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June 3, 2015

Mr. Andrew Malsom
Wisconsin Department of Transportation
141 NW Barstow Street
Waukesha, WI 53187

Subject: Phase 2.5 Investigation
USH 45, Illinois State Line to STH 50, Bristol, Kenosha County, Wisconsin
WisDOT Project ID #3200-02-03
TRC Project #230448.0000.0000

Dear Andy:

The attached report documents the Phase 2.5 investigation findings for the Bristol Garage and Bristol Motors sites along USH 45 in Bristol, Wisconsin. Two (2) copies have been provided for your use.

Please contact me with questions. I can be reached at 262-901-2126 or
bbergmann@trcsolutions.com.

Sincerely,

TRC Environmental Corporation


Bryan J. Bergmann, P.G.
Project Manager

cc: Shar TeBeest – WisDOT (hard copy and pdf on CD)
Jim Morse – TRC



Phase 2.5 Investigation

USH 45, Illinois State Line to STH 50
Bristol, Kenosha County, Wisconsin

WisDOT Project ID #3200-02-03

June 2015

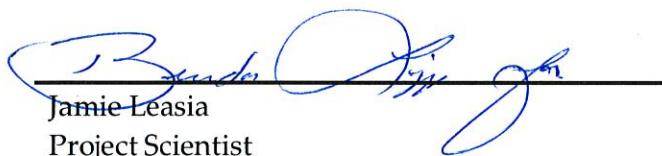


Phase 2.5 Investigation

**USH 45, Illinois State Line to STH 50
Bristol, Kenosha County, Wisconsin**

WisDOT Project ID #3200-02-03

June 2015



Jamie Leasia
Project Scientist



Bryan Bergmann, P.G.
Project Manager



James E. Morse
Senior Client Service Manager

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Commonly Used Abbreviations and Acronyms

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 Closed 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 is planning to reconstruct USH 45 from the Illinois state line to STH 50 in Kenosha County. In January 2015, TRC Environmental Corporation (TRC) was retained by the WisDOT to conduct a Phase 2.5 Investigation in order to define the extent of soil impacts at the Bristol Garage site, and to determine if contaminated soil might be encountered during construction near the Bristol Motors site.

TRC's Phase 2.5 Investigation indicated the following:

- Petroleum-contaminated soil exceeding WDNR standards is present from just below the existing ground surface to a depth of approximately 10 feet bgs in the vicinity of the former tank cavity (GP-2 and GP-8), near the southwest corner of the Bristol Garage site.
- The general extent of soil impacts in the vicinity of the former tank cavity near the southwest corner of the Bristol Garage site has been defined.
- Soil contamination was not identified near the northwest corner of the Bristol Motors site.

Special provisions should be included in the construction documents advising the contractor of these findings, and the requirement to manage contaminated soil removed by the project.

An excavation management plan should be prepared and submitted to the WDNR for their review and concurrence. The WisDOT's environmental consultant should be present during excavations in the area of known contamination during construction to field screen and document the excavation activities.

Since WisDOT is the responsible party for the Bristol Garage site, TRC recommends that the petroleum-impacted soil in the vicinity of the former tank cavity near the southwest corner of the Bristol Garage site be excavated (hot spot removal) prior to or during the reconstruction of USH 45. The impacted soil will require landfill disposal (bioremediation). Confirmation soil samples are to be collected from the sidewalls and floor of the excavation for laboratory analysis. After excavation of the impacted soil, a formal site closure request to the WDNR can be made.

Section 1 Background

The WisDOT is planning to reconstruct USH 45 from the Illinois state line to STH 50 in Kenosha County. Figure 1 show the project location.

In October 2012, Himalayan Consultants LLC (Himalayan) completed the Phase 1 for the project.

Prior to reconstruction, the WisDOT plans to acquire the Bristol Garage property located in the northeast quadrant of USH 45 (aka 200th Ave.) and 84th Street (property address is 8335 200th Avenue). The west side of the property (closest to USH 45) is currently occupied by a building used for automotive repairs. The existing auto repair building will be demolished, and a storm water retention pond will be constructed on the property.

In May 2013, TRC completed a Phase 3 investigation for the Bristol Garage site located at 8335 200th Avenue. The Phase 3 consisted of seven soil probes (GP-1 through GP-7). Temporary wells were installed in borings GP-3 and GP-4. The results of the Phase 3 Investigation revealed petroleum-contaminated soil in GP-2, which was located in the area of the former USTs. GRO, benzene, naphthalene, and total arsenic concentrations exceeded the NR 720 RCLs.

Groundwater results revealed low concentrations of benzene and ethylbenzene in GP-4. However, the concentrations were below the NR 140 PALs. In addition, arsenic concentrations in GP-4 were detected slightly above the NR 140 PAL but below the NR 140 ES. Due to the soil and groundwater contamination discovered during the Phase 3 investigation, the WDNR was notified of the new release. The WDNR BRRTS No. for the Bristol Garage site is 02-30-563385. USTs formerly used at the Bristol Garage site included one 550-gallon leaded gasoline UST and one 300-gallon unleaded gasoline UST. WDNR BRRTS and UST information and results of the Phase 3 investigation for the Bristol Garage site are provided in Appendix A.

In January 2015, TRC was retained by the WisDOT to conduct a Phase 2.5 Investigation in order to define the extent of soil impacts at the Bristol Garage site, and to determine if contaminated soil might be encountered during construction near the Bristol Motors site. The Bristol Motors site is a closed LUST site at 8481 200th Ave. (USH 45) (WDNR BRRTS No. 03-30-002527). USTs formerly used at the Bristol Motors site included one 1,000-gallon and one 550-gallon unleaded gasoline USTs, and one 1,000-gallon leaded gasoline UST. WDNR BRRTS and UST information for the Bristol Motors site is provided in Appendix A.

Section 2

Sampling Activities

TRC performed the Phase 2.5 Investigation field activities on February 9, 2015, and April 7, 2015. The field work was planned to be completed on February 9, 2015. However, due to snow piles along USH 45, the work was completed in April 2015 after the snow had melt.

On February 9, 2015, five soil probe borings (GP-8 through GP-12) were advanced near the Bristol Garage and the Bristol Motors sites. Soil probes GP-8, GP-9, and GP-10 were advanced near the southwest corner of the Bristol Garage site. Soil probes GP-11 and GP-12 were advanced near the northwest corner of the Bristol Motors site. Groundwater was not encountered in soil probes GP-8 through GP-12. Figure 2 shows the soil probe locations.

On April 7, 2015, three soil probe borings (GP-13 through GP-15) were advanced near the Bristol Garage Site. Groundwater was not encountered in soil probes GP-13 through GP-15. Figure 2 shows the soil probe locations.

During soil boring activities, soil was continuously sampled, classified, and field-screened using a PID. The soil types, field observations, quantities, and the types of samples collected from each boring are summarized below.

Each soil boring was advanced to its proposed terminal depth of 10 feet. In general, the soil profile consisted of approximately 1 to 2.5 feet of fill (sand and gravel) underlain by native silt and clay. Groundwater was not observed in any of the soil borings. Upon completion, each borehole was abandoned with bentonite chips. Soil boring logs and abandonment forms are provided in Appendix B.

Two soil samples from each boring were submitted for laboratory analysis of DRO, GRO/PVOCs plus naphthalene, and lead or RCRA metals.

Photographs taken during fieldwork activities are included as Appendix C.

Section 3

Soil Sampling Results and Evaluation

Soil sample laboratory analytical results, including results from the Phase 3 investigation completed at the Bristol Garage site in 2013, are summarized in Table 1. The Phase 2.5 laboratory analytical report, which includes the analytical methods used, is included in Appendix D.

- During the Phase 3 investigation in 2013, several VOC concentrations exceeded the respective NR 720 soil standards in GP-2 (6'-8'). The GRO, DRO, and arsenic concentrations in GP-2 (6'-8') were 250 mg/kg, 10 mg/kg and 11 mg/kg, respectively. The WDNR does not have soil standards for GRO and DRO. The arsenic concentration exceeded the background threshold value of 8.0 mg/kg.
- Elevated PID readings (ranging from 22.1 to 462.6 Instrument Units) were observed in samples from GP-8. Black staining and petroleum odors were noted in the 2'-4' bgs interval. The GRO concentration in GP-8 (2'-4') was 330 mg/kg. 1,2,4-trimethylbenzene was detected in GP-8 (2'-4'). However, the result was flagged by the laboratory because the result was an estimated concentration. The GRO concentration in GP-8 (8'-10') was 4.6 mg/kg.
- In GP-14 (2'-4'), the DRO concentration was 30 mg/kg and the lead concentration was 110 mg/kg. Because the lead result was greater than 100 mg/kg, the sample was also analyzed by the toxicity characteristic leaching procedure (TCLP) for landfill disposal purposes. The TCLP lead result was 0.037 mg/l, which was less than the landfill acceptance criterion of 5.0 mg/l.
- The naphthalene concentrations in GP-13 (8'-10') and GP-15 (8'-10') were 130 µg/kg and 120 µg/kg, respectively. Both results were flagged by the laboratory as estimated concentrations, and the results were less than the detection limit in most of the other samples analyzed for this Phase 2.5 Investigation.

TRC performed calculations using the soil sample lab data to determine if the concentrations of detected compounds exceed the calculated industrial and non-industrial cumulative hazard indices, and/or the cumulative cancer risk (See Appendix E for calculations). All results were below the respective RCLs, calculated cumulative hazard indices, and/or the cumulative cancer risk with the exception of sample GP-2 (6'-8') where the result exceeded the calculated direct contact non-industrial cancer risk (cumulative).

Section 4

Findings, Conclusions, and Recommendations

TRC's Phase 2.5 Investigation indicated the following:

- Petroleum-contaminated soil exceeding WDNR standards is present from just below the existing ground surface to a depth of approximately 10 feet bgs in the vicinity of the former tank cavity (GP-2 and GP-8) near the southwest corner of the Bristol Garage site.
- The general extent of soil impacts in the vicinity of the former tank cavity near the southwest corner of the Bristol Garage site has been defined.
- Soil contamination was not identified near the northwest corner of the Bristol Motors site.

Special provisions should be included in the construction documents advising the contractor of these findings, and the requirement to manage contaminated soil removed by the project. Draft special provisions are included in Appendix F.

An excavation management plan should be prepared and submitted to the WDNR for their review and concurrence. The WisDOT's environmental consultant should be present during excavations in the area of known contamination during construction to field screen and document the excavation activities.

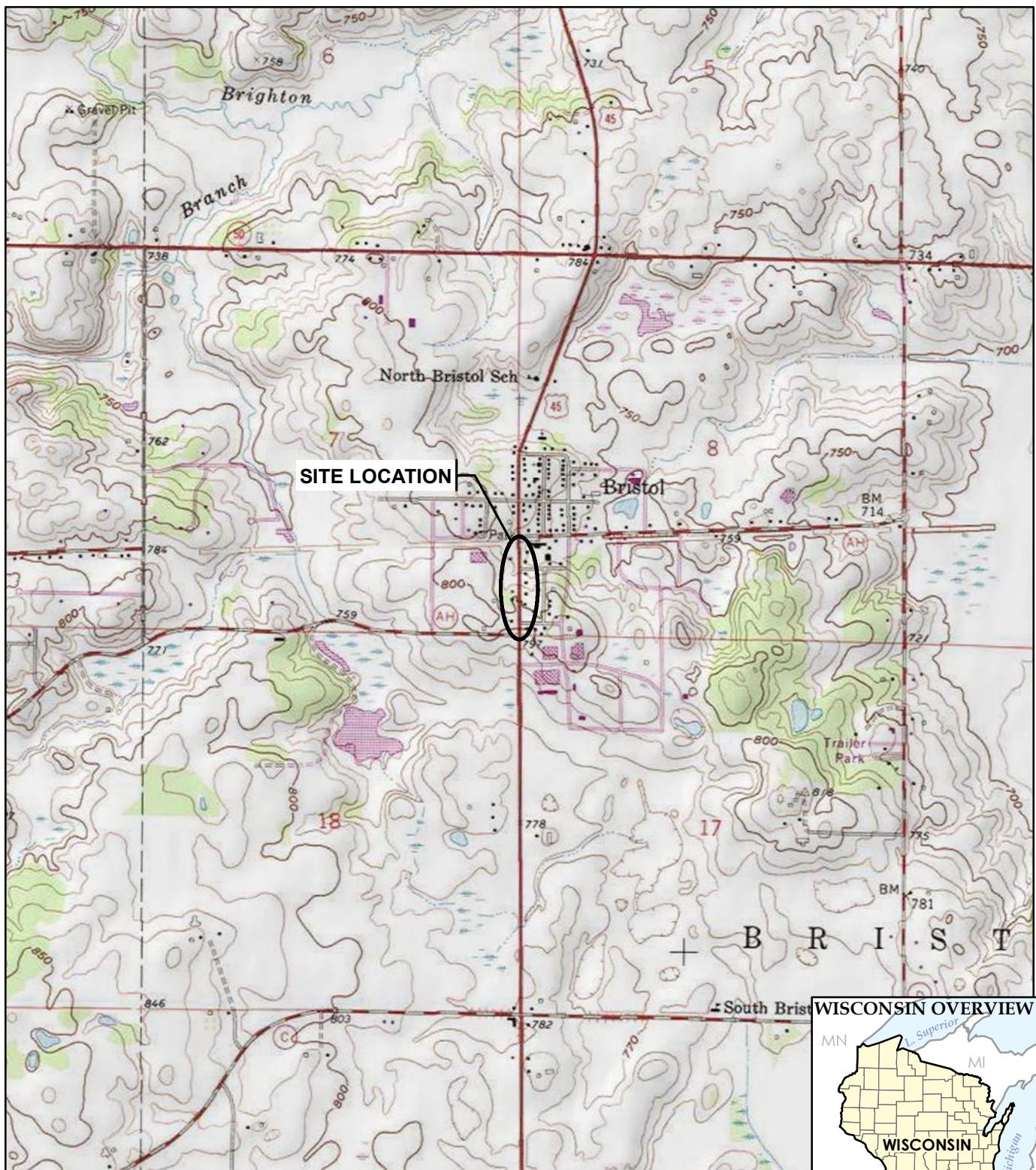
Since WisDOT is the responsible party for the Bristol Garage site, TRC recommends that the petroleum-impacted soil in the vicinity of the former tank cavity near the southwest corner of the Bristol Garage site be excavated (hot spot removal) prior to or during the reconstruction of USH 45. The impacted soil will require landfill disposal (bioremediation). Confirmation soil samples are to be collected from the sidewalls and floor of the excavation for laboratory analysis. After excavation of the impacted soil, a formal site closure request to the WDNR can be made.

Table 1
 Soil Sampling Results Summary - Phase 2.5 Investigation
 USH 45 - Bristol Motors and Bristol Garage
 Town of Bristol, Kenosha County, WI
 WisDOT I.D. 3200-02-03, TRC Project ID 230448.0000.0000

ANALYTES ⁽¹⁾	SOIL RCL NR 720 ⁽⁴⁾				SOIL SAMPLE ID, DEPTH (feet bgs), SOIL TYPE, SAMPLE DATE														TRIP BLANK
					GP-1		GP-2		GP-3		GP-4		GP-5		GP-6		GP-7		
	GROUNDWATER PATHWAY ⁽²⁾	NON-INDUSTRIAL DIRECT CONTACT ⁽³⁾	INDUSTRIAL DIRECT CONTACT ⁽³⁾	SURFICIAL BACKGROUND THRESHOLD ⁽⁵⁾	4'- 6'	6'- 8'	6'- 8'	12'- 14'	0'- 4'	8'- 10'	0'- 2'	2'- 4'	2'- 4'	8'- 10'	2'- 4'	6'- 8'	0'- 2'	4'- 6'	
					SILTY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY	FILL: SILTY SAND	SANDY CLAY	SILTY CLAY	SILTY CLAY	SILTY CLAY TO SILTY SAND	SILTY CLAY	SILTY CLAY	SANDY SILT & CLAY	SILTY CLAY	SILTY CLAY	
SAMPLES COLLECTED ON 4/24/2013																			
PID Readings	--	--	--	--	0.0	0.0	212	0.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
GRO (mg/kg)	--	--	--	--	<3.1	<2.5	250	<2.4	<2.1	<2.6	<3.0	<2.9	<3.2	<2.3	<2.9	<2.6	<3.4	<2.3	<2.5
DRO (mg/kg)	--	--	--	--	2.8 J	3.8 J	11	3.3 J	2.6 J	3.3 J	2.5 J	2.1 J	2.1 J	2.4 J	1.9 J	<1.7	3.5 J	2.0 J	--
VOCs (µg/kg)																			
Benzene	5.1	1,490	7,410	--	<23	<18	470	<18	<15	<19	<21	<21	<23	<16	<21	<19	<25	<17	<18
n-Butylbenzene	-	108,000	108,000	--	--	--	1,400	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	-	145,000	145,000	--	--	--	770	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	1,570	7,470	37,000	--	<24	<19	790	<18	<16	<20	<23	<22	<25	<17	<22	<20	<26	<18	<19
Isopropylbenzene	--	268,000	268,000	--	--	--	680	--	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	--	162,000	162,000	--	--	--	790	--	--	--	--	--	--	--	--	--	--	--	--
Methyl-tert-butyl-ether	27	59,400	293,000	--	<15	<12	<30	<12	<10	<13	<14	<14	<16	<11	<14	<13	<16	<11	<12
Naphthalene	658.2	5,150	26,000	--	<150	<120	1,800	<120	<100	<130	<140	<140	<160	<110	<140	<130	<160	<110	<120
n-Propylbenzene	--	--	--	--	--	--	1,200	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	1,107.2	818,000	818,000	--	<21	<17	<8.1	<17	<14	<18	<20	<20	<22	<15	<20	<18	<23	<16	<17
1,2,4-Trimethylbenzene	1382.1 ⁽⁶⁾	89,800	219,000	--	<38	<30	4,700	<30	<26	<32	<36	<36	<38	<28	<36	<32	<42	<28	<30
1,3,5-Trimethylbenzene	1382.1 ⁽⁶⁾	182,000	182,000	--	<38	<30	4,700	<30	<26	<32	<36	<36	<38	<28	<36	<32	<42	<28	<30
Xylenes	3,940	258,000	258,000	--	<38	<30	1,600	<29	<25	<32	<36	<36	<39	<27	<35	<32	<41	<28	<30
Metals (mg/kg)																			
Arsenic	0.584	0.613	2.39	8	--	--	11	--	--	--	--	--	--	--	--	--	--	--	--
Barium	164.8	15,300	100,000	364	--	--	54	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.752	70	799	1	--	--	0.19 J	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	360,000	100,000	100,000	44	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--
Lead	27	400	800	52	14 B	13 B	10 B	8.9 B	7.3 B	15 B	19 B	11 B	12 B	10 B	14 B	8.7 B	23 B	9.4 B	--
Selenium	0.52	391	5,110	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.85	391	5110	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	0.208	3.13	3.13	-	--	--	0.018	--	--	--	--	--	--	--	--	--	--	--	--
TCLP Metals (mg/l)																			
TCLP Lead	-	-	-	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HAZARD INDEX (CUMULATIVE)⁽⁷⁾																			
NON-INDUSTRIAL	1.0	--	--	0.0000	0.0000	0.3971	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	--	
INDUSTRIAL	--	1.0	--	0.0000	0.0000	0.0453	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	--
CANCER RISK (CUMULATIVE)⁽⁷⁾																			
NON-INDUSTRIAL	1.00E-05	-	--	0.00E+00	0.00E+00	1.90E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	--	
INDUSTRIAL	--	1.00E-05	--	0.00E+00	0.00E+00	4.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	--	

Notes:

1. PID = Photoionization Detector
2. GRO = Gasoline Range Organics analyzed using the Wisconsin Modified Method
3. DRO = Diesel Range Organics analyzed using Wisconsin Modified Method
4. VOCs = Volatile Organic Compounds analyzed using EPA Method 8260B
5. mg/kg = milligrams per kilogram (ppm)
6. µg/kg = micrograms per kilogram (ppb)
7. Total metals analyzed using EPA Method 6010B, except for mercury which was analyzed using EPA Method 7471A
8. TCLP Metals = Toxicity Characteristic Leaching Procedure for Metals analyzed using EPA Method 6010B
9. ND = Not Detected
10. -- = not analyzed
11. Samples were collected by TRC and analyzed by Test America (WDNR Cert. #998020430)
- PVOCs listed above are the NR720 generic RCLs for the protection of



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES.



1" = 2,000'
1:24,000

0 2,000 4,000 FEET



708 Heartland Trail
Suite 3000
Madison, WI 53717
Phone: 608.826.3600

**WISDOT ID# 3200-02-03
USH 45, ILLINOIS STATE LINE TO STH 50
BRISTOL, KENOSHA COUNTY, WISCONSIN**

SITE LOCATION MAP

DRAWN BY:	RHODE B
APPROVED BY:	BERGMANN B
PROJECT NO:	230488
FILE NO.	230448-001slm.mxd
DATE:	JUNE 2015

FIGURE 1



LEGEND

NOTES

● SOIL BORING LOCATIONS (4/24/2013)

1. BASE MAP IMAGERY FROM
ESRI/MICROSOFT, "WORLD IMAGERY",
WEB BASEMAP SERVICE LAYER, 2011.

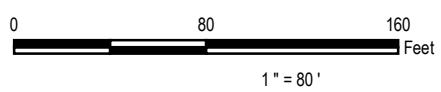
● SOIL BORING LOCATIONS (2/9/2015)

2. MAP PROJECTION AND GRID
COORDINATES ARE NAD83 STATE
PLANE WISCONSIN- SOUTH, US
SURVEY FEET.

● SOIL BORING LOCATIONS (4/7/2015)

APPROXIMATE EXTENT
OF CONTAMINATED SOIL

APPROXIMATE SITE BOUNDARY



1" = 80'
1:960

PROJECT:

WISDOT ID# 3200-02-03
USH 45, ILLINOIS STATE LINE TO STH 50
BRISTOL, KENOSHA COUNTY, WISCONSIN

SHEET TITLE:

SOIL BORING LOCATIONS

DRAWN BY:	RHODE B	SCALE:	230488
CHECKED BY:	LEASIA J	1: 960	FILE NO. 230448-003.mxd
APPROVED BY:	BERGMANN B	DATE PRINTED:	
DATE:	JUNE 2015		

FIGURE 2



708 Heartland Trail, Suite 3000
Madison, WI 53717
Phone: 608.826.3600
www.trcsolutions.com

Appendix A

Historical Information

Wisconsin Department of Natural Resources

Environmental Cleanup & Brownfields Redevelopment

BRRTS on the Web

Click the Location Name below to view the Location Details page for this Activity. Other Activities, if present, may be viewed from that page.

02-30-563385 BRISTOL GARAGE

ERP - OPEN

Location Name (Click Location Name to View Location Details)		County	WDNR Region
BRISTOL GARAGE		KENOSHA	SOUTHEAST
Address		Municipality	
8335 200TH AVE		BRISTOL	
Public Land Survey System		Latitude	Google Maps RR Sites Map
SW 1/4 of the SW 1/4 of Sec 08, T01N, R21E		42.5563119	CLICK TO VIEW CLICK TO VIEW
Additional Location Description		Longitude	Facility ID Size (Acres)
NONE		-88.0503386	230120660 UNKNOWN
Jurisdiction	PECFA No.	EPA Cerclis ID	Start Date End Date Last Action
DNR RR			2015-02-26 2015-03-02

Comments

8335 200TH AVE (AKA USH 45)

Characteristics

PECFA Tracked?	EPA NPL Site?	Eligible for PECFA Funds?	Above Ground Storage Tank?	Drycleaner?	Co-Contamination?	On GIS Registry? 
No	No	No	No	No	No	No

Actions

Place Cursor Over Action Code to View Description

Date	Code	Name	Comment
2015-02-26	1	Notification	
		Linked to Code 1: 0230563385_Notification.pdf	Click to Download or Open
2015-03-02	2	RP Letter Sent	
		Linked to Code 2: 0230563385_RP_Letter.pdf	Click to Download or Open

Impacts

Type	Comment
Contamination in Right of Way	-
Groundwater Contamination (Potential)	-
Soil Contamination	-

Substances

Substance	Type	Amount Released	Units
Volatile Organic Compounds	VOC		
Diesel Fuel	Petroleum		
Gasoline - Unleaded and Leaded	Petroleum		

Who

Click name of Project Manager or File Contact to compose email

Role	Name/Address
Consultant	TRC (FORMERLY RMT) 150 N PATRICK BLVD STE 180 BROOKFIELD , WI 53045
Project Manager	DOUG CIESLAK 9531 RAYNE RD STURTEVANT, WI 53177
Responsible Party	WI DOT 4802 SHEBOYGAN AVE MADISON, WI 53705
RP Contact/Agent	SHARLENE TEBEST 4802 SHEBOYGAN AVE MADISON, WI 53705

Quick Response Codes ? Scan the QR Code to transfer to your wireless device				
				

BRRTS data comes from various sources, both internal and external to DNR. There may be omissions and errors in the data and delays in updating new information. Please see the [disclaimers page](#) for more information.

The Official Internet site for the Wisconsin Department of Natural Resources
101 S. Webster Street . PO Box 7921 . Madison, Wisconsin 53707-7921 . 608.266.2621

Release 2.4 | 04/21/2015 | [Release Notes](#)

Petroleum Programs Home	Search Instructions	Search by Tank ID	Search by Site, Owner, or Tank Characteristics
------------------------------------------------	--------------------------------------------	------------------------------------------	-----------------------------------------------------------------------

Tank List

Searching for:

Street address = 8335
 County Code = 30

Number of matching records: 2

Type	ID	Facility ID	Address	Status	Contents	Size (gals)	Cust ID	Owner
------	----	-------------	---------	--------	----------	-------------	---------	-------

County: KENOSHA, FDID: 3003 - Bristol, Municipality: TOWN OF BRISTOL

1.	UST	404998 58514	8335 200TH AVE	Closed/Removed	Leaded Gasoline	550	305541	BRISTOL GARAGE
2.	UST	404999 58514	8335 200TH AVE	Closed/Removed	Unleaded Gasoline	300	305541	BRISTOL GARAGE

[Download](#) **Disclaimer:** Tank Status does not reflect that the tank is code complying.

