT5</b>	Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Well Name <b>AS-1</b>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. <input type="checkbox"/> ° <input type="checkbox"/> ' <input type="checkbox"/> " Long. <input type="checkbox"/> ° <input type="checkbox"/> ' <input type="checkbox"/> " or St. Plane _____ ft. N, _____ ft. E.	Wis. DNR Unique Well Number: _____ DNR Well Number: _____
Type of Well Water Table Observation Well <input type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source ft. <input type="checkbox"/> 1/4 of <input type="checkbox"/> 1/4 of Sec. <input type="checkbox"/> T. <input type="checkbox"/> N. R. <input type="checkbox"/> E. <input type="checkbox"/> W.	Date Well Installed <b>11/02/95</b>
Distance Well Is From Waste/Source Boundary	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <b>Mike Nelson</b>
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No		Boart Longyear
A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
B. Well casing, top elevation <b>-0.50</b> ft. MSL	2. Protective cover pipe: a. Inside diameter: <b>8.0</b> in. b. Length: <b>1.0</b> ft. c. Material: Steel <input checked="" type="checkbox"/> 0.4 Other <input type="checkbox"/> 	
C. Land surface elevation _____ ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____ Bentonite <input type="checkbox"/> 3.0 Concrete <input type="checkbox"/> 0.1 Other <input checked="" type="checkbox"/> 	
D. Surface seal, bottom _____ ft. MSL or <b>4.0</b> ft.	3. Surface seal: Native	
12. USC classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 3.0 Annular space seal <input type="checkbox"/>  Other <input type="checkbox"/> 	
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 3.3 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 3.5 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 3.1 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 5.0 e. _____ Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 0.1 Tremie pumped <input type="checkbox"/> 0.2 Gravity <input checked="" type="checkbox"/> 0.8	
14. Drilling method used: Rotary <input type="checkbox"/> 5.0 Hollow Stem Auger <input checked="" type="checkbox"/> 4.1 Other <input type="checkbox"/> 	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 3.3 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 3.2 c. _____ Other <input type="checkbox"/> 	
15. Drilling fluid used: Water <input type="checkbox"/> 0.2 Air <input type="checkbox"/> 0.1 Drilling Mud <input type="checkbox"/> 0.3 None <input checked="" type="checkbox"/> 9.9	7. Fine sand material: Manufacturer, product name and mesh size a. _____ b. Volume added _____ ft <sup>3</sup>	
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Describe _____	8. Filter pack material: Manufacturer, product name and mesh size a. <b>#30 American Material</b>  b. Volume added _____ ft <sup>3</sup>	
17. Source of water (attach analysis):	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 2.3 Flush threaded PVC schedule 80 <input type="checkbox"/> 2.4 Other <input type="checkbox"/> 	
E. Bentonite seal, top _____ ft. MSL or <b>4.0</b> ft.	10. Screen material: <b>Stainless Steel</b> a. Screen Type: Factory cut <input type="checkbox"/> 1.1 Continuous slot <input checked="" type="checkbox"/> 0.1 Other <input type="checkbox"/> 	
F. Fine sand, top _____ ft. MSL or _____ ft.	b. Manufacturer <b>Boart Longyear</b> 0.010 in. c. Slot size: <b>3.0</b> ft.	
G. Filter pack, top _____ ft. MSL or <b>7.0</b> ft.	d. Slotted length: _____	
H. Screen joint, top _____ ft. MSL or <b>13.0</b> ft.	11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 1.4 Other <input type="checkbox"/> 	
I. Well bottom _____ ft. MSL or <b>16.0</b> ft.		
J. Filter pack, bottom _____ ft. MSL or <b>16.5</b> ft.		
K. Borehole, bottom _____ ft. MSL or <b>16.5</b> ft.		
L. Borehole, diameter <b>8.0</b> in.		
M. O.D. well casing <b>2.37</b> in.		
N. I.D. well casing <b>2.06</b> in.		



I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature 

Firm **Boart Longyear**  
101 Alderson Street

Tel: (715) 359-7090

Fax: (715) 355-5715

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

**State of Wisconsin  
Department of Natural Resources**

**Route To:**

- Solid Waste
- Emergency Response
- Wastewater

- Haz. Waste
- Underground Tanks
- Water Resources
- Other

## **Soil Boring Log Information**

7-91

Page 1 of 2

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

R. Fehl

**Firm**

**BOART LONGYEAR**

**BOBBY LONGYEAR**  
101 Alderson Schofield, WI 54476-0109  
Tel: (715) 359-7090 Fax: (715) 355-5715

This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

7-91

Boring Number AS-1

**Use only as an attachment to Form 4400-122.**

Page 2 of 2

The monitoring wells were sampled on November 2, 1995 in accordance with WDNR guidelines for sampling. Samples were packed on ice and shipped under chain-of-custody procedures to Mid-State Associates, Inc. in Baraboo, Wisconsin. A copy of the analytical laboratory report is presented in Attachment 1. Table 1 summarizes PVOC analytical results from this and previous sampling rounds performed by Montgomery Watson.

