Stantec Consulting Services Inc.
12075 Corporate Parkway, Suite 200 Mequon WI 53092

February 15, 2017
File: 193703931

Attention: Tauren Beggs
Hydrogeologist
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
2984 Shawano Ave.
Green Bay, WI 54313-6727

Dear Mr. Beggs:

Reference: Supplemental Site Investigation
1037 S 26th Street
Manitowoc, Wisconsin
WDNR BRRTS #03-36-100462
Stantec Project No. 193703931

On behalf of the City of Manitowoc, Wisconsin (City), Stantec Consulting Services Inc. (Stantec) has completed a supplemental site investigation at the property located at 1037 S. 26th Street in the City (herein referred to as the "Property" or "Site"); the location of the Site is illustrated on Figure 1. The scope of work was completed in conformance with the Stantec (2016) *Site-Specific Sampling and Analysis Plan* (SAP) utilizing protocols described in the Stantec (2015) *Quality Assurance Project Plan* (*QAPP*) and associated Stantec (2016) *QAPP Addenda*. This work was performed using funds from an assessment grant for petroleum brownfields awarded to the City by the United States Environmental Protection Agency (USEPA) in 2015 under Cooperative Agreement Number BF-00E01529-0.

The purpose of this supplemental site investigation was to further evaluate residual soil and groundwater impacts identified in the Stantec (2016) *Phase II Environmental Site Assessment (Phase II ESA)*. Background information, field investigation methods, sampling results, and conclusions are presented in the following sections.

BACKGROUND

Utilizing petroleum brownfield assessment funding provided to the City by the USEPA in 2015, under cooperative agreement BF-00E01529-0, Stantec completed a Phase II ESA for the Property on November 22, 2016. The Phase II ESA identified residual petroleum and/or possible solvent impacts to soil and/or groundwater attributable to prior Site operations. The Phase II ESA was submitted to the Wisconsin Department of Natural Resources (WDNR) for review and comment. Per the request of WDNR, this supplemental site investigation was completed to further confirm/delineate residual impacts identified at the Site.

FIELD INVESTIGATION METHODS

Field work associated with the supplemental site investigation was completed by Stantec on January 9, 2017. The scope of work included advancing three soil borings (SB-8, SB-9, and MW-1) using dual-tube direct push Geoprobe® drilling techniques. Photographic documentation of the field work is provided in Attachment A. Stratigraphic soil boring logs completed by a Stantec geologist and WDNR abandonment forms (Form 3300-5) for SB-8 and SB-9 are provided in Attachment B. Sample locations are illustrated on Figure 2 relative to current Site features. Please note borings were placed to accommodate the limitations of the Site, such as utilities, storage areas, work areas, etc; also see Appendix B of the Stantec (2016) Phase II ESA.

A portable photoionization detector (PID) was used to screen soil samples for the presence of volatile organic compounds (VOCs). Two soil samples from each boring at the intervals with the greatest apparent impacts were collected, placed in laboratory supplied containers, preserved as appropriate, placed on ice in a sample cooler and submitted to TestAmerica, Inc. for VOCs analysis (SW846 Method 5035/8260B) using chain of custody procedures. The laboratory reports are provided in Attachment C and detected constituents (plus non-detected chlorinated solvents) are summarized on Table 1.

Soil boring location MW-1 was completed as a two-inch diameter schedule 40 polyvinyl chloride (PVC) groundwater monitoring well with a 10-foot long 10 slot (0.010-inch) screen per the requirements of ch. NR 141 Wisconsin Administrative Code (WAC). As illustrated on the WDNR Monitoring Well Construction Form 4400-113A provided in Attachment D, quartz filter sand was placed in the annular space between the borehole wall and the outside of the well screen. The annular space above the quartz filter pack was filled to the ground surface with granular bentonite to serve as a seal to prevent infiltration of surface water/fluid runoff into the borings which would potentially compromise the integrity and representativeness of the groundwater sample data. As noted on WDNR form 4400-113B provided in Attachment D, MW-1 was purged dry on January 11, 2017 using a disposable bailer to develop the well prior to groundwater sample collection. Following recovery, a groundwater sample and a duplicate sample were collected using a new disposable bailer. Groundwater samples were poured directly into laboratory-supplied sample jars containing a hydrochloric acid preservative as described in the Stantec (2016) *SAP* and Stantec (2015) *QAPP*. Groundwater samples were immediately placed in a cooler on ice and submitted to TestAmerica in Chicago, Illinois under a chain of custody for VOC analysis (SW846 Method 8260B). A second groundwater sample was collected from MW-1 on January 20, 2017 per protocols described previously and submitted to TestAmerica in Chicago, Illinois under a chain of custody for VOC analysis. Laboratory analytical reports are presented in Attachment C and detected constituents (plus non-detected chlorinates solvents) are summarized on Table 2.

As outlined in the Stantec (2016) *QAPP*, MW-1 was abandoned/sealed on February 6, 2017 with bentonite. As noted on the WDNR form 3300-5 provided in Attachment D, the PVC well casing was removed, granular bentonite was placed by gravity into the borehole, and the surface repaired to match the surrounding area.

To evaluate current soil and groundwater data in the context of the Underground Storage Tank (UST) closure investigation completed previously by GHD, Inc. (GHD) in 2001, Stantec imported Figure 7 from the GHD (2001) *Site Investigation Report* into the Manitowoc Brownfields Geographic Information System (GIS) database by georeferencing the GHD figure to building corners identified in a polygon featureclass of buildings provided by the City. GHD sample locations and the locations of key Site features (GHD, 2001) were digitized by Stantec and are illustrated on Figure 3 along with Stantec sample locations.

As noted in the Stantec (2016) *SAP*, the property was developed for automotive use by 1930. Key site features illustrated on digitized Sanborn® Fire Insurance Maps dated 1946 and 1952 contained in the Manitowoc Brownfields GIS database were digitized and are illustrated on Figure 4 relative to the current Site engineered barriers (building and parking lots), Stantec sample locations, and GHD (2001) sample locations.

SAMPLING RESULTS

Applicable Cleanup Criteria

Health-based soil residual contaminant levels (RCL) and groundwater quality Preventive Action Limits (PAL) and Enforcement Standards (ES) outlined in ch. NR 720 WAC and ch. NR 140 WAC, respectively (as described in detail in the Stantec (2016) *Phase II ESA*) were utilized in evaluating data from this supplemental site investigation.

Soil Lithology

Soil horizons encountered at the three soil borings are consistent with previous observations and consisted of an engineered barrier (concrete at MW-1 and SB-9 or asphalt/concrete at SB-8) underlain three apparent continuous soil units. The concrete/asphalt was followed by an upper silty clay unit underlain by a continuous well graded medium grained sand unit and a lower silty clay unit, which extended to the depths of each boring. Shallow groundwater was encountered near the sand/silty clay interface, which is consistent with the Stantec (2016) Phase II ESA and the UST investigation/closure investigation completed previously by GHD in 2001.

Soil Quality

As noted on the soil boring logs, PID measurements of soil from the vadose at SB-8 and SB-9 were not greater than background measurements. In addition, as noted on Table 1, the concentrations of all petroleum and solvent VOCs in soil samples from these two boring locations were less than laboratory detection limits. Therefore, VOCs are not considered constituents of concern in soil for these two locations.

The concentrations of petroleum VOCs (Benzene, Ethylbenzene, Naphthalene, Toluene, and Xylene) in soil at MW-1 were less than applicable ch. NR 720 direct contact exposure RCLs at industrial properties, but greater than applicable soil to groundwater RCLs. However, as noted below, the concentrations of these constituents in groundwater are less than applicable ch. NR 140 WAC PALs. Therefore, residual petroleum VOC impacts to soil do not appear to pose a significant threat to groundwater at the Site. As added to Table 1, the concentrations of chloroform and chlorinated solvents in soil at MW-1 were less than laboratory detection limits.

Groundwater Quality

Except for chloroform, the concentrations of VOCs in groundwater at MW-1 are all less than applicable ch. NR 140 WAC ESs. However, as chloroform can be a laboratory artifact and has not been detected in any other soil (including from MW-1) nor groundwater sample during this investigation, the apparent detections at MW-1 are considered suspect by Stantec. If indeed present at MW-1, the source and extent of chloroform must be very limited as chloroform was not detected in TW-2 nor in TW-3.

Although inconsistent *de mininis* residual solvent impacts to groundwater may be present at MW-1, VOCs do not appear to pose a significant threat to groundwater quality. The concentrations of PCE in the groundwater sample and the duplicate sample collected on January 11, 2017 were less than the laboratory detection limit of 0.37 micrograms per liter. As

qualified with a "J" on Table 2, the concentration of PCE in the groundwater sample collected from MW-1 on January 20, 2017 was greater than the laboratory detection limit of 0.37 micrograms per liter, but less than the laboratory quantitation (reporting) limit of 1.0 microgram per liter. Therefore, as noted in ch. NR 140.14(3)(c), as the reported concentrations of PCE in groundwater remain less than the laboratory quantitation limit, the PAL has not been attained.

CONCLUSIONS

The results of this supplemental site investigation are consistent with previous work completed at the Site. As summarized on Tables 1-2 and illustrated on Figures 2-4, residual petroleum and possible solvent impacts to soil and/or groundwater identified during the Stantec (2016) Phase II ESA and this supplemental site investigation could be attributed to a multitude of potential sources; many of which have previously been removed from the Site or are no longer in use.

The current occupant proposes to continue to operate the Site for industrial use as an automotive repair facility following final payment of the land contract. As the engineered barriers must be maintained to continue to operate the Site for industrial use, and as a site-wide institutional control for residual soil and groundwater impacts was filed against the deed during UST closure, residual soil and groundwater impacts at the property appear managed.

Stantec recommends that a copy of this report be included with the closed case file. Compliance with the requirements of the existing institutional control (deed restriction) should continue. In addition, it is recommended that the current engineered barrier, which includes the building and paved areas, be maintained to minimize the potential for direct contact with underlying soils and migration of residual impacts to groundwater.

Regards,

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Brownfields Hydrogeologist

Reference: Supplemental Site Investigation
1037 S 26th Street
Manitowoc, Wisconsin
WDNR BRRTS #03-36-100462
Stantec Project No. 193703931

Enclosures:
Figures
Tables
Attachments: A – Photographic Documentation
B – Soil Boring Logs and Abandonment Forms
C – Laboratory Reports
D – Well Construction, Development, and Abandonment Forms

c. Mr. Nic Sparacio, City of Manitowoc, Wisconsin
Mr. Jon Peterson, USEPA Region 5

LIMITATIONS

This Supplemental Site Investigation was performed in accordance with generally accepted practices of the profession for performing similar studies at the same time and in the same geographical area. Stantec observed that degree of care and skill generally exercised by the profession under similar circumstances and conditions. No other warranty is expressed or implied.

Stantec observations, findings, and opinions must not be considered as scientific certainties, but only an opinion based on our professional judgment concerning the significance of the data gathered during the course of the investigation. Specifically, Stantec does not and cannot represent that the Site contains no hazardous or toxic materials or other latent condition beyond that observed by Stantec.

Stantec does not warrant that this submittal represents an exhaustive study of all possible environmental concerns at the project area. The items investigated as part of this study represent likely sources of environmental concerns at the project area, and are consequently believed to adequately address the public at risk at the present time.