[Close this response window](#)



This document was last revised: February 2010

Wisconsin Department of Safety and Professional Services

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 Plot
 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 =



FIG. 1
 Attached Xrefs:
 Attached Images:
 Layout:

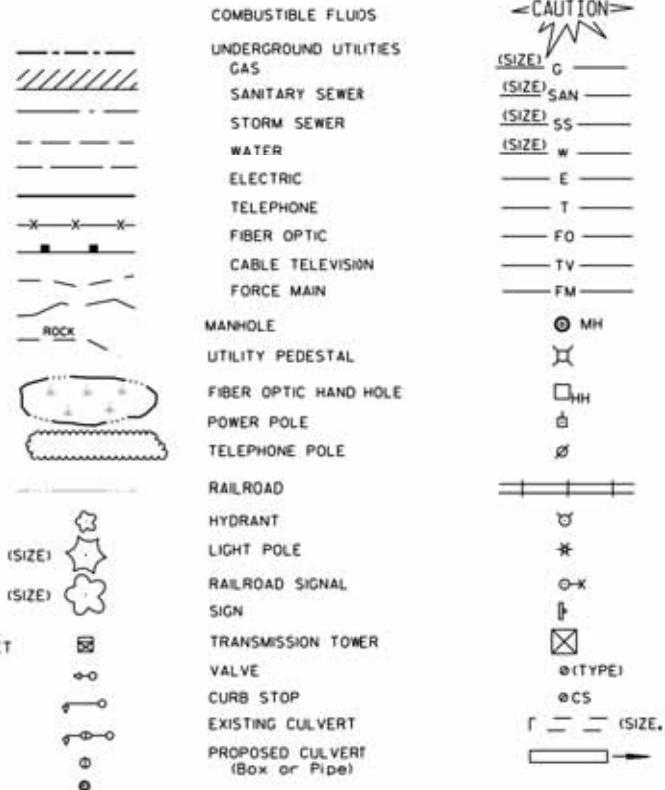
Dwg Size: 0.41 Mb
 May 16, 2013
 Plot Date: 12:28 PM
 Plot Time:

J.WisDOT202795/202795-01.dwg
 KONIAR, JOHN
 0386863

PLOT DATA
 Drawing Name: TRC
 Operator Name: Drawing Plot Scale:

DESIGNATION	TRANSITIONAL	RURAL	URBAN	TRANSITIONAL
STA 19+83 TO	STA 34+00 TO	STA 34+00	STA 249+65 TO	STA 281+00 TO
STA 34+00	STA 249+65		STA 281+00	STA 302+78
A.A.D.T. 2005	= 7500	= 7500	= 7300	= 7300
A.A.D.T. 2030	= 9500	= 9500	= 9500	= 9500
D.H.V.	= 1000	= 1000	= 1000	= 1000
D.D.	= 62/38	= 62/38	= 62/38	= 62/38
T.	= 5.7%	= 5.7%	= 5.7%	= 5.7%
DESIGN SPEED	= 50 MPH	= 60 MPH	= 40 MPH	= 50 MPH
ESALS	= 1,189,900	= 1,189,900	= 1,197,200	= 1,197,200

CONVENTIONAL SYMBOLS



STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 PLAN OF PROPOSED IMPROVEMENT

ILLINOIS STATE LINE - MILWAUKEE ROAD

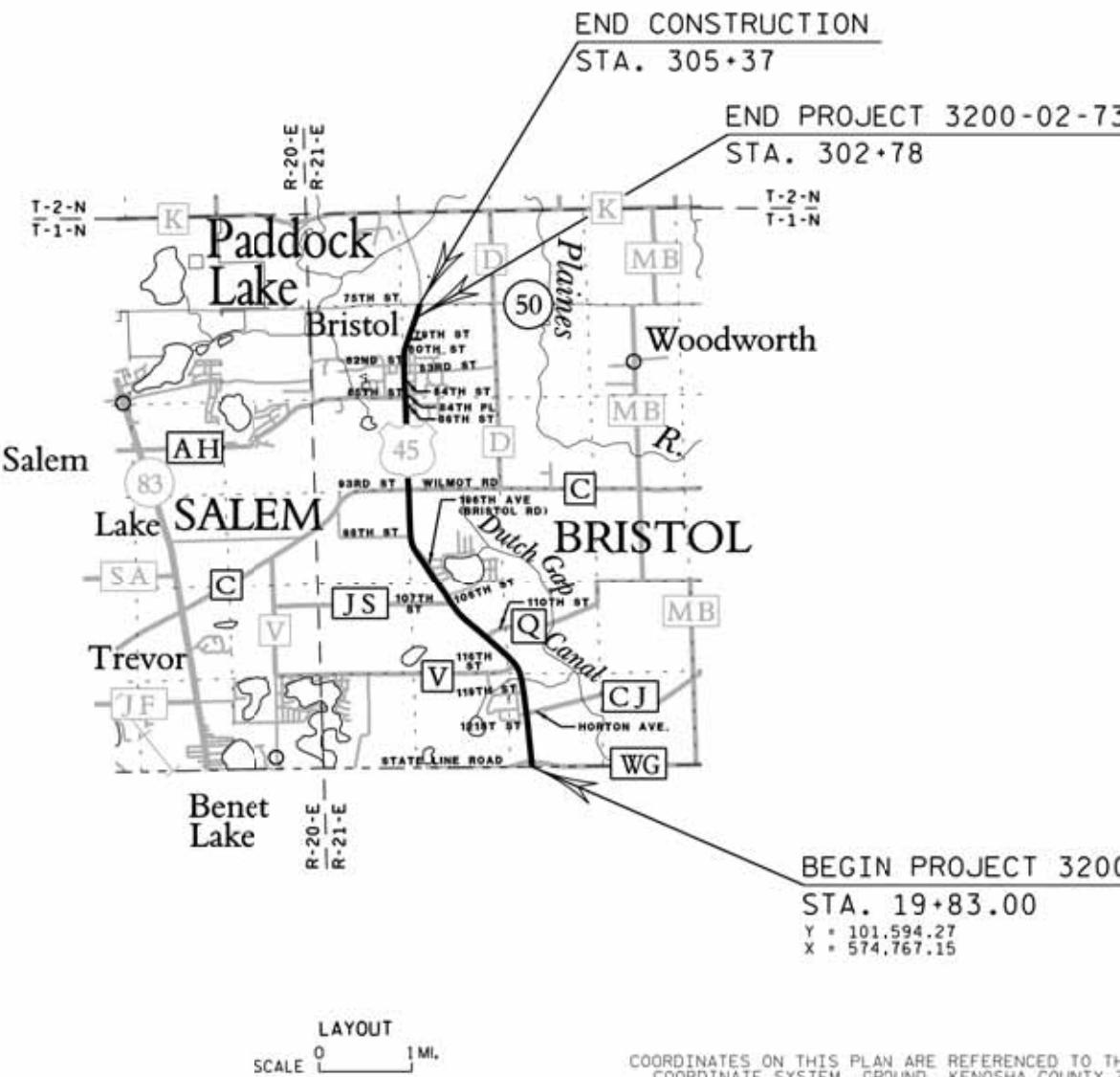
ILLINOIS STATE LINE - STH 50

USH 45
 KENOSHA COUNTY

STATE PROJECT NUMBER
3200-02-73

60% PLAN
OCTOBER 26, 2012

TPP WILL BE PREPARED BY WISDOT
 FOLLOWING THE 60% PLAN REVIEW



TOTAL NET LENGTH OF CENTERLINE = 5.359 MI.

Base Map Provided by the WisDOT

PROJECT: BRISTOL GARAGE
 NORTHEAST QUADRANT OF USH 45 AND 84TH STR.
 BRISTOL, WISCONSIN - WisDOT 3200-02-73

PROJECT LOCATION AND LIMITS

DRAWN BY:	J. KONIAR	SCALE:	PROJ. NO.	202795.0000.0000
CHECKED BY:	B. BERGMANN	AS NOTED	FILE NO.	202795-01.dwg
APPROVED BY:	K. YASS	DATE PRINTED:		
DATE:	MAY 2013			

FIGURE 1

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

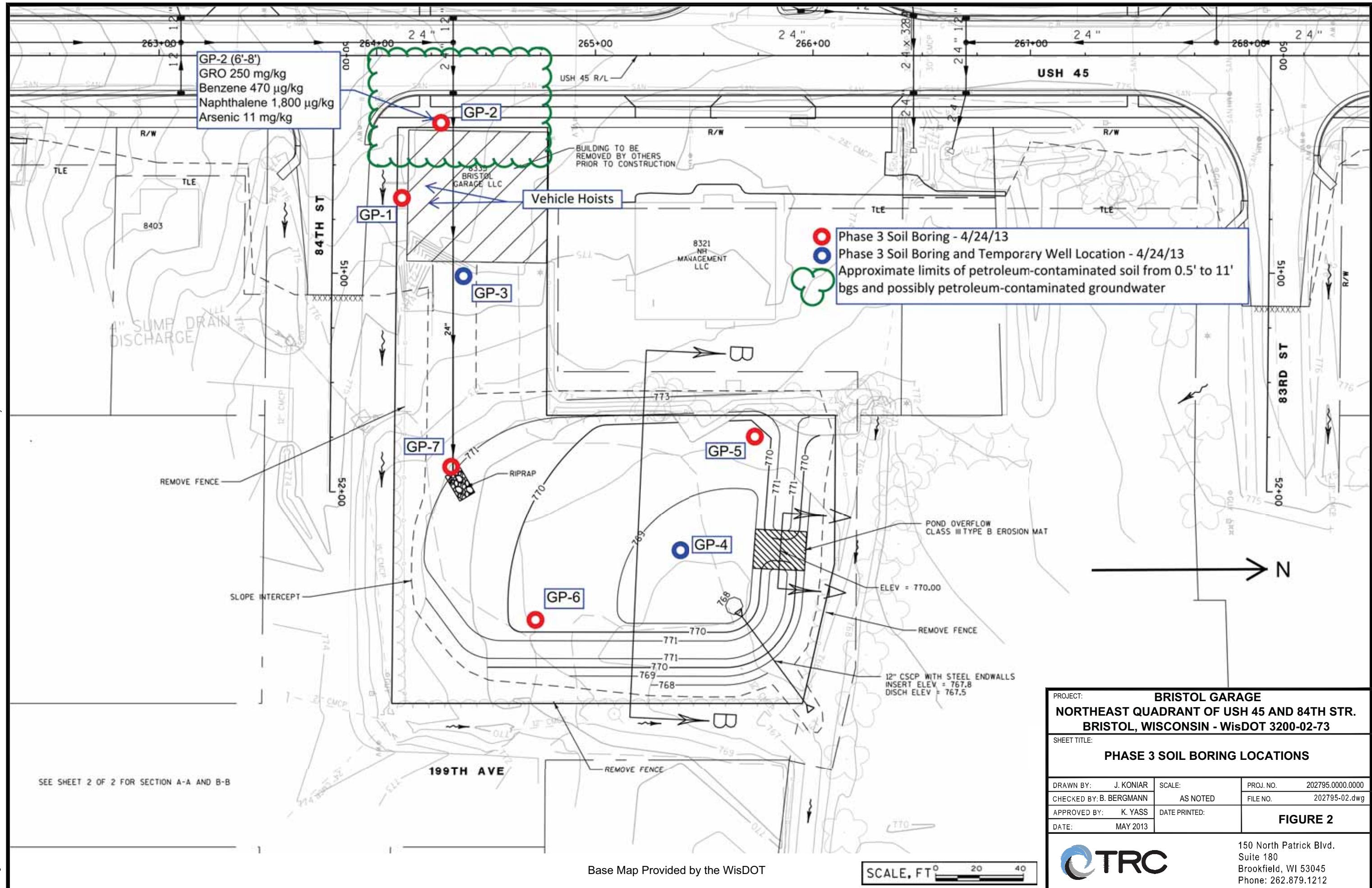


Table 1
 Soil Sampling Results Summary - Phase 3 Investigation
 Bristol Garage
 Northeast Quadrant of USH 45 and 84th Street
 WisDOT Project ID 3200-02-73; TRC Project ID 202795.0000.0000

	NR 720 RCL	Soil Sample ID and Depth (feet bgs)														TYPICAL LANDFILL ACCEPTANCE CRITERIA	
		GP-1 (4'-6')		GP-2 (6'-8')		GP-3 (0'-4')		GP-4 (8'-10')		GP-5 (0'-2')		GP-6 (2'-4')		GP-7 (8'-10')			
		(4'-6')	(6'-8')	(6'-8')	(12'-14')	(0'-4')	(8'-10')	(0'-2')	(2'-4')	(2'-4')	(8'-10')	(2'-4')	(6'-8')	(0'-2')	(4'-6')	Blank	
Samples Collected April 24, 2013																	
PID Readings	-	0.0	0.0	212	0.4	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	
GRO (mg/kg)	100	<3.1	<2.5	250	<2.4	<2.1	<2.6	<3.0	<2.9	<3.2	<2.3	<2.9	<2.6	<3.4	<2.3	<2.5	2,000 mg/kg
DRO (mg/kg)	100	2.8 J	3.8 J	11	3.3 J	2.6 J	3.3 J	2.5 J	2.1 J	2.1 J	2.4 J	1.9 J	<1.7	3.5 J	2.0 J	--	2,000 mg/kg
PVOCs/VOCs (µg/kg)																	
Benzene	5.5	<23	<18	470	<18	<15	<19	<21	<21	<23	<16	<21	<19	<25	<17	<18	10,000 µg/kg
n-Butylbenzene	-	--	--	1,400	--	--	--	--	--	--	--	--	--	--	--	--	--
sec-Butylbenzene	-	--	--	770	--	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	2,900	<24	<19	790	<18	<16	<20	<23	<22	<25	<17	<22	<20	<26	<18	<19	
Isopropylbenzene	-	--	--	680	--	--	--	--	--	--	--	--	--	--	--	--	--
p-Isopropyltoluene	-	--	--	790	--	--	--	--	--	--	--	--	--	--	--	--	--
MTBE	-	<15	<12	<30	<12	<10	<13	<14	<14	<16	<11	<14	<13	<16	<11	<12	
Naphthalene	400	<150	<120	1,800	<120	<100	<130	<140	<140	<160	<110	<140	<130	<160	<110	<120	
n-Propylbenzene	-	--	--	1,200	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	1,500	<21	<17	<8.1	<17	<14	<18	<20	<20	<22	<15	<20	<18	<23	<16	<17	
Trimethylbenzenes	-	<38	<30	4,700	<30	<26	<32	<36	<36	<38	<28	<36	<32	<42	<28	<30	
Xylenes	4,100	<38	<30	1,600	<29	<25	<32	<36	<35	<39	<27	<35	<32	<41	<28	<30	
Metals (mg/kg)																	
Arsenic	0.039	--	--	11	--	--	--	--	--	--	--	--	--	--	--	--	100 mg/kg
Barium	-	--	--	54	--	--	--	--	--	--	--	--	--	--	--	--	2,000 mg/kg
Cadmium	8	--	--	0.19 J	--	--	--	--	--	--	--	--	--	--	--	--	20 mg/kg
Chromium	16,000 (tri)	--	--	21	--	--	--	--	--	--	--	--	--	--	--	--	100 mg/kg
Lead	50	14 B	13 B	10 B	8.9 B	7.3 B	15 B	19 B	11 B	12 B	10 B	14 B	8.7 B	23 B	9.4 B	--	100 mg/kg
Mercury	-	--	--	0.018	--	--	--	--	--	--	--	--	--	--	--	--	4 mg/kg
PCBs (µg/kg)	--	--	--	<52.6	--	--	--	--	--	--	--	--	--	--	--	--	

Notes:

1. PID = Photoionization Detector
2. GRO = Gasoline Range Organics analyzed using the Wisconsin Modified Method
3. mg/kg = milligrams per kilogram (ppm)
4. DRO = Diesel Range Organics analyzed using Wisconsin Modified Method
5. PVOCs = Petroleum Volatile Organic Compounds analyzed using EPA Method 8021
6. µg/kg = micrograms per kilogram (ppb)
7. VOCs = Volatile Organic Compounds analyzed using EPA Method 8260B
8. PCBs - Polychlorinated Biphenyls analyzed using EPA Method 8082
9. Total metals analyzed using EPA Method 6010
10. -- = not analyzed
11. Samples were collected by TRC and analyzed by Test America (WDNR Cert. #998020430)
12. NR 720 RCL = Residual Contaminant Level from NR 720, WAC. RCL listed for DRO and GRO are the more stringent of the two NR 720.09 values. RCLs for the PVOCs listed above are the NR720 generic RCLs for the protection of groundwater. RCLs for metals are the NR 720 Table 2 non-industrial values
13. - = Standard not established.
14. J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
15. B = Compound was found in the blank and sample
16. Results in **BOLD** indicate an exceedence (or potential exceedence if J- or B-flagged) of the NR 720 RCL

Created by: B. Bergmann 5/9/13

Checked by: T. Stapel 5/9/13

Table 2
Groundwater Sampling Results Summary – Phase 3 Investigation
USH 45 Bristol Garage – Bristol
WisDOT Project ID 3200-02-73; TRC Project ID 202795.0000.0000

	NR 140 STANDARD		TEMPORARY WELL ID		Trip Blank
			GP-3	GP-4	
	ES	PAL	April 24, 2013		
VOCs ($\mu\text{g/l}$)					
Benzene	5	0.5	<0.074	0.44 J	<0.074
Ethylbenzene	700	140	<0.13	0.31 J	<0.13
Remaining VOCs	-	-	ND	ND	ND
Metals, Dissolved ($\mu\text{g/l}$)					
Arsenic	10	1	0.36 J	1.7	--
Barium	2,000	400	92	66	--
Cadmium	5	0.5	0.18 J	<0.10	--
Chromium	100	10	0.76 J	0.66 J	--
Lead	15	1.5	0.73	0.83	--
Selenium	50	10	0.53 J, ^	<0.25	--
Silver	50	10	0.15 J	<0.069	--
Mercury	2	0.2	<0.064	<0.064	--

Notes:

1. VOCs = Volatile Organic Compounds analyzed using EPA Method 8260; only the VOCs detected are listed above.

Created by: B. Bergmann 5/9/13

Checked by: T. Stapel 5/9/13

2. $\mu\text{g/l}$ = micrograms per liter (ppb).

3. Metals analyzed using EPA Method 6020, except for mercury which was analyzed using EPA Method 7470.

4. NR 140 ES = Wisconsin Administrative Code Chapter NR 140 Enforcement Standard.

5. NR 140 PAL = Wisconsin Administrative Code Chapter NR 140 Preventive Action Limit.

6. J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

7. ^ = Instrument related QC exceeds the control limit.

8. - = Standard not established

9. -- = Not analyzed

10. ND = Not Detected

11. Results in *Italics* indicate an exceedence or potential exceedence of the NR 140, WAC PAL.

Wisconsin Department of Natural Resources

Environmental Cleanup & Brownfields Redevelopment

BRRTS on the Web

Click the Location Name below to view the Location Details page for this Activity. Other Activities, if present, may be viewed from that page.

[BOTW Home](#) > [Basic Search](#) >> 03-30-002527 Activity Details

03-30-002527 BRISTOL MOTORS								
LUST - CLOSED								
Location Name (Click Location Name to View Location Details)				County	WDNR Region			
BRISTOL MOTORS				KENOSHA	SOUTHEAST			
Address				Municipality				
8481 200TH AVE				BRISTOL				
Public Land Survey System			Latitude	Google Maps	RR Sites Map			
SW 1/4 of the SW 1/4 of Sec 08, T01N, R21E			42.5540672	CLICK TO VIEW	CLICK TO VIEW			
Additional Location Description			Longitude	Facility ID	Size (Acres)			
NONE			-88.0500235	230136170	UNKNOWN			
Jurisdiction	PECFA No.	EPA Cerclis ID	Start Date	End Date	Last Action			
DNR RR	53104-9525-81		1992-07-16	1995-07-06	1995-07-06			
Characteristics								
PECFA Tracked?	EPA NPL Site?	Eligible for PECFA Funds?	Above Ground Storage Tank?	Drycleaner?	Co-Contamination? [?]			
Yes	No	Yes	No	No	No			
Actions								
Place Cursor Over Action Code to View Description								
Date	Code	Name	Comment					
1992-07-16	2	RP Letter Sent						
1992-07-16	1	Notification						
1992-07-29	35	Site Investigation Workplan Received (w/out Fee)	SI WORK PLAN RECV'D					
1992-08-10	36	Site Investigation Workplan Approved	SI WORK PLAN APPV'D					
1992-11-05	43	Status Report Received	QRTLY/MTHLY STATUS RPT					
1993-01-21	39	Remedial Action Options Report Received (w/out Fee)	RA WORK PLAN RECV'D					
1993-01-21	37	SI Report Received (w/out Fee)	SI REPORT RECV'D					
1993-04-02	99	Miscellaneous	SI AND RA REPORT DENIED					
1994-02-07	37	SI Report Received (w/out Fee)	SI REPORT RECV'D					
1994-02-07	39	Remedial Action Options Report Received (w/out Fee)	RA WORK PLAN RECV'D					
1994-08-02	42	Remedial Action Report Approved	RA REPORT APPV'D					
1995-03-07	41	Remedial Action Report Received	RA REPORT RECV'D					
1995-04-04	30	Site Investigation Workplan Go Ahead (notice to proceed)	NOTICE TO PROCEED					
1995-06-09	43	Status Report Received	QRTLY/MTHLY STATUS RPT					
1995-07-06	11	Activity Closed						
1995-07-06	99	Miscellaneous	SITE CLOSED					
Who								
Click name of Project Manager or File Contact to compose email								

Role	Name/Address		
Responsible Party	BRISTOL MOTORS 8481 200TH AVE BRISTOL, WI 53104		
<p style="text-align: center;">Quick Response Codes </p> <p style="text-align: center;">Scan the QR Code to transfer to your wireless device</p>			
			
	This Page URL	Google Maps	

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The Official Internet site for the Wisconsin Department of Natural Resources
101 S. Webster Street . PO Box 7921 . Madison, Wisconsin 53707-7921 . 608.266.2621

Release 2.2 | 12/17/2014 | [Release Notes](#)

Petroleum Programs Home	Search Instructions	Search by Tank ID	Search by Site, Owner, or Tank Characteristics
------------------------------------------------	--------------------------------------------	------------------------------------------	-----------------------------------------------------------------------

Tank List

Searching for:

Street address = 8481 200TH AVE

County Code = 30

Municipality = BRISTOL

Number of matching records: 3

Type	ID	Facility ID	Address	Status	Contents	Size (gals)	Cust ID	Owner
County: KENOSHA, FDID: 3003 - Bristol, Municipality: TOWN OF BRISTOL								
1.	UST	404964 58517	8481 200TH AVE	Closed/Removed	Unleaded Gasoline	1000	357529	RICHARD G NORMAN
2.	UST	404965 58517	8481 200TH AVE	Closed/Removed	Leaded Gasoline	1000	357530	RICHARD G NORMAN
3.	UST	405020 58517	8481 200TH AVE	Closed/Removed	Unleaded Gasoline	550	357529	RICHARD G NORMAN

[Download](#)

Disclaimer: Tank Status does not reflect that the tank is code complying.

[Close this response window](#)



[To Top](#)

This document was last revised: February 2010

Wisconsin Department of Safety and Professional Services

Appendix B

Soil Boring Logs and

Borehole Abandonment Forms



SOIL BORING LOG

BORING NO. GP-8

Page 1 of 1

Facility/Project Name: USH 45 Bristol, WI - Phase 2.5 (ID# 3732-00-00) 230448				Date Drilling Started: 2/9/15	Date Drilling Completed: 2/9/15	Project Number: 3732-00-00			
Drilling Firm: Probe Technologies	Drilling Method: Geoprobe		Surface Elev. (ft) —	TOC Elevation (ft) —	Total Depth (ft bgs) 10.0	Borehole Dia. (in) 2.125			
Boring Location: N: 208930.7 E: 2493747.1				Personnel: Logged By - A. Heeter Driller - D. Bendorf	Drilling Equipment: Geoprobe				
Civil Town/City or Village: Bristol	County: Kenosha	State: Wisconsin	Water Level Observations: While Drilling: Date/Time After Drilling: Date/Time						
SAMPLE	NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	ppm (PPM)	COMMENTS
GP		75		1	CONCRETE/ASPHALT Dark brown with black staining, Sandy, Gravelly FILL, semi-cohesive, non-plastic, dry	CA		428.0	Black staining and petroleum odor Sample: GP-8 (2'-4')
GP		75		2		F		462.6	
GP		75		3	Mottled light tan/brown, Silty CLAY with Fill, semi-moist				No odors or staining
GP		100		4				123.2	
GP		100		5				126.0	
GP		100		6				22.1	
GP		100		7					
GP		100		8	Increasing Sand content at 8'				Sample: GP-8 (8'-10')
GP		100		9					
GP		100		10	EOB at 10'				

SOIL BORING WELL CONSTRUCTION LOG WISDOT BRISTOL PHASE 2.5 GPI 3732-00-00 5/15/15

Signature:	Firm: TRC Environmental 150 N. Patrick Blvd. Brookfield/Wisconsin/53045 Fax (262) 879-1220	(262) 879-1212
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SOIL BORING LOG

BORING NO. GP-9

Page 1 of 1

Facility/Project Name: USH 45 Bristol, WI - Phase 2.5 (ID# 3732-00-00) 230448				Date Drilling Started: 2/9/15	Date Drilling Completed: 2/9/15	Project Number: 3732-00-00
Drilling Firm: Probe Technologies	Drilling Method: Geoprobe	Surface Elev. (ft) —	TOC Elevation (ft) —	Total Depth (ft bgs) 10.0	Borehole Dia. (in) 2.125	
Boring Location: N: 208855.6 E: 2493791.8				Personnel Logged By - A. Heeter Driller - D. Bendorf	Drilling Equipment: Geoprobe	
Civil Town/City/or Village: Bristol	County: Kenosha	State: Wisconsin		Water Level Observations: While Drilling: Date/Time After Drilling: Date/Time	Depth (ft bgs) Depth (ft bgs)	
SAMPLE	NUMBER AND TYPE	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG ppm (PPM)
GP	100		1	CONCRETE/ASPHALT Light tan/brown, Sandy, Gravelly FILL, non-cohesive, non-plastic, moist	CA	
GP	100		2		F	
GP	100		3			
GP	100		4	Beige-tan, Sandy CLAY, moderately cohesive, moderate plasticity, medium-moist		
GP	100		5			
GP	100		6			
GP	100		7		CL	
GP	100		8			
GP	100		9			
			10	EOB at 10'		
				Comments No odors or staining Sample: GP-9 (4'-6') No odors or staining Sample: GP-9 (8'-10')		

SOIL BORING WELL CONSTRUCTION LOG WISDOT BRISTOL PHASE 2.5 GPJ 3732-00-00 5/6/15

Signature:	Firm: TRC Environmental 150 N. Patrick Blvd. Brookfield/Wisconsin/53045 Fax (262) 879-1220	(262) 879-1212
------------	-----------------------------------------------------------------------------------------------	----------------



SOIL BORING LOG

BORING NO. GP-10

Page 1 of 1

Facility/Project Name: USH 45 Bristol, WI - Phase 2.5 (ID# 3732-00-00) 230448				Date Drilling Started: 2/9/15	Date Drilling Completed: 2/9/15	Project Number: 3732-00-00			
Drilling Firm: Probe Technologies		Drilling Method: Geoprobe		Surface Elev. (ft) ---	TOC Elevation (ft) ---	Total Depth (ft bgs) 10.0			
Boring Location: N: 208978.6 E: 2493783.6				Personnel Logged By - A. Heeter Driller - D. Bendorf	Drilling Equipment: Geoprobe				
Civil Town/City or Village: Bristol		County: Kenosha	State: Wisconsin	Water Level Observations: While Drilling: Date/Time After Drilling: Date/Time					
SAMPLE	NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	ppm (PPM)	COMMENTS
GP	75			1	CONCRETE/ASPHALT Beige-gray, Sandy, Gravelly FILL, semi-cohesive, semi-plastic, slightly moist	CA		0.0	No odors or staining
GP	75			2		F		0.0	Sample: GP-10 (2'-4')
GP	100			3				0.0	
GP	100			4	Grey-brown mottled with black flecks, Silty CLAY with some Gravel, dry			0.0	No odors or staining
GP	100			5				0.0	
GP	100			6				0.0	
GP	100			7				0.0	
GP	100			8	Grey-brown mottled with black flecks, Silty CLAY, semi-cohesive, semi-moist			0.0	Sample: GP-10 (8'-10')
GP	100			9				0.0	
GP	100			10	EOB at 10'			0.0	

SOIL BORING WELL CONSTRUCTION LOG WISDOT BRISTOL PHASE 2.5 GPJ 3732-00-00 5/5/15

Signature:

Firm: TRC Environmental

(262) 879-1212
150 N. Patrick Blvd. Brookfield/Wisconsin/53045 Fax (262) 879-1220



SOIL BORING LOG

BORING NO. GP-11

Page 1 of 1

Facility/Project Name: USH 45 Bristol, WI - Phase 2.5 (ID# 3732-00-00) 230448				Date Drilling Started: 2/9/15	Date Drilling Completed: 2/9/15	Project Number: 3732-00-00
Drilling Firm: Probe Technologies		Drilling Method: Geoprobe		Surface Elev. (ft) —	TOC Elevation (ft) —	Total Depth (ft bgs) 10.0
Boring Location: N: 208105.7 E: 2493818.0			Personnel Logged By - A. Heeter Driller - D. Bendorf		Drilling Equipment: Geoprobe	
Civil Town/City/or Village: Bristol		County: Kenosha	State: Wisconsin		Water Level Observations: While Drilling: Date/Time After Drilling: Date/Time	Depth (ft bgs) Depth (ft bgs)
SAMPLE	NUMBER AND TYPE	DEPTH IN FEET	LITHOLOGIC DESCRIPTION			USCS GRAPHIC LOG PPM (PPM)
GP	100	1	CONCRETE/ASPHALT			CA // /
GP	100	2	Tan, Silty CLAY and some Fill, cohesive, semi-plastic			<1
GP	100	3				<1
GP	100	4				<1
GP	100	5				<1
GP	100	6				<1
GP	100	7				<1
GP	100	8				<1
GP	100	9				<1
GP	100	10	EOB at 10'			<1
SOIL BORING WELL CONSTRUCTION LOG WISDOT BRISTOL PHASE 2.5.GPJ 3732-00-00 5/6/15						