Results from this sampling round were similar to previous sampling rounds. No PVOCs were detected in wells MW3, MW4, MW5, and MW6, and only methyl tert butyl ether (MTBE) was detected in MW1 (810 µg/L). Low concentrations of PVOCs were again detected in well MW7; however, only MTBE (140 µg/L) exceeded the Chapter NR140, Wisconsin Administrative Code (NR 140), Enforcement Standard (ES) and only benzene (0.8 µg/L) exceeded the NR 140, Preventive Action Limit (PAL). PVOCs were again detected in well MW2, but only benzene (110 µg/L) and MTBE (1300 µg/L) exceeded the ES.

### **Remedial Alternatives Evaluation**

On November 2, 1995, an air sparge well and a soil vapor monitoring well were installed at the site by Wisconsin Test Drilling. Well locations are shown on Figure 1 and soil boring logs and well construction details are presented in Attachment 2. An air sparge/soil vapor extraction test was performed on November 9, 1995 by Montgomery Watson. Preliminary results from this test indicate the site is not suitable for air sparging, soil vapor extraction, or groundwater extraction. At this time we are awaiting the results of air samples collected during the test. Results of the this test will be presented in the Remedial Action Plan.

The chosen remedial alternative for this site in June 1989 was to excavate contaminated soil to the extent practicable. Approximately 700 cubic yards of soil was removed during excavation activities. Residual soil contamination continues to effect groundwater quality at two locations and analytical results summarized in Table 1 indicate little change in contaminant concentrations during the last three years. The extent of contamination is very limited at this site and groundwater is not used for drinking water purposes in the site vicinity. Therefore, Montgomery Watson will contact the current site owner, Mr. Tom Bergemann, and the adjacent property owners, the City of Racine, and the Wisconsin Department of Transportation to get their opinions regarding further remediation of the remaining contamination and their willingness to accept an alternative form of site closure.

**Notice:** Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

**Verification Only of Fill and Seal**

**Route to DNR Bureau:**

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Drinking Water   | <input type="checkbox"/> Watershed/Wastewater | <input checked="" type="checkbox"/> Remediation/Redevelopment |
| <input type="checkbox"/> Waste Management | <input type="checkbox"/> Other: _____         |   |

**1. Well Location Information**

County <b>Racine</b>	WI Unique Well # of Removed Well <b>A5-1</b>	Hicap #
Latitude / Longitude (see instructions) <b>42.6969 N -87.9255 W</b>		Format Code <b>X DD</b>
		Method Code <b>GPS008</b> <input type="checkbox"/> SCR002 <input type="checkbox"/> DDM <input type="checkbox"/> OTH001
1/4 SW or Gov't Lot #	1/4 SE	Section <b>19</b>
		Township <b>3 N</b>
		Range <b>22</b>
		E <input type="checkbox"/> W
Well Street Address <b>3818 Durand Ave, Racine</b>		
Well City, Village or Town <b>Racine</b>		Well ZIP Code <b>53405</b>
Subdivision Name		Lot #

Reason for Removal from Service  
**Construction interference**

**3. Filled & Sealed Well / Drillhole / Borehole Information**

<input checked="" type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) <b>11-02-1995</b>
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.
<input type="checkbox"/> Borehole / Drillhole	

Construction Type:

- Drilled     Driven (Sandpoint)     Dug  
 Other (specify): \_\_\_\_\_

Formation Type:

- Unconsolidated Formation     Bedrock

Total Well Depth From Ground Surface (ft.)  
**16.5**

Lower Drillhole Diameter (in.)  
**8**

Was well annular space grouted?  Yes  No  Unknown

If yes, to what depth (feet)?  
**3.59**

**5. Material Used to Fill Well / Drillhole**

**3 1/8" Bentonite Chips**

**2. Facility / Owner Information**

Facility Name <b>Mobil Station # 05-KT5</b>		
Facility ID (FID or PWS) <b>252125830</b>		
License/Permit/Monitoring #		
Original Well Owner <b>ExxonMobil</b>		
Present Well Owner <b>ExxonMobil</b>		
Mailing Address of Present Owner <b>PO Box 874, Joliet Refinery</b>		
City of Present Owner <b>Joliet</b>	State <b>IL</b>	ZIP Code <b>60434</b>

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Liner(s) perforated?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Casing left in place?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Was casing cut off below surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Did sealing material rise to surface?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Did material settle after 24 hours?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If yes, was hole retopped?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

Required Method of Placing Sealing Material

- Conductor Pipe-Gravity     Conductor Pipe-Pumped  
 Screened & Poured (Bentonite Chips)     Other (Explain): \_\_\_\_\_

Sealing Materials

- Neat Cement Grout     Concrete  
 Sand-Cement (Concrete) Grout     Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

- Bentonite Chips     Bentonite - Cement Grout  
 Granular Bentonite     Bentonite - Sand Slurry

**6. Comments**

**7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing <b>TRC Environmental Corp.</b>	License #	Date of Filling & Sealing or Verification (mm/dd/yyyy) <b>05/29/2020</b>	Date Received	Noted By
Street or Route <b>150 N. Patrik Blvd, Suite 180</b>	Telephone Number <b>(262) 901-2162</b>	Comments		
City <b>Brookfield</b>	State <b>WI</b>	ZIP Code <b>53045</b>	Signature of Person Doing Work <b>[Signature]</b>	Date Signed <b>7-16-2020</b>