FIGURES

Figure No.
1

Title
Figure 1
Site Location and USGS Topo Map

Client/Project
City of Manitowoc
USEPA Brownfield Assessment Grant
Hazardous Substances

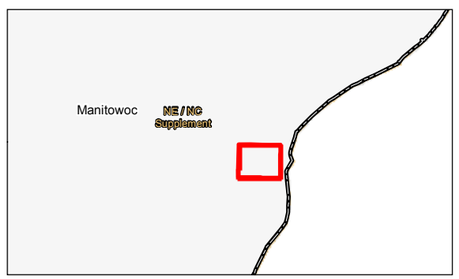
0 500 1,000 Feet

1937003931
Prepared by HLB on 5-24-16

N

Legend

Target Site



Notes

1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803
2. Feet
3. Data Sources Include:
   Orthophotography: 2015 City of Mantiowoc

Stantec

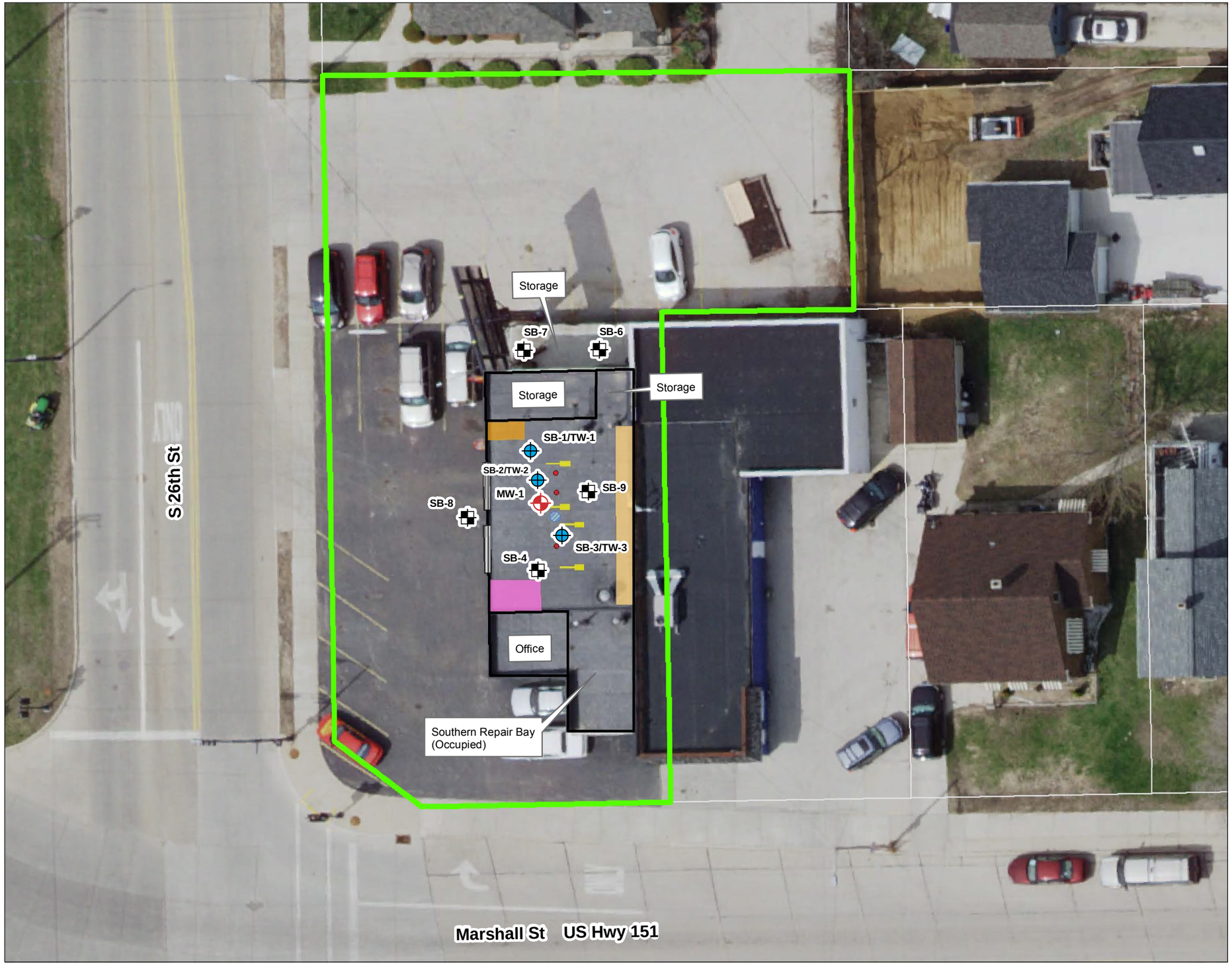


Figure No.
2

Title
Figure 2. Site Features and Sample Locations

Client/Project
City of Manitowoc
USEPA Brownfield Assessment Grant
Petroleum Substances

193703931
Prepared by HLB on 9-7-16

0 15 30 Feet

N

Legend

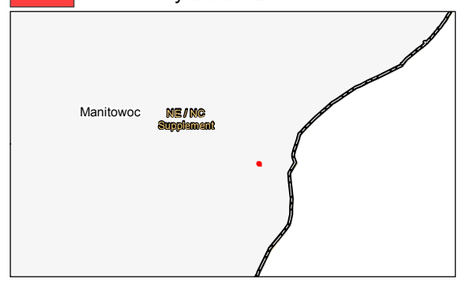
- Interior Walls
- Target Property

Sample Locations

- Soil Boring / Monitoring Well
- Soil Boring / Temp Well
- Soil Boring

Current Site Features

- Garage Door
- Work Bench
- Drum Storage
- Current Hydraulic Lift
- Current Hydraulic Lift
- Catch Basin
- Mechanical/Tool Storage
- Former Hydraulic Lifts



Notes

1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803
2. Feet
3. Data Sources Include:
   Orthophotography: 2015 City of Mantiowoc

Stantec

Figure No.
3

Title
Figure 3. Sample Locations and 2001 Site Features

Client/Project
City of Manitowoc
USEPA Brownfield Assessment Grant
Petroleum Substances

193703931
Prepared by HLB on 9-7-16

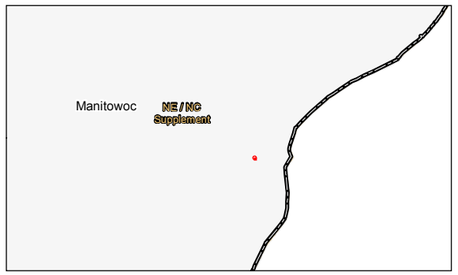
0 5 10 Feet

N

Legend

Stantec Sample Locations (2016-17)
- Monitoring Well
- Soil Boring / Temp Well
- Soil Boring

GHD Inc. Site Features (2001)
- Monitoring Well
- Soil Boring
- 4,000 Gallon UST (Gasoline)
- 4,000 Gallon UST (Gasoline)
- 6,000 Gallon UST (Gasoline)
- 4,000 Gallon UST (Diesel)
- Fill Pipes
- Kerosene UST
- Pump Island
- Groundwater Impacts
- Gravel Area
- Target Property



Notes
1. Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803
2. Feet
3. Data Sources Include:
   Orthophotography: 2015 City of Mantiowoc
   GHD Inc. (2001) data was digitized from Figure 7 of the GIS package based on georeferencing the figure to building corners as identified

Stantec

Figure No.
4

Title
Figure 4. Sample Locations and Historic Site Features

Client/Project
City of Manitowoc
USEPA Brownfield Assessment Grant
Petroleum Substances

0 5 10 Feet

193703931
Prepared by HLB on 9-7-16

N

Legend

GHD Inc. Sample Locations (2001)

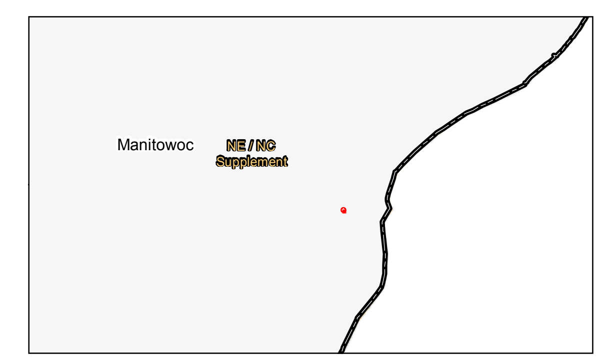
- Monitoring Well
- Soil Boring

Stantec Sample Locations (2016-17)

- Monitoring Well
- Soil Boring / Temp Well
- Soil Boring

Sanborn Maps 1946-1952

- Filling Station
- Gasoline USTs
- Target Property



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   GHD Inc. (2001) data was digitized from Figure 7 of the GIS package based on georeferencing the figure to building corners as identified