Signature:

Firm: TRC Environmental

150 N. Patrick Blvd. Brookfield/Wisconsin/53045 Fax (262) 879-1220

(262) 879-1212

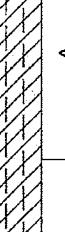
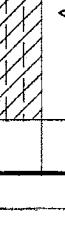


SOIL BORING LOG

BORING NO. GP-12

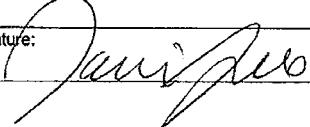
Page 1 of 1

Facility/Project Name: USH 45 Bristol, WI - Phase 2.5 (ID# 3732-00-00) 230448				Date Drilling Started: 2/9/15	Date Drilling Completed: 2/9/15	Project Number: 3732-00-00			
Drilling Firm: Probe Technologies		Drilling Method: Geoprobe		Surface Elev. (ft) —	TOC Elevation (ft) —	Total Depth (ft bgs) 10.0	Borehole Dia. (in) 2.125		
Boring Location: N: 208096.6 E: 2493847.4				Personnel Logged By - A. Heeter Driller - D. Bendorf		Drilling Equipment: Geoprobe			
Civil Town/City or Village: Bristol		County: Kenosha	State: Wisconsin	Water Level Observations: While Drilling: Date/Time After Drilling: Date/Time		Depth (ft bgs) Depth (ft bgs)			
SAMPLE	NUMBER AND TYPE	DEPTH IN FEET	BLOW COUNTS	LITHOLOGIC DESCRIPTION		USCS	GRAPHIC LOG	PPM (PPM)	COMMENTS
GP		100		Orange-beige to tan, Sandy, Gravelly FILL, moderate plasticity				<1	No odors or staining GP-12 (2'-4')
GP		100						<1	
GP		100				F		<1	
GP		100						<1	
GP		100						<1	
GP		100						<1	
GP		100						<1	
GP		100						<1	
SOIL BORING WELL CONSTRUCTION LOG WISDOT BRISTOL PHASE 2.5 GPJ 3732-00-00 5/5/15.									
Signature:				Firm: TRC Environmental 150 N. Patrick Blvd. Brookfield/Wisconsin/53045 Fax (262) 879-1220				(262) 879-1212	

SOIL BORING LOG									
BORING NO. GP-13									
Page 1 of 1									
Facility/Project Name: USH 45 Bristol, WI - Phase 2.5 (ID# 3732-00-00) 230448				Date Drilling Started: 4/7/15	Date Drilling Completed: 4/7/15	Project Number: 3732-00-00			
Drilling Firm: Probe Technologies		Drilling Method: Geoprobe		Surface Elev. (ft) —	TOC Elevation (ft) —	Total Depth (ft bgs) 10.0			
Boring Location: N: 208857.1 E: 2493842.4				Personnel Logged By - A. Heeter Driller - D. Bendorf		Drilling Equipment: Geoprobe			
Civil Town/City or Village: Bristol		County: Kenosha	State: Wisconsin		Water Level Observations: While Drilling: Date/Time After Drilling: Date/Time	Depth (ft bgs) Depth (ft bgs)			
SAMPLE	NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	ppm (PPM)	COMMENTS
GP		50		1	Dark brown, FILL with some Sand, non-plastic	F		<1	No odors or staining
GP		50		2	Dark gray, soft, Clayey SILT, semi-cohesive, dry, semi-plastic			<1	No odors or staining
GP		100		3				<1	
GP		100		4				<1	Sample: GP-13 (4' - 6')
GP		100		5				<1	
GP		100		6				<1	
GP		100		7				<1	
GP		100		8	Light brown at 8'			<1	Sample: GP-13 (8' - 10')
GP		100		9				<1	
GP		100		10	EOB at 10'			<1	

SOIL BORING WELL CONSTRUCTION LOG WISDOT BRISTOL PHASE 2.5, GPJ 3732-00-00 5/5/15

Signature:



Firm: TRC Environmental

150 N. Patrick Blvd. Brookfield/Wisconsin/53045 Fax (262) 879-1220

(262) 879-1212



SOIL BORING LOG

BORING NO. GP-14

Page 1 of 1

Facility/Project Name: USH 45 Bristol, WI - Phase 2.5 (ID# 3732-00-00) 230448				Date Drilling Started: 4/7/15	Date Drilling Completed: 4/7/15	Project Number: 3732-00-00			
Drilling Firm: Probe Technologies		Drilling Method: Geoprobe		Surface Elev. (ft) —	TOC Elevation (ft) —	Total Depth (ft bgs) 10.0	Borehole Dia. (in) 2.125		
Boring Location: N: 208860.9 E: 2493749.0				Personnel Logged By - A. Heeter Driller - D. Bendorf		Drilling Equipment: Geoprobe			
Civil Town/City or Village: Bristol		County: Kenosha	State: Wisconsin		Water Level Observations: While Drilling: Date/Time After Drilling: Date/Time		Depth (ft bgs) Depth (ft bgs)		
SAMPLE NUMBER AND TYPE	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION		USCS	GRAPHIC LOG	PPM (PPM)	COMMENTS
GP	100			Dark brown, FILL with some Sand and Gravel		F		<1	No odors or staining
GP	100		1						
GP	100		2	Dark gray, firm, Silty CLAY, cohesive, dry, plastic				<1	Sample: GP-14 (2' - 4')
GP	100		3						No stains or odors
GP	100		4						
GP	100		5						
GP	100		6						
GP	100		7						
GP	100		8						
GP	100		9						
GP	100		10	EOB at 10'		CL- ML		<1	Sample: GP-14 (6' - 8')

SOIL BORING WELL CONSTRUCTION LOG WISDOT BRISTOL PHASE 2.5.GPJ 3732-00-00 5/5/15

Signature:

Firm: TRC Environmental

150 N. Patrick Blvd. Brookfield/Wisconsin/53045 Fax (262) 879-1220

(262) 879-1212



SOIL BORING LOG

BORING NO. GP-15

Page 1 of 1

Facility/Project Name: USH 45 Bristol, WI - Phase 2.5 (ID# 3732-00-00) 230448				Date Drilling Started: 4/7/15	Date Drilling Completed: 4/7/15	Project Number: 3732-00-00			
Drilling Firm: Probe Technologies		Drilling Method: Geoprobe		Surface Elev. (ft) —	TOC Elevation (ft) —	Total Depth (ft bgs) 10.0	Borehole Dia. (in) 2.125		
Boring Location: N: 208795.2 E: 2493791.3				Personnel Logged By - A. Heeter Driller - D. Bendorf		Drilling Equipment: Geoprobe			
Civil Town/City or Village: Bristol		County: Kenosha	State: Wisconsin	Water Level Observations: While Drilling: Date/Time After Drilling: Date/Time					
SAMPLE	NUMBER AND TYPE	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION		USCS	GRAPHIC LOG	Depth (ft bgs)	Depth (ft bgs)
									ppm (PPM)
GP	83		1	Light brown, firm, FILL with Silty Sand and some Clay, dry				<1	No odors or staining
GP	83		2					<1	Sample: GP-15 (2' - 4')
GP	50		3					<1	
GP	50		4					<1	
GP	50		5					<1	
GP	50		6					<1	
GP	50		7					<1	
GP	100		8	Grayish brown with mottling, CLAY with some Silt, cohesive, plastic				<1	Sample: GP-15 (8' - 10')
			9					<1	
			10	EOB at 10'					

SOIL BORING WELL CONSTRUCTION LOG WISDOT BRISTOL PHASE 2.5 GPJ 3732-00-00 5/6/16

Signature:

Firm: TRC Environmental
150 N. Patrick Blvd. Brookfield/Wisconsin/53045(262) 879-1212
Fax (262) 879-1220

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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.

Route to:

Drinking Water Watershed/Wastewater Waste Management Remediation/Redevelopment Other: _____

1. General Information

WI Unique Well No.	DNR Well ID No.	County	Facility Name
		KENOSHA	BRISTOL GARAGE - WIS DOT
Common Well Name GP-8		Gov't Lot # (if applicable)	Facility ID
1/4	1/4	Section	Township
NW	SW	8	1 N
Range	E		<input checked="" type="checkbox"/> W
Well Location	ft. / M	(Local Grid <input type="checkbox"/>	Datum
		N / S	E / W
WTM - <input type="checkbox"/>	UTM - <input type="checkbox"/>	Latitude/Longitude - <input type="checkbox"/>	State Plane - <input type="checkbox"/> S C N
Local Grid Origin	ft. / M	Datum	Zone
		N,	E / W
WTM - <input type="checkbox"/>	UTM - <input type="checkbox"/>	Latitude/Longitude - <input type="checkbox"/>	State Plane - <input type="checkbox"/> S C N
Reason For Abandonment SOIL BORING		WI Unique Well No. of Replacement Well	

3. Well / Drillhole / Borehole Information

<input type="checkbox"/> Monitoring Well	Original Construction Date	
<input type="checkbox"/> Water Well		
<input checked="" type="checkbox"/> Borehole / Drillhole	If a Well Construction Report is available, please attach.	
Construction Type:		
<input type="checkbox"/> Drilled	<input type="checkbox"/> Driven (Sandpoint)	<input type="checkbox"/> Dug
<input checked="" type="checkbox"/> Other (specify): Direct Push		
Formation Type:		
<input checked="" type="checkbox"/> Unconsolidated Formation	<input type="checkbox"/> Bedrock	
Total Well Depth From Groundsurface (ft.) 10	Casing Diameter (in.) 3.25	Required Method of Placing Sealing Material
Lower Drillhole Diameter (in.)	Casing Depth (ft.)	<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		<input checked="" type="checkbox"/> Screened & Poured <input type="checkbox"/> Other (Explain): _____
If yes, to what depth (feet)?	Depth to Water (feet)	<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)
		<input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry "
		<input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:		
<input type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout	
<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry	

5. Material Used To Fill Well / Drillhole

BENTONITE CHIPS	From (ft.)	To (ft.)	No. Yards, Sacks, Sealant or Volume (circle one)	Mix Ratio or Mud Weight
	Surface	10	13	

6. Comments

7. Supervision of Work		DNR Use Only	
Name of Person or Firm Doing Sealing Work PROSE TECHNOLOGIES, INC.	Date of Abandonment 2/9/15	Date Received	Noted By
Street or Route 111225 SOUTH SHORE DR.	Telephone Number (262) 470-4768	Comments	
City PALMYRA	State WI	ZIP Code 53156	Signature of Person Doing Work Diedrich M
			Date Signed 2/20/15

Well / Drillhole / Borehole Abandonment

Form 3300-005 (R 12/04)

Page 1 of 2

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Route to:

Drinking Water Watershed/Wastewater Waste Management Remediation/Redevelopment Other: _____

1. General Information

WI Unique Well No.	DNR Well ID No.	County	Facility Name
		KENOSHA	BRISTOL GARAGE - WIS DOT
Common Well Name <i>SP-9</i>		Gov't Lot # (if applicable)	Facility ID
1/4 1/4 NW	% SW	Section 8	Township (N) 21 Range <input checked="" type="checkbox"/> E <input type="checkbox"/> W
Well Location <input type="checkbox"/> R / M (Local Grid <input type="checkbox"/>)		Datum <i>N / S E / W</i>	
WTM- <input type="checkbox"/> UTM- <input type="checkbox"/> Latitude/Longitude- <input type="checkbox"/> State Plane- <input type="checkbox"/>		Zone <i>S C N</i>	
Local Grid Origin <input type="checkbox"/> R / M		Datum <i>N, E / W</i>	
WTM- <input type="checkbox"/> UTM- <input type="checkbox"/> Latitude/Longitude- <input type="checkbox"/> State Plane- <input type="checkbox"/>		Zone <i>S C N</i>	
Reason For Abandonment <i>SOIL BORING</i>		WI Unique Well No. of Replacement Well	

3. Well / Drillhole / Borehole Information

<input type="checkbox"/> Monitoring Well	Original Construction Date		
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach..		
<input checked="" type="checkbox"/> Borehole / Drillhole			
Construction Type:			
<input type="checkbox"/> Drilled	<input type="checkbox"/> Driven (Sandpoint)	<input type="checkbox"/> Dug	
<input checked="" type="checkbox"/> Other (specify): <i>DIRECT PUSH</i>			
Formation Type:			
<input checked="" type="checkbox"/> Unconsolidated Formation	<input type="checkbox"/> Bedrock		
Total Well Depth From Groundsurface (ft.) <i>10</i>	Casing Diameter (in.) <i>2.25</i>	Required Method of Placing Sealing Material	
Lower Drillhole Diameter (in.)	Casing Depth (ft.)	<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown		<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	<input type="checkbox"/> Other (Explain): _____
If yes, to what depth (feet)?		Sealing Materials	
Depth to Water (feet)		<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Clay-Sand Slurry (11 lb/gal. wt.)
		<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite-Sand Slurry "
		<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Bentonite Chips
For Monitoring Wells and Monitoring Well Boreholes Only:			
<input type="checkbox"/> Bentonite Chips		<input type="checkbox"/> Bentonite - Cement Grout	
<input type="checkbox"/> Granular Bentonite		<input type="checkbox"/> Bentonite - Sand Slurry	
5. Material Used To Fill Well / Drillhole			
<i>BENTONITE CHIPS</i>			
From (ft.)	To (ft.)	No. Yards, Sacks or Volume (Circle one)	Mix Ratio or Mud Weight
Surface	<i>10</i>	<i>13</i>	

6. Comments

7. Supervision of Work		DNR Use Only	
Name of Person or Firm Doing Sealing Work <i>PROBE TECHNOLOGIES, INC.</i>	Date of Abandonment <i>2/9/15</i>	Date Received	Noted By
Street or Route <i>11225 SOUTH SHORE DR.</i>	Telephone Number <i>(626) 470-4768</i>	Comments	
City <i>PALMYRA</i>	State <i>WI</i>	ZIP Code <i>53560</i>	Signature of Person Doing Work <i>John J. Mull</i>
			Date Signed <i>2/20/15</i>

Well / Drillhole / Borehole Abandonment

Form 3300-005 (R 12/04)

Page 1 of 2

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Route to:

Drinking Water Watershed/Wastewater Waste Management Remediation/Redevelopment Other: _____

1. General Information

WI Unique Well No.	DNR Well ID No.	County	Facility Name					
		KENOSHA	BRISTOL GARAGE - WIS DOT					
Common Well Name		Gov't Lot # (if applicable)	Facility ID					
6P-10			License/Permit/Monitoring No.					
1/4	1/4	Section	Township	Range	<input checked="" type="checkbox"/> E	Street Address of Well		
NW	SW	8	1	N	<input type="checkbox"/> W	US Hwy 45 + 84 TH ST.		
Well Location		ft. / M	(Local Grid <input type="checkbox"/>	Datum	City, Village or Town			
		N / S	E / W		Bristol			
Local Grid Origin		ft. / M	Datum	Zone	Present Well Owner			
		N,	E / W	S C N	Original Well Owner			
WTM- <input type="checkbox"/> UTM- <input type="checkbox"/> Latitude/Longitude- <input type="checkbox"/> State Plane- <input type="checkbox"/>		S C N	Street Address or Route of Present Owner					
Reason For Abandonment		WI Unique Well No. of Replacement Well	4802 Sheboygan Ave, Room 451					
SOIL BORING			City					
3. Well / Drillhole / Borehole Information			State					
<input type="checkbox"/> Monitoring Well		Original Construction Date	ZIP Code					
<input type="checkbox"/> Water Well		_____						
<input checked="" type="checkbox"/> Borehole / Drillhole		If a Well Construction Report is available, please attach.	_____					
Construction Type:								
<input type="checkbox"/> Drilled		<input type="checkbox"/> Driven (Sandpoint)	<input type="checkbox"/> Dug	_____				
<input checked="" type="checkbox"/> Other (specify):		DIRECT PUSH						
Formation Type:								
<input checked="" type="checkbox"/> Unconsolidated Formation		<input type="checkbox"/> Bedrock	Required Method of Placing Sealing Material					
Total Well Depth From Groundsurface (ft.)		Casing Diameter (in.)	<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input checked="" type="checkbox"/> Screened & Poured <input type="checkbox"/> Other (Explain): _____ (Bentonite Chips)					
10		3.25						
Lower Drillhole Diameter (in.)		Casing Depth (ft.)	<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry " <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Bentonite Chips					
For Monitoring Wells and Monitoring Well Boreholes Only:								
Was well annular space grouted?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown	<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry			
If yes, to what depth (feet)?		Depth to Water (feet)						

5. Material Used To Fill Well / Drillhole

BENTONITE CHIPS

From (ft.)	To (ft.)	No. Yards - Sacks Sealant or Volume (Circle one)	Mix Ratio or Mud Weight
Surface	10	1/3	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Sealing Work	Date of Abandonment	Date Received	DNR Use Only
PROSE TECHNOLOGIES, INC.	2/9/15		Noted By
Street or Route	Telephone Number	Comments	
111225 SOUTH SHORE DR.	(262) 470-4768		
City	State	ZIP Code	Signature of Person Doing Work
PALMYRA	WI	53156	JUNE BULL
			Date Signed
			2/20/15

Well / Drillhole / Borehole Abandonment

Form 3300-005 (R 12/04)

Page 1 of 2

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Route to:

Drinking Water Watershed/Wastewater Waste Management Remediation/Redevelopment Other

1. General Information

WI Unique Well No.	DNR Well ID No.	County	2. Facility / Owner Information			
		KENOSHA				
Common Well Name	Gov't Lot # (if applicable)			Facility Name	BRISTOL GARAGE - WIS DOT	
SP-11				Facility ID	License/Permit/Monitoring No.	
1/4 NW	% SW	Section 8	Township 1 N	Range 21 E	Street Address of Well	
					US Hwy 45 + 84 TH ST.	
Well Location	R / M	(Local Grid <input type="checkbox"/>)	Datum			City, Village or Town
				N / S	E / W	BRISTOL
WTM- <input type="checkbox"/>	UTM- <input type="checkbox"/>	Latitude/Longitude- <input type="checkbox"/>	State Plane- <input type="checkbox"/>	S C N	Present Well Owner	Original Well Owner
Local Grid Origin	ft. / m	Datum			WISDOT	WISDOT
				N, E / W	Street Address or Route of Present Owner	
WTM- <input type="checkbox"/>	UTM- <input type="checkbox"/>	Latitude/Longitude- <input type="checkbox"/>	State Plane- <input type="checkbox"/>	S C N	4802 Sheboygan Ave, Room 451	
Reason For Abandonment				MI Unique Well No. of Replacement Well	City	State ZIP Code
SOIL BORING					MADISON	WI 53767

3. Well / Drillhole / Borehole Information

<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole	Original Construction Date		
	If a Well Construction Report is available, please attach.		
Construction Type:	<input type="checkbox"/> Drilled	<input type="checkbox"/> Driven (Sandpoint)	
<input checked="" type="checkbox"/> Other (specify):	DIRECT PUSH		
Formation Type:	<input checked="" type="checkbox"/> Unconsolidated Formation	<input type="checkbox"/> Bedrock	
Total Well Depth From Groundsurface (ft.)	Casing Diameter (in.)		
10	2.25		
Lower Drillhole Diameter (in.)	Casing Depth (ft.)		
Was well annular space grouted?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
If yes, to what depth (feet)?	Depth to Water (feet)		
5. Material Used To Fill Well / Drillhole			
BENTONITE CHIPS			
From (ft.)	To (ft.)	No. Yards, Sacks or Volume (Circle one)	Mix Ratio or Mud Weight
Surface	10	13	

6. Comments

7. Supervision of Work		DNR Use Only	
Name of Person or Firm Doing Sealing Work	Date of Abandonment	Date Received	Noted By
PROSE TECHNOLOGIES, INC.	2/9/15		
Street or Route	Telephone Number	Comments	
111225 SOUTH SHORE DR.	(626) 470-4768		
City	State ZIP Code	Signature of Person Doing Work	Date Signed
PALMYRA	WI 53560	JULIE ZELL	2/26/15

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Route to:

Drinking Water Watershed/Wastewater Waste Management Remediation/Redevelopment Other:

1. General Information

WI Unique Well No.	DNR Well ID No.	County	Facility Name
		KENOSHA	BRISTOL GARAGE - WIS DOT
Common Well Name		Gov't Lot # (if applicable)	Facility ID
6P-12			License/Permit/Monitoring No.
1/4	1/4	Section	Township Range
NN	SW	8	1 N 21 E
Well Location <input type="checkbox"/> ft. / <input type="checkbox"/> M (Local Grid <input type="checkbox"/>)		Datum	
<input type="checkbox"/> N / <input type="checkbox"/> S		<input type="checkbox"/> E / <input type="checkbox"/> W	
Zone			
WTM- <input type="checkbox"/>	UTM- <input type="checkbox"/>	Latitude/Longitude- <input type="checkbox"/>	State Plane- <input type="checkbox"/> S C N
Local Grid Origin <input type="checkbox"/> ft. / <input type="checkbox"/> M		Datum	
<input type="checkbox"/> N, <input type="checkbox"/> E / <input type="checkbox"/> W		Zone	
WTM- <input type="checkbox"/>	UTM- <input type="checkbox"/>	Latitude/Longitude- <input type="checkbox"/>	State Plane- <input type="checkbox"/> S C N
Reason For Abandonment		WI Unique Well No. of Replacement Well	
SOIL BORING			

3. Well / Drillhole / Borehole Information

<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole	Original Construction Date
	If a Well Construction Report is available, please attach.
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): DIRECT PUSH	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	
Total Well Depth From Groundsurface (ft.)	Casing Diameter (in.)
10	2.25
Lower Drillhole Diameter (in.)	Casing Depth (ft.)
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Was casing cut off below surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Did material settle after 24 hours? If yes, was hole retopped?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A

Required Method of Placing Sealing Material

<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped
<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	<input type="checkbox"/> Other (Explain): _____

Sealing Materials

<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)
<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite-Sand Slurry "
<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

<input type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout
<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole		From (ft.)	To (ft.)	No. Yards, Sacks, Sealant or Volume (circle one)	Mix Ratio or Mud Weight
BENTONITE CHIPS		Surface	10	13	

6. Comments

7. Supervision of Work			DNR Use Only		
Name of Person or Firm Doing Sealing Work	Date of Abandonment	Date Received	Noted By		
PROBE TECHNOLOGIES, INC.	2/9/15				
Street or Route	Telephone Number	Comments			
11125 SOUTH SHORE DR.	(262) 470-4768				
City	State	ZIP Code	Signature of Person Doing Work	Date Signed	
PALMYRA	WI	53156	<i>Deuel</i>	2/20/15	

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Route to:

Drinking Water Watershed/Wastewater Waste Management Remediation/Redevelopment Other: _____

1. General Information

W Unique Well No.	DNR Well ID No.	County	KENOSHA			
Common Well Name		Gov't Lot # (if applicable)				
1/4 NW	1/4 SW	Section 8	Township 1 N	Range 21 E		
Well Location ft. / M (Local Grid <input type="checkbox"/>)			Datum			
<input type="checkbox"/> N / S			<input type="checkbox"/> E / W Zone			
WTM- <input type="checkbox"/> UTM- <input type="checkbox"/> Latitude/Longitude- <input type="checkbox"/> State Plane- <input type="checkbox"/>			<input type="checkbox"/> S C N			
Local Grid Origin ft. / M			Datum			
<input type="checkbox"/> N, <input type="checkbox"/> E / W			Zone			
WTM- <input type="checkbox"/> UTM- <input type="checkbox"/> Latitude/Longitude- <input type="checkbox"/> State Plane- <input type="checkbox"/>			<input type="checkbox"/> S C N			
Reason For Abandonment SOIL BORING			WI Unique Well No. of Replacement Well _____			

3. Well / Drillhole / Borehole Information

<input type="checkbox"/> Monitoring Well	Original Construction Date		
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.		
<input checked="" type="checkbox"/> Borehole / Drillhole			
Construction Type:	<input type="checkbox"/> Drilled	<input type="checkbox"/> Driven (Sandpoint)	<input type="checkbox"/> Dug
<input checked="" type="checkbox"/> Other (specify):	DIRECT PUSH		
Formation Type:	<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		
Total Well Depth From Groundsurface (ft.)	Casing Diameter (in.)		
10	2.25		
Lower Drillhole Diameter (in.)	Casing Depth (ft.)		
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			
If yes, to what depth (feet)?	Depth to Water (feet)		

5. Material Used To Fill Well / Drillhole

BENTONITE CHIPS

2. Facility / Owner Information

Facility Name	BRISTOL GARAGE - WI DOT		
Facility ID	License/Permit/Monitoring No.		
Street Address of Well US Hwy 45 + 84th ST.			
City, Village or Town BRISTOL			
Present Well Owner WisDOT	Original Well Owner WisDOT		
Street Address or Route of Present Owner 4802 Sheboygan Ave. Room 451			
City Madison	State WI	ZIP Code 53707	
4. Pump, Liner, Screen, Casing & Sealing Material			
Pump and piping removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Was casing cut off below surface?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes	<input 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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

Required Method of Placing Sealing Material

<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped
<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	<input type="checkbox"/> Other (Explain): _____

Sealing Materials

<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)
<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite-Sand Slurry "
<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

<input type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout
<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry

From (ft.)	To (ft.)	No. Yards, Sacks or Volume (Circle one)	Mix Ratio or Mud Weight
Surface	10	1/3	

6. Comments

7. Supervision of Work			DNR Use Only	
Name of Person or Firm Doing Sealing Work PROSE TECHNOLOGIES, INC.	Date of Abandonment 4/17/15	Date Received	Noted By	
Street or Route 110225 SOUTH SHORE DR.	Telephone Number (262) 470-4768	Comments		
City PALMYRA	State WI	ZIP Code 53156	Signature of Person Doing Work <i>Janell Zabel</i>	Date Signed 5/11/15

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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.

Route to:

Drinking Water Watershed/Wastewater Waste Management Remediation/Redevelopment Other: _____

1. General Information

WI Unique Well No.	DNR Well ID No.	County	Facility Name
		KENOSHA	BRISTOL GARAGE - WIS DOT
Common Well Name GP-14		Gov't Lot # (if applicable)	Facility ID
1/4 NW	1/4 SW	Section 8	Township 1 N Range 21 E Street Address of Well US Hwy 45 + 84 TH ST.
Well Location ft. / M (Local Grid <input type="checkbox"/>)		Datum	City, Village or Town BRISTOL
<input type="checkbox"/> N / S <input type="checkbox"/> E / W		Zone	Present Well Owner
WTM- <input type="checkbox"/> UTM- <input type="checkbox"/> Latitude/Longitude- <input type="checkbox"/> State Plane- <input type="checkbox"/> S C N			Original Well Owner
Local Grid Origin ft. / M		Datum	WisDOT
<input type="checkbox"/> N, <input type="checkbox"/> E / W		Zone	Street Address or Route of Present Owner 4802 Sheboygan Ave. Room 451
WTM- <input type="checkbox"/> UTM- <input type="checkbox"/> Latitude/Longitude- <input type="checkbox"/> State Plane- <input type="checkbox"/> S C N			City Madison State WI ZIP Code 53707
Reason For Abandonment SOIL BORING		WI Unique Well No. of Replacement Well	

3. Well / Drillhole / Borehole Information

<input type="checkbox"/> Monitoring Well	Original Construction Date	
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.	
<input checked="" type="checkbox"/> Borehole / Drillhole		
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug		
<input checked="" type="checkbox"/> Other (specify): DIRECT PUSH		

Formation Type:
 Unconsolidated Formation Bedrock

Total Well Depth From Groundsurface (ft.) Casing Diameter (in.)
10 3.25

Lower Drillhole Diameter (in.) Casing Depth (ft.)