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TABLES

Table 1
Soil Quality and Ch. NR 720 RCLs
1037 S 26th Street
Manitowoc, Wisconsin

Constituents (ug/kg)	ch. NR 720 RCLs	Sample Location, Sample Depth, and Sample Date															
		SB-1		SB-2			SB-3		SB-4	SB-6	SB-7	SB-8		SB-9		MW-1	
		SB-1 (3-4.5) 3 - 4.5 ft 18-Oct-16	SB-1 (7) 7 ft 18-Oct-16	SB-2 (3-4.5) 3 - 4.5 ft 18-Oct-16	SB-2 (4.5-6) 4.5 - 6 ft 18-Oct-16	SB-2 (7) 7 ft 18-Oct-16	SB-3 (3-4.5) 3 - 4.5 ft 18-Oct-16	SB-3 (7) 7 ft 18-Oct-16	SB-4 (2) 2 ft 18-Oct-16	SB-6 (.5-1) 0.5 - 1 ft 18-Oct-16	SB-7 (.5-1) 0.5 - 1 ft 18-Oct-16	SB-8 (2) 2 ft 1/9/17	SB-8 (7) 7 ft 1/9/17	SB-9 (3) 3 ft 1/9/17	SB-9 (6) 6 ft 1/9/17	MW-1 (3) 3ft 1/9/17	MW-1 (6) 6ft 1/9/17
Polychlorinated Biphenyls																	
Aroclor 1016	20,600[A]	-	-	-	<20	-	<18	-	-	-	-	-	-	-	-	-	-
Aroclor 1221	670[A]	-	-	-	<20	-	<18	-	-	-	-	-	-	-	-	-	-
Aroclor 1232	620[A]	-	-	-	<20	-	<18	-	-	-	-	-	-	-	-	-	-
Aroclor 1242	717[A]	-	-	-	<20	-	<18	-	-	-	-	-	-	-	-	-	-
Aroclor 1248	718[A]	-	-	-	<20	-	<18	-	-	-	-	-	-	-	-	-	-
Aroclor 1254	724[A]	-	-	-	<20	-	<18	-	-	-	-	-	-	-	-	-	-
Aroclor 1260	731[A]	-	-	-	<20	-	<18	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds																	
Benzene	7,410[A] 5.1[B]	<16	<13	<14	-	<14	<15	<14	<13	<18	<17	<8.9	<8.0	<17	<17	**190[B]**	**890[B]**
Butylbenzene, n-	108,000[A]	<65	<54	<57	-	<55	<61	<56	<53	<70	<70	<24	<21	<46	<44	430	1,400
Butylbenzene, sec- (2-Phenylbutane	145,000[A]	<65	<54	<57	-	<55	<61	<56	<53	<70	<70	<24	<22	<47	<45	<84	330
Chloroform (Trichloromethane)	423[A] 3.3[B]	<65	<54	<57	-	<55	<61	<56	<53	<70	<70	<23	<20	<44	<42	<78	<42
Ethylbenzene	37,000[A] 1,570[B]	<16	<13	<14	-	<14	<15	<14	<13	<18	<17	<11	<10	<22	<21	910	**6,900[B]**
Isopropylbenzene	268,000[A]	<65	<54	<57	-	<55	<61	<56	<53	<70	<70	<23	<21	<45	<44	<81	730*
Isopropyltoluene, p- (Cymene)	162,000[A]	<65	<54	<57	-	<55	<61	<56	<53	<70	<70	<22	<20	<43	<41	<76	1,100
Naphthalene	26,000[A] 658[B]	<65 *	<54 *	<57 *	-	<55 *	<61 *	<56 *	<53 *	<70 *	<70 *	<20	<18	<39	<38	480	**3,100[B]**
Propylbenzene, n-	264,000[A]	<65	<54	<57	-	<55	<61	<56	<53	<70	<70	<25	<23	<49	<47	290	2,000
Tetrachloroethene (PCE)	153,000[A] 4.5[B]	<65	<54	<57	-	<55	<61	<56	**40 J[B]**	<70	<70	<23	<20	<44	<42	<78	<42
Toluene	818,000[A] 1,107[B]	<16	<13	<14	-	<14	<15	<14	<13	<18	<17	<8.9	<8.1	<17	<17	**9,900[B]**	**130,000[B]**
Trichloroethene (TCE)	1,260[A] 3.6[B]	<32 *	<27 *	<29 *	-	<28 *	<31 *	<28 *	<26 *	<35 *	<35 *	<10	<9	<19	<19	<34	<18
Trimethylbenzene, 1,2,4-	219,000[A]	<65	<54	<57	-	<55	<61	<56	<53	<70	<70	<22	<20	<42	<41	2,300	20,000
Trimethylbenzene, 1,3,5-	182,000[A]	<65	<54	<57	-	<55	<61	<56	<53	<70	<70	<23	<21	<45	<43	760	6,300
Vinyl chloride	67.1[A] 0.1[B]	<32	<27	<29	-	<28	<31	<28	<26	<35	<35	<16	<14	<31	<30	<55	<29
Xylenes, Total	260,000[A] 3,960[B]	<32	<27	<29	-	<28	<31	<28	<26	<35	<35	<13	<12	<26	<25	**6,400[B]**	**63,000[B]**
Polycyclic Aromatic Hydrocarbons																	
Acenaphthene	33,000,000[A]	<37	-	-	<39	-	<36	-	<34	<37	<38	-	-	-	-	-	-
Acenaphthylene	n/v	<37	-	-	<39	-	<36	-	<34	12 J	14 J	-	-	-	-	-	-
Anthracene	100,000,000[A] 196,949[B]	<37	-	-	<39	-	<36	-	<34	16 J	29 J	-	-	-	-	-	-
Benzo(a)anthracene	2,100[A]	<37	-	-	<39	-	<36	-	<34	66	91	-	-	-	-	-	-
Benzo(a)pyrene	211[A] 470[B]	<37	-	-	<39	-	<36	-	<34	73	97	-	-	-	-	-	-
Benzo(b)fluoranthene	2,110[A] 479[B]	<37	-	-	<39	-	<36	-	<34	99	140	-	-	-	-	-	-
Benzo(g,h,i)perylene	n/v	<37	-	-	<39	-	27 J	-	<34	43	50	-	-	-	-	-	-
Benzo(k)fluoranthene	21,100[A]	<37	-	-	<39	-	<36	-	<34	37	48	-	-	-	-	-	-
Chrysene	211,000[A] 145[B]	<37	-	-	<39	-	<36	-	<34	77	100	-	-	-	-	-	-
Dibenzo(a,h)anthracene	211[A]	<37	-	-	<39	-	<36	-	<34	13 J	17 J	-	-	-	-	-	-
Fluoranthene	22,000,000[A] 88,878[B]	<37	-	-	<39	-	<36	-	14 J	150	200	-	-	-	-	-	-
Fluorene	22,000,000[A] 14,830[D]	<37	-	-	<39	-	<36	-	<34	6.5 J	9.6 J	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	2,110[A]	<37	-	-	<39	-	14 J	-	<34	58	71	-	-	-	-	-	-
Methylnaphthalene, 1-	53,100[A]	<74	-	-	<79	-	<72	-	<68	9.2 J	9.6 J	-	-	-	-	-	-
Methylnaphthalene, 2-	2,200,000[A]	<74	-	-	<79	-	<72	-	<68	11 J	9.2 J	-	-	-	-	-	-
Naphthalene	26,000[A] 658[B]	<37	-	-	<39	-	<36	-	<34	9.5 J	7.6 J	-	-	-	-	-	-
Phenanthrene	n/v	<37	-	-	<39	-	<36	-	6.2 J	83	110	-	-	-	-	-	-
Pyrene	16,500,000[A] 54,546[B]	<37	-	-	<39	-	<36	-	8.5 J	120	170	-	-	-	-	-	-

Notes:

ch NR 720 RCLs	Residual contaminant levels for soil outlined in chapter NR 720 Wisconsin Administrative Code; updated June 2016	<0.03	Analyte was not detected at a concentration greater than the laboratory reporting limit.
[A]	Ch. NR 720 Industrial Direct Contact RCL	n/v	No standard/guideline value.
[B]	Ch. NR 720 Soil to Groundwater RCL	-	Parameter not analyzed / not available.
6.5[A]	Concentration exceeds the indicated standard.	*	Indicates analysis is not within the quality control limits.
15.2	Measured concentration did not exceed the indicated standard.	J	The reported result is an estimated value.

Table 2
Groundwater Quality and Ch. NR 140 Standards
1037 S 26th Street
Manitowoc, Wisconsin

Constituents	Units	CH. NR 140 PAL	CH. NR 140 ES	MW-1			TW-1	TW-2	TW-3
				11-Jan-17	11-Jan-17	20-Jan-17	18-Oct-16	18-Oct-16	18-Oct-16
Volatile Organic Compounds									
Benzene	µg/L	0.5[A]	5[B]	<0.15	<0.15	0.40 J	<0.15	<0.15	<1.5
Butylbenzene, n-	µg/L	NE[A]	n/v	<0.39	<0.39	<0.39	<0.39	20	<3.9
Butylbenzene, sec- (2-Phenylbutane)	µg/L	NE[A]	n/v	<0.40	<0.40	<0.40	<0.40	8.4	<4.0
Chloroform (Trichloromethane)	µg/L	0.6[A]	**6[B]**	**6.3[AB]**	**8.1[AB]**	**9.6[AB]**	<0.37	<0.37	<3.7
Ethylbenzene	µg/L	140[A]	700[B]	<0.18	<0.18	0.22 J	<0.18	9.5	5.8
Isopropylbenzene	µg/L	NE[A]	n/v	<0.39	<0.39	<0.39	<0.39	3.8	<3.9
Isopropyltoluene, p- (Cymene)	µg/L	NE[A]	n/v	<0.36	<0.36	<0.36	<0.36	9.3	6.6 J
Naphthalene	µg/L	**10[A]**	100[B]	1.9	2.9	3.9	<0.34	**52[A]**	**94[A]**
Propylbenzene, n-	µg/L	NE[A]	n/v	<0.41	<0.41	<0.41	<0.41	10	8.8 J
Tetrachloroethene (PCE)	µg/L	**0.5[A]**	5[B]	<0.37	<0.37	**0.70 J [A]**	<0.37	**0.63 J[A]**	<3.7
Toluene	µg/L	160[A]	800[B]	0.59	1.6	6.5	0.46 J	0.27 J	<1.5
Trichloroethene (TCE)	µg/L	**0.5[A]**	5[B]	<0.16	<0.16	<0.16	<0.16	**0.54[A]**	<1.6
Trimethylbenzene, 1,2,4-	µg/L	**96[A]**	n/v	<0.36	<1.0	2.2	1.4	88	**110[A]**
Trimethylbenzene, 1,3,5-	µg/L	96[A]	n/v	3	6.5	9.3	0.86 J	34	43
Vinyl chloride	µg/L	0.02[A]	0.2[B]	<0.20	<0.20	<0.20	<0.20	<0.20	<2.0
Xylenes, Total	µg/L	400[A]	2,000[B]	<0.22	<0.22	0.85 J	1.8	3.8	8.5 J
Polycyclic Aromatic Hydrocarbons									
Acenaphthene	µg/L	NE[A]	n/v	-	-	-	<0.78	<0.81	<3.9
Acenaphthylene	µg/L	NE[A]	n/v	-	-	-	<0.78	<0.81	<3.9
Anthracene	µg/L	600[A]	3,000[B]	-	-	-	<0.78	<0.81	<3.9
Benzo(a)anthracene	µg/L	NE[A]	n/v	-	-	-	<0.16	<0.16	<0.78
Benzo(a)pyrene	µg/L	0.02[A]	0.2[B]	-	-	-	<0.16	<0.16	<0.78
Benzo(b)fluoranthene	µg/L	0.02[A]	0.2[B]	-	-	-	<0.16	<0.16	<0.78
Benzo(g,h,i)perylene	µg/L	NE[A]	n/v	-	-	-	<0.78	<0.81	<3.9
Benzo(k)fluoranthene	µg/L	NE[A]	n/v	-	-	-	<0.16	<0.16	<0.78
Chrysene	µg/L	0.02[A]	0.2[B]	-	-	-	<0.39	<0.40	<1.9
Dibenzo(a,h)anthracene	µg/L	NE[A]	n/v	-	-	-	<0.24	<0.24	<1.2
Fluoranthene	µg/L	80[A]	400[B]	-	-	-	<0.78	<0.81	<3.9
Fluorene	µg/L	80[A]	400[B]	-	-	-	<0.78	1.4	7.2
Indeno(1,2,3-cd)pyrene	µg/L	NE[A]	n/v	-	-	-	<0.16	<0.16	<0.78
Methylnaphthalene, 1-	µg/L	NE[A]	n/v	-	-	-	0.93 J	17	71
Methylnaphthalene, 2-	µg/L	NE[A]	n/v	-	-	-	0.98 J	7.1	75
Naphthalene	µg/L	**10[A]**	100[B]	-	-	-	0.86	3.0	**48[A]**
Phenanthrene	µg/L	NE[A]	n/v	-	-	-	<0.78	1.7	27
Pyrene	µg/L	50[A]	250[B]	-	-	-	<0.78	<0.81	<3.9

Notes:

Ch. NR 140 PAL	Preventive Action Limit (PAL) found in ch. NR 140 WAC
Ch. NR 140 ES	Enforcement Standard (ES) found in ch. NR 140 WAC
A	Exceeds Wisconsin Groundwater Preventive Action Limit
B	Exceeds Ch. NR 140 WAC Enforcement Standard (ES)
15.2	Measured concentration did not exceed the indicated standard.
<0.03	Analyte was not detected at a concentration greater than the method detection limit.
J	Concentration is an estimate between the laboratory detection limit and the laboratory quantitation limit.