Was well annular space grouted? Yes No Unknown

If yes, to what depth (feet)? Depth to Water (feet)

5. Material Used To Fill Well / Drillhole

BENTONITE CHIPS

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Liner(s) removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Screen removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Casing left in place?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Was casing cut off below surface?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Did material settle after 24 hours? If yes, was hole retopped?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input 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 Clay-Sand Slurry (11 lb./gal. wt.)
 Sand-Cement (Concrete) Grout Bentonite-Sand Slurry "
 Concrete 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 Sealing Work PROSE TECHNOLOGIES, INC.	Date of Abandonment 4/7/15	Date Received	Noted By
Street or Route 111225 SOUTH SHORE DR.	Telephone Number (608) 470-4768	Comments	
City PALMYRA	State WI	ZIP Code 53156	Signature of Person Doing Work JULIE ZEHL
			Date Signed 5/1/15

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, 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.

Route to:

Drinking Water Watershed/Wastewater Waste Management Remediation/Redevelopment Other: _____

1. General Information

WI Unique Well No.	DNR Well ID No.	County	Facility Name
		KENOSHA	BRISTOL GARAGE - WIS DOT
Common Well Name GP-15		Gov't Lot # (if applicable)	Facility ID
1/4 NW	1/4 SW	Section 8	Township 21 N Range E
Well Location ft. / M (Local Grid <input type="checkbox"/>)		Datum	
<input type="checkbox"/> N / S <input type="checkbox"/> E / W		Zone <input type="checkbox"/> S <input type="checkbox"/> C <input type="checkbox"/> N	
WTM- <input type="checkbox"/> UTM- <input type="checkbox"/> Latitude/Longitude- <input type="checkbox"/> State Plane- <input type="checkbox"/>		<input type="checkbox"/> S <input type="checkbox"/> C <input type="checkbox"/> N	
Local Grid Origin R / M		Datum	
<input type="checkbox"/> N, <input type="checkbox"/> E / W		Zone <input type="checkbox"/> S <input type="checkbox"/> C <input type="checkbox"/> N	
WTM- <input type="checkbox"/> UTM- <input type="checkbox"/> Latitude/Longitude- <input type="checkbox"/> State Plane- <input type="checkbox"/>		<input type="checkbox"/> S <input type="checkbox"/> C <input type="checkbox"/> N	
Reason For Abandonment SOIL BORING		WI Unique Well No. of Replacement Well	

3. Well / Drillhole / Borehole Information

<input type="checkbox"/> Monitoring Well	Original Construction Date																						
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.																						
<input checked="" type="checkbox"/> Borehole / Drillhole																							
Construction Type:																							
<input type="checkbox"/> Drilled	<input type="checkbox"/> Driven (Sandpoint)	<input type="checkbox"/> Dug																					
<input checked="" type="checkbox"/> Other (specify): DIRECT PUSH																							
Formation Type:																							
<input checked="" type="checkbox"/> Unconsolidated Formation	<input type="checkbox"/> Bedrock																						
Total Well Depth From Groundsurface (ft.)	Casing Diameter (in.)	Required Method of Placing Sealing Material																					
10	2.25	<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped	<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	<input type="checkbox"/> Other (Explain): _____	Sealing Materials				<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)	<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite-Sand Slurry "	<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Bentonite Chips	For Monitoring Wells and Monitoring Well Boreholes Only:				<input type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout	<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry
<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped																						
<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	<input type="checkbox"/> Other (Explain): _____																						
Sealing Materials																							
<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)																						
<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite-Sand Slurry "																						
<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Bentonite Chips																						
For Monitoring Wells and Monitoring Well Boreholes Only:																							
<input type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout																						
<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry																						

5. Material Used To Fill Well / Drillhole

BENTONITE CHIPS	From (ft.)	To (ft.)	No. Yards, Sacks or Volume (circle one)	Mix Ratio or Mud Weight
	Surface	10	1/3	

6. Comments

7. Supervision of Work			DNR Use Only	
Name of Person or Firm Doing Sealing Work PROBE TECHNOLOGIES, INC.	Date of Abandonment 4/7/15	Date Received	Noted By	
Street or Route W1225 SOUTH SHORE DR	Telephone Number (626) 470-4768	Comments		
City PALMYRA	State WI	ZIP Code 53156	Signature of Person Doing Work John J. Bell	Date Signed 5/1/15

Appendix C

Photographs

Photographic Log

Client Name:		Site Location:	Project No.:
Wisconsin Department of Transportation (WisDOT)		USH 45, IL State Line to STH 50 Bristol, Kenosha County, WI	WisDOT: 3200-02-03 TRC: 230448.0000.0000
Photo No. 1	Date 2/9/2015		Description Looking south at the location of GP-8.

Photo No. 2	Date 2/9/2015	
Description Looking north at the location of GP-9.		

Photographic Log

Client Name:		Site Location:	Project No.:
Wisconsin Department of Transportation (WisDOT)		USH 45, IL State Line to STH 50 Bristol, Kenosha County, WI	WisDOT: 3200-02-03 TRC: 230448.0000.0000
Photo No.	Date		
3	2/9/2015		
Description			
Looking west at the location of GP-10.			
Photo No.	Date		
4	2/9/2015		
Description			
Looking southwest at the location of GP-11.			

Photographic Log

Client Name:		Site Location:	Project No.:
Wisconsin Department of Transportation (WisDOT)		USH 45, IL State Line to STH 50 Bristol, Kenosha County, WI	WisDOT: 3200-02-03 TRC: 230448.0000.0000
Photo No.	Date		
5	2/9/2015		
Description Looking northwest at the location of GP-12.			
Photo No.	Date		
6	4/7/2015		
Description Looking south at the location of GP-13.			

Photographic Log

Client Name:		Site Location:	Project No.:
Wisconsin Department of Transportation (WisDOT)		USH 45, IL State Line to STH 50 Bristol, Kenosha County, WI	WisDOT: 3200-02-03 TRC: 230448.0000.0000
Photo No. 7	Date 4/7/2015		Description Looking northeast at the location of GP-14.

Photo No.	Date	
8	4/7/2015	
Description Looking west at the location of GP-15.		

Appendix D

Laboratory Analytical Report

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: 500-92046-1](#)

Client Project/Site: USH 45 Bristol - 230448

For:

TRC Environmental Corporation.

150 N. Patrick Blvd.

Suite 180

Brookfield, Wisconsin 53045

Attn: Mr. Bryan Bergmann

Bonnie Stadelmann

Authorized for release by:

2/23/2015 4:31:18 PM

Bonnie Stadelmann, Senior Project Manager

bonnie.stadelmann@testamericainc.com

Designee for

Sandie Fredrick, Project Manager II

(920)261-1660

sandie.fredrick@testamericainc.com

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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.

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Case Narrative

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Job ID: 500-92046-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-92046-1

Comments

No additional comments.

Receipt

The samples were received on 2/11/2015 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

Except:

Please change the sample ID's as follows:

GP-1 (2'-4') should be GP-8 (2'-4')

GP-1 (8'-10') should be GP-8 (8'-10')

GP-2 (4'-6') should be GP-9 (4'-6')

GP-2 (8'-10') should be GP-9 (8'-10')

GP-3 (2'-4') should be GP-10 (2'-4')

GP-3 (8'-10') should be GP-10 (8'-10')

GP-4 (2'-4') should be GP-11 (2'-4')

GP-4 (8'10') should be GP-11 (8'-10')

GP-5 (2'-4') should be GP-12 (2'-4')

GP-5 (8'-10') should be GP-12 (8'-10')

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.

Organic Prep

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

VOA Prep

Method(s) 5035: MeOH was added to provide 1:1 ratio

GP-10 (2-4) (500-92046-5), GP-10 (8-10) (500-92046-6), GP-11 (2-4) (500-92046-7), GP-11 (8-10) (500-92046-8), GP-12 (2-4) (500-92046-9), GP-12 (8-10) (500-92046-10), GP-8 (2-4) (500-92046-1), GP-8 (8-10) (500-92046-2), GP-9 (4-6) (500-92046-3), GP-9 (8-10) (500-92046-4)

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: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Client Sample ID: GP-8 (2-4)

Lab Sample ID: 500-92046-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	32	J	36	22	ug/Kg	1	⊗	WDNR	Total/NA
Wisconsin GRO	3800	J	7200	3600	ug/Kg	1	⊗	WDNR	Total/NA
WI Diesel Range Organics (C10-C28)	330		44	18	mg/Kg	10	⊗	WI-DRO	Total/NA
Arsenic	6.4		1.0	0.48	mg/Kg	1	⊗	6010B	Total/NA
Barium	82		1.0	0.19	mg/Kg	1	⊗	6010B	Total/NA
Chromium	24		1.0	0.18	mg/Kg	1	⊗	6010B	Total/NA
Lead	18		0.52	0.26	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.7		1.0	0.52	mg/Kg	1	⊗	6010B	Total/NA

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

Lab Sample ID: 500-92046-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
WI Diesel Range Organics (C10-C28)	4.6		4.3	1.7	mg/Kg	1	⊗	WI-DRO	Total/NA
Arsenic	6.7		1.1	0.53	mg/Kg	1	⊗	6010B	Total/NA
Barium	36		1.1	0.21	mg/Kg	1	⊗	6010B	Total/NA
Chromium	16		1.1	0.20	mg/Kg	1	⊗	6010B	Total/NA
Lead	9.0		0.57	0.29	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.2		1.1	0.57	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.016	J	0.019	0.0067	mg/Kg	1	⊗	7471A	Total/NA

Client Sample ID: GP-9 (4-6)

Lab Sample ID: 500-92046-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.2		1.0	0.47	mg/Kg	1	⊗	6010B	Total/NA
Barium	41		1.0	0.19	mg/Kg	1	⊗	6010B	Total/NA
Chromium	16		1.0	0.18	mg/Kg	1	⊗	6010B	Total/NA
Lead	9.2		0.51	0.26	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.1		1.0	0.51	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.020		0.018	0.0061	mg/Kg	1	⊗	7471A	Total/NA

Client Sample ID: GP-9 (8-10)

Lab Sample ID: 500-92046-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.3		1.1	0.52	mg/Kg	1	⊗	6010B	Total/NA
Barium	29		1.1	0.20	mg/Kg	1	⊗	6010B	Total/NA
Chromium	14		1.1	0.19	mg/Kg	1	⊗	6010B	Total/NA
Lead	8.3		0.56	0.28	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.0	J	1.1	0.55	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.018		0.017	0.0061	mg/Kg	1	⊗	7471A	Total/NA

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

Lab Sample ID: 500-92046-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.1		1.0	0.48	mg/Kg	1	⊗	6010B	Total/NA
Barium	48		1.0	0.19	mg/Kg	1	⊗	6010B	Total/NA
Chromium	14		1.0	0.18	mg/Kg	1	⊗	6010B	Total/NA
Lead	19		0.52	0.26	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.2		1.0	0.51	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.051		0.019	0.0066	mg/Kg	1	⊗	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Detection Summary

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

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

Lab Sample ID: 500-92046-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.3		1.0	0.48	mg/Kg	1	⊗	6010B	Total/NA
Barium	43		1.0	0.19	mg/Kg	1	⊗	6010B	Total/NA
Chromium	19		1.0	0.18	mg/Kg	1	⊗	6010B	Total/NA
Lead	8.1		0.52	0.26	mg/Kg	1	⊗	6010B	Total/NA
Selenium	1.0		1.0	0.51	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.041		0.017	0.0061	mg/Kg	1	⊗	7471A	Total/NA

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

Lab Sample ID: 500-92046-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		0.56	0.28	mg/Kg	1	⊗	6010B	Total/NA

Client Sample ID: GP-11 (8-10)

Lab Sample ID: 500-92046-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.1		0.53	0.26	mg/Kg	1	⊗	6010B	Total/NA

Client Sample ID: GP-12 (2-4)

Lab Sample ID: 500-92046-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		0.54	0.27	mg/Kg	1	⊗	6010B	Total/NA

Client Sample ID: GP-12 (8-10)

Lab Sample ID: 500-92046-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	8.8		0.50	0.25	mg/Kg	1	⊗	6010B	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 500-92046-11

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Method	Method Description	Protocol	Laboratory
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7471A	Mercury (CVAA)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI

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-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:

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: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-92046-1	GP-8 (2-4)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-2	GP-8 (8-10)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-3	GP-9 (4-6)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-4	GP-9 (8-10)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-5	GP-10 (2-4)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-6	GP-10 (8-10)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-7	GP-11 (2-4)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-8	GP-11 (8-10)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-9	GP-12 (2-4)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-10	GP-12 (8-10)	Solid	02/09/15 00:00	02/11/15 10:25
500-92046-11	Trip Blank	Solid	02/09/15 00:00	02/11/15 10:25

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Client Sample ID: GP-8 (2-4)

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-1

Matrix: Solid

Percent Solids: 80.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	32	J	36	22	ug/Kg	⊗	02/09/15 12:00	02/13/15 13:26	1
1,3,5-Trimethylbenzene	<22		36	22	ug/Kg	⊗	02/09/15 12:00	02/13/15 13:26	1
Benzene	<26		36	26	ug/Kg	⊗	02/09/15 12:00	02/13/15 13:26	1
Ethylbenzene	<27		36	27	ug/Kg	⊗	02/09/15 12:00	02/13/15 13:26	1
Methyl tert-butyl ether	<17		36	17	ug/Kg	⊗	02/09/15 12:00	02/13/15 13:26	1
Naphthalene	<170		360	170	ug/Kg	⊗	02/09/15 12:00	02/13/15 13:26	1
Toluene	<24		36	24	ug/Kg	⊗	02/09/15 12:00	02/13/15 13:26	1
Xylenes, Total	<43		110	43	ug/Kg	⊗	02/09/15 12:00	02/13/15 13:26	1
Wisconsin GRO	3800	J	7200	3600	ug/Kg	⊗	02/09/15 12:00	02/13/15 13:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		80 -				02/09/15 12:00	02/13/15 13:26	1
a,a,a-Trifluorotoluene	97		80 -				02/09/15 12:00	02/13/15 13:26	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)	330		44	18	mg/Kg	⊗	02/12/15 07:48	02/12/15 18:30	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	69		44 - 148				02/12/15 07:48	02/12/15 18:30	10

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.4		1.0	0.48	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:51	1
Barium	82		1.0	0.19	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:51	1
Cadmium	<0.061		0.21	0.061	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:51	1
Chromium	24		1.0	0.18	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:51	1
Lead	18		0.52	0.26	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:51	1
Selenium	1.7		1.0	0.52	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:51	1
Silver	<0.12		0.52	0.12	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:51	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0070		0.020	0.0070	mg/Kg	⊗	02/12/15 14:00	02/13/15 08:56	1

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

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-2

Matrix: Solid

Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<21		34	21	ug/Kg	⊗	02/09/15 12:00	02/13/15 14:01	1
1,3,5-Trimethylbenzene	<21		34	21	ug/Kg	⊗	02/09/15 12:00	02/13/15 14:01	1
Benzene	<25		34	25	ug/Kg	⊗	02/09/15 12:00	02/13/15 14:01	1
Ethylbenzene	<26		34	26	ug/Kg	⊗	02/09/15 12:00	02/13/15 14:01	1
Methyl tert-butyl ether	<16		34	16	ug/Kg	⊗	02/09/15 12:00	02/13/15 14:01	1
Naphthalene	<160		340	160	ug/Kg	⊗	02/09/15 12:00	02/13/15 14:01	1
Toluene	<23		34	23	ug/Kg	⊗	02/09/15 12:00	02/13/15 14:01	1
Xylenes, Total	<41		100	41	ug/Kg	⊗	02/09/15 12:00	02/13/15 14:01	1
Wisconsin GRO	<3400		6900	3400	ug/Kg	⊗	02/09/15 12:00	02/13/15 14:01	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

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

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-2

Matrix: Solid

Percent Solids: 84.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		80 -	02/09/15 12:00	02/13/15 14:01	1
a,a,a-Trifluorotoluene	98		80 -	02/09/15 12:00	02/13/15 14:01	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)	4.6		4.3	1.7	mg/Kg	⊗	02/12/15 07:48	02/12/15 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	62		44 - 148	02/12/15 07:48	02/12/15 19:41	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.7		1.1	0.53	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:57	1
Barium	36		1.1	0.21	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:57	1
Cadmium	<0.066		0.23	0.066	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:57	1
Chromium	16		1.1	0.20	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:57	1
Lead	9.0		0.57	0.29	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:57	1
Selenium	1.2		1.1	0.57	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:57	1
Silver	<0.13		0.57	0.13	mg/Kg	⊗	02/12/15 10:15	02/12/15 19:57	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.019	0.0067	mg/Kg	⊗	02/12/15 14:00	02/13/15 09:04	1

Client Sample ID: GP-9 (4-6)

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-3

Matrix: Solid

Percent Solids: 86.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<20		34	20	ug/Kg	⊗	02/13/15 12:00	02/13/15 14:36	1
1,3,5-Trimethylbenzene	<20		34	20	ug/Kg	⊗	02/13/15 12:00	02/13/15 14:36	1
Benzene	<24		34	24	ug/Kg	⊗	02/13/15 12:00	02/13/15 14:36	1
Ethylbenzene	<25		34	25	ug/Kg	⊗	02/13/15 12:00	02/13/15 14:36	1
Methyl tert-butyl ether	<16		34	16	ug/Kg	⊗	02/13/15 12:00	02/13/15 14:36	1
Naphthalene	<160		340	160	ug/Kg	⊗	02/13/15 12:00	02/13/15 14:36	1
Toluene	<23		34	23	ug/Kg	⊗	02/13/15 12:00	02/13/15 14:36	1
Xylenes, Total	<40		100	40	ug/Kg	⊗	02/13/15 12:00	02/13/15 14:36	1
Wisconsin GRO	<3400		6700	3400	ug/Kg	⊗	02/13/15 12:00	02/13/15 14:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		80 -	02/13/15 12:00	02/13/15 14:36	1
a,a,a-Trifluorotoluene	97		80 -	02/13/15 12:00	02/13/15 14:36	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)	<1.7		4.3	1.7	mg/Kg	⊗	02/12/15 07:48	02/12/15 20:16	1
n-Nonane	69		44 - 148				02/12/15 07:48	02/12/15 20:16	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Client Sample ID: GP-9 (4-6)
Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-3
Matrix: Solid
Percent Solids: 86.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.2		1.0	0.47	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:04	1
Barium	41		1.0	0.19	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:04	1
Cadmium	<0.059		0.20	0.059	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:04	1
Chromium	16		1.0	0.18	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:04	1
Lead	9.2		0.51	0.26	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:04	1
Selenium	1.1		1.0	0.51	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:04	1
Silver	<0.12		0.51	0.12	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:04	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020		0.018	0.0061	mg/Kg	⊗	02/12/15 14:00	02/13/15 09:21	1

Client Sample ID: GP-9 (8-10)

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-4

Matrix: Solid

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<20		33	20	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:11	1
1,3,5-Trimethylbenzene	<20		33	20	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:11	1
Benzene	<24		33	24	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:11	1
Ethylbenzene	<25		33	25	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:11	1
Methyl tert-butyl ether	<16		33	16	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:11	1
Naphthalene	<160		330	160	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:11	1
Toluene	<22		33	22	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:11	1
Xylenes, Total	<39		99	39	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:11	1
Wisconsin GRO	<3300		6600	3300	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:11	1

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		80 -	02/09/15 12:00	02/13/15 15:11	1
a,a,a-Trifluorotoluene	98		80 -	02/09/15 12:00	02/13/15 15:11	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)	<1.7		4.2	1.7	mg/Kg	⊗	02/12/15 07:48	02/12/15 20:51	1
Surrogate									
n-Nonane	71		44 - 148				02/12/15 07:48	02/12/15 20:51	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3		1.1	0.52	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:10	1
Barium	29		1.1	0.20	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:10	1
Cadmium	<0.065		0.22	0.065	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:10	1
Chromium	14		1.1	0.19	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:10	1
Lead	8.3		0.56	0.28	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:10	1
Selenium	1.0 J		1.1	0.55	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:10	1
Silver	<0.13		0.56	0.13	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:10	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Client Sample ID: GP-9 (8-10)
Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-4
Matrix: Solid
Percent Solids: 85.6

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.017	0.0061	mg/Kg	⊗	02/12/15 14:00	02/13/15 09:23	1

Client Sample ID: GP-10 (2-4)
Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-5
Matrix: Solid
Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<21		35	21	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:46	1
1,3,5-Trimethylbenzene	<21		35	21	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:46	1
Benzene	<25		35	25	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:46	1
Ethylbenzene	<26		35	26	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:46	1
Methyl tert-butyl ether	<17		35	17	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:46	1
Naphthalene	<170		350	170	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:46	1
Toluene	<24		35	24	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:46	1
Xylenes, Total	<42		100	42	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:46	1
Wisconsin GRO	<3500		6900	3500	ug/Kg	⊗	02/09/15 12:00	02/13/15 15:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		80 -				02/09/15 12:00	02/13/15 15:46	1
a,a,a-Trifluorotoluene	97		80 -				02/09/15 12:00	02/13/15 15:46	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)	<1.7		4.1	1.7	mg/Kg	⊗	02/12/15 07:48	02/12/15 21:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	68		44 - 148				02/12/15 07:48	02/12/15 21:27	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.1		1.0	0.48	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:17	1
Barium	48		1.0	0.19	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:17	1
Cadmium	<0.060		0.21	0.060	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:17	1
Chromium	14		1.0	0.18	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:17	1
Lead	19		0.52	0.26	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:17	1
Selenium	1.2		1.0	0.51	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:17	1
Silver	<0.12		0.52	0.12	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:17	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.051		0.019	0.0066	mg/Kg	⊗	02/12/15 14:00	02/13/15 09:25	1

Client Sample ID: GP-10 (8-10)
Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-6
Matrix: Solid
Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<20		34	20	ug/Kg	⊗	02/09/15 12:00	02/13/15 16:22	1
1,3,5-Trimethylbenzene	<20		34	20	ug/Kg	⊗	02/09/15 12:00	02/13/15 16:22	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

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

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-6

Matrix: Solid

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<24		34	24	ug/Kg	☀	02/09/15 12:00	02/13/15 16:22	1
Ethylbenzene	<26		34	26	ug/Kg	☀	02/09/15 12:00	02/13/15 16:22	1
Methyl tert-butyl ether	<16		34	16	ug/Kg	☀	02/09/15 12:00	02/13/15 16:22	1
Naphthalene	<160		340	160	ug/Kg	☀	02/09/15 12:00	02/13/15 16:22	1
Toluene	<23		34	23	ug/Kg	☀	02/09/15 12:00	02/13/15 16:22	1
Xylenes, Total	<41		100	41	ug/Kg	☀	02/09/15 12:00	02/13/15 16:22	1
Wisconsin GRO	<3400		6800	3400	ug/Kg	☀	02/09/15 12:00	02/13/15 16:22	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108			80 -			02/09/15 12:00	02/13/15 16:22	1
a,a,a-Trifluorotoluene	98			80 -			02/09/15 12:00	02/13/15 16:22	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)	<1.7		4.3	1.7	mg/Kg	☀	02/12/15 07:48	02/12/15 22:02	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Nonane	68			44 - 148			02/12/15 07:48	02/12/15 22:02	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3		1.0	0.48	mg/Kg	☀	02/12/15 10:15	02/12/15 20:39	1
Barium	43		1.0	0.19	mg/Kg	☀	02/12/15 10:15	02/12/15 20:39	1
Cadmium	<0.060		0.21	0.060	mg/Kg	☀	02/12/15 10:15	02/12/15 20:39	1
Chromium	19		1.0	0.18	mg/Kg	☀	02/12/15 10:15	02/12/15 20:39	1
Lead	8.1		0.52	0.26	mg/Kg	☀	02/12/15 10:15	02/12/15 20:39	1
Selenium	1.0		1.0	0.51	mg/Kg	☀	02/12/15 10:15	02/12/15 20:39	1
Silver	<0.12		0.52	0.12	mg/Kg	☀	02/12/15 10:15	02/12/15 20:39	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.017	0.0061	mg/Kg	☀	02/12/15 14:00	02/13/15 09:27	1

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

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-7

Matrix: Solid

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<21		35	21	ug/Kg	☀	02/09/15 12:00	02/13/15 16:57	1
1,3,5-Trimethylbenzene	<21		35	21	ug/Kg	☀	02/09/15 12:00	02/13/15 16:57	1
Benzene	<25		35	25	ug/Kg	☀	02/09/15 12:00	02/13/15 16:57	1
Ethylbenzene	<27		35	27	ug/Kg	☀	02/09/15 12:00	02/13/15 16:57	1
Methyl tert-butyl ether	<17		35	17	ug/Kg	☀	02/09/15 12:00	02/13/15 16:57	1
Naphthalene	<170		350	170	ug/Kg	☀	02/09/15 12:00	02/13/15 16:57	1
Toluene	<24		35	24	ug/Kg	☀	02/09/15 12:00	02/13/15 16:57	1
Xylenes, Total	<42		110	42	ug/Kg	☀	02/09/15 12:00	02/13/15 16:57	1
Wisconsin GRO	<3500		7100	3500	ug/Kg	☀	02/09/15 12:00	02/13/15 16:57	1
Surrogate		%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107			80 -			02/09/15 12:00	02/13/15 16:57	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

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

Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-7

Matrix: Solid

Percent Solids: 82.7

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		80 -	02/09/15 12:00	02/13/15 16:57	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		4.4	1.8	mg/Kg	⊗	02/12/15 07:48	02/12/15 23:13	1

Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	69		44 - 148	02/12/15 07:48	02/12/15 23:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.56	0.28	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:45	1

Client Sample ID: GP-11 (8-10)

Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-8

Matrix: Solid

Percent Solids: 85.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<20		34	20	ug/Kg	⊗	02/09/15 12:00	02/13/15 17:32	1
1,3,5-Trimethylbenzene	<20		34	20	ug/Kg	⊗	02/09/15 12:00	02/13/15 17:32	1
Benzene	<25		34	25	ug/Kg	⊗	02/09/15 12:00	02/13/15 17:32	1
Ethylbenzene	<26		34	26	ug/Kg	⊗	02/09/15 12:00	02/13/15 17:32	1
Methyl tert-butyl ether	<16		34	16	ug/Kg	⊗	02/09/15 12:00	02/13/15 17:32	1
Naphthalene	<160		340	160	ug/Kg	⊗	02/09/15 12:00	02/13/15 17:32	1
Toluene	<23		34	23	ug/Kg	⊗	02/09/15 12:00	02/13/15 17:32	1
Xylenes, Total	<41		100	41	ug/Kg	⊗	02/09/15 12:00	02/13/15 17:32	1
Wisconsin GRO	<3400		6800	3400	ug/Kg	⊗	02/09/15 12:00	02/13/15 17:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	106		80 -				02/09/15 12:00	02/13/15 17:32	1
a,a,a-Trifluorotoluene	98		80 -				02/09/15 12:00	02/13/15 17:32	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	⊗	02/12/15 07:48	02/12/15 23:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	66		44 - 148				02/12/15 07:48	02/12/15 23:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.1		0.53	0.26	mg/Kg	⊗	02/12/15 10:15	02/12/15 20:52	1

Client Sample ID: GP-12 (2-4)

Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-9

Matrix: Solid

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<20		33	20	ug/Kg	⊗	02/09/15 12:00	02/13/15 18:07	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Client Sample ID: GP-12 (2-4)

Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-9

Matrix: Solid

Percent Solids: 85.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	<20		33	20	ug/Kg	☀	02/09/15 12:00	02/13/15 18:07	1
Benzene	<24		33	24	ug/Kg	☀	02/09/15 12:00	02/13/15 18:07	1
Ethylbenzene	<25		33	25	ug/Kg	☀	02/09/15 12:00	02/13/15 18:07	1
Methyl tert-butyl ether	<16		33	16	ug/Kg	☀	02/09/15 12:00	02/13/15 18:07	1
Naphthalene	<160		330	160	ug/Kg	☀	02/09/15 12:00	02/13/15 18:07	1
Toluene	<22		33	22	ug/Kg	☀	02/09/15 12:00	02/13/15 18:07	1
Xylenes, Total	<39		99	39	ug/Kg	☀	02/09/15 12:00	02/13/15 18:07	1
Wisconsin GRO	<3300		6600	3300	ug/Kg	☀	02/09/15 12:00	02/13/15 18:07	1
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	106		80 -				02/09/15 12:00	02/13/15 18:07	1
a,a,a-Trifluorotoluene	98		80 -				02/09/15 12:00	02/13/15 18:07	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	☀	02/12/15 07:48	02/13/15 00:23	1
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	64		44 - 148				02/12/15 07:48	02/13/15 00:23	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		0.54	0.27	mg/Kg	☀	02/12/15 10:15	02/12/15 20:58	1

Client Sample ID: GP-12 (8-10)

Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-10

Matrix: Solid

Percent Solids: 84.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<21		35	21	ug/Kg	☀	02/09/15 12:00	02/13/15 18:42	1
1,3,5-Trimethylbenzene	<21		35	21	ug/Kg	☀	02/09/15 12:00	02/13/15 18:42	1
Benzene	<25		35	25	ug/Kg	☀	02/09/15 12:00	02/13/15 18:42	1
Ethylbenzene	<27		35	27	ug/Kg	☀	02/09/15 12:00	02/13/15 18:42	1
Methyl tert-butyl ether	<17		35	17	ug/Kg	☀	02/09/15 12:00	02/13/15 18:42	1
Naphthalene	<170		350	170	ug/Kg	☀	02/09/15 12:00	02/13/15 18:42	1
Toluene	<24		35	24	ug/Kg	☀	02/09/15 12:00	02/13/15 18:42	1
Xylenes, Total	<42		110	42	ug/Kg	☀	02/09/15 12:00	02/13/15 18:42	1
Wisconsin GRO	<3500		7000	3500	ug/Kg	☀	02/09/15 12:00	02/13/15 18:42	1
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	108		80 -				02/09/15 12:00	02/13/15 18:42	1
a,a,a-Trifluorotoluene	100		80 -				02/09/15 12:00	02/13/15 18:42	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)	<1.7		4.3	1.7	mg/Kg	☀	02/12/15 07:48	02/13/15 00:59	1
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	70		44 - 148				02/12/15 07:48	02/13/15 00:59	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Client Sample ID: GP-12 (8-10)
Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-10
Matrix: Solid
Percent Solids: 84.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.8		0.50	0.25	mg/Kg	☀	02/12/15 10:15	02/12/15 21:04	1

Client Sample ID: Trip Blank

Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<18		25	18	ug/Kg		02/09/15 12:00	02/13/15 12:51	1
Ethylbenzene	<19		25	19	ug/Kg		02/09/15 12:00	02/13/15 12:51	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		02/09/15 12:00	02/13/15 12:51	1
Naphthalene	<120		250	120	ug/Kg		02/09/15 12:00	02/13/15 12:51	1
Toluene	<17		25	17	ug/Kg		02/09/15 12:00	02/13/15 12:51	1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		02/09/15 12:00	02/13/15 12:51	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		02/09/15 12:00	02/13/15 12:51	1
Xylenes, Total	<30		75	30	ug/Kg		02/09/15 12:00	02/13/15 12:51	1
Surrogate							Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	104		80 -				02/09/15 12:00	02/13/15 12:51	1

TestAmerica Chicago

Definitions/Glossary

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Qualifiers

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.

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.
F1	MS and/or MSD Recovery exceeds the control limits

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

GC VOA

Analysis Batch: 227450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-92046-1	GP-8 (2-4)	Total/NA	Solid	WDNR	227480
500-92046-2	GP-8 (8-10)	Total/NA	Solid	WDNR	227480
500-92046-3	GP-9 (4-6)	Total/NA	Solid	WDNR	227480
500-92046-4	GP-9 (8-10)	Total/NA	Solid	WDNR	227480
500-92046-5	GP-10 (2-4)	Total/NA	Solid	WDNR	227480
500-92046-6	GP-10 (8-10)	Total/NA	Solid	WDNR	227480
500-92046-7	GP-11 (2-4)	Total/NA	Solid	WDNR	227480
500-92046-8	GP-11 (8-10)	Total/NA	Solid	WDNR	227480
500-92046-9	GP-12 (2-4)	Total/NA	Solid	WDNR	227480
500-92046-10	GP-12 (8-10)	Total/NA	Solid	WDNR	227480
500-92046-11	Trip Blank	Total/NA	Solid	WDNR	227480
LCS 490-227517/2-A	Lab Control Sample	Total/NA	Solid	WDNR	227517
LCSD 490-227517/3-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	227517
MB 490-227450/6	Method Blank	Total/NA	Solid	WDNR	227517

Prep Batch: 227480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-92046-1	GP-8 (2-4)	Total/NA	Solid	5035	13
500-92046-2	GP-8 (8-10)	Total/NA	Solid	5035	14
500-92046-3	GP-9 (4-6)	Total/NA	Solid	5035	15
500-92046-4	GP-9 (8-10)	Total/NA	Solid	5035	
500-92046-5	GP-10 (2-4)	Total/NA	Solid	5035	
500-92046-6	GP-10 (8-10)	Total/NA	Solid	5035	
500-92046-7	GP-11 (2-4)	Total/NA	Solid	5035	
500-92046-8	GP-11 (8-10)	Total/NA	Solid	5035	
500-92046-9	GP-12 (2-4)	Total/NA	Solid	5035	
500-92046-10	GP-12 (8-10)	Total/NA	Solid	5035	
500-92046-11	Trip Blank	Total/NA	Solid	5035	

Prep Batch: 227517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-227517/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-227517/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

GC Semi VOA

Prep Batch: 275597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-92046-1	GP-8 (2-4)	Total/NA	Solid	WI DRO PREP	
500-92046-2	GP-8 (8-10)	Total/NA	Solid	WI DRO PREP	
500-92046-3	GP-9 (4-6)	Total/NA	Solid	WI DRO PREP	
500-92046-4	GP-9 (8-10)	Total/NA	Solid	WI DRO PREP	
500-92046-5	GP-10 (2-4)	Total/NA	Solid	WI DRO PREP	
500-92046-6	GP-10 (8-10)	Total/NA	Solid	WI DRO PREP	
500-92046-7	GP-11 (2-4)	Total/NA	Solid	WI DRO PREP	
500-92046-8	GP-11 (8-10)	Total/NA	Solid	WI DRO PREP	
500-92046-9	GP-12 (2-4)	Total/NA	Solid	WI DRO PREP	
500-92046-10	GP-12 (8-10)	Total/NA	Solid	WI DRO PREP	
LCS 500-275597/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-275597/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	

TestAmerica Chicago

QC Association Summary

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

GC Semi VOA (Continued)

Prep Batch: 275597 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-275597/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	

Analysis Batch: 275683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-92046-1	GP-8 (2-4)	Total/NA	Solid	WI-DRO	275597
500-92046-2	GP-8 (8-10)	Total/NA	Solid	WI-DRO	275597
500-92046-3	GP-9 (4-6)	Total/NA	Solid	WI-DRO	275597
500-92046-4	GP-9 (8-10)	Total/NA	Solid	WI-DRO	275597
500-92046-5	GP-10 (2-4)	Total/NA	Solid	WI-DRO	275597
500-92046-6	GP-10 (8-10)	Total/NA	Solid	WI-DRO	275597
500-92046-7	GP-11 (2-4)	Total/NA	Solid	WI-DRO	275597
500-92046-8	GP-11 (8-10)	Total/NA	Solid	WI-DRO	275597
500-92046-9	GP-12 (2-4)	Total/NA	Solid	WI-DRO	275597
500-92046-10	GP-12 (8-10)	Total/NA	Solid	WI-DRO	275597
LCS 500-275597/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	275597
LCSD 500-275597/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	275597
MB 500-275597/1-A	Method Blank	Total/NA	Solid	WI-DRO	275597

Metals

Prep Batch: 275661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-92046-1	GP-8 (2-4)	Total/NA	Solid	3050B	
500-92046-2	GP-8 (8-10)	Total/NA	Solid	3050B	
500-92046-3	GP-9 (4-6)	Total/NA	Solid	3050B	
500-92046-4	GP-9 (8-10)	Total/NA	Solid	3050B	
500-92046-5	GP-10 (2-4)	Total/NA	Solid	3050B	
500-92046-6	GP-10 (8-10)	Total/NA	Solid	3050B	
500-92046-7	GP-11 (2-4)	Total/NA	Solid	3050B	
500-92046-8	GP-11 (8-10)	Total/NA	Solid	3050B	
500-92046-9	GP-12 (2-4)	Total/NA	Solid	3050B	
500-92046-10	GP-12 (8-10)	Total/NA	Solid	3050B	
LCS 500-275661/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 500-275661/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 275666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-92046-1	GP-8 (2-4)	Total/NA	Solid	7471A	
500-92046-1 DU	GP-8 (2-4)	Total/NA	Solid	7471A	
500-92046-1 MS	GP-8 (2-4)	Total/NA	Solid	7471A	
500-92046-1 MSD	GP-8 (2-4)	Total/NA	Solid	7471A	
500-92046-2	GP-8 (8-10)	Total/NA	Solid	7471A	
500-92046-3	GP-9 (4-6)	Total/NA	Solid	7471A	
500-92046-4	GP-9 (8-10)	Total/NA	Solid	7471A	
500-92046-5	GP-10 (2-4)	Total/NA	Solid	7471A	
500-92046-6	GP-10 (8-10)	Total/NA	Solid	7471A	
LCS 500-275666/13-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 500-275666/12-A	Method Blank	Total/NA	Solid	7471A	

QC Association Summary

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Metals (Continued)

Analysis Batch: 275808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-92046-1	GP-8 (2-4)	Total/NA	Solid	6010B	275661
500-92046-2	GP-8 (8-10)	Total/NA	Solid	6010B	275661
500-92046-3	GP-9 (4-6)	Total/NA	Solid	6010B	275661
500-92046-4	GP-9 (8-10)	Total/NA	Solid	6010B	275661
500-92046-5	GP-10 (2-4)	Total/NA	Solid	6010B	275661
500-92046-6	GP-10 (8-10)	Total/NA	Solid	6010B	275661
500-92046-7	GP-11 (2-4)	Total/NA	Solid	6010B	275661
500-92046-8	GP-11 (8-10)	Total/NA	Solid	6010B	275661
500-92046-9	GP-12 (2-4)	Total/NA	Solid	6010B	275661
500-92046-10	GP-12 (8-10)	Total/NA	Solid	6010B	275661
LCS 500-275661/2-A	Lab Control Sample	Total/NA	Solid	6010B	275661
MB 500-275661/1-A	Method Blank	Total/NA	Solid	6010B	275661

Analysis Batch: 275862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-92046-1	GP-8 (2-4)	Total/NA	Solid	7471A	275666
500-92046-1 DU	GP-8 (2-4)	Total/NA	Solid	7471A	275666
500-92046-1 MS	GP-8 (2-4)	Total/NA	Solid	7471A	275666
500-92046-1 MSD	GP-8 (2-4)	Total/NA	Solid	7471A	275666
500-92046-2	GP-8 (8-10)	Total/NA	Solid	7471A	275666
500-92046-3	GP-9 (4-6)	Total/NA	Solid	7471A	275666
500-92046-4	GP-9 (8-10)	Total/NA	Solid	7471A	275666
500-92046-5	GP-10 (2-4)	Total/NA	Solid	7471A	275666
500-92046-6	GP-10 (8-10)	Total/NA	Solid	7471A	275666
LCS 500-275666/13-A	Lab Control Sample	Total/NA	Solid	7471A	275666
MB 500-275666/12-A	Method Blank	Total/NA	Solid	7471A	275666

General Chemistry

Analysis Batch: 275552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-92046-1	GP-8 (2-4)	Total/NA	Solid	Moisture	
500-92046-1 DU	GP-8 (2-4)	Total/NA	Solid	Moisture	
500-92046-2	GP-8 (8-10)	Total/NA	Solid	Moisture	
500-92046-3	GP-9 (4-6)	Total/NA	Solid	Moisture	
500-92046-4	GP-9 (8-10)	Total/NA	Solid	Moisture	
500-92046-5	GP-10 (2-4)	Total/NA	Solid	Moisture	
500-92046-6	GP-10 (8-10)	Total/NA	Solid	Moisture	
500-92046-7	GP-11 (2-4)	Total/NA	Solid	Moisture	
500-92046-8	GP-11 (8-10)	Total/NA	Solid	Moisture	
500-92046-9	GP-12 (2-4)	Total/NA	Solid	Moisture	
500-92046-10	GP-12 (8-10)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

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-)	TFT (80-)
500-92046-1	GP-8 (2-4)	102	102
500-92046-2	GP-8 (8-10)	103	103
500-92046-3	GP-9 (4-6)	103	103
500-92046-4	GP-9 (8-10)	104	104
500-92046-5	GP-10 (2-4)	107	107
500-92046-6	GP-10 (8-10)	108	108
500-92046-7	GP-11 (2-4)	107	107
500-92046-8	GP-11 (8-10)	106	106
500-92046-9	GP-12 (2-4)	106	106
500-92046-10	GP-12 (8-10)	108	108
500-92046-11	Trip Blank	104	104
LCS 490-227517/2-A	Lab Control Sample	110	110
LCSD 490-227517/3-A	Lab Control Sample Dup	112	112
MB 490-227450/6	Method Blank	102	102

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

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)	
500-92046-1	GP-8 (2-4)	69	
500-92046-2	GP-8 (8-10)	62	
500-92046-3	GP-9 (4-6)	69	
500-92046-4	GP-9 (8-10)	71	
500-92046-5	GP-10 (2-4)	68	
500-92046-6	GP-10 (8-10)	68	
500-92046-7	GP-11 (2-4)	69	
500-92046-8	GP-11 (8-10)	66	
500-92046-9	GP-12 (2-4)	64	
500-92046-10	GP-12 (8-10)	70	
LCS 500-275597/2-A	Lab Control Sample	70	
LCSD 500-275597/3-A	Lab Control Sample Dup	72	
MB 500-275597/1-A	Method Blank	71	

Surrogate Legend

C9 = n-Nonane

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

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

Lab Sample ID: MB 490-227450/6

Matrix: Solid

Analysis Batch: 227450

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<18		25	18	ug/Kg			02/13/15 12:16	1
Ethylbenzene	<19		25	19	ug/Kg			02/13/15 12:16	1
Methyl tert-butyl ether	<12		25	12	ug/Kg			02/13/15 12:16	1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg			02/13/15 12:16	1
Naphthalene	<120		250	120	ug/Kg			02/13/15 12:16	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg			02/13/15 12:16	1
Toluene	<17		25	17	ug/Kg			02/13/15 12:16	1
Xylenes, Total	<30		75	30	ug/Kg			02/13/15 12:16	1
Wisconsin GRO	<2500		5000	2500	ug/Kg			02/13/15 12:16	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
a,a,a-Trifluorotoluene	102		80 -		02/13/15 12:16	1
a,a,a-Trifluorotoluene	96		80 -		02/13/15 12:16	1

Lab Sample ID: LCS 490-227517/2-A

Matrix: Solid

Analysis Batch: 227450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 227517

Analyte	Spike	LCS	LCS	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier				
Benzene	100	99.2		ug/Kg	99	76 - 120	
Ethylbenzene	100	99.3		ug/Kg	99	77 - 120	
Methyl tert-butyl ether	100	99.5		ug/Kg	99	73 - 120	
1,2,4-Trimethylbenzene	100	97.0		ug/Kg	97	60 - 140	
Naphthalene	100	102		ug/Kg	102	74 - 127	
1,3,5-Trimethylbenzene	100	97.6		ug/Kg	98	74 - 133	
Toluene	100	98.1		ug/Kg	98	79 - 120	
Wisconsin GRO	1000	986		ug/Kg	99	80 - 120	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
a,a,a-Trifluorotoluene	110		80 -
a,a,a-Trifluorotoluene	98		80 -

Lab Sample ID: LCSD 490-227517/3-A

Matrix: Solid

Analysis Batch: 227450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 227517

Analyte	Spike	LCSD	LCSD	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier					
Benzene	100	102		ug/Kg	102	76 - 120	NaN	27
Ethylbenzene	100	101		ug/Kg	101	77 - 120	NaN	49
Methyl tert-butyl ether	100	98.3		ug/Kg	98	73 - 120	NaN	31
1,2,4-Trimethylbenzene	100	98.9		ug/Kg	99	60 - 140	NaN	50
Naphthalene	100	99.4		ug/Kg	99	74 - 127	NaN	50
1,3,5-Trimethylbenzene	100	99.4		ug/Kg	99	74 - 133	NaN	42
Toluene	100	101		ug/Kg	101	79 - 120	NaN	37
Wisconsin GRO	1000	990		ug/Kg	99	80 - 120	0	20

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

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

Lab Sample ID: LCSD 490-227517/3-A

Matrix: Solid

Analysis Batch: 227450

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 227517

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	112		80 -
a,a,a-Trifluorotoluene	98		80 -

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

Lab Sample ID: MB 500-275597/1-A

Matrix: Solid

Analysis Batch: 275683

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 275597

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		02/12/15 07:48	02/12/15 16:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	71		44 - 148	02/12/15 07:48	02/12/15 16:45	1

Lab Sample ID: LCS 500-275597/2-A

Matrix: Solid

Analysis Batch: 275683

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 275597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
WI Diesel Range Organics (C10-C28)	20.0	17.2		mg/Kg		86	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	70		44 - 148	02/12/15 07:48	02/12/15 16:45	1

Lab Sample ID: LCSD 500-275597/3-A

Matrix: Solid

Analysis Batch: 275683

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 275597

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	Limit
WI Diesel Range Organics (C10-C28)	20.0	16.6		mg/Kg		83	70 - 120	4

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits	Prepared	Analyzed	RPD	Limit
n-Nonane	72		44 - 148	02/12/15 10:15	02/12/15 19:38	1	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-275661/1-A

Matrix: Solid

Analysis Batch: 275808

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 275661

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.46		1.0	0.46	mg/Kg		02/12/15 10:15	02/12/15 19:38	1
Barium	<0.18		1.0	0.18	mg/Kg		02/12/15 10:15	02/12/15 19:38	1
Cadmium	<0.058		0.20	0.058	mg/Kg		02/12/15 10:15	02/12/15 19:38	1

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

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

Lab Sample ID: MB 500-275661/1-A

Matrix: Solid

Analysis Batch: 275808

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 275661

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chromium	<0.17		1.0	0.17	mg/Kg		02/12/15 10:15	02/12/15 19:38	1
Lead	<0.25		0.50	0.25	mg/Kg		02/12/15 10:15	02/12/15 19:38	1
Selenium	<0.50		1.0	0.50	mg/Kg		02/12/15 10:15	02/12/15 19:38	1
Silver	<0.12		0.50	0.12	mg/Kg		02/12/15 10:15	02/12/15 19:38	1

Lab Sample ID: LCS 500-275661/2-A

Matrix: Solid

Analysis Batch: 275808

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 275661

Analyte	Spike		Result	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added									
Arsenic	10.0		10.0			mg/Kg		100	80 - 120	
Barium	200		185			mg/Kg		92	80 - 120	
Cadmium	5.00		4.95			mg/Kg		99	80 - 120	
Chromium	20.0		20.4			mg/Kg		102	80 - 120	
Lead	10.0		10.5			mg/Kg		105	80 - 120	
Selenium	10.0		9.35			mg/Kg		94	80 - 120	
Silver	5.00		4.90			mg/Kg		98	80 - 120	

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 500-275666/12-A

Matrix: Solid

Analysis Batch: 275862

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 275666

Analyte	MB		Result	Qualifer	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer							
Mercury	<0.0058		0.017	0.0058	mg/Kg		02/12/15 14:00	02/13/15 08:47	1

Lab Sample ID: LCS 500-275666/13-A

Matrix: Solid

Analysis Batch: 275862

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 275666

Analyte	Spike		Result	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added									
Mercury	0.167		0.170			mg/Kg		102	80 - 120	

Lab Sample ID: 500-92046-1 MS

Matrix: Solid

Analysis Batch: 275862

Client Sample ID: GP-8 (2-4)

Prep Type: Total/NA

Prep Batch: 275666

Analyte	Sample		Spike	MS		Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier		Added						
Mercury	<0.0070		0.0994	0.143	F1	mg/Kg	⊗	144	80 - 120	

Lab Sample ID: 500-92046-1 MSD

Matrix: Solid

Analysis Batch: 275862

Client Sample ID: GP-8 (2-4)

Prep Type: Total/NA

Prep Batch: 275666

Analyte	Sample		Spike	MSD		Unit	D	%Rec	Limits	RPD
	Result	Qualifier		Added						
Mercury	<0.0070		0.0975	0.138	F1	mg/Kg	⊗	142	80 - 120	3

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 500-92046-1 DU

Matrix: Solid

Analysis Batch: 275862

Client Sample ID: GP-8 (2-4)

Prep Type: Total/NA

Prep Batch: 275666

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Mercury	<0.0070		0.0150	J	mg/Kg	⊗	NC	20

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Client Sample ID: GP-8 (2-4)

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-1

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	5035			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 13:26	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		10	275683	02/12/15 18:30	SAW	TAL CHI
Total/NA	Prep	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 19:51	KML	TAL CHI
Total/NA	Prep	7471A			275666	02/12/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	275862	02/13/15 08:56	RLL	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

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

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-2

Matrix: Solid

Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 14:01	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		1	275683	02/12/15 19:41	SAW	TAL CHI
Total/NA	Prep	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 19:57	KML	TAL CHI
Total/NA	Prep	7471A			275666	02/12/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	275862	02/13/15 09:04	RLL	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

Client Sample ID: GP-9 (4-6)

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-3

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	5035			227480	02/13/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 14:36	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		1	275683	02/12/15 20:16	SAW	TAL CHI
Total/NA	Prep	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 20:04	KML	TAL CHI
Total/NA	Prep	7471A			275666	02/12/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	275862	02/13/15 09:21	RLL	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Client Sample ID: GP-9 (8-10)

Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-4
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	5035			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 15:11	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		1	275683	02/12/15 20:51	SAW	TAL CHI
Total/NA	Prep	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 20:10	KML	TAL CHI
Total/NA	Prep	7471A			275666	02/12/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	275862	02/13/15 09:23	RLL	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

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

Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-5
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	5035			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 15:46	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		1	275683	02/12/15 21:27	SAW	TAL CHI
Total/NA	Prep	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 20:17	KML	TAL CHI
Total/NA	Prep	7471A			275666	02/12/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	275862	02/13/15 09:25	RLL	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

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

Date Collected: 02/09/15 00:00
Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-6
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	5035			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 16:22	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		1	275683	02/12/15 22:02	SAW	TAL CHI
Total/NA	Prep	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 20:39	KML	TAL CHI
Total/NA	Prep	7471A			275666	02/12/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	275862	02/13/15 09:27	RLL	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

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

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-7

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			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 16:57	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		1	275683	02/12/15 23:13	SAW	TAL CHI
Total/NA	Prep	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 20:45	KML	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

Client Sample ID: GP-11 (8-10)

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-8

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	5035			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 17:32	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		1	275683	02/12/15 23:48	SAW	TAL CHI
Total/NA	Prep	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 20:52	KML	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

Client Sample ID: GP-12 (2-4)

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-9

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	5035			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 18:07	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		1	275683	02/13/15 00:23	SAW	TAL CHI
Total/NA	Prep	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 20:58	KML	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

Client Sample ID: GP-12 (8-10)

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-10

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	5035			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 18:42	SLM	TAL NSH
Total/NA	Prep	WI DRO PREP			275597	02/12/15 07:48	SML	TAL CHI
Total/NA	Analysis	WI-DRO		1	275683	02/13/15 00:59	SAW	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Client Sample ID: GP-12 (8-10)

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-10

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	3050B			275661	02/12/15 10:15	JLC	TAL CHI
Total/NA	Analysis	6010B		1	275808	02/12/15 21:04	KML	TAL CHI
Total/NA	Analysis	Moisture		1	275552	02/11/15 20:16	MJD	TAL CHI

Client Sample ID: Trip Blank

Date Collected: 02/09/15 00:00

Date Received: 02/11/15 10:25

Lab Sample ID: 500-92046-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			227480	02/09/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	227450	02/13/15 12:51	SLM	TAL NSH

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

Certification Summary

Client: TRC Environmental Corporation.
Project/Site: USH 45 Bristol - 230448

TestAmerica Job ID: 500-92046-1

Laboratory: TestAmerica Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	998020430	08-31-15

Analysis Method Prep Method Matrix Analyte

TestAmerica

THE LEADER IN ENVIRONM

2417 Bond Street, University F
Phone: 708.534.5200 Fax



500-92046 COC

(optional)
Report To
Contact: Andrew Heeter
Company: TRC
Address: 150 North Patrick Blvd,
Address: Ste 180, Brookfield WI 53045
Phone: 262-901-2153
Fax:
E-Mail: Andrew@TRCSolutions.com

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-92046

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler: 0.4

Client		Client Project #		Preservative	9	8	9	8	8						Preservative Key
Project Name				Parameter											1. HCl, Cool to 4°
Project Location/State		Lab Project #													2. H2SO4, Cool to 4°
Sampler		Lab PM													3. HNO3, Cool to 4°
Lab ID	MS/MSD	Sample ID		Sampling	Date	Time	# of Containers	Matrix	Glo	DRO	PVC + Naphthalene	RCA Metals	Lead		Comments
1		GP-1 (2-4)		2-9-15	-		5		X	X	X	X			
2		GP-1 (8-10)			-		1		X	X	X	X			
3		GP-2 (4-6)			-		1		X	X	X	X			
4		GP-2 (8-10)			-		1		X	X	X	X			
5		GP-3 (2-4)			-		1		X	X	X	X			
6		GP-3 (8-10)			-		1		X	X	X	X			
7		GP-4 (2-4)			-		1		X	X	X		X		
8		GP-4 (8-10)			-		1		X	X	X		X		
9		GP-5 (2-4)			-		1		X	X	X		X		
10		GP-5 (8-10)			-		1		X	X	X		X		
11		TRIP Blanks													

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
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
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:

Chain of Custody Record
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)

Shipping/Receiving

Company:

America Laboratories, Inc.

Address:

2960 Foster Freighton Drive,

City: Nashville

State, Zip: TN, 37204

Phone: 615-726-0177(Tel) 615-726-3404(Fax)

Email: sandie.fredrick@testamericainc.com

Due Date Requested:

2/9/2015

TAT Requested (days):

PO#:

Project Name: USH 45 Bristol - 230448

Site:

SSDN#:

Lab PM:	Lab Tracking No(s):	CC# No:
Fredrick, Sandie J		500-58909-1
E-Mail:		Page:

 THE LEADER IN ENVIRONMENTAL TESTING
 500-58909-1
 Page 1 of 1
 Job #:
 500-92046-1
Analysis Requested

Preservation Codes:

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 - EDA

M - Hexane

N - None

O - AspAO2

P - Na2O4S

Q - Na2SO3

R - Na2S2O3

S - H2O4

T - TSP Dodecahydrate

U - Acetone

V - MCAA

W - ph-4.5

Z - other (specify)

Total Number of containers:

Other:

Special Instructions/Note:

Sample Identification - Client ID (Lab ID)

WI_GRO/5035FM_Calc (MOD) PVOC+NAP+GRO

WI_GRO/5035FM_Calc PVOC+NAP

Sample Date

Field Filtered

MS/MSD

Yes or No

Sample Time

Preservation Code:

A-Art.

G-grab

Storage Temp:

A-Art.