ATTACHMENT A
PHOTOGRAPHIC DOCUMENTATION

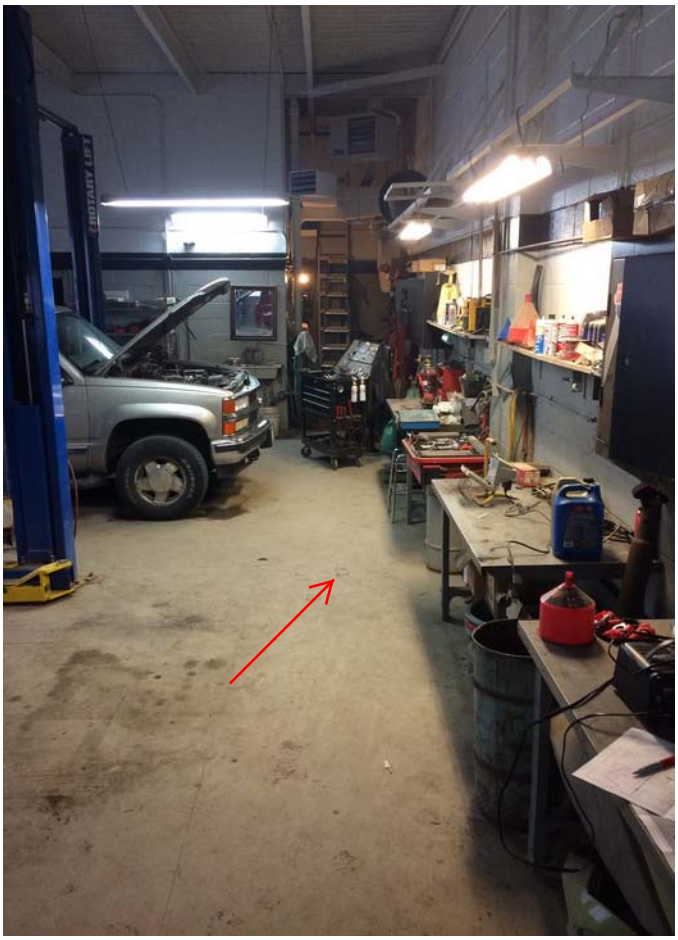
#1 - Subsurface utilities

#2 - Upper and lower soil units (typical)

#3 - Sand/silty clay interface (typical)

#4 - Location of SB-8

#5 - View of fmr. lift, catch basin, and MW-1



#6 - Garage interior and SB-9

Stantec

ATTACHMENT B
SOIL BORING LOGS AND ABANDONMENT FORMS

Design with community in mind

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
1037 S. 26th Street	.	MW-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Cabeno Environmental	1/9/2017	1/9/2017	Dual Tube Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
	MW-1	MW-1	Feet MSL	Feet MSL	8.3 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E S/©/N
NW 1/4 of SW 1/4 of Section 30, T 19 N, R 24 E
Lat 44° 5' 15.1" Long 87° 40' 47.6"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
336100462	Manitowoc	36	Manitowoc

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-1.5) GEOPROBE	18 12			Concrete and rebar, no odor				25						
(1.5-3) GEOPROBE	18 6		1.5	Silty Clay; soft, brownish red (10YR4/4), moist, petro odor	CL-ML			21						
(3-4.5) GEOPROBE	18 14		3.0	Sand; well graded, medium grained, some silt, trace angular gravel, redish brown (10YR4/6), moist, petro odor				126						*Sample Collected @ 3'
(4.5-6) GEOPROBE	18 14		4.5					21						
(6-7.5) GEOPROBE	18 10		6.0		SW			16						*Sample Collected @ 6'
(7.5-9) GEOPROBE	18 12		7.5	...strong petroleum odors ...wet				45						
(9-10.5) GEOPROBE	18 14		9.0	Silty Clay; medium stiff, cohesive, moist to wet, brown (10YR4/2), petro odor				55						
(10.5-12) GEOPROBE	18 14		10.5					55						
(12-13.5) GEOPROBE	18 18		12.0		CL-ML			71						
(13.5-15) GEOPROBE	18 18		13.5					56						
			15.0	End of borehole @ 15 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
	Stantec 12075 Corporate Parkway Mequon WI 53092	2626436159 Fax:

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
1037 S. 26th Street	.	SB-8

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Cabeno Environmental	1/9/2017	1/9/2017	Dual Tube Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E S/C/N
NW 1/4 of SW 1/4 of Section 30, T 19 N, R 24 E
Lat 44° 5' 15.1" Long 87° 40' 47.6"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
336100462	Manitowoc	36	Manitowoc

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-1.5) GEOPROBE	18 16			Asphalt Concrete , no odor				<1						
(1.5-3) GEOPROBE	18 17		2	Silty Clay; soft, brownish red (10YR4/4), moist, no odor	CL-ML			<1						*Sample Collected @ 2'
(3-4.5) GEOPROBE	18 18		4	Sand; well graded, medium grained, some silt, trace angular gravel, redish brown (10YR4/6), moist, no odor				<1						
(4.5-6) GEOPROBE	18 15							<1						
(6-7.5) GEOPROBE	18 16		6		SW			<1						
(7.5-9) GEOPROBE	18 16		8	...petroleum odors ...wet				<1						*Sample Collected @ 7'
(9-10.5) GEOPROBE	18 16		10	Silty Clay; medium stiff, cohesive, moist to wet, brown (10YR4/2), no odor	CL-ML			7.1						
(10.5-12) GEOPROBE	18 16							15						
			12	End of borehole @ 12 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
	Stantec 12075 Corporate Parkway Mequon WI 53092	2626436159 Fax:

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
1037 S. 26th Street	.	SB-9

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Cabeno Environmental	1/9/2017	1/9/2017	Dual Tube Geoprobe

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane N, E S/©/N
NW 1/4 of SW 1/4 of Section 30, T 19 N, R 24 E
Lat 44° 5' 15.1"
Long 87° 40' 47.6"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
336100462	Manitowoc	36	Manitowoc

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
(0-1.5) GEOPROBE	18 14			Concrete and rebar, no odor				<1						
(1.5-3) GEOPROBE	18 18		2	Silty Clay; soft, brownish red (10YR4/4), moist, no odor	CL-ML			<1						*Sample Collected @ 2'
(3-4.5) GEOPROBE	18 16		4	Sand; well graded, medium grained, some silt, trace angular gravel, redish brown (10YR4/6), moist, no odor	SW			<1						
(4.5-6) GEOPROBE	18 15							<1						
(6-7.5) GEOPROBE	18 18		6					<1						*Sample Collected @ 6'
(7.5-9) GEOPROBE	18 18		8					<1						
				Silty Clay; medium stiff, cohesive, moist to wet, brown (10YR4/2), no odor ...wet	CL-ML									
				End of borehole @ 9 feet below grade										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
	Stantec 12075 Corporate Parkway Mequon WI 53092	2626436159 Fax:

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $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. NOTE: See the instructions 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: Manitowoc

Common Well Name: SB-8 Lot (if applicable)

Grid Location: NW 1/4 of SW 1/4 of Sec. 30 ; T. 19 N; R. 24 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☒

Lat 44° 5' 15.1" Long 87° 40' 47.6" or

State Plane _____ ft. N. _____ ft. E. S ☐ C ☒ N ☐ Zone

Reason For Abandonment: Phase II Investigation Borehole

WI Unique Well No. of Replacement Well:

(2) FACILITY /OWNER INFORMATION

Facility Name: 1037 S. 26th Street

Facility ID: 336100462 License/Permit/Monitoring No.: .

Street Address of Well: 1037 S. 26th Street

City, Village, or Town: Manitowoc

Present Well Owner: Edward Wagner Original Owner:

Street Address or Route of Owner: 1037 S. 26th St

City, State, Zip Code: Manitowoc, WI 54220

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date _____

☐ Monitoring Well
☐ Water Well
☒ Drillhole / Borehole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) _____ (From ground surface) Casing Diameter (in.) _____

Casing Depth (ft.) _____

Lower Drillhole Diameter (in.) 2.0

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown

If Yes, To What Depth? _____ Feet

Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☐ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☐ No	

Required Method of Placing Sealing Material
☒ Conductor Pipe - Gravity ☐ Conductor Pipe - Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips	Surface	12.0	0.25	

(6) Comments _____

(7) Name of Person or Firm Doing Sealing Work: Stantec Consulting

Date of Abandonment: 1/9/17

Signature of Person Doing Work

Date Signed

Street or Route: 12075 Corporate Parkway

Telephone Number: 2624422815

City, State, Zip Code: Mequon, WI 53092

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $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. NOTE: See the instructions 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: Manitowoc

Common Well Name: SB-9 | Gov't Lot (if applicable)

Grid Location: NW 1/4 of SW 1/4 of Sec. 30 ; T. 19 N; R. 24 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☒

Lat 44° 5' 15.1" Long 87° 40' 47.6" or

State Plane _____ ft. N. _____ ft. E. S ☒ C N ☐ Zone

Reason For Abandonment: Phase II Investigation Borehole | WI Unique Well No. of Replacement Well:

(2) FACILITY /OWNER INFORMATION

Facility Name: 1037 S. 26th Street

Facility ID: 336100462 | License/Permit/Monitoring No.: .

Street Address of Well: 1037 S. 26th Street

City, Village, or Town: Manitowoc

Present Well Owner: Edward Wagner | Original Owner:

Street Address or Route of Owner: 1037 S. 26th St

City, State, Zip Code: Manitowoc, WI 54220

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date _____

☐ Monitoring Well
☐ Water Well
☒ Drillhole / Borehole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) _____ (From ground surface) Casing Diameter (in.) _____
Casing Depth (ft.) _____
Lower Drillhole Diameter (in.) 2.0

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? _____ Feet
Depth to Water (Feet) _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☐ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☐ No	

Required Method of Placing Sealing Material
☒ Conductor Pipe - Gravity ☐ Conductor Pipe - Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☐ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Bentonite Chips	Surface	9.0	0.25	

(6) Comments _____

(7) Name of Person or Firm Doing Sealing Work: Stantec Consulting | Date of Abandonment: 1/9/17

Signature of Person Doing Work | Date Signed

Street or Route: 12075 Corporate Parkway | Telephone Number: 2624422815

City, State, Zip Code: Mequon, WI 53092

FOR DNR OR COUNTY USE ONLY

Date Received | Noted By

Comments

ATTACHMENT C
LABORATORY REPORTS

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: 500-122569-1
Client Project/Site: Autowerks - 193703931

For:
Stantec Consulting Corp.
12075 Corporate Pkwy, Suite 200
Mequon, Wisconsin 53092

Attn: Harris Byers

Sandie Fredrick

Authorized for release by:
1/19/2017 12:38:37 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Case Narrative

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Job ID: 500-122569-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-122569-1

Comments
No additional comments.

Receipt
The samples were received on 1/13/2017 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

Receipt Exceptions

One or more containers for the following sample was received broken or leaking: 1 of the 3 Voas submitted to lab was received broken, still have enough volume to run parameters

GC/MS VOA
Method(s) 5035: extract vial has < 8 grams of sample in 10 ml of methanol. Samples 2, 3, 8 & 9.