(C-comp)Matrix (H-water,
Solid,
Oil/water,
Solid,
Observation).**BT-Samples A-Art**

Field Filtered

MS/MSD

GP-1 (2-4) (500-92046-1)

2/9/15

Central

Solid

X

Plus GRO

GP-1 (8-10) (500-92046-2)

2/9/15

Central

Solid

X

Plus GRO

GP-2 (4-6) (500-92046-3)

2/9/15

Central

Solid

X

Plus GRO

GP-2 (8-10) (500-92046-4)

2/9/15

Central

Solid

X

Plus GRO

GP-3 (2-4) (500-92046-5)

2/9/15

Central

Solid

X

Plus GRO

GP-3 (8-10) (500-92046-6)

2/9/15

Central

Solid

X

Plus GRO

GP-4 (2-4) (500-92046-7)

2/9/15

Central

Solid

X

Plus GRO

GP-4 (8-10) (500-92046-8)

2/9/15

Central

Solid

X

Plus GRO

GP-5 (2-4) (500-92046-9)

2/9/15

Central

Solid

X

Plus GRO

GP-5 (8-10) (500-92046-10)

2/9/15

Central

Solid

X

Plus GRO

Trip Blank (500-92046-11)

2/9/15

Central

Solid

X

Plus GRO

Possible Hazard Identification*Unconfirmed*

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:

Relinquished by: *J.A.* Date: *2/11/15* Time: *1630* Company: *ReRepaged*

Relinquished by: Date/Time: Received by: Company: Received by: Date/Time: Company:

Custody Seals Intact:

△ Yes

△ No

Custody Seal No.: *Cooper Temperature(s) °C and Other Remarks:*

COOLER RECEIPT FORM

Cooler Received/Opened On: 2/12/2015 @0830

1. Tracking # 3706 (last 4 digits, FedEx)Courier: Fed-Ex IR Gun ID: 147404562. Temperature of rep. sample or temp blank when opened: 3.3 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 Front5. 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) EF7. Were custody seals on containers: YES NO and Intact YES...NO...NAWere these signed and dated correctly? YES...NO...NA8. 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...NAb. Was there any observable headspace present in any VOA vial? YES...NO...NA14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NAI certify that I unloaded the cooler and answered questions 7-14 (initial) EF15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NAb. 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) EF17. 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) EFI certify that I attached a label with the unique LIMS number to each container (initial) EF21. 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: 500-92046-1

Login Number: 92046

List Source: TestAmerica Chicago

List Number: 1

Creator: Lunt, Jeff T

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	0.4
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.	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: 500-92046-1

Login Number: 92046

List Source: TestAmerica Nashville

List Number: 2

List Creation: 02/13/15 08:39 AM

Creator: Ford, Easton

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	
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.	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-94313-1

Client Project/Site: WisDOT Bristol Motors - 230448

For:

TRC Environmental Corporation.

150 N. Patrick Blvd.

Suite 180

Brookfield, Wisconsin 53045

Attn: Mr. Bryan Bergmann

Authorized for release by:

4/22/2015 3:46:27 PM

Sandie Fredrick, Project Manager II

(920)261-1660

sandie.fredrick@testamericainc.com

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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.

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Case Narrative

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Job ID: 500-94313-1

Laboratory: TestAmerica Chicago

Narrative

**Job Narrative
500-94313-1**

Comments

No additional comments.

Receipt

The samples were received on 4/8/2015 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

Except: Didn't received the tared weight jar for sample 6 for DRO, weighed out in lab per client.

GC VOA

Method(s) 8015B: Insufficient sample volume was prepared to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 241238.

Method(s) 8021B: The method blank for 241237 contained Naphthalene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8021B: Insufficient sample volume was prepared to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 241237.

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.

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.

Detection Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: GP-13 (4-6)

Lab Sample ID: 500-94313-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
WI Diesel Range Organics (C10-C28)	2.2	J	4.6	1.8	mg/Kg	1	⊗	WI-DRO	Total/NA
Arsenic	6.8	F1	1.3	0.62	mg/Kg	1	⊗	6010B	Total/NA
Barium	110	F1 V	1.3	0.24	mg/Kg	1	⊗	6010B	Total/NA
Chromium	23	V	1.3	0.23	mg/Kg	1	⊗	6010B	Total/NA
Lead	18	F1	0.67	0.33	mg/Kg	1	⊗	6010B	Total/NA
Selenium	0.80	J F1	1.3	0.66	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.055		0.019	0.0068	mg/Kg	1	⊗	7471A	Total/NA

Client Sample ID: GP-13 (8-10)

Lab Sample ID: 500-94313-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics [C6 - C10]	3300	J ^	5500	2700	ug/Kg	1	⊗	8015B	Total/NA
Naphthalene	130	J B	270	24	ug/Kg	1	⊗	8021B	Total/NA
Arsenic	3.6		1.1	0.51	mg/Kg	1	⊗	6010B	Total/NA
Barium	33		1.1	0.20	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.31		0.22	0.063	mg/Kg	1	⊗	6010B	Total/NA
Chromium	12		1.1	0.19	mg/Kg	1	⊗	6010B	Total/NA
Lead	9.6		0.55	0.27	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.012	J	0.019	0.0065	mg/Kg	1	⊗	7471A	Total/NA

Client Sample ID: GP-14 (2-4)

Lab Sample ID: 500-94313-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
WI Diesel Range Organics (C10-C28)	30		4.2	1.7	mg/Kg	1	⊗	WI-DRO	Total/NA
Arsenic	3.9		1.1	0.51	mg/Kg	1	⊗	6010B	Total/NA
Barium	51		1.1	0.20	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.56		0.22	0.064	mg/Kg	1	⊗	6010B	Total/NA
Chromium	12		1.1	0.19	mg/Kg	1	⊗	6010B	Total/NA
Lead	110		0.56	0.28	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.034		0.017	0.0058	mg/Kg	1	⊗	7471A	Total/NA

Client Sample ID: GP-14 (6-8)

Lab Sample ID: 500-94313-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics [C6 - C10]	3000	J ^	4800	2400	ug/Kg	1	⊗	8015B	Total/NA
Arsenic	6.0		1.2	0.54	mg/Kg	1	⊗	6010B	Total/NA
Barium	73		1.2	0.21	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.26		0.23	0.068	mg/Kg	1	⊗	6010B	Total/NA
Chromium	22		1.2	0.20	mg/Kg	1	⊗	6010B	Total/NA
Lead	11		0.59	0.29	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.022		0.018	0.0065	mg/Kg	1	⊗	7471A	Total/NA

Client Sample ID: GP-15 (2-4)

Lab Sample ID: 500-94313-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.1		1.1	0.52	mg/Kg	1	⊗	6010B	Total/NA
Barium	43		1.1	0.21	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.19	J	0.23	0.066	mg/Kg	1	⊗	6010B	Total/NA
Chromium	15		1.1	0.20	mg/Kg	1	⊗	6010B	Total/NA
Lead	9.7		0.57	0.28	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: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: GP-15 (2-4) (Continued)

Lab Sample ID: 500-94313-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.019		0.019	0.0067	mg/Kg	1	⊗	7471A	Total/NA

Client Sample ID: GP-15 (8-10)

Lab Sample ID: 500-94313-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics [C6 - C10]	3400	J ^	4700	2300	ug/Kg	1	⊗	8015B	Total/NA
1,2,4-Trimethylbenzene	26	J	47	23	ug/Kg	1	⊗	8021B	Total/NA
Naphthalene	120	J B	230	21	ug/Kg	1	⊗	8021B	Total/NA
WI Diesel Range Organics (C10-C28)	2.6	J	4.5	1.8	mg/Kg	1	⊗	WI-DRO	Total/NA
Arsenic	3.5		1.0	0.47	mg/Kg	1	⊗	6010B	Total/NA
Barium	30		1.0	0.19	mg/Kg	1	⊗	6010B	Total/NA
Cadmium	0.13	J	0.20	0.059	mg/Kg	1	⊗	6010B	Total/NA
Chromium	14		1.0	0.18	mg/Kg	1	⊗	6010B	Total/NA
Lead	8.8		0.51	0.25	mg/Kg	1	⊗	6010B	Total/NA
Mercury	0.011	J	0.018	0.0064	mg/Kg	1	⊗	7471A	Total/NA

Client Sample ID: MeOH Blank

Lab Sample ID: 500-94313-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	16	J	25	12	ug/Kg	1		WDNR	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL NSH
8021B	Volatile Organic Compounds (GC)	SW846	TAL NSH
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7471A	Mercury (CVAA)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI

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-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:

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: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-94313-1	GP-13 (4-6)	Solid	04/07/15 00:00	04/08/15 10:00
500-94313-2	GP-13 (8-10)	Solid	04/07/15 00:00	04/08/15 10:00
500-94313-3	GP-14 (2-4)	Solid	04/07/15 00:00	04/08/15 10:00
500-94313-4	GP-14 (6-8)	Solid	04/07/15 00:00	04/08/15 10:00
500-94313-5	GP-15 (2-4)	Solid	04/07/15 00:00	04/08/15 10:00
500-94313-6	GP-15 (8-10)	Solid	04/07/15 00:00	04/08/15 10:00
500-94313-7	MeOH Blank	Solid	04/07/15 00:00	04/08/15 10:00

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TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: GP-13 (4-6)

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-1

Matrix: Solid

Percent Solids: 74.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<20		33	20	ug/Kg	⊗	04/07/15 12:00	04/21/15 22:26	1
1,3,5-Trimethylbenzene	<20		33	20	ug/Kg	⊗	04/07/15 12:00	04/21/15 22:26	1
Benzene	<24		33	24	ug/Kg	⊗	04/07/15 12:00	04/21/15 22:26	1
Ethylbenzene	<25		33	25	ug/Kg	⊗	04/07/15 12:00	04/21/15 22:26	1
Methyl tert-butyl ether	<16		33	16	ug/Kg	⊗	04/07/15 12:00	04/21/15 22:26	1
Naphthalene	<160		330	160	ug/Kg	⊗	04/07/15 12:00	04/21/15 22:26	1
Toluene	<23		33	23	ug/Kg	⊗	04/07/15 12:00	04/21/15 22:26	1
Xylenes, Total	<40		100	40	ug/Kg	⊗	04/07/15 12:00	04/21/15 22:26	1
Wisconsin GRO	<3300		6700	3300	ug/Kg	⊗	04/07/15 12:00	04/21/15 22:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		80 -				04/07/15 12:00	04/21/15 22:26	1
a,a,a-Trifluorotoluene	93		80 -				04/07/15 12:00	04/21/15 22:26	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	4.6	1.8	mg/Kg	⊗	04/09/15 22:00	04/10/15 14:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	83		44 - 148				04/09/15 22:00	04/10/15 14:14	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.8	F1	1.3	0.62	mg/Kg	⊗	04/09/15 08:35	04/09/15 19:42	1
Barium	110	F1 V	1.3	0.24	mg/Kg	⊗	04/09/15 08:35	04/09/15 19:42	1
Cadmium	<0.077	F1	0.27	0.077	mg/Kg	⊗	04/09/15 08:35	04/09/15 19:42	1
Chromium	23	V	1.3	0.23	mg/Kg	⊗	04/09/15 08:35	04/09/15 19:42	1
Lead	18	F1	0.67	0.33	mg/Kg	⊗	04/09/15 08:35	04/09/15 19:42	1
Selenium	0.80	J F1	1.3	0.66	mg/Kg	⊗	04/09/15 08:35	04/09/15 19:42	1
Silver	<0.16	F1	0.67	0.16	mg/Kg	⊗	04/09/15 08:35	04/09/15 19:42	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055		0.019	0.0068	mg/Kg	⊗	04/09/15 14:00	04/10/15 13:47	1

Client Sample ID: GP-13 (8-10)

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-2

Matrix: Solid

Percent Solids: 87.8

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	3300	J ^	5500	2700	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		50 - 150				04/07/15 12:00	04/15/15 07:25	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<27		55	27	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:25	1
1,3,5-Trimethylbenzene	<27		55	27	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:25	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: GP-13 (8-10)

Lab Sample ID: 500-94313-2

Date Collected: 04/07/15 00:00

Matrix: Solid

Date Received: 04/08/15 10:00

Percent Solids: 87.8

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<19		55	19	ug/Kg	☀	04/07/15 12:00	04/15/15 07:25	1
Ethylbenzene	<24		55	24	ug/Kg	☀	04/07/15 12:00	04/15/15 07:25	1
Methyl tert-butyl ether	<36		550	36	ug/Kg	☀	04/07/15 12:00	04/15/15 07:25	1
Naphthalene	130	J B	270	24	ug/Kg	☀	04/07/15 12:00	04/15/15 07:25	1
Toluene	<23		55	23	ug/Kg	☀	04/07/15 12:00	04/15/15 07:25	1
Xylenes, Total	<100		160	100	ug/Kg	☀	04/07/15 12:00	04/15/15 07:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	97		50 - 150				04/07/15 12:00	04/15/15 07:25	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)	<1.6		3.9	1.6	mg/Kg	☀	04/09/15 22:00	04/10/15 14:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	83		44 - 148				04/09/15 22:00	04/10/15 14:50	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.6		1.1	0.51	mg/Kg	☀	04/09/15 08:35	04/09/15 20:05	1
Barium	33		1.1	0.20	mg/Kg	☀	04/09/15 08:35	04/09/15 20:05	1
Cadmium	0.31		0.22	0.063	mg/Kg	☀	04/09/15 08:35	04/09/15 20:05	1
Chromium	12		1.1	0.19	mg/Kg	☀	04/09/15 08:35	04/09/15 20:05	1
Lead	9.6		0.55	0.27	mg/Kg	☀	04/09/15 08:35	04/09/15 20:05	1
Selenium	<0.54		1.1	0.54	mg/Kg	☀	04/09/15 08:35	04/09/15 20:05	1
Silver	<0.13		0.55	0.13	mg/Kg	☀	04/09/15 08:35	04/09/15 20:05	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.019	0.0065	mg/Kg	☀	04/09/15 14:00	04/10/15 13:49	1

Client Sample ID: GP-14 (2-4)

Lab Sample ID: 500-94313-3

Date Collected: 04/07/15 00:00

Matrix: Solid

Date Received: 04/08/15 10:00

Percent Solids: 86.0

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	☀	04/07/15 12:00	04/21/15 22:58	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	☀	04/07/15 12:00	04/21/15 22:58	1
Benzene	<21		29	21	ug/Kg	☀	04/07/15 12:00	04/21/15 22:58	1
Ethylbenzene	<22		29	22	ug/Kg	☀	04/07/15 12:00	04/21/15 22:58	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	☀	04/07/15 12:00	04/21/15 22:58	1
Naphthalene	<140		290	140	ug/Kg	☀	04/07/15 12:00	04/21/15 22:58	1
Toluene	<19		29	19	ug/Kg	☀	04/07/15 12:00	04/21/15 22:58	1
Xylenes, Total	<34		86	34	ug/Kg	☀	04/07/15 12:00	04/21/15 22:58	1
Wisconsin GRO	<2900		5700	2900	ug/Kg	☀	04/07/15 12:00	04/21/15 22:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		80 -				04/07/15 12:00	04/21/15 22:58	1
a,a,a-Trifluorotoluene	92		80 -				04/07/15 12:00	04/21/15 22:58	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: GP-14 (2-4)

Date Collected: 04/07/15 00:00
Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-3

Matrix: Solid

Percent Solids: 86.0

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)	30		4.2	1.7	mg/Kg	⊗	04/09/15 22:00	04/13/15 12:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	78		44 - 148				04/09/15 22:00	04/13/15 12:24	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.9		1.1	0.51	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:10	1
Barium	51		1.1	0.20	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:10	1
Cadmium	0.56		0.22	0.064	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:10	1
Chromium	12		1.1	0.19	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:10	1
Lead	110		0.56	0.28	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:10	1
Selenium	<0.55		1.1	0.55	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:10	1
Silver	<0.13		0.56	0.13	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:10	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.017	0.0058	mg/Kg	⊗	04/09/15 14:00	04/10/15 13:51	1

Client Sample ID: GP-14 (6-8)

Date Collected: 04/07/15 00:00
Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-4

Matrix: Solid

Percent Solids: 82.8

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	3000	J ^	4800	2400	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		50 - 150				04/07/15 12:00	04/15/15 07:58	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<24		48	24	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:58	1
1,3,5-Trimethylbenzene	<24		48	24	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:58	1
Benzene	<16		48	16	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:58	1
Ethylbenzene	<21		48	21	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:58	1
Methyl tert-butyl ether	<32		480	32	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:58	1
Naphthalene	<21		240	21	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:58	1
Toluene	<20		48	20	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:58	1
Xylenes, Total	<88		140	88	ug/Kg	⊗	04/07/15 12:00	04/15/15 07:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		50 - 150				04/07/15 12:00	04/15/15 07:58	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)	<1.6		4.1	1.6	mg/Kg	⊗	04/09/15 22:00	04/10/15 16:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	83		44 - 148				04/09/15 22:00	04/10/15 16:01	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: GP-14 (6-8)

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-4

Matrix: Solid

Percent Solids: 82.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.0		1.2	0.54	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:22	1
Barium	73		1.2	0.21	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:22	1
Cadmium	0.26		0.23	0.068	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:22	1
Chromium	22		1.2	0.20	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:22	1
Lead	11		0.59	0.29	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:22	1
Selenium	<0.58		1.2	0.58	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:22	1
Silver	<0.14		0.59	0.14	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:22	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.018	0.0065	mg/Kg	⊗	04/09/15 14:00	04/10/15 13:53	1

Client Sample ID: GP-15 (2-4)

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-5

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	⊗	04/07/15 12:00	04/21/15 23:30	1
1,3,5-Trimethylbenzene	<17		29	17	ug/Kg	⊗	04/07/15 12:00	04/21/15 23:30	1
Benzene	<21		29	21	ug/Kg	⊗	04/07/15 12:00	04/21/15 23:30	1
Ethylbenzene	<22		29	22	ug/Kg	⊗	04/07/15 12:00	04/21/15 23:30	1
Methyl tert-butyl ether	<14		29	14	ug/Kg	⊗	04/07/15 12:00	04/21/15 23:30	1
Naphthalene	<140		290	140	ug/Kg	⊗	04/07/15 12:00	04/21/15 23:30	1
Toluene	<20		29	20	ug/Kg	⊗	04/07/15 12:00	04/21/15 23:30	1
Xylenes, Total	<35		86	35	ug/Kg	⊗	04/07/15 12:00	04/21/15 23:30	1
Wisconsin GRO	<2900		5800	2900	ug/Kg	⊗	04/07/15 12:00	04/21/15 23:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	91		80 -				04/07/15 12:00	04/21/15 23:30	1
a,a,a-Trifluorotoluene	92		80 -				04/07/15 12:00	04/21/15 23:30	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)	<1.6		4.0	1.6	mg/Kg	⊗	04/09/15 22:00	04/10/15 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Nonane	84		44 - 148				04/09/15 22:00	04/10/15 16:37	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.1		1.1	0.52	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:27	1
Barium	43		1.1	0.21	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:27	1
Cadmium	0.19 J		0.23	0.066	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:27	1
Chromium	15		1.1	0.20	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:27	1
Lead	9.7		0.57	0.28	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:27	1
Selenium	<0.56		1.1	0.56	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:27	1
Silver	<0.13		0.57	0.13	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:27	1

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: GP-15 (2-4)

Lab Sample ID: 500-94313-5

Date Collected: 04/07/15 00:00
Date Received: 04/08/15 10:00

Matrix: Solid

Percent Solids: 85.3

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0067	mg/Kg	⊗	04/09/15 14:00	04/10/15 13:55	1

Client Sample ID: GP-15 (8-10)

Lab Sample ID: 500-94313-6

Date Collected: 04/07/15 00:00
Date Received: 04/08/15 10:00

Matrix: Solid

Percent Solids: 88.2

Method: 8015B - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	3400	J ^	4700	2300	ug/Kg	⊗	04/07/15 12:00	04/15/15 08:30	1
<hr/>									
Surrogate									
a,a,a-Trifluorotoluene	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	98		50 - 150				04/07/15 12:00	04/15/15 08:30	1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	26	J	47	23	ug/Kg	⊗	04/07/15 12:00	04/15/15 08:30	1
1,3,5-Trimethylbenzene	<23		47	23	ug/Kg	⊗	04/07/15 12:00	04/15/15 08:30	1
Benzene	<16		47	16	ug/Kg	⊗	04/07/15 12:00	04/15/15 08:30	1
Ethylbenzene	<21		47	21	ug/Kg	⊗	04/07/15 12:00	04/15/15 08:30	1
Methyl tert-butyl ether	<31		470	31	ug/Kg	⊗	04/07/15 12:00	04/15/15 08:30	1
Naphthalene	120	J B	230	21	ug/Kg	⊗	04/07/15 12:00	04/15/15 08:30	1
Toluene	<20		47	20	ug/Kg	⊗	04/07/15 12:00	04/15/15 08:30	1
Xylenes, Total	<86		140	86	ug/Kg	⊗	04/07/15 12:00	04/15/15 08:30	1
<hr/>									
Surrogate									
a,a,a-Trifluorotoluene	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	95		50 - 150				04/07/15 12:00	04/15/15 08:30	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)	2.6	J	4.5	1.8	mg/Kg	⊗	04/09/15 22:00	04/10/15 17:12	1
<hr/>									
Surrogate									
n-Nonane	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	84		44 - 148				04/09/15 22:00	04/10/15 17:12	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.5		1.0	0.47	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:32	1
Barium	30		1.0	0.19	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:32	1
Cadmium	0.13	J	0.20	0.059	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:32	1
Chromium	14		1.0	0.18	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:32	1
Lead	8.8		0.51	0.25	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:32	1
Selenium	<0.51		1.0	0.51	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:32	1
Silver	<0.12		0.51	0.12	mg/Kg	⊗	04/09/15 08:35	04/09/15 20:32	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.011	J	0.018	0.0064	mg/Kg	⊗	04/09/15 14:00	04/10/15 13:57	1

TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: MeOH Blank

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<18		25	18	ug/Kg		04/07/15 12:00	04/21/15 21:54	1
Ethylbenzene	<19		25	19	ug/Kg		04/07/15 12:00	04/21/15 21:54	1
Methyl tert-butyl ether	16 J		25	12	ug/Kg		04/07/15 12:00	04/21/15 21:54	1
Naphthalene	<120		250	120	ug/Kg		04/07/15 12:00	04/21/15 21:54	1
Toluene	<17		25	17	ug/Kg		04/07/15 12:00	04/21/15 21:54	1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		04/07/15 12:00	04/21/15 21:54	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		04/07/15 12:00	04/21/15 21:54	1
Xylenes, Total	<30		75	30	ug/Kg		04/07/15 12:00	04/21/15 21:54	1
Surrogate							Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90			80 -			04/07/15 12:00	04/21/15 21:54	1

Definitions/Glossary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Qualifiers

GC VOA

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

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
F1	MS and/or MSD Recovery is outside acceptance limits.
V	Serial Dilution exceeds the control limits
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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QC Association Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

GC VOA

Prep Batch: 240290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1	GP-13 (4-6)	Total/NA	Solid	5035	
500-94313-2	GP-13 (8-10)	Total/NA	Solid	5035	
500-94313-3	GP-14 (2-4)	Total/NA	Solid	5035	
500-94313-4	GP-14 (6-8)	Total/NA	Solid	5035	
500-94313-5	GP-15 (2-4)	Total/NA	Solid	5035	
500-94313-6	GP-15 (8-10)	Total/NA	Solid	5035	
500-94313-7	MeOH Blank	Total/NA	Solid	5035	

Prep Batch: 240302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-240302/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 490-240302/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
MB 490-240302/1-A	Method Blank	Total/NA	Solid	5030B	

Analysis Batch: 241237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-2	GP-13 (8-10)	Total/NA	Solid	8021B	
500-94313-4	GP-14 (6-8)	Total/NA	Solid	8021B	
500-94313-6	GP-15 (8-10)	Total/NA	Solid	8021B	
LCS 490-241237/4	Lab Control Sample	Total/NA	Solid	8021B	
LCSD 490-241237/20	Lab Control Sample Dup	Total/NA	Solid	8021B	
MB 490-241237/22	Method Blank	Total/NA	Solid	8021B	

Analysis Batch: 241238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-2	GP-13 (8-10)	Total/NA	Solid	8015B	
500-94313-4	GP-14 (6-8)	Total/NA	Solid	8015B	
500-94313-6	GP-15 (8-10)	Total/NA	Solid	8015B	
LCS 490-241238/5	Lab Control Sample	Total/NA	Solid	8015B	
LCSD 490-241238/34	Lab Control Sample Dup	Total/NA	Solid	8015B	
MB 490-241238/7	Method Blank	Total/NA	Solid	8015B	

Analysis Batch: 242761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1	GP-13 (4-6)	Total/NA	Solid	WDNR	
500-94313-3	GP-14 (2-4)	Total/NA	Solid	WDNR	
500-94313-5	GP-15 (2-4)	Total/NA	Solid	WDNR	
500-94313-7	MeOH Blank	Total/NA	Solid	WDNR	
LCS 490-240302/2-A	Lab Control Sample	Total/NA	Solid	WDNR	
LCSD 490-240302/3-A	Lab Control Sample Dup	Total/NA	Solid	WDNR	
MB 490-240302/1-A	Method Blank	Total/NA	Solid	WDNR	
MB 490-240302/1-A	Method Blank	Total/NA	Solid	WDNR	

GC Semi VOA

Analysis Batch: 282962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1	GP-13 (4-6)	Total/NA	Solid	WI-DRO	
500-94313-2	GP-13 (8-10)	Total/NA	Solid	WI-DRO	
500-94313-3	GP-14 (2-4)	Total/NA	Solid	WI-DRO	

TestAmerica Chicago

QC Association Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

GC Semi VOA (Continued)

Analysis Batch: 282962 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-4	GP-14 (6-8)	Total/NA	Solid	WI-DRO	283215
500-94313-5	GP-15 (2-4)	Total/NA	Solid	WI-DRO	283215
500-94313-6	GP-15 (8-10)	Total/NA	Solid	WI-DRO	283215
LCS 500-283215/2-A	Lab Control Sample	Total/NA	Solid	WI-DRO	283215
LCSD 500-283215/3-A	Lab Control Sample Dup	Total/NA	Solid	WI-DRO	283215
MB 500-283215/1-A	Method Blank	Total/NA	Solid	WI-DRO	283215

Prep Batch: 283215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1	GP-13 (4-6)	Total/NA	Solid	WI DRO PREP	9
500-94313-2	GP-13 (8-10)	Total/NA	Solid	WI DRO PREP	10
500-94313-3	GP-14 (2-4)	Total/NA	Solid	WI DRO PREP	11
500-94313-4	GP-14 (6-8)	Total/NA	Solid	WI DRO PREP	12
500-94313-5	GP-15 (2-4)	Total/NA	Solid	WI DRO PREP	13
500-94313-6	GP-15 (8-10)	Total/NA	Solid	WI DRO PREP	
LCS 500-283215/2-A	Lab Control Sample	Total/NA	Solid	WI DRO PREP	
LCSD 500-283215/3-A	Lab Control Sample Dup	Total/NA	Solid	WI DRO PREP	
MB 500-283215/1-A	Method Blank	Total/NA	Solid	WI DRO PREP	

Metals

Prep Batch: 283066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1	GP-13 (4-6)	Total/NA	Solid	3050B	
500-94313-1 DU	GP-13 (4-6)	Total/NA	Solid	3050B	
500-94313-1 MS	GP-13 (4-6)	Total/NA	Solid	3050B	
500-94313-1 MSD	GP-13 (4-6)	Total/NA	Solid	3050B	
500-94313-2	GP-13 (8-10)	Total/NA	Solid	3050B	
500-94313-3	GP-14 (2-4)	Total/NA	Solid	3050B	
500-94313-4	GP-14 (6-8)	Total/NA	Solid	3050B	
500-94313-5	GP-15 (2-4)	Total/NA	Solid	3050B	
500-94313-6	GP-15 (8-10)	Total/NA	Solid	3050B	
LCS 500-283066/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 500-283066/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 283139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1	GP-13 (4-6)	Total/NA	Solid	7471A	
500-94313-2	GP-13 (8-10)	Total/NA	Solid	7471A	
500-94313-3	GP-14 (2-4)	Total/NA	Solid	7471A	
500-94313-4	GP-14 (6-8)	Total/NA	Solid	7471A	
500-94313-5	GP-15 (2-4)	Total/NA	Solid	7471A	
500-94313-6	GP-15 (8-10)	Total/NA	Solid	7471A	
LCS 500-283139/13-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 500-283139/12-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 283246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1	GP-13 (4-6)	Total/NA	Solid	6010B	283066
500-94313-1 DU	GP-13 (4-6)	Total/NA	Solid	6010B	283066

TestAmerica Chicago

QC Association Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Metals (Continued)

Analysis Batch: 283246 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1 MS	GP-13 (4-6)	Total/NA	Solid	6010B	283066
500-94313-1 MSD	GP-13 (4-6)	Total/NA	Solid	6010B	283066
500-94313-2	GP-13 (8-10)	Total/NA	Solid	6010B	283066
500-94313-3	GP-14 (2-4)	Total/NA	Solid	6010B	283066
500-94313-4	GP-14 (6-8)	Total/NA	Solid	6010B	283066
500-94313-5	GP-15 (2-4)	Total/NA	Solid	6010B	283066
500-94313-6	GP-15 (8-10)	Total/NA	Solid	6010B	283066
LCS 500-283066/2-A	Lab Control Sample	Total/NA	Solid	6010B	283066
MB 500-283066/1-A	Method Blank	Total/NA	Solid	6010B	283066

Analysis Batch: 283367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1	GP-13 (4-6)	Total/NA	Solid	7471A	283139
500-94313-2	GP-13 (8-10)	Total/NA	Solid	7471A	283139
500-94313-3	GP-14 (2-4)	Total/NA	Solid	7471A	283139
500-94313-4	GP-14 (6-8)	Total/NA	Solid	7471A	283139
500-94313-5	GP-15 (2-4)	Total/NA	Solid	7471A	283139
500-94313-6	GP-15 (8-10)	Total/NA	Solid	7471A	283139
LCS 500-283139/13-A	Lab Control Sample	Total/NA	Solid	7471A	283139
MB 500-283139/12-A	Method Blank	Total/NA	Solid	7471A	283139

General Chemistry

Analysis Batch: 282957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-1	GP-13 (4-6)	Total/NA	Solid	Moisture	
500-94313-2	GP-13 (8-10)	Total/NA	Solid	Moisture	
500-94313-3	GP-14 (2-4)	Total/NA	Solid	Moisture	
500-94313-4	GP-14 (6-8)	Total/NA	Solid	Moisture	
500-94313-5	GP-15 (2-4)	Total/NA	Solid	Moisture	
500-94313-6	GP-15 (8-10)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFT2 (50-150)
500-94313-2	GP-13 (8-10)	96
500-94313-4	GP-14 (6-8)	100
500-94313-6	GP-15 (8-10)	98
LCS 490-241238/5	Lab Control Sample	148
LCSD 490-241238/34	Lab Control Sample Dup	142
MB 490-241238/7	Method Blank	86

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFT1 (50-150)
500-94313-2	GP-13 (8-10)	97
500-94313-4	GP-14 (6-8)	98
500-94313-6	GP-15 (8-10)	95
LCS 490-241237/4	Lab Control Sample	103
LCSD 490-241237/20	Lab Control Sample Dup	106
MB 490-241237/22	Method Blank	97

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TFT (80-)	TFT (80-)
500-94313-1	GP-13 (4-6)	90	90
500-94313-3	GP-14 (2-4)	91	91
500-94313-5	GP-15 (2-4)	91	91
500-94313-7	MeOH Blank	90	90
LCS 490-240302/2-A	Lab Control Sample	94	94
LCSD 490-240302/3-A	Lab Control Sample Dup	94	94
MB 490-240302/1-A	Method Blank	91	91
MB 490-240302/1-A	Method Blank	89	89

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

TestAmerica Chicago

Surrogate Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

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)							
500-94313-1	GP-13 (4-6)	83							
500-94313-2	GP-13 (8-10)	83							
500-94313-3	GP-14 (2-4)	78							
500-94313-4	GP-14 (6-8)	83							
500-94313-5	GP-15 (2-4)	84							
500-94313-6	GP-15 (8-10)	84							
LCS 500-283215/2-A	Lab Control Sample	85							
LCSD 500-283215/3-A	Lab Control Sample Dup	86							
MB 500-283215/1-A	Method Blank	85							

Surrogate Legend

C9 = n-Nonane

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 490-241238/7

Matrix: Solid

Analysis Batch: 241238

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics [C6 - C10]	<2500		5000	2500	ug/Kg			04/14/15 17:24	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
a,a,a-Trifluorotoluene	86		50 - 150					04/14/15 17:24	1

Lab Sample ID: LCS 490-241238/5

Matrix: Solid

Analysis Batch: 241238

Analyte	MB	MB	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
	Result	Qualifier							
Gasoline Range Organics [C6 - C10]			10000	11000		ug/Kg		110	70 - 130
Surrogate	LC	LC	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
a,a,a-Trifluorotoluene	148		50 - 150						

Lab Sample ID: LCSD 490-241238/34

Matrix: Solid

Analysis Batch: 241238

Analyte	MB	MB	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.
	Result	Qualifier							
Gasoline Range Organics [C6 - C10]			10000	11900		ug/Kg		119	70 - 130
Surrogate	LC	LC	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
a,a,a-Trifluorotoluene	142		50 - 150						

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 490-241237/22

Matrix: Solid

Analysis Batch: 241237

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,4-Trimethylbenzene	<25		50	25	ug/Kg			04/15/15 02:34	1
1,3,5-Trimethylbenzene	<25		50	25	ug/Kg			04/15/15 02:34	1
Benzene	<17		50	17	ug/Kg			04/15/15 02:34	1
Ethylbenzene	<22		50	22	ug/Kg			04/15/15 02:34	1
Methyl tert-butyl ether	<33		500	33	ug/Kg			04/15/15 02:34	1
Naphthalene	146	J	250	22	ug/Kg			04/15/15 02:34	1
Toluene	<21		50	21	ug/Kg			04/15/15 02:34	1
Xylenes, Total	<92		150	92	ug/Kg			04/15/15 02:34	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
a,a,a-Trifluorotoluene	97		50 - 150					04/15/15 02:34	1

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 490-241237/4

Matrix: Solid

Analysis Batch: 241237

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

Analyte		Spike	LCS	LCS		%Rec.		
		Added	Result	Qualifier	Unit	D	%Rec	Limits
1,2,4-Trimethylbenzene		100	93.5		ug/Kg	94	60 - 140	
1,3,5-Trimethylbenzene		100	97.7		ug/Kg	98	60 - 140	
Benzene		100	98.8		ug/Kg	99	76 - 120	
Ethylbenzene		100	100		ug/Kg	100	77 - 120	
Methyl tert-butyl ether		100	95.2		ug/Kg	95	73 - 120	
m-Xylene & p-Xylene		200	193		ug/Kg	97	80 - 120	
Naphthalene		100	103		ug/Kg	103	74 - 127	
o-Xylene		100	98.3		ug/Kg	98	79 - 120	
Toluene		100	101		ug/Kg	101	79 - 120	

Surrogate	LCS		LCS	
	%Recovery	Qualifier	Limits	
a.a.a-Trifluorotoluene	103		50 - 150	

Lab Sample ID: LCSD 490-241237/20

Matrix: Solid

Analysis Batch: 241237

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

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec.		RPD Limit
		Result	Qualifier			%Rec	Limits	
1,2,4-Trimethylbenzene	100	105		ug/Kg		105	60 - 140	11 50
1,3,5-Trimethylbenzene	100	107		ug/Kg		107	60 - 140	9 50
Benzene	100	104		ug/Kg		104	76 - 120	5 27
Ethylbenzene	100	107		ug/Kg		107	77 - 120	7 49
Methyl tert-butyl ether	100	79.4		ug/Kg		79	73 - 120	18 31
m-Xylene & p-Xylene	200	209		ug/Kg		104	80 - 120	8 47
Naphthalene	100	108		ug/Kg		108	74 - 127	5 50
o-Xylene	100	105		ug/Kg		105	79 - 120	7 47
Toluene	100	107		ug/Kg		107	79 - 120	5 37

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

Lab Sample ID: MB 490-240302/1-A

Matrix-Solid

Analysis Batch: 242761

**Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 240302**

Analyte	MB	MB	Prep Date: 2/10/15						
	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<18		25	18	ug/Kg		04/10/15 09:10	04/21/15 20:50	1
Ethylbenzene	<19		25	19	ug/Kg		04/10/15 09:10	04/21/15 20:50	1
Methyl tert-butyl ether	<12		25	12	ug/Kg		04/10/15 09:10	04/21/15 20:50	1
1,2,4-Trimethylbenzene	<15		25	15	ug/Kg		04/10/15 09:10	04/21/15 20:50	1
Naphthalene	<120		250	120	ug/Kg		04/10/15 09:10	04/21/15 20:50	1
1,3,5-Trimethylbenzene	<15		25	15	ug/Kg		04/10/15 09:10	04/21/15 20:50	1
Toluene	<17		25	17	ug/Kg		04/10/15 09:10	04/21/15 20:50	1
Xylenes, Total	<30		75	30	ug/Kg		04/10/15 09:10	04/21/15 20:50	1

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

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

Lab Sample ID: MB 490-240302/1-A

Matrix: Solid

Analysis Batch: 242761

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 240302

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene			89		80 -	04/10/15 09:10	04/21/15 20:50	1

Lab Sample ID: MB 490-240302/1-A

Matrix: Solid

Analysis Batch: 242761

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 240302

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<18				25	18	ug/Kg		04/10/15 09:10	04/22/15 03:45	1
Ethylbenzene	<19				25	19	ug/Kg		04/10/15 09:10	04/22/15 03:45	1
Methyl tert-butyl ether	<12				25	12	ug/Kg		04/10/15 09:10	04/22/15 03:45	1
1,2,4-Trimethylbenzene	<15				25	15	ug/Kg		04/10/15 09:10	04/22/15 03:45	1
Naphthalene	<120				250	120	ug/Kg		04/10/15 09:10	04/22/15 03:45	1
1,3,5-Trimethylbenzene	<15				25	15	ug/Kg		04/10/15 09:10	04/22/15 03:45	1
Toluene	<17				25	17	ug/Kg		04/10/15 09:10	04/22/15 03:45	1
Xylenes, Total	<30				75	30	ug/Kg		04/10/15 09:10	04/22/15 03:45	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene			91		80 -	04/10/15 09:10	04/22/15 03:45	1

Lab Sample ID: LCS 490-240302/2-A

Matrix: Solid

Analysis Batch: 242761

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 240302

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	Prepared	Analyzed	Dil Fac
	Added											
Benzene	5000			4530		ug/Kg		91	76 - 120			
Ethylbenzene	5000			4690		ug/Kg		94	77 - 120			
Methyl tert-butyl ether	5000			4950		ug/Kg		99	73 - 120			
1,2,4-Trimethylbenzene	5000			4700		ug/Kg		94	60 - 140			
Naphthalene	5000			5470		ug/Kg		109	74 - 127			
1,3,5-Trimethylbenzene	5000			4590		ug/Kg		92	74 - 133			
Toluene	5000			4670		ug/Kg		93	79 - 120			

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene			94		80 -			

Lab Sample ID: LCSD 490-240302/3-A

Matrix: Solid

Analysis Batch: 242761

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 240302

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added										
Benzene	5000			4530		ug/Kg		91	76 - 120	0	27
Ethylbenzene	5000			4720		ug/Kg		94	77 - 120	1	49
Methyl tert-butyl ether	5000			4900		ug/Kg		98	73 - 120	1	31
1,2,4-Trimethylbenzene	5000			4690		ug/Kg		94	60 - 140	0	50
Naphthalene	5000			5390		ug/Kg		108	74 - 127	1	50
1,3,5-Trimethylbenzene	5000			4590		ug/Kg		92	74 - 133	0	42
Toluene	5000			4670		ug/Kg		93	79 - 120	0	37

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

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

Lab Sample ID: LCSD 490-240302/3-A

Matrix: Solid

Analysis Batch: 242761

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 240302

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	94		80 -

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

Lab Sample ID: MB 500-283215/1-A

Matrix: Solid

Analysis Batch: 282962

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 283215

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		04/09/15 22:00	04/10/15 11:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	85		44 - 148	04/09/15 22:00	04/10/15 11:52	1

Lab Sample ID: LCS 500-283215/2-A

Matrix: Solid

Analysis Batch: 282962

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 283215

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limts
WI Diesel Range Organics (C10-C28)	20.0	17.8		mg/Kg		89	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	85		44 - 148	04/09/15 22:00	04/10/15 11:52	1

Lab Sample ID: LCSD 500-283215/3-A

Matrix: Solid

Analysis Batch: 282962

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 283215

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	Limit
WI Diesel Range Organics (C10-C28)	20.0	17.3		mg/Kg		87	70 - 120	3 20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Nonane	86		44 - 148	04/09/15 22:00	04/10/15 11:52	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 500-283066/1-A

Matrix: Solid

Analysis Batch: 283246

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 283066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.46		1.0	0.46	mg/Kg		04/09/15 08:35	04/09/15 19:30	1
Barium	<0.18		1.0	0.18	mg/Kg		04/09/15 08:35	04/09/15 19:30	1
Cadmium	<0.058		0.20	0.058	mg/Kg		04/09/15 08:35	04/09/15 19:30	1
Chromium	<0.17		1.0	0.17	mg/Kg		04/09/15 08:35	04/09/15 19:30	1

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

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

Lab Sample ID: MB 500-283066/1-A

Matrix: Solid

Analysis Batch: 283246

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 283066

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.25		0.50	0.25	mg/Kg		04/09/15 08:35	04/09/15 19:30	1
Selenium	<0.50		1.0	0.50	mg/Kg		04/09/15 08:35	04/09/15 19:30	1
Silver	<0.12		0.50	0.12	mg/Kg		04/09/15 08:35	04/09/15 19:30	1

Lab Sample ID: LCS 500-283066/2-A

Matrix: Solid

Analysis Batch: 283246

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 283066

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Added	Result							
Arsenic	10.0	9.54	mg/Kg		95		80 - 120		
Barium	200	202	mg/Kg		101		80 - 120		
Cadmium	5.00	4.75	mg/Kg		95		80 - 120		
Chromium	20.0	19.7	mg/Kg		99		80 - 120		
Lead	10.0	9.57	mg/Kg		96		80 - 120		
Selenium	10.0	8.69	mg/Kg		87		80 - 120		
Silver	5.00	4.59	mg/Kg		92		80 - 120		

Lab Sample ID: 500-94313-1 MS

Matrix: Solid

Analysis Batch: 283246

Client Sample ID: GP-13 (4-6)

Prep Type: Total/NA

Prep Batch: 283066

Analyte	Sample		Spike Added	MS		Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier		Result	Qualifier					
Arsenic	6.8	F1	12.4	16.3		mg/Kg	⊗	77	75 - 125	
Barium	110	F1 V	248	347		mg/Kg	⊗	94	75 - 125	
Cadmium	<0.077	F1	6.19	4.91		mg/Kg	⊗	79	75 - 125	
Chromium	23	V	24.8	49.8		mg/Kg	⊗	106	75 - 125	
Lead	18	F1	12.4	28.6		mg/Kg	⊗	86	75 - 125	
Selenium	0.80	J F1	12.4	9.12	F1	mg/Kg	⊗	67	75 - 125	
Silver	<0.16	F1	6.19	4.57	F1	mg/Kg	⊗	74	75 - 125	

Lab Sample ID: 500-94313-1 MSD

Matrix: Solid

Analysis Batch: 283246

Client Sample ID: GP-13 (4-6)

Prep Type: Total/NA

Prep Batch: 283066

Analyte	Sample		Spike Added	MSD		Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier		Result	Qualifier						
Arsenic	6.8	F1	12.4	15.4	F1	mg/Kg	⊗	69	75 - 125	6	20
Barium	110	F1 V	247	291	F1	mg/Kg	⊗	72	75 - 125	17	20
Cadmium	<0.077	F1	6.19	4.42	F1	mg/Kg	⊗	72	75 - 125	10	20
Chromium	23	V	24.7	44.9		mg/Kg	⊗	86	75 - 125	10	20
Lead	18	F1	12.4	24.1	F1	mg/Kg	⊗	51	75 - 125	17	20
Selenium	0.80	J F1	12.4	8.26	F1	mg/Kg	⊗	60	75 - 125	10	20
Silver	<0.16	F1	6.19	4.15	F1	mg/Kg	⊗	67	75 - 125	10	20

Lab Sample ID: 500-94313-1 DU

Matrix: Solid

Analysis Batch: 283246

Client Sample ID: GP-13 (4-6)

Prep Type: Total/NA

Prep Batch: 283066

Analyte	Sample		DU Result	DU Qualifier	Unit	D	RPD	Limit
	Result	Qualifier						
Arsenic	6.8	F1	6.08		mg/Kg	⊗	12	20

TestAmerica Chicago

QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

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

Lab Sample ID: 500-94313-1 DU

Matrix: Solid

Analysis Batch: 283246

Client Sample ID: GP-13 (4-6)

Prep Type: Total/NA

Prep Batch: 283066

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Analyte	Sample	Sample	DU		DU		D		RPD	Limit
	Result	Qualifier	Result	Qualifier	Unit					
Barium	110	F1 V	112		mg/Kg	⊗			1	20
Cadmium	<0.077	F1	<0.065		mg/Kg	⊗			NC	20
Chromium	23	V	24.0		mg/Kg	⊗			2	20
Lead	18	F1	15.6		mg/Kg	⊗			14	20
Selenium	0.80	J F1	0.718	J	mg/Kg	⊗			11	20
Silver	<0.16	F1	<0.13		mg/Kg	⊗			NC	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 500-283139/12-A

Matrix: Solid

Analysis Batch: 283367

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 283139

6

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.0058		0.017	0.0058	mg/Kg		04/09/15 14:00	04/10/15 13:02	1

Lab Sample ID: LCS 500-283139/13-A

Matrix: Solid

Analysis Batch: 283367

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 283139

7

Analyte	Spike Added	LCs	LCs	Unit	D	%Rec	Limits
		Result	Qualifier				
Mercury	0.167	0.174		mg/Kg		105	80 - 120

TestAmerica Chicago

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: GP-13 (4-6)

Lab Sample ID: 500-94313-1

Date Collected: 04/07/15 00:00

Matrix: Solid

Date Received: 04/08/15 10:00

Percent Solids: 74.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	242761	04/21/15 22:26	RRS	TAL NSH
Total/NA	Prep	WI DRO PREP			283215	04/09/15 22:00	LLH	TAL CHI
Total/NA	Analysis	WI-DRO		1	282962	04/10/15 14:14	PJG	TAL CHI
Total/NA	Prep	3050B			283066	04/09/15 08:35	JLC	TAL CHI
Total/NA	Analysis	6010B		1	283246	04/09/15 19:42	PJ1	TAL CHI
Total/NA	Prep	7471A			283139	04/09/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	283367	04/10/15 13:47	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	282957	04/08/15 13:56	LWN	TAL CHI

Client Sample ID: GP-13 (8-10)

Lab Sample ID: 500-94313-2

Date Collected: 04/07/15 00:00

Matrix: Solid

Date Received: 04/08/15 10:00

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	8015B		1	241238	04/15/15 07:25	AMC	TAL NSH
Total/NA	Prep	5035			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	8021B		1	241237	04/15/15 07:25	AMC	TAL NSH
Total/NA	Prep	WI DRO PREP			283215	04/09/15 22:00	LLH	TAL CHI
Total/NA	Analysis	WI-DRO		1	282962	04/10/15 14:50	PJG	TAL CHI
Total/NA	Prep	3050B			283066	04/09/15 08:35	JLC	TAL CHI
Total/NA	Analysis	6010B		1	283246	04/09/15 20:05	PJ1	TAL CHI
Total/NA	Prep	7471A			283139	04/09/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	283367	04/10/15 13:49	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	282957	04/08/15 13:56	LWN	TAL CHI

Client Sample ID: GP-14 (2-4)

Lab Sample ID: 500-94313-3

Date Collected: 04/07/15 00:00

Matrix: Solid

Date Received: 04/08/15 10:00

Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	242761	04/21/15 22:58	RRS	TAL NSH
Total/NA	Prep	WI DRO PREP			283215	04/09/15 22:00	LLH	TAL CHI
Total/NA	Analysis	WI-DRO		1	282962	04/13/15 12:24	PJG	TAL CHI
Total/NA	Prep	3050B			283066	04/09/15 08:35	JLC	TAL CHI
Total/NA	Analysis	6010B		1	283246	04/09/15 20:10	PJ1	TAL CHI
Total/NA	Prep	7471A			283139	04/09/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	283367	04/10/15 13:51	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	282957	04/08/15 13:56	LWN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: GP-14 (6-8)

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-4

Matrix: Solid

Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	8015B		1	241238	04/15/15 07:58	AMC	TAL NSH
Total/NA	Prep	5035			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	8021B		1	241237	04/15/15 07:58	AMC	TAL NSH
Total/NA	Prep	WI DRO PREP			283215	04/09/15 22:00	LLH	TAL CHI
Total/NA	Analysis	WI-DRO		1	282962	04/10/15 16:01	PJG	TAL CHI
Total/NA	Prep	3050B			283066	04/09/15 08:35	JLC	TAL CHI
Total/NA	Analysis	6010B		1	283246	04/09/15 20:22	PJ1	TAL CHI
Total/NA	Prep	7471A			283139	04/09/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	283367	04/10/15 13:53	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	282957	04/08/15 13:56	LWN	TAL CHI

Client Sample ID: GP-15 (2-4)

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-5

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	5035			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	242761	04/21/15 23:30	RRS	TAL NSH
Total/NA	Prep	WI DRO PREP			283215	04/09/15 22:00	LLH	TAL CHI
Total/NA	Analysis	WI-DRO		1	282962	04/10/15 16:37	PJG	TAL CHI
Total/NA	Prep	3050B			283066	04/09/15 08:35	JLC	TAL CHI
Total/NA	Analysis	6010B		1	283246	04/09/15 20:27	PJ1	TAL CHI
Total/NA	Prep	7471A			283139	04/09/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	283367	04/10/15 13:55	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	282957	04/08/15 13:56	LWN	TAL CHI

Client Sample ID: GP-15 (8-10)

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-6

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			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	8015B		1	241238	04/15/15 08:30	AMC	TAL NSH
Total/NA	Prep	5035			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	8021B		1	241237	04/15/15 08:30	AMC	TAL NSH
Total/NA	Prep	WI DRO PREP			283215	04/09/15 22:00	LLH	TAL CHI
Total/NA	Analysis	WI-DRO		1	282962	04/10/15 17:12	PJG	TAL CHI
Total/NA	Prep	3050B			283066	04/09/15 08:35	JLC	TAL CHI
Total/NA	Analysis	6010B		1	283246	04/09/15 20:32	PJ1	TAL CHI
Total/NA	Prep	7471A			283139	04/09/15 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	283367	04/10/15 13:57	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	282957	04/08/15 13:56	LWN	TAL CHI

TestAmerica Chicago

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Client Sample ID: MeOH Blank

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Lab Sample ID: 500-94313-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			240290	04/07/15 12:00	JLP	TAL NSH
Total/NA	Analysis	WDNR		1	242761	04/21/15 21:54	RRS	TAL NSH

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

Certification Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448

TestAmerica Job ID: 500-94313-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-15

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	998020430	08-31-15

TestAmerica

THE LEADER IN ENVIRONMENTAL

2417 Bond Street, University Park, IL 604
Phone: 708.534.5200 Fax: 708.534.



500-94313 COC

(optional)

Report To
Contact: Bryan Bergmann

Company: TRC

Address: 162 N Patrick Blvd

Address: Ste 100, Brookfield, WI 53045

Phone: 262-901-2153

Fax: _____

E-Mail: bbergmann@trccorporation.com

(optional)

Bill To

Contact: _____

Company: _____

Address: _____

Address: _____

Phone: _____

Fax: _____

Chain of Custody Record

Lab Job #: 500-94313

Chain of Custody Number: _____

Page 1 of 1

Temperature °C of Cooler: 21.2

- 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		# of Containers	Matrix	Comments
			GRO	DRO			
1	TRC 230448						
2	WisDOT - Bristol Motors & Bristol						
3	Project Name: WF						
4	Project Location/State: Lab Project #						
5	Sampler: JL/DH						
6							
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8							
9							
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13							
14							
15							

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 _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By: <i>John D. Bergmann</i>	Company: TRC	Date: 4/7/15	Time: 1600	Received By: <i>John D. Bergmann</i>	Company: TRC	Date: 4/8/15	Time: 1000
Relinquished By:	Company:	Date:	Time:	Received By:	Company:	Date:	Time:

Lab Courier: *FedEx*
Shipped: *FedEx*
Hand Delivered: *FedEx*

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 Chicago

2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Fax (708) 534-5211

Chain of Custody Record



TestAmerica

THE LEADERS IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Sampler:	Lab P.M.: Fredrick, Sandie J	Carrier Tracking No(s): 500-60461-1
Client Contact: Shipping/Receiving	Contract Lab:	Phone:	E-Mail: sandie.fredrick@testamericainc.com	Page: 1 of 1
Company: TestAmerica Laboratories, Inc	Address: 2860 Foster Creighton Drive,	Due Date Requested: 4/22/2015	TAT Requested (days):	Job #: 500-94313-1
City: Nashville	State, Zip: TN 37204	PO#:	Loc: 500 94313	Preservation Codes: A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - Di Water K - EDTA L - EDA Other:
Phone: 615-726-0177 (Tel) Email: Project Name: WisDOT Bristol Motors - 230448	WFO #: 50010540	ISSOW#:	WL-GRO/6035FM-Calc (MDF) PVC+NP+GRO WL-GRO/6035FM-Calc (MDF) PVC+NAP+GRO	Total Number of containers: 1
Analysis Requested Sample ID - Client ID (Lab ID) Perform M/S/MS (yes or No) Interfaced Sample (yes or No)				
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Water, Solid, Gaseous, Tissue, Air)
GP-13 (4-6) (500-94313-1)	4/7/15	Central	Solid	X
GP-13 (8-10) (500-94313-2)	4/7/15	Central	Solid	X
GP-14 (2-4) (500-94313-3)	4/7/15	Central	Solid	X
GP-14 (6-8) (500-94313-4)	4/7/15	Central	Solid	X
GP-15 (2-4) (500-94313-5)	4/7/15	Central	Solid	X
GP-15 (8-10) (500-94313-6)	4/7/15	Central	Solid	X
MeOH Blank (500-94313-7)	4/7/15	Central	Solid	X
Special Instructions/Note: <input checked="" type="checkbox"/> Plus GRO <input type="checkbox"/> Plus GRO				
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)				
Empty Kit Relinquished by: Relinquished by: <i>John W. Shatto</i> Date/Time: 4/9/15 1515 Company: <i>J.W. Shatto Co., Inc.</i> Received By: <i>J.W. Shatto</i> Date/Time: 4/9/15 / 0840 Company: <i>J.W. Shatto Co., Inc.</i>				
Relinquished by: Relinquished by: Date/Time: Received By: Date/Time: Company: Company				
Custody Seals intact: <input checked="" type="checkbox"/> Custody Seal No.: 4-3 <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Cooler Temperature(s) °C and Other Remarks: 4-3				

COOLER RECEIPT FORM

Cooler Received/Opened On 4/9/2015 @ 0840

1. Tracking # 6137 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 4.3 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: (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) MJW

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 50%

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence # CA

I certify that I unloaded the cooler and answered questions 7-14 (initial) CA

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) CH

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) CH

I certify that I attached a label with the unique LIMS number to each container (initial) CH

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: 500-94313-1

Login Number: 94313

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

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	2.2
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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: 500-94313-1

Login Number: 94313

List Source: TestAmerica Nashville

List Number: 2

List Creation: 04/09/15 04:22 PM

Creator: Huckaba, Jimmy

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.	N/A	
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.	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: 500-94313-2

Client Project/Site: WisDOT Bristol Motors - 230448 TCLP

For:

TRC Environmental Corporation.

150 N. Patrick Blvd.

Suite 180

Brookfield, Wisconsin 53045

Attn: Mr. Bryan Bergmann



Authorized for release by:

4/27/2015 11:32:39 AM

Sandie Fredrick, Project Manager II

(920)261-1660

sandie.fredrick@testamericainc.com

LINKS

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results through

TotalAccess

Have a Question?

 Ask
The
Expert

Visit us at:

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.