Method(s) 8260B: The extraction LCS associated with preparation batch 368618 had several analyte recoveries outside control limits. The data have been reported and qualified.
MW-1 (3') (500-122569-2) and MW-1 (6') (500-122569-3)

Method(s) 8260B: The laboratory control sample (LCS) for batches 368776 and 168777 recovered outside control limits for the following analytes: Hexachlorobutadiene.. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The following sample was diluted due to the abundance of non-target analytes: MW-1 (3') (500-122569-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The following analyte recovered outside control limits for the LCS associated with analytical batch 369073: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

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

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

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Client Sample ID: MW-1 — Lab Sample ID: 500-122569-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	3.0		1.0	0.25	ug/L	1		8260B	Total/NA
Chloroform	6.3		2.0	0.37	ug/L	1		8260B	Total/NA
Naphthalene	1.9		1.0	0.34	ug/L	1		8260B	Total/NA
Toluene	0.59		0.50	0.15	ug/L	1		8260B	Total/NA

Client Sample ID: MW-1 (3') — Lab Sample ID: 500-122569-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2300		210	75	ug/Kg	100	☼	8260B	Total/NA
1,3,5-Trimethylbenzene	760		210	80	ug/Kg	100	☼	8260B	Total/NA
Benzene	190		53	31	ug/Kg	100	☼	8260B	Total/NA
Ethylbenzene	910		53	38	ug/Kg	100	☼	8260B	Total/NA
Naphthalene	480		210	70	ug/Kg	100	☼	8260B	Total/NA
n-Butylbenzene	430		210	82	ug/Kg	100	☼	8260B	Total/NA
N-Propylbenzene	290		210	87	ug/Kg	100	☼	8260B	Total/NA
Toluene	9900		53	31	ug/Kg	100	☼	8260B	Total/NA
Xylenes, Total	6400		110	46	ug/Kg	100	☼	8260B	Total/NA

Client Sample ID: MW-1 (6') — Lab Sample ID: 500-122569-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	20000		110	40	ug/Kg	50	☼	8260B	Total/NA
1,3,5-Trimethylbenzene	6300		110	43	ug/Kg	50	☼	8260B	Total/NA
Benzene	890		28	16	ug/Kg	50	☼	8260B	Total/NA
Ethylbenzene	6900		28	21	ug/Kg	50	☼	8260B	Total/NA
Isopropylbenzene	730	*	110	43	ug/Kg	50	☼	8260B	Total/NA
Naphthalene	3100		110	38	ug/Kg	50	☼	8260B	Total/NA
n-Butylbenzene	1400		110	44	ug/Kg	50	☼	8260B	Total/NA
N-Propylbenzene	2000		110	47	ug/Kg	50	☼	8260B	Total/NA
p-Isopropyltoluene	1100		110	41	ug/Kg	50	☼	8260B	Total/NA
sec-Butylbenzene	330		110	45	ug/Kg	50	☼	8260B	Total/NA
Toluene - DL	130000		280	170	ug/Kg	500	☼	8260B	Total/NA
Xylenes, Total - DL	63000		560	250	ug/Kg	500	☼	8260B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 500-122569-4

No Detections.

Client Sample ID: Dup — Lab Sample ID: 500-122569-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	6.5		1.0	0.25	ug/L	1		8260B	Total/NA
Chloroform	8.1		2.0	0.37	ug/L	1		8260B	Total/NA
Naphthalene	2.9		1.0	0.34	ug/L	1		8260B	Total/NA
Toluene	1.6		0.50	0.15	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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.

Laboratory References:

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

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-122569-1	MW-1	Water	01/11/17 13:00	01/13/17 10:20
500-122569-2	MW-1 (3')	Solid	01/09/17 12:00	01/13/17 10:20
500-122569-3	MW-1 (6')	Solid	01/09/17 12:15	01/13/17 10:20
500-122569-4	Trip Blank	Water	01/09/17 00:00	01/13/17 10:20
500-122569-5	Dup	Water	01/09/17 00:00	01/13/17 10:20

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Client Sample ID: MW-1
Date Collected: 01/11/17 13:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/17 18:28	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/17 18:28	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/17 18:28	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/17 18:28	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/17 18:28	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/17 18:28	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/17 18:28	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/17 18:28	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			01/16/17 18:28	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/17 18:28	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/17 18:28	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/17 18:28	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/17 18:28	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/17 18:28	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/17 18:28	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/17 18:28	1
1,3,5-Trimethylbenzene	**3.0**		1.0	0.25	ug/L			01/16/17 18:28	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/17 18:28	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/17 18:28	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/17 18:28	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/17 18:28	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/17 18:28	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/17 18:28	1
Benzene	<0.15		0.50	0.15	ug/L			01/16/17 18:28	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/17 18:28	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/17 18:28	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/17 18:28	1
Bromoform	<0.48	F1	1.0	0.48	ug/L			01/16/17 18:28	1
Bromomethane	<0.80		2.0	0.80	ug/L			01/16/17 18:28	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/17 18:28	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/17 18:28	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/17 18:28	1
Chloroform	**6.3**		2.0	0.37	ug/L			01/16/17 18:28	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/17 18:28	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/17 18:28	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/17 18:28	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/17 18:28	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/17 18:28	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			01/16/17 18:28	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/17 18:28	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/17 18:28	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/17 18:28	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/17 18:28	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/17 18:28	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/17 18:28	1
Naphthalene	**1.9**		1.0	0.34	ug/L			01/16/17 18:28	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/17 18:28	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/17 18:28	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/17 18:28	1

Client Sample ID: MW-1

Date Collected: 01/11/17 13:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/17 18:28	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/17 18:28	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/17 18:28	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/17 18:28	1
Toluene	**0.59**		0.50	0.15	ug/L			01/16/17 18:28	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/17 18:28	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/17 18:28	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/17 18:28	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/17 18:28	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			01/16/17 18:28	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/17 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 127*		*01/16/17 18:28*	*1*
4-Bromofluorobenzene (Surr)	*83*		*71 - 120*		*01/16/17 18:28*	*1*
Dibromofluoromethane	*107*		*70 - 120*		*01/16/17 18:28*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*01/16/17 18:28*	*1*

Client Sample ID: MW-1 (3')

Date Collected: 01/09/17 12:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-2

Matrix: Solid
Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<97		210	97	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,1,1-Trichloroethane	<80		210	80	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,1,2,2-Tetrachloroethane	<84		210	84	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,1,2-Trichloroethane	<74		210	74	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,1-Dichloroethane	<86		210	86	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,1-Dichloroethene	<82		210	82	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,1-Dichloropropene	<63		210	63	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,2,3-Trichlorobenzene	<96		210	96	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,2,3-Trichloropropane	<87		210	87	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,2,4-Trichlorobenzene	<72		210	72	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,2,4-Trimethylbenzene	**2300**		210	75	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,2-Dibromo-3-Chloropropane	<420		1100	420	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,2-Dibromoethane	<81		210	81	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,2-Dichlorobenzene	<70		210	70	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,2-Dichloroethane	<82		210	82	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,2-Dichloropropane	<90	*	210	90	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,3,5-Trimethylbenzene	**760**		210	80	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,3-Dichlorobenzene	<84		210	84	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,3-Dichloropropane	<76		210	76	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
1,4-Dichlorobenzene	<76		210	76	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
2,2-Dichloropropane	<93		210	93	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
2-Chlorotoluene	<66		210	66	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
4-Chlorotoluene	<74		210	74	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Benzene	**190**		53	31	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Bromobenzene	<75		210	75	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Bromochloromethane	<90		210	90	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100

Client Sample ID: MW-1 (3')

Date Collected: 01/09/17 12:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-2
Matrix: Solid
Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	<78		210	78	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Bromoform	<100		210	100	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Bromomethane	<170		420	170	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Carbon tetrachloride	<81		210	81	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Chlorobenzene	<81		210	81	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Chloroethane	<110	*	210	110	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Chloroform	<78		420	78	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Chloromethane	<67		210	67	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
cis-1,2-Dichloroethene	<86		210	86	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
cis-1,3-Dichloropropene	<87		210	87	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Dibromochloromethane	<100		210	100	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Dibromomethane	<57		210	57	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Dichlorodifluoromethane	<140		420	140	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Ethylbenzene	**910**		53	38	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Hexachlorobutadiene	<94	*	210	94	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Isopropyl ether	<58		210	58	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Isopropylbenzene	<81	*	210	81	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Methyl tert-butyl ether	<83		210	83	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Methylene Chloride	<340		1100	340	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Naphthalene	**480**		210	70	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
n-Butylbenzene	**430**		210	82	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
N-Propylbenzene	**290**		210	87	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
p-Isopropyltoluene	<76		210	76	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
sec-Butylbenzene	<84		210	84	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Styrene	<81		210	81	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
tert-Butylbenzene	<84		210	84	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Tetrachloroethene	<78		210	78	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Toluene	**9900**		53	31	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
trans-1,2-Dichloroethene	<74		210	74	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
trans-1,3-Dichloropropene	<76		210	76	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Trichloroethene	<34		110	34	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Trichlorofluoromethane	<90		210	90	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Vinyl chloride	<55		110	55	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100
Xylenes, Total	**6400**		110	46	ug/Kg	☼	01/09/17 12:00	01/17/17 15:31	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 127*	*01/09/17 12:00*	*01/17/17 15:31*	*100*
4-Bromofluorobenzene (Surr)	*114*		*71 - 120*	*01/09/17 12:00*	*01/17/17 15:31*	*100*
Dibromofluoromethane	*94*		*70 - 120*	*01/09/17 12:00*	*01/17/17 15:31*	*100*
Toluene-d8 (Surr)	*99*		*75 - 120*	*01/09/17 12:00*	*01/17/17 15:31*	*100*

Client Sample ID: MW-1 (6')

Date Collected: 01/09/17 12:15
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-3
Matrix: Solid
Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<52		110	52	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,1,1-Trichloroethane	<43		110	43	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,1,2,2-Tetrachloroethane	<45		110	45	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50