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Case Narrative

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Job ID: 500-94313-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-94313-2

Comments

TCLP Lead analysis added by client - 500-94313-3.

Receipt

The samples were received on 4/8/2015 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

Metals

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

Detection Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Client Sample ID: GP-14 (2-4)

Lab Sample ID: 500-94313-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.037	J	0.050	0.0075	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

Method Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CHI

Protocol References:

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

Laboratory References:

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

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Sample Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-94313-3	GP-14 (2-4)	Solid	04/07/15 00:00	04/08/15 10:00

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TestAmerica Chicago

Client Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Client Sample ID: GP-14 (2-4)

Lab Sample ID: 500-94313-3

Matrix: Solid

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.037	J	0.050	0.0075	mg/L		04/24/15 08:35	04/24/15 16:08	1

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TestAmerica Chicago

Definitions/Glossary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Qualifiers

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

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QC Association Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Metals

Leach Batch: 285052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-3	GP-14 (2-4)	TCLP	Solid	1311	
500-94313-3 DU	GP-14 (2-4)	TCLP	Solid	1311	
500-94313-3 MS	GP-14 (2-4)	TCLP	Solid	1311	
LB 500-285052/1-B	Method Blank	TCLP	Solid	1311	

Prep Batch: 285334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-3	GP-14 (2-4)	TCLP	Solid	3010A	
500-94313-3 DU	GP-14 (2-4)	TCLP	Solid	3010A	285052
500-94313-3 MS	GP-14 (2-4)	TCLP	Solid	3010A	285052
LB 500-285052/1-B	Method Blank	TCLP	Solid	3010A	285052
LCS 500-285334/2-A	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 285475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-94313-3	GP-14 (2-4)	TCLP	Solid	6010B	
500-94313-3 DU	GP-14 (2-4)	TCLP	Solid	6010B	285334
500-94313-3 MS	GP-14 (2-4)	TCLP	Solid	6010B	285334
LB 500-285052/1-B	Method Blank	TCLP	Solid	6010B	285334
LCS 500-285334/2-A	Lab Control Sample	Total/NA	Solid	6010B	285334

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QC Sample Results

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 500-285334/2-A

Matrix: Solid

Analysis Batch: 285475

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				
Lead	0.100	0.101		mg/L	101	101	80 - 120

Lab Sample ID: LB 500-285052/1-B

Matrix: Solid

Analysis Batch: 285475

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.050	0.0075	mg/L		04/24/15 08:35	04/24/15 15:59	1

Lab Sample ID: 500-94313-3 MS

Matrix: Solid

Analysis Batch: 285475

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec
	Result	Qualifier		Result	Qualifier			
Lead	0.037	J	0.100	0.149		mg/L	111	50 - 150

Lab Sample ID: 500-94313-3 DU

Matrix: Solid

Analysis Batch: 285475

Analyte	Sample	Sample	DU	DU	Unit	D	RPD
	Result	Qualifier		Result			
Lead	0.037	J		0.0386	J	mg/L	3

TestAmerica Chicago

Lab Chronicle

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Client Sample ID: GP-14 (2-4)

Lab Sample ID: 500-94313-3

Matrix: Solid

Date Collected: 04/07/15 00:00

Date Received: 04/08/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			285052	04/22/15 19:45	MJD	TAL CHI
TCLP	Prep	3010A			285334	04/24/15 08:35	JLC	TAL CHI
TCLP	Analysis	6010B		1	285475	04/24/15 16:08	PJ1	TAL CHI

Laboratory References:

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

Certification Summary

Client: TRC Environmental Corporation.
Project/Site: WisDOT Bristol Motors - 230448 TCLP

TestAmerica Job ID: 500-94313-2

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-15

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TestAmerica Chicago

From: Fredrick, Sandie
Sent: Wednesday, April 22, 2015 4:18 PM
To: Healy, Jayne
Subject: FW: TestAmerica report and EDD files from 500-94313-1 WisDOT Bristol Motors - 230448
Hi Jayne,
Can you please scan this to job 500-94313-2?
Thanks,
Sandie

SANDRA FREDRICK
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street
University Park, IL 60484
Tel 920-261-1660
sandie.fredrick@testamericainc.com

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](#)

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From: Bergmann, Bryan [mailto:BBergmann@trcsolutions.com]
Sent: Wednesday, April 22, 2015 4:00 PM
To: Fredrick, Sandie
Subject: RE: TestAmerica report and EDD files from 500-94313-1 WisDOT Bristol Motors - 230448

Hi Sandie,

Please run TCLP lead on GP-14 (2'-4'). Standard turn around. Thank you.

From: Fredrick, Sandie [mailto:sandie.fredrick@testamericainc.com]
Sent: Wednesday, April 22, 2015 3:52 PM
To: Bergmann, Bryan
Subject: TestAmerica report and EDD files from 500-94313-1 WisDOT Bristol Motors - 230448

Hello Bryan,

Attached please find the report and EDD files for job 500-94313-1; WisDOT Bristol Motors - 230448

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](#)

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SANDIE J FREDRICK

Project Manager II

TestAmerica Chicago

THE LEADER IN ENVIRONMENTAL TESTING

Tel: 920.261.1660

www.testamericainc.com

Reference: [226521]

Attachments: 2

Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-94313-2

Login Number: 94313

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

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	2.2
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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	

Appendix E

Cumulative Hazard Index and

Cancer Risk Calculations

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-1 (4-6) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 5/5/2015.

Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-1 (6-8) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 5/5/2015.

Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # :	# of Soil-Concentration Entries:	19	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
GP-2 (6-8) Non Industrial			1	0.3971	1.9E-05
Bottom-Line: NO! This NON-INDUSTRIAL site sampling location will need either further cleanup to lower contaminant levels or the construction of a cap/cover to address the direct-contact pathway.					

Date of Entry: 5/5/2015.
 Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Contaminant	CAS Number	NC RCL (mg/kg)	C RCL (mg/kg)	Not-To-Exceed D-C RCL (mg/kg)	Basis	BTv (mg/kg)	INPUTTED Site Data (mg/kg)	Flag E = Individual Exceedance!	Hazard Quotient (HQ) from Data	Cancer Risk (CR) from Data
Benzene	71-43-2	111.	1.49	1.49	ca		0.47		0.0042	3.2E-07
Ethylbenzene	100-41-4	4,220.	7.47	7.47	ca		0.79		0.0002	1.1E-07
Xylenes	1330-20-7	890.	-	258.	Csat		1.6		0.0018	
Trimethylbenzene, 1,2,4-	95-63-6	89.8	-	89.8	nc		4.7		0.0523	
Trimethylbenzene, 1,3,5-	108-67-8	782.	-	182.	Csat		4.7		0.006	
Naphthalene	91-20-3	188.	5.15	5.15	ca		1.8		0.0096	3.5E-07
Arsenic, Inorganic	7440-38-2	34.3	0.613	0.613	ca	8.	11.	E	0.3207	1.8E-05
Barium	7440-39-3	15,300.	-	15,300.	nc	364.	54.			
Cadmium (Diet)	7440-43-9	70.	2,110.	70.	nc	1.	0.19			
Chromium, Total	7440-47-3	-	-			44.	21.			
Mercury (elemental)	7439-97-6	14.7	-	3.13	Csat		0.018		0.0012	
Lead and Compounds	7439-92-1	-	-	400.	nc	52.	10.			
Butylbenzene, n-	104-51-8	3,910.	-	108.	Csat		1.4		0.0004	
Butylbenzene, sec-	135-98-8	7,820.	-	145.	Csat		0.77		0.0001	
Cumene	98-82-8	2,660.	-	268.	Csat		0.68		0.0003	
Isopropyltoluene, p-	99-87-6	-	-	162.	Csat		0.79			
Propyl benzene	103-65-1	3,970.	-	264.	Csat		1.2		0.0003	
Test1Chem(DRO)	Wis. DRO						11.			
Test2Chem(GRO)	Wis. GRO						250.			

Created by: C. Zingsheim 4/29/2015
 Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-2 (12-14) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Hazard Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
		Bottom-Line:	Yes, levels are below direct-contact concern.	

Date of Entry: 5/5/2015.

Date of Entry: 5/5/2015.
Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-3 (0-4) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Hazard Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
		Bottom-Line:	Yes, levels are below direct-contact concern.	

Date of Entry: 5/5/2015.

Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-3 (8-10) Non Industrial	# of Soil-Concentration Entries: 2	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Number of Individual Exceedance</th><th style="text-align: left; padding: 2px;">(Cumulative) Hazard Index</th><th style="text-align: left; padding: 2px;">(Cumulative) Cancer Risk</th></tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 2px;">0</td><td style="text-align: center; padding: 2px;">0.</td><td style="text-align: center; padding: 2px;">0.0E+00</td></tr> </tbody> </table>	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk	0	0.	0.0E+00
Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk						
0	0.	0.0E+00						
		Bottom-Line: Yes, levels are below direct-contact concern.						

Date of Entry: 5/5/2015.

Date of Entry: 5/5/2015.
Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-4 (0-2) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 5/5/2015.

Date of Entry: 5/5/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-4 (2-4) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Hazard Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
		Bottom-Line:	Yes, levels are below direct-contact concern.	

Date of Entry: 5/5/2015.

Date of Entry: 5/5/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-5 (2-4) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 5/5/2015.

Date of Entry: 5/5/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-5 (8-10) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 5/5/2015.

Date of Entry: 3/3/2015.

I list below only has contaminants with data

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-6 (2-4) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Hazard Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
		Bottom-Line:	Yes, levels are below direct-contact concern.	

Date of Entry: 5/5/2015.

Date of Entry: 5/5/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-6 (6-8) Non Industrial	# of Soil-Concentration Entries: 1	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
		Bottom-Line:	Yes, levels are below direct-contact concern.	

Date of Entry: 5/5/2015.

Date of Entry: 3/3/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-7 (0-2) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 5/5/2015.

Date of Entry: 5/5/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-7 (4-6) Non Industrial	# of Soil-Concentration Entries: 2	Number of Individual Hazard Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
		Bottom-Line:	Yes, levels are below direct-contact concern.	

Date of Entry: 5/5/2015.

Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS #: GP-8 (2-4) Non Industrial	# of Soil-Concentration Entries: 8	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.0047	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 5/6/2015.

Date of Entry: 5/8/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-8 (8-10) Non Industrial	# of Soil-Concentration Entries: 7	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk
		0	0.0042	0.0E+00

Date of Entry: 5/6/2015.

Date of Entry: 5/8/2015.

List below only has contaminants with data.

Bottom-line:

Yes, levels are below direct-contact concern.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-9 (4-6) Non Industrial	# of Soil-Concentration Entries: 6	Number of Individual Hazard Exceedance 0	(Cumulative) Hazard Index 0.0042	(Cumulative) Cancer Risk 0.E+00
	Bottom-Line:		Yes, levels are below direct-contact concern.	

Date of Entry: 5/6/2015.

Date of Entry: 5/8/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-9 (8-10) Non Industrial	# of Soil-Concentration Entries: 6	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding-bottom: 5px;">Number of Individual Exceedance</th><th style="text-align: left; padding-bottom: 5px;">(Cumulative) Hazard Index</th><th style="text-align: left; padding-bottom: 5px;">(Cumulative) Cancer Risk</th></tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td><td style="text-align: center;">0.0038</td><td style="text-align: center;">0.0E+00</td></tr> </tbody> </table>	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk	0	0.0038	0.0E+00
Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk						
0	0.0038	0.0E+00						
	Bottom-Line:	Yes, levels are below direct-contact concern.						

Date of Entry: 5/6/2015

Date of Entry: 5/8/2015
Date of Worksheet Used: 01/22/2015

List below only has contaminants with data

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-10 (2-4) Non Industrial	# of Soil-Concentration Entries: 6	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding-bottom: 5px;">Number of Individual Exceedance</th><th style="text-align: left; padding-bottom: 5px;">(Cumulative) Hazard Index</th><th style="text-align: left; padding-bottom: 5px;">(Cumulative) Cancer Risk</th></tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td><td style="text-align: center;">0.0065</td><td style="text-align: center;">0.0E+00</td></tr> </tbody> </table>	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk	0	0.0065	0.0E+00
Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk						
0	0.0065	0.0E+00						
	Bottom-Line:	Yes, levels are below direct-contact concern.						

Date of Entry: 5/6/2015.

Date of Entry: 5/8/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS #: GP-10 (8-10) Non Industrial	# of Soil-Concentration Entries: 6	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding-bottom: 5px;">Number of Individual Exceedance</th><th style="text-align: left; padding-bottom: 5px;">(Cumulative) Hazard Index</th><th style="text-align: left; padding-bottom: 5px;">(Cumulative) Cancer Risk</th></tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td><td style="text-align: center;">0.0053</td><td style="text-align: center;">0.0E+00</td></tr> </tbody> </table> <p style="margin-top: 10px;">Bottom-Line:</p> <p style="color: blue;">Yes, levels are below direct-contact concern.</p>	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk	0	0.0053	0.0E+00
Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk						
0	0.0053	0.0E+00						

Date of Entry: 5/6/2015.

Date of Entry: 5/8/2015.

I list below only has contaminants with data

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-11 (2-4) Non Industrial	# of Soil-Concentration Entries: 1	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
		Bottom-Line:	Yes, levels are below direct-contact concern.	

Date of Entry: 5/6/2015.

Date of Entry: 5/8/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-11 (8-10) Non Industrial	# of Soil-Concentration Entries: 1	Number of Individual Hazard Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
		Bottom-Line:	Yes, levels are below direct-contact concern.	

Date of Entry: 5/6/2015.

Date of Entry: 5/8/2015.

List below only has contaminants with data.

Bottom-Line:

Yes, levels are below direct-contact concern.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-12 (2-4) Non Industrial	# of Soil-Concentration Entries: 1	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 5/6/2015.

Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-12 (8-10) Non Industrial	# of Soil-Concentration Entries: 1	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding-bottom: 5px;">Number of Individual Exceedance</th><th style="text-align: center; padding-bottom: 5px;">(Cumulative) Hazard Index</th><th style="text-align: center; padding-bottom: 5px;">(Cumulative) Cancer Risk</th></tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td><td style="text-align: center;">0.</td><td style="text-align: center;">0.0E+00</td></tr> </tbody> </table>	Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk	0	0.	0.0E+00
Number of Individual Exceedance	(Cumulative) Hazard Index	(Cumulative) Cancer Risk						
0	0.	0.0E+00						
	Bottom-Line:	Yes, levels are below direct-contact concern.						

Date of Entry: 5/6/2015.

Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS #: GP-13 (4-6) Non Industrial	# of Soil-Concentration Entries: 7	Number of Individual Exceedance Hazard Index 0 0.0058 0.0E+00
	Bottom-Line:	Yes, levels are below direct-contact concern.

*Date of Entry: 4/29/2015.
Date of Worksheet Used: 01/22/2015.*

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS #: GP-13 (8-10) Non Industrial	# of Soil-Concentration Entries: 8	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.0015	(Cumulative) Cancer Risk 2.5E-08
	Bottom-Line:	Yes, levels are below direct-contact concern.		

Date of Entry: 4/29/2015.
Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-14 (2-4) Industrial	# of Soil-Concentration Entries: 7	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.1381	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line: Yes, levels are below INDUSTRIAL direct-contact concern.			

Date of Entry: 4/29/2015.
Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-14 (6-8) Non Industrial	# of Soil-Concentration Entries: 7	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.0015	(Cumulative) Cancer Risk 0.0E+00
	Bottom-Line: Yes, levels are below direct-contact concern.			

Date of Entry: 4/29/2015.
Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS # : GP-15 (2-4) Non Industrial	# of Soil-Concentration Entries: 6	Number of Individual Exceedance 0 (Cumulative) Hazard Index 0.0013 (Cumulative) Cancer Risk 0.0E+00
	Bottom-Line: Yes, levels are below direct-contact concern.	

*Date of Entry: 4/29/2015.
Date of Worksheet Used: 01/22/2015.*

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Direct-Contact ***Exceedance - Hazard - Risk*** Calculation Summary from Soil Data

BRRTS #: GP-15 (8-10) Non Industrial	# of Soil-Concentration Entries: 10	Number of Individual Exceedance 0	(Cumulative) Hazard Index 0.0017	(Cumulative) Cancer Risk 2.3E-08
Bottom-Line:		Yes, levels are below direct-contact concern.		

Date of Entry: 4/29/2015.
Date of Worksheet Used: 01/22/2015.

List below only has contaminants with data.

Created by: C. Zingsheim 4/29/2015
Checked by: J. Leasia 5/4/2015

Appendix F

Draft Special Provisions

Excavation, Hauling, and Disposal (Bioremediation) of Petroleum Contaminated Soil, Item 205.0501.S.

A Description

A.1 General

This special provision describes excavating, loading, hauling, and bioremediation of petroleum contaminated soil at a DNR licensed facility. The closest DNR licensed landfill facilities that can bioremediate this soil once excavated are:

Waste Management's Pheasant Run Recycling and Disposal Facility (RDF)
19414 60th Street
Bristol, Wisconsin
(262) 857-7956

Republic Services, Inc. Kestrel Hawk Landfill
1989 Oakes Road
Racine, WI 53406
(262) 215-1774

Perform this work in accordance 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

The department and others 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 locations as shown on the plans:

- Station 263+50 to 264+50 from reference line to 50 feet right of reference line, from approximately 0 to 10 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 265 cubic yards (approximately 450 tons using a conversion factor of 1.7 tons per cubic yard). Ground water is not expected to be encountered at this location.

Directly load soil excavated by the project at the above location into trucks that will transport the soil to a WDNR-licensed bioremediation facility.

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

No active groundwater monitoring wells were observed within the construction limits. If active groundwater monitoring wells are encountered during construction, notify the 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 in accordance with Section C below.

A.3 Excavation Management Plan

The excavation management plan for this project has been designed to minimize the offsite bioremediation of contaminated material. 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, PO Box 798, Waukesha, WI 53187-0798
Phone:	262-548-6705
Fax:	262-548-6891
E-mail:	andrew.malsom@dot.wi.gov

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:	Tyler Stapel, P.E.
Phone:	262-901-2142 (office), 262-825-2045 (cell)
Fax:	262-879-1220
E-mail:	wstapel@trcsolutions.com

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 bioremediation 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 licensed bioremediation facility that will be used for bioremediation 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 from the bioremediation facility for bioremediation of contaminated soils. Do not transport contaminated soil 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 soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products and metals. 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

Supplement standard spec 205.3 with the following:

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

The environmental consultant will periodically monitor soil excavated from the contaminated areas. 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 disposal 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 disposal so as not to contain free liquids.

If dewatering is required in an area of known contamination, water generated from dewatering activities may contain contaminants and require special handling and disposal. Limit excavation in the location described above in A2 to minimize the handling of groundwater. Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge or dispose of contaminated water. Provide copies of such Permit to the engineer. Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities. 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 the contaminated area 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 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.

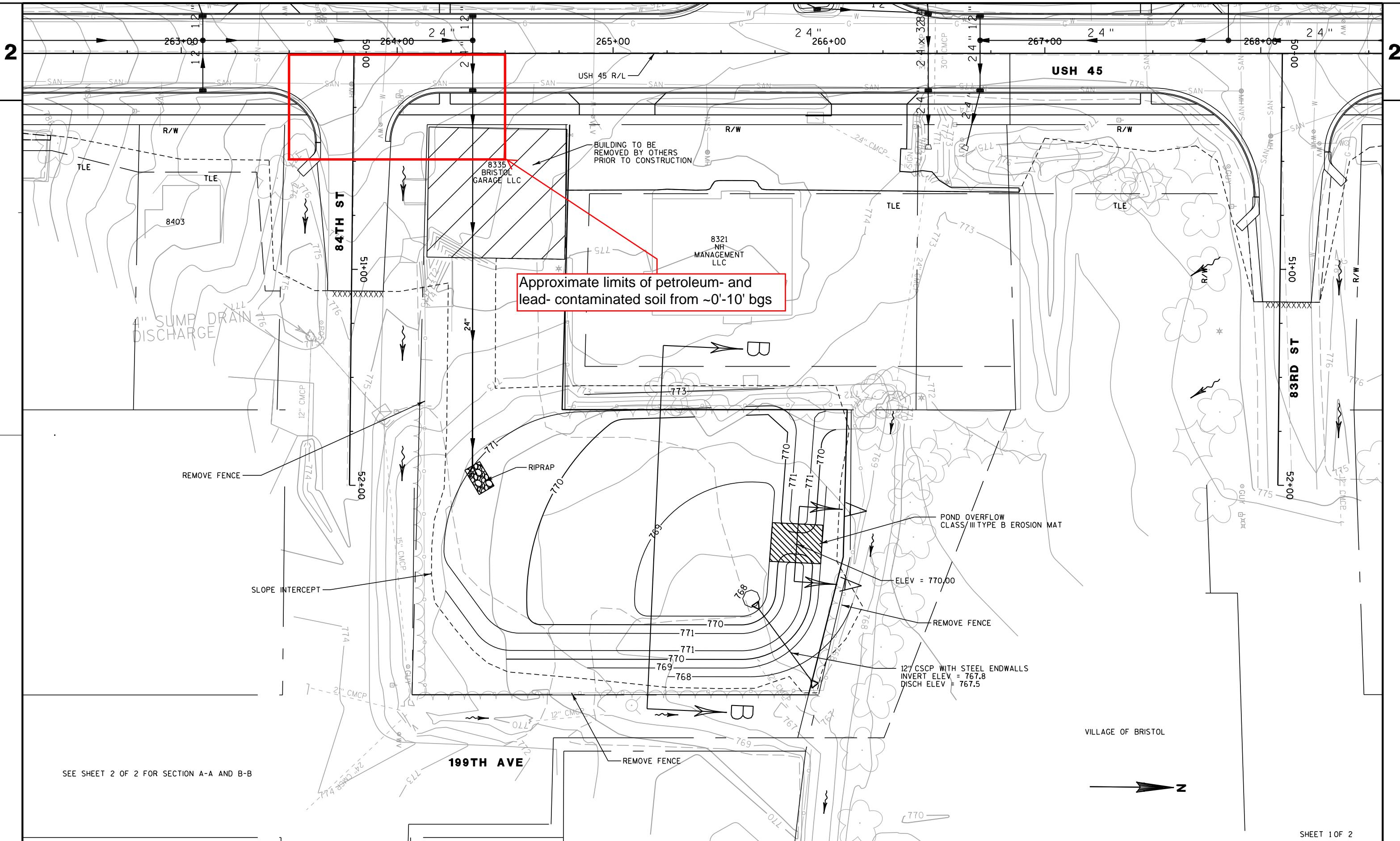
E Payment

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

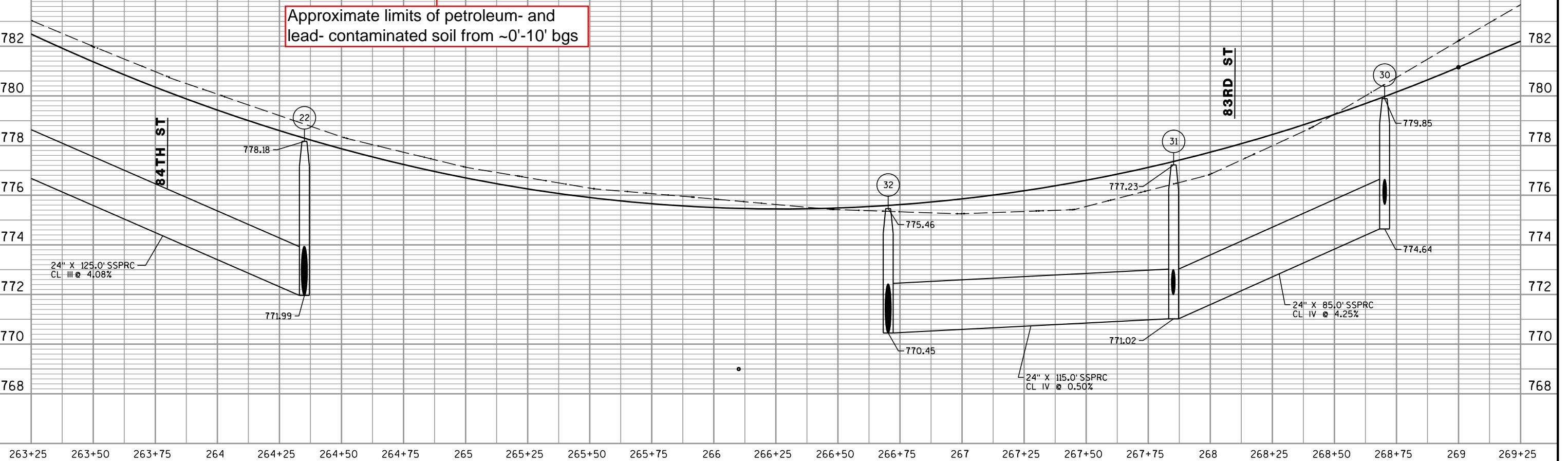
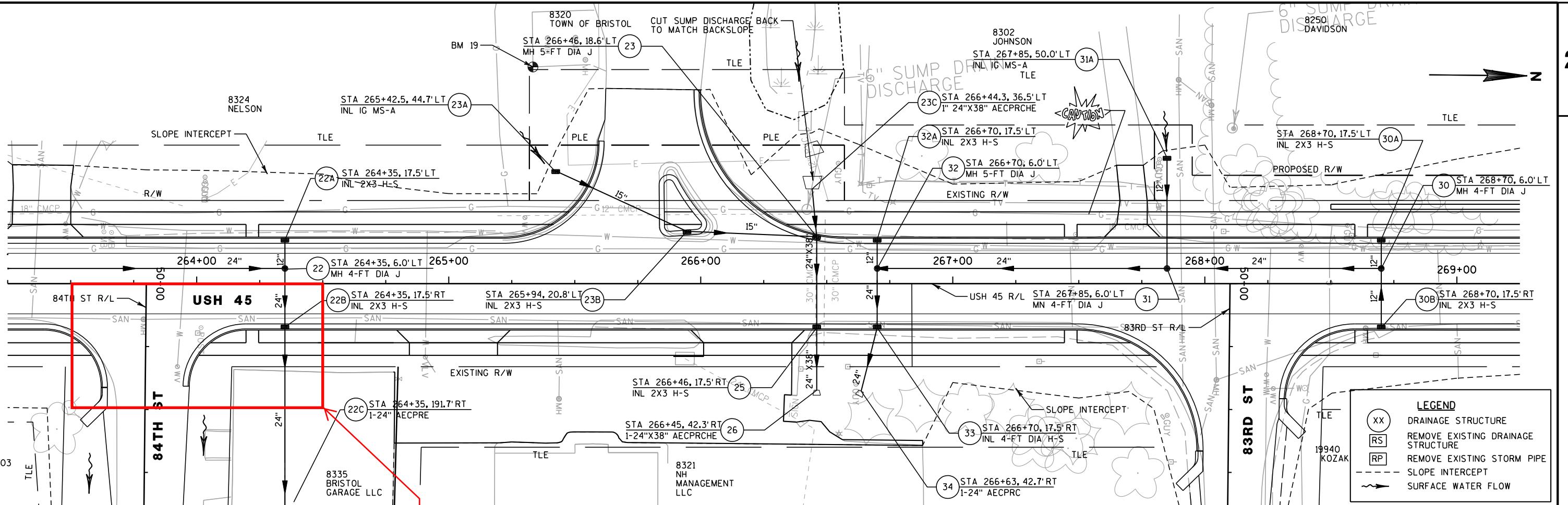
Payment is full compensation for excavating, segregating, loading, hauling, and disposal of contaminated soil; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation; and dewatering of soils prior to transport, if necessary. No additional payment will be made for tipping fees associated with the disposal of contaminated soil.

205-003 (20080902)



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PROJECT NO: 3200-02-73

HWY: USH 45

COUNTY: KENOSHA

STORM SEWER - USH 45

SCALE, FEET

SHEET

E

FILE NAME : t:\1102721.11\cadd\sheets\storm\022504_ss.DGN

PLOT DATE : 4/1/2014

PLOT BY : trg

PLOT NAME :

PLOT SCALE : \$\$.....plotscale.....\$\$. WISDOT/CADD'S SHEET 30