Client Sample ID: MW-1 (6')
Date Collected: 01/09/17 12:15
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-3
Matrix: Solid
Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<40		110	40	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,1-Dichloroethane	<46		110	46	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,1-Dichloroethene	<44		110	44	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,1-Dichloropropene	<33		110	33	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,2,3-Trichlorobenzene	<51		110	51	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,2,3-Trichloropropane	<47		110	47	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,2,4-Trichlorobenzene	<38		110	38	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,2,4-Trimethylbenzene	**20000**		110	40	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,2-Dibromo-3-Chloropropane	<220		560	220	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,2-Dibromoethane	<43		110	43	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,2-Dichlorobenzene	<38		110	38	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,2-Dichloroethane	<44		110	44	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,2-Dichloropropane	<48	*	110	48	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,3,5-Trimethylbenzene	**6300**		110	43	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,3-Dichlorobenzene	<45		110	45	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,3-Dichloropropane	<41		110	41	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
1,4-Dichlorobenzene	<41		110	41	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
2,2-Dichloropropane	<50		110	50	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
2-Chlorotoluene	<35		110	35	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
4-Chlorotoluene	<39		110	39	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Benzene	**890**		28	16	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Bromobenzene	<40		110	40	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Bromochloromethane	<48		110	48	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Bromodichloromethane	<42		110	42	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Bromoform	<54		110	54	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Bromomethane	<89		220	89	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Carbon tetrachloride	<43		110	43	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Chlorobenzene	<43		110	43	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Chloroethane	<57	*	110	57	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Chloroform	<42		220	42	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Chloromethane	<36		110	36	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
cis-1,2-Dichloroethene	<46		110	46	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
cis-1,3-Dichloropropene	<47		110	47	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Dibromochloromethane	<55		110	55	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Dibromomethane	<30		110	30	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Dichlorodifluoromethane	<76		220	76	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Ethylbenzene	**6900**		28	21	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Hexachlorobutadiene	<50	*	110	50	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Isopropyl ether	<31		110	31	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Isopropylbenzene	**730**	*	110	43	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Methyl tert-butyl ether	<44		110	44	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Methylene Chloride	<180		560	180	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Naphthalene	**3100**		110	38	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
n-Butylbenzene	**1400**		110	44	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
N-Propylbenzene	**2000**		110	47	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
p-Isopropyltoluene	**1100**		110	41	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
sec-Butylbenzene	**330**		110	45	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Styrene	<43		110	43	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
tert-Butylbenzene	<45		110	45	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50

Client Sample ID: MW-1 (6')

Date Collected: 01/09/17 12:15
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-3
Matrix: Solid
Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<42		110	42	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
trans-1,2-Dichloroethene	<39		110	39	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
trans-1,3-Dichloropropene	<41		110	41	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Trichloroethene	<18		56	18	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Trichlorofluoromethane	<48		110	48	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50
Vinyl chloride	<29		56	29	ug/Kg	☼	01/09/17 12:15	01/17/17 15:57	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 127*	*01/09/17 12:15*	*01/17/17 15:57*	*50*
4-Bromofluorobenzene (Surr)	*113*		*71 - 120*	*01/09/17 12:15*	*01/17/17 15:57*	*50*
Dibromofluoromethane	*91*		*70 - 120*	*01/09/17 12:15*	*01/17/17 15:57*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*01/09/17 12:15*	*01/17/17 15:57*	*50*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**130000**		280	170	ug/Kg	☼	01/09/17 12:15	01/17/17 16:23	500
Xylenes, Total	**63000**		560	250	ug/Kg	☼	01/09/17 12:15	01/17/17 16:23	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 127*	*01/09/17 12:15*	*01/17/17 16:23*	*500*
4-Bromofluorobenzene (Surr)	*118*		*71 - 120*	*01/09/17 12:15*	*01/17/17 16:23*	*500*
Dibromofluoromethane	*92*		*70 - 120*	*01/09/17 12:15*	*01/17/17 16:23*	*500*
Toluene-d8 (Surr)	*100*		*75 - 120*	*01/09/17 12:15*	*01/17/17 16:23*	*500*

Client Sample ID: Trip Blank

Date Collected: 01/09/17 00:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/17/17 15:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/17/17 15:05	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/17/17 15:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/17/17 15:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/17/17 15:05	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/17/17 15:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/17/17 15:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/17/17 15:05	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			01/17/17 15:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/17/17 15:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/17/17 15:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/17/17 15:05	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/17/17 15:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/17/17 15:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/17/17 15:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/17/17 15:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/17/17 15:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/17/17 15:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/17/17 15:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/17/17 15:05	1

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Client Sample ID: Trip Blank
Date Collected: 01/09/17 00:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/17/17 15:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/17/17 15:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/17/17 15:05	1
Benzene	<0.15		0.50	0.15	ug/L			01/17/17 15:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/17/17 15:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/17/17 15:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/17/17 15:05	1
Bromoform	<0.48		1.0	0.48	ug/L			01/17/17 15:05	1
Bromomethane	<0.80		2.0	0.80	ug/L			01/17/17 15:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/17/17 15:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/17/17 15:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/17/17 15:05	1
Chloroform	<0.37		2.0	0.37	ug/L			01/17/17 15:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/17/17 15:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/17/17 15:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/17/17 15:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/17/17 15:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/17/17 15:05	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			01/17/17 15:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/17/17 15:05	1
Hexachlorobutadiene	<0.45	*	1.0	0.45	ug/L			01/17/17 15:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/17/17 15:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/17/17 15:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/17/17 15:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/17/17 15:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/17/17 15:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/17/17 15:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/17/17 15:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/17/17 15:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/17 15:05	1
Styrene	<0.39		1.0	0.39	ug/L			01/17/17 15:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/17 15:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/17/17 15:05	1
Toluene	<0.15		0.50	0.15	ug/L			01/17/17 15:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/17/17 15:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/17/17 15:05	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/17/17 15:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/17/17 15:05	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			01/17/17 15:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/17/17 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 127*		*01/17/17 15:05*	*1*
4-Bromofluorobenzene (Surr)	*112*		*71 - 120*		*01/17/17 15:05*	*1*
Dibromofluoromethane	*92*		*70 - 120*		*01/17/17 15:05*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*01/17/17 15:05*	*1*

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Client Sample ID: Dup
Date Collected: 01/09/17 00:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/19/17 00:12	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/19/17 00:12	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/19/17 00:12	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/19/17 00:12	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/19/17 00:12	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/19/17 00:12	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/19/17 00:12	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/19/17 00:12	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			01/19/17 00:12	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/19/17 00:12	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/19/17 00:12	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/19/17 00:12	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/19/17 00:12	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/19/17 00:12	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/19/17 00:12	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/19/17 00:12	1
1,3,5-Trimethylbenzene	**6.5**		1.0	0.25	ug/L			01/19/17 00:12	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/19/17 00:12	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/19/17 00:12	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/19/17 00:12	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/19/17 00:12	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/19/17 00:12	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/19/17 00:12	1
Benzene	<0.15		0.50	0.15	ug/L			01/19/17 00:12	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/19/17 00:12	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/19/17 00:12	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/19/17 00:12	1
Bromoform	<0.48		1.0	0.48	ug/L			01/19/17 00:12	1
Bromomethane	<0.80		2.0	0.80	ug/L			01/19/17 00:12	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/19/17 00:12	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/19/17 00:12	1
Chloroethane	<0.51	*	1.0	0.51	ug/L			01/19/17 00:12	1
Chloroform	**8.1**		2.0	0.37	ug/L			01/19/17 00:12	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/19/17 00:12	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/19/17 00:12	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/19/17 00:12	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/19/17 00:12	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/19/17 00:12	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			01/19/17 00:12	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/19/17 00:12	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/19/17 00:12	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/19/17 00:12	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/19/17 00:12	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/19/17 00:12	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/19/17 00:12	1
Naphthalene	**2.9**		1.0	0.34	ug/L			01/19/17 00:12	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/19/17 00:12	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/19/17 00:12	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/19/17 00:12	1

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Client Sample ID: Dup
Date Collected: 01/09/17 00:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/19/17 00:12	1
Styrene	<0.39		1.0	0.39	ug/L			01/19/17 00:12	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/19/17 00:12	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/19/17 00:12	1
Toluene	**1.6**		0.50	0.15	ug/L			01/19/17 00:12	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/19/17 00:12	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/19/17 00:12	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/19/17 00:12	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/19/17 00:12	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			01/19/17 00:12	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/19/17 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 127*		*01/19/17 00:12*	*1*
4-Bromofluorobenzene (Surr)	*110*		*71 - 120*		*01/19/17 00:12*	*1*
Dibromofluoromethane	*90*		*70 - 120*		*01/19/17 00:12*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*01/19/17 00:12*	*1*

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.

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: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

GC/MS VOA

Prep Batch: 368618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122569-2	MW-1 (3')	Total/NA	Solid	5035	
500-122569-3	MW-1 (6')	Total/NA	Solid	5035	
500-122569-3 - DL	MW-1 (6')	Total/NA	Solid	5035	
LB3 500-368618/7-A	Method Blank	Total/NA	Solid	5035	
LCS 500-368618/8-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 368633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122569-1	MW-1	Total/NA	Water	8260B	
MB 500-368633/6	Method Blank	Total/NA	Water	8260B	
LCS 500-368633/4	Lab Control Sample	Total/NA	Water	8260B	
500-122569-1 MS	MW-1	Total/NA	Water	8260B	
500-122569-1 MSD	MW-1	Total/NA	Water	8260B	

Analysis Batch: 368776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122569-2	MW-1 (3')	Total/NA	Solid	8260B	368618
500-122569-3	MW-1 (6')	Total/NA	Solid	8260B	368618
500-122569-3 - DL	MW-1 (6')	Total/NA	Solid	8260B	368618
LB3 500-368618/7-A	Method Blank	Total/NA	Solid	8260B	368618
MB 500-368776/27	Method Blank	Total/NA	Solid	8260B	
LCS 500-368618/8-A	Lab Control Sample	Total/NA	Solid	8260B	368618
LCS 500-368776/6	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 368777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122569-4	Trip Blank	Total/NA	Water	8260B	
MB 500-368777/27	Method Blank	Total/NA	Water	8260B	
LCS 500-368777/6	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 369073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122569-5	Dup	Total/NA	Water	8260B	
MB 500-369073/6	Method Blank	Total/NA	Water	8260B	
LCS 500-369073/3	Lab Control Sample	Total/NA	Water	8260B	

General Chemistry

Analysis Batch: 368530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122569-2	MW-1 (3')	Total/NA	Solid	Moisture	
500-122569-3	MW-1 (6')	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

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

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(71-127)	(71-120)	(70-120)	(75-120)
500-122569-2	MW-1 (3')	109	114	94	99
500-122569-3	MW-1 (6')	109	113	91	99
500-122569-3 - DL	MW-1 (6')	106	118	92	100
LB3 500-368618/7-A	Method Blank	110	110	94	99
LCS 500-368618/8-A	Lab Control Sample	105	115	95	100
LCS 500-368776/6	Lab Control Sample	108	110	95	100
MB 500-368776/27	Method Blank	109	109	91	99

Surrogate Legend

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

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(71-127)	(71-120)	(70-120)	(75-120)
500-122569-1	MW-1	108	83	107	92
500-122569-1 MS	MW-1	106	83	106	93
500-122569-1 MSD	MW-1	105	83	104	93
500-122569-4	Trip Blank	107	112	92	98
500-122569-5	Dup	107	110	90	99
LCS 500-368633/4	Lab Control Sample	104	82	102	93
LCS 500-368777/6	Lab Control Sample	108	110	95	100
LCS 500-369073/3	Lab Control Sample	103	109	94	98
MB 500-368633/6	Method Blank	107	82	106	92
MB 500-368777/27	Method Blank	109	109	91	99
MB 500-369073/6	Method Blank	101	112	91	101

Surrogate Legend

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

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

Lab Sample ID: LB3 500-368618/7-A
Matrix: Solid
Analysis Batch: 368776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 368618

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		50	23	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,1,1-Trichloroethane	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,1,2,2-Tetrachloroethane	<20		50	20	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,1,2-Trichloroethane	<18		50	18	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,1-Dichloroethane	<21		50	21	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,1-Dichloroethene	<20		50	20	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,1-Dichloropropene	<15		50	15	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,2,3-Trichlorobenzene	<23		50	23	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,2,3-Trichloropropane	<21		50	21	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,2,4-Trichlorobenzene	<17		50	17	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,2,4-Trimethylbenzene	<18		50	18	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,2-Dibromo-3-Chloropropane	<100		250	100	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,2-Dibromoethane	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,2-Dichlorobenzene	<17		50	17	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,2-Dichloroethane	<20		50	20	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,2-Dichloropropane	<21		50	21	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,3,5-Trimethylbenzene	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,3-Dichlorobenzene	<20		50	20	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,3-Dichloropropane	<18		50	18	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
1,4-Dichlorobenzene	<18		50	18	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
2,2-Dichloropropane	<22		50	22	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
2-Chlorotoluene	<16		50	16	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
4-Chlorotoluene	<18		50	18	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Benzene	<7.3		13	7.3	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Bromobenzene	<18		50	18	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Bromochloromethane	<21		50	21	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Bromodichloromethane	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Bromoform	<24		50	24	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Bromomethane	<40		100	40	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Carbon tetrachloride	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Chlorobenzene	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Chloroethane	<25		50	25	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Chloroform	<19		100	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Chloromethane	<16		50	16	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
cis-1,2-Dichloroethene	<20		50	20	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
cis-1,3-Dichloropropene	<21		50	21	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Dibromochloromethane	<24		50	24	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Dibromomethane	<14		50	14	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Dichlorodifluoromethane	<34		100	34	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Ethylbenzene	<9.2		13	9.2	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Hexachlorobutadiene	<22		50	22	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Isopropyl ether	<14		50	14	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Isopropylbenzene	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Methyl tert-butyl ether	<20		50	20	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Methylene Chloride	<82		250	82	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Naphthalene	<17		50	17	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
n-Butylbenzene	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
N-Propylbenzene	<21		50	21	ug/Kg		01/16/17 01:30	01/17/17 14:13	50

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

Lab Sample ID: LB3 500-368618/7-A
Matrix: Solid
Analysis Batch: 368776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 368618

Analyte	LB3 Result	LB3 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<18		50	18	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
sec-Butylbenzene	<20		50	20	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Styrene	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
tert-Butylbenzene	<20		50	20	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Tetrachloroethene	<19		50	19	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Toluene	<7.4		13	7.4	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
trans-1,2-Dichloroethene	<18		50	18	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
trans-1,3-Dichloropropene	<18		50	18	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Trichloroethene	<8.2		25	8.2	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Trichlorofluoromethane	<21		50	21	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Vinyl chloride	<13		25	13	ug/Kg		01/16/17 01:30	01/17/17 14:13	50
Xylenes, Total	<11		25	11	ug/Kg		01/16/17 01:30	01/17/17 14:13	50

Surrogate	*LB3 %Recovery*	*LB3 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 127*	*01/16/17 01:30*	*01/17/17 14:13*	*50*
4-Bromofluorobenzene (Surr)	*110*		*71 - 120*	*01/16/17 01:30*	*01/17/17 14:13*	*50*
Dibromofluoromethane	*94*		*70 - 120*	*01/16/17 01:30*	*01/17/17 14:13*	*50*
Toluene-d8 (Surr)	*99*		*75 - 120*	*01/16/17 01:30*	*01/17/17 14:13*	*50*

Lab Sample ID: LCS 500-368618/8-A
Matrix: Solid
Analysis Batch: 368776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	2500	2760		ug/Kg		110	68 - 125
1,1,1-Trichloroethane	2500	2670		ug/Kg		107	70 - 125
1,1,2,2-Tetrachloroethane	2500	3030		ug/Kg		121	68 - 125
1,1,2-Trichloroethane	2500	2960		ug/Kg		118	70 - 125
1,1-Dichloroethane	2500	2930		ug/Kg		117	70 - 125
1,1-Dichloroethene	2500	2510		ug/Kg		100	70 - 125
1,1-Dichloropropene	2500	2830		ug/Kg		113	70 - 125
1,2,3-Trichlorobenzene	2500	3090		ug/Kg		123	58 - 135
1,2,3-Trichloropropane	2500	2950		ug/Kg		118	63 - 125
1,2,4-Trichlorobenzene	2500	3040		ug/Kg		122	64 - 126
1,2,4-Trimethylbenzene	2500	3020		ug/Kg		121	70 - 125
1,2-Dibromo-3-Chloropropane	2500	3050		ug/Kg		122	51 - 125
1,2-Dibromoethane	2500	2880		ug/Kg		115	70 - 125
1,2-Dichlorobenzene	2500	2860		ug/Kg		114	70 - 125
1,2-Dichloroethane	2500	2950		ug/Kg		118	70 - 125
1,2-Dichloropropane	2500	3220	*	ug/Kg		129	70 - 125
1,3,5-Trimethylbenzene	2500	3010		ug/Kg		120	70 - 125
1,3-Dichlorobenzene	2500	2780		ug/Kg		111	70 - 125
1,3-Dichloropropane	2500	3130		ug/Kg		125	70 - 125
1,4-Dichlorobenzene	2500	2660		ug/Kg		106	70 - 125
2,2-Dichloropropane	2500	2750		ug/Kg		110	62 - 125
2-Chlorotoluene	2500	3030		ug/Kg		121	69 - 125
4-Chlorotoluene	2500	2930		ug/Kg		117	70 - 125
Benzene	2500	2870		ug/Kg		115	70 - 125

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

Lab Sample ID: LCS 500-368618/8-A
Matrix: Solid
Analysis Batch: 368776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 368618

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	2500	3030		ug/Kg		121	70 - 125
Bromochloromethane	2500	2580		ug/Kg		103	70 - 125
Bromodichloromethane	2500	2750		ug/Kg		110	70 - 125
Bromoform	2500	2730		ug/Kg		109	54 - 128
Bromomethane	2500	1480		ug/Kg		59	40 - 150
Carbon tetrachloride	2500	2520		ug/Kg		101	70 - 125
Chlorobenzene	2500	2820		ug/Kg		113	70 - 125
Chloroethane	2500	1390	*	ug/Kg		56	60 - 139
Chloroform	2500	2820		ug/Kg		113	70 - 125
Chloromethane	2500	2250		ug/Kg		90	60 - 140
cis-1,2-Dichloroethene	2500	2770		ug/Kg		111	70 - 125
cis-1,3-Dichloropropene	2500	3080		ug/Kg		123	70 - 125
Dibromochloromethane	2500	2650		ug/Kg		106	66 - 125
Dibromomethane	2500	2710		ug/Kg		108	70 - 125
Dichlorodifluoromethane	2500	1730		ug/Kg		69	51 - 140
Ethylbenzene	2500	2750		ug/Kg		110	70 - 125
Hexachlorobutadiene	2500	3870	*	ug/Kg		155	57 - 140
Isopropylbenzene	2500	3140	*	ug/Kg		126	70 - 125
Methyl tert-butyl ether	2500	2760		ug/Kg		110	67 - 125
Methylene Chloride	2500	2690		ug/Kg		108	68 - 125
Naphthalene	2500	2870		ug/Kg		115	50 - 136
n-Butylbenzene	2500	2820		ug/Kg		113	70 - 125
N-Propylbenzene	2500	2950		ug/Kg		118	70 - 125
p-Isopropyltoluene	2500	2820		ug/Kg		113	70 - 125
sec-Butylbenzene	2500	2950		ug/Kg		118	70 - 125
Styrene	2500	2750		ug/Kg		110	70 - 125
tert-Butylbenzene	2500	2990		ug/Kg		120	70 - 125
Tetrachloroethene	2500	2940		ug/Kg		118	70 - 125
Toluene	2500	2910		ug/Kg		117	70 - 125
trans-1,2-Dichloroethene	2500	2560		ug/Kg		102	70 - 125
trans-1,3-Dichloropropene	2500	2900		ug/Kg		116	70 - 125
Trichloroethene	2500	2780		ug/Kg		111	70 - 125
Trichlorofluoromethane	2500	2410		ug/Kg		96	60 - 126
Vinyl chloride	2500	2280		ug/Kg		91	70 - 126
Xylenes, Total	5000	5510		ug/Kg		110	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 127*
4-Bromofluorobenzene (Surr)	*115*		*71 - 120*
Dibromofluoromethane	*95*		*70 - 120*
Toluene-d8 (Surr)	*100*		*75 - 120*

Lab Sample ID: MB 500-368633/6
Matrix: Water
Analysis Batch: 368633

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/16/17 10:27	1

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

Lab Sample ID: MB 500-368633/6
Matrix: Water
Analysis Batch: 368633

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/16/17 10:27	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/16/17 10:27	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/16/17 10:27	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/16/17 10:27	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/16/17 10:27	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/16/17 10:27	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/16/17 10:27	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			01/16/17 10:27	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/16/17 10:27	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/16/17 10:27	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/16/17 10:27	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/16/17 10:27	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/16/17 10:27	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/16/17 10:27	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/16/17 10:27	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/16/17 10:27	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/16/17 10:27	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/16/17 10:27	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/16/17 10:27	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/16/17 10:27	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/16/17 10:27	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/16/17 10:27	1
Benzene	<0.15		0.50	0.15	ug/L			01/16/17 10:27	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/16/17 10:27	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/16/17 10:27	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/16/17 10:27	1
Bromoform	<0.48		1.0	0.48	ug/L			01/16/17 10:27	1
Bromomethane	<0.80		2.0	0.80	ug/L			01/16/17 10:27	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/16/17 10:27	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/16/17 10:27	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/16/17 10:27	1
Chloroform	<0.37		2.0	0.37	ug/L			01/16/17 10:27	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/16/17 10:27	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/16/17 10:27	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/16/17 10:27	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/16/17 10:27	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/16/17 10:27	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			01/16/17 10:27	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/16/17 10:27	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/16/17 10:27	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/16/17 10:27	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/16/17 10:27	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/16/17 10:27	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/16/17 10:27	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/16/17 10:27	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/16/17 10:27	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/16/17 10:27	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/16/17 10:27	1

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

Lab Sample ID: MB 500-368633/6
Matrix: Water
Analysis Batch: 368633

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/17 10:27	1
Styrene	<0.39		1.0	0.39	ug/L			01/16/17 10:27	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/16/17 10:27	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/16/17 10:27	1
Toluene	<0.15		0.50	0.15	ug/L			01/16/17 10:27	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/16/17 10:27	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/16/17 10:27	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/16/17 10:27	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/16/17 10:27	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			01/16/17 10:27	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/16/17 10:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 127*		*01/16/17 10:27*	*1*
4-Bromofluorobenzene (Surr)	*82*		*71 - 120*		*01/16/17 10:27*	*1*
Dibromofluoromethane	*106*		*70 - 120*		*01/16/17 10:27*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*01/16/17 10:27*	*1*

Lab Sample ID: LCS 500-368633/4
Matrix: Water
Analysis Batch: 368633

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	50.4		ug/L		101	68 - 125
1,1,1-Trichloroethane	50.0	49.0		ug/L		98	70 - 125
1,1,2,2-Tetrachloroethane	50.0	41.5		ug/L		83	68 - 125
1,1,2-Trichloroethane	50.0	49.2		ug/L		98	70 - 125
1,1-Dichloroethane	50.0	45.2		ug/L		90	70 - 125
1,1-Dichloroethene	50.0	46.8		ug/L		94	70 - 125
1,1-Dichloropropene	50.0	45.4		ug/L		91	70 - 125
1,2,3-Trichlorobenzene	50.0	50.7		ug/L		101	58 - 135
1,2,3-Trichloropropane	50.0	40.2		ug/L		80	63 - 125
1,2,4-Trichlorobenzene	50.0	51.1		ug/L		102	64 - 126
1,2,4-Trimethylbenzene	50.0	42.9		ug/L		86	70 - 125
1,2-Dibromo-3-Chloropropane	50.0	40.6		ug/L		81	51 - 125
1,2-Dibromoethane	50.0	48.7		ug/L		97	70 - 125
1,2-Dichlorobenzene	50.0	48.6		ug/L		97	70 - 125
1,2-Dichloroethane	50.0	52.0		ug/L		104	70 - 125
1,2-Dichloropropane	50.0	48.0		ug/L		96	70 - 125
1,3,5-Trimethylbenzene	50.0	42.0		ug/L		84	70 - 125
1,3-Dichlorobenzene	50.0	48.1		ug/L		96	70 - 125
1,3-Dichloropropane	50.0	47.1		ug/L		94	70 - 125
1,4-Dichlorobenzene	50.0	48.2		ug/L		96	70 - 125
2,2-Dichloropropane	50.0	42.8		ug/L		86	62 - 125
2-Chlorotoluene	50.0	41.3		ug/L		83	69 - 125
4-Chlorotoluene	50.0	41.9		ug/L		84	70 - 125
Benzene	50.0	45.4		ug/L		91	70 - 125
Bromobenzene	50.0	50.0		ug/L		100	70 - 125

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

Lab Sample ID: LCS 500-368633/4
Matrix: Water
Analysis Batch: 368633

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromochloromethane	50.0	54.3		ug/L		109	70 - 125
Bromodichloromethane	50.0	47.8		ug/L		96	70 - 125
Bromoform	50.0	62.4		ug/L		125	54 - 128
Bromomethane	50.0	45.3		ug/L		91	40 - 150
Carbon tetrachloride	50.0	51.3		ug/L		103	70 - 125
Chlorobenzene	50.0	47.4		ug/L		95	70 - 125
Chloroethane	50.0	41.3		ug/L		83	60 - 139
Chloroform	50.0	46.9		ug/L		94	70 - 125
Chloromethane	50.0	48.8		ug/L		98	60 - 140
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	70 - 125
cis-1,3-Dichloropropene	50.0	44.1		ug/L		88	70 - 125
Dibromochloromethane	50.0	52.5		ug/L		105	66 - 125
Dibromomethane	50.0	51.1		ug/L		102	70 - 125
Dichlorodifluoromethane	50.0	40.3		ug/L		81	51 - 140
Ethylbenzene	50.0	46.0		ug/L		92	70 - 125
Hexachlorobutadiene	50.0	57.3		ug/L		115	57 - 140
Isopropylbenzene	50.0	42.5		ug/L		85	70 - 125
Methyl tert-butyl ether	50.0	47.1		ug/L		94	67 - 125
Methylene Chloride	50.0	45.5		ug/L		91	68 - 125
Naphthalene	50.0	43.1		ug/L		86	50 - 136
n-Butylbenzene	50.0	41.1		ug/L		82	70 - 125
N-Propylbenzene	50.0	41.5		ug/L		83	70 - 125
p-Isopropyltoluene	50.0	43.3		ug/L		87	70 - 125
sec-Butylbenzene	50.0	41.9		ug/L		84	70 - 125
Styrene	50.0	48.4		ug/L		97	70 - 125
tert-Butylbenzene	50.0	43.6		ug/L		87	70 - 125
Tetrachloroethene	50.0	55.6		ug/L		111	70 - 125
Toluene	50.0	44.0		ug/L		88	70 - 125
trans-1,2-Dichloroethene	50.0	47.7		ug/L		95	70 - 125
trans-1,3-Dichloropropene	50.0	45.7		ug/L		91	70 - 125
Trichloroethene	50.0	52.7		ug/L		105	70 - 125
Trichlorofluoromethane	50.0	48.0		ug/L		96	60 - 126
Vinyl chloride	50.0	42.3		ug/L		85	70 - 126
Xylenes, Total	100	91.4		ug/L		91	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*71 - 127*
4-Bromofluorobenzene (Surr)	*82*		*71 - 120*
Dibromofluoromethane	*102*		*70 - 120*
Toluene-d8 (Surr)	*93*		*75 - 120*

Lab Sample ID: 500-122569-1 MS
Matrix: Water
Analysis Batch: 368633

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	<0.46		50.0	54.2		ug/L		108	68 - 125
1,1,1-Trichloroethane	<0.38		50.0	52.3		ug/L		105	70 - 125

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

Lab Sample ID: 500-122569-1 MS
Matrix: Water
Analysis Batch: 368633

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	<0.40		50.0	45.2		ug/L		90	68 - 125
1,1,2-Trichloroethane	<0.35		50.0	52.0		ug/L		104	70 - 125
1,1-Dichloroethane	<0.41		50.0	48.3		ug/L		97	70 - 125
1,1-Dichloroethene	<0.39		50.0	50.0		ug/L		100	70 - 125
1,1-Dichloropropene	<0.30		50.0	48.1		ug/L		96	70 - 125
1,2,3-Trichlorobenzene	<0.46		50.0	54.8		ug/L		110	58 - 135
1,2,3-Trichloropropane	<0.41		50.0	42.9		ug/L		86	63 - 125
1,2,4-Trichlorobenzene	<0.34		50.0	51.9		ug/L		104	64 - 126
1,2,4-Trimethylbenzene	<0.36		50.0	45.6		ug/L		91	70 - 125
1,2-Dibromo-3-Chloropropane	<2.0		50.0	45.3		ug/L		91	51 - 125
1,2-Dibromoethane	<0.39		50.0	53.0		ug/L		106	70 - 125
1,2-Dichlorobenzene	<0.33		50.0	51.7		ug/L		103	70 - 125
1,2-Dichloroethane	<0.39		50.0	56.8		ug/L		114	70 - 125
1,2-Dichloropropane	<0.43		50.0	50.9		ug/L		102	70 - 125
1,3,5-Trimethylbenzene	3.0		50.0	48.3		ug/L		91	70 - 125
1,3-Dichlorobenzene	<0.40		50.0	51.0		ug/L		102	70 - 125
1,3-Dichloropropane	<0.36		50.0	50.4		ug/L		101	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	50.3		ug/L		101	70 - 125
2,2-Dichloropropane	<0.44		50.0	43.5		ug/L		87	62 - 125
2-Chlorotoluene	<0.31		50.0	44.6		ug/L		89	69 - 125
4-Chlorotoluene	<0.35		50.0	44.0		ug/L		88	70 - 125
Benzene	<0.15		50.0	48.0		ug/L		96	70 - 125
Bromobenzene	<0.36		50.0	54.2		ug/L		108	70 - 125
Bromochloromethane	<0.43		50.0	58.9		ug/L		118	70 - 125
Bromodichloromethane	<0.37		50.0	51.4		ug/L		103	70 - 125
Bromoform	<0.48	F1	50.0	67.9	F1	ug/L		136	54 - 128
Bromomethane	<0.80		50.0	47.9		ug/L		96	40 - 150
Carbon tetrachloride	<0.38		50.0	54.9		ug/L		110	70 - 125
Chlorobenzene	<0.39		50.0	50.7		ug/L		101	70 - 125
Chloroethane	<0.51		50.0	44.1		ug/L		88	60 - 139
Chloroform	6.3		50.0	56.2		ug/L		100	70 - 125
Chloromethane	<0.32		50.0	50.5		ug/L		101	60 - 140
cis-1,2-Dichloroethene	<0.41		50.0	51.7		ug/L		103	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	45.0		ug/L		90	70 - 125
Dibromochloromethane	<0.49		50.0	57.7		ug/L		115	66 - 125
Dibromomethane	<0.27		50.0	55.9		ug/L		112	70 - 125
Dichlorodifluoromethane	<0.67		50.0	42.3		ug/L		85	51 - 140
Ethylbenzene	<0.18		50.0	49.2		ug/L		98	70 - 125
Hexachlorobutadiene	<0.45		50.0	62.8		ug/L		126	57 - 140
Isopropylbenzene	<0.39		50.0	45.3		ug/L		91	70 - 125
Methyl tert-butyl ether	<0.39		50.0	49.1		ug/L		98	67 - 125
Methylene Chloride	<1.6		50.0	48.9		ug/L		98	68 - 125
Naphthalene	1.9		50.0	51.2		ug/L		99	50 - 136
n-Butylbenzene	<0.39		50.0	42.0		ug/L		84	70 - 125
N-Propylbenzene	<0.41		50.0	43.6		ug/L		87	70 - 125
p-Isopropyltoluene	<0.36		50.0	47.5		ug/L		95	70 - 125
sec-Butylbenzene	<0.40		50.0	45.0		ug/L		90	70 - 125
Styrene	<0.39		50.0	50.8		ug/L		102	70 - 125

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

Lab Sample ID: 500-122569-1 MS
Matrix: Water
Analysis Batch: 368633

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	<0.40		50.0	45.6		ug/L		91	70 - 125
Tetrachloroethene	<0.37		50.0	59.2		ug/L		118	70 - 125
Toluene	0.59		50.0	47.5		ug/L		94	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	50.6		ug/L		101	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	47.4		ug/L		95	70 - 125
Trichloroethene	<0.16		50.0	55.3		ug/L		111	70 - 125
Trichlorofluoromethane	<0.43		50.0	51.4		ug/L		103	60 - 126
Vinyl chloride	<0.20		50.0	44.6		ug/L		89	70 - 126
Xylenes, Total	<0.22		100	94.9		ug/L		95	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 127*
4-Bromofluorobenzene (Surr)	*83*		*71 - 120*
Dibromofluoromethane	*106*		*70 - 120*
Toluene-d8 (Surr)	*93*		*75 - 120*

Lab Sample ID: 500-122569-1 MSD
Matrix: Water
Analysis Batch: 368633

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	<0.46		50.0	51.4		ug/L		103	68 - 125	5	20
1,1,1-Trichloroethane	<0.38		50.0	49.2		ug/L		98	70 - 125	6	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	42.9		ug/L		86	68 - 125	5	20
1,1,2-Trichloroethane	<0.35		50.0	48.4		ug/L		97	70 - 125	7	20
1,1-Dichloroethane	<0.41		50.0	45.8		ug/L		92	70 - 125	5	20
1,1-Dichloroethene	<0.39		50.0	46.9		ug/L		94	70 - 125	6	20
1,1-Dichloropropene	<0.30		50.0	45.0		ug/L		90	70 - 125	7	20
1,2,3-Trichlorobenzene	<0.46		50.0	52.1		ug/L		104	58 - 135	5	20
1,2,3-Trichloropropane	<0.41		50.0	39.9		ug/L		80	63 - 125	7	20
1,2,4-Trichlorobenzene	<0.34		50.0	48.7		ug/L		97	64 - 126	6	20
1,2,4-Trimethylbenzene	<0.36		50.0	42.7		ug/L		85	70 - 125	7	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	42.5		ug/L		85	51 - 125	6	20
1,2-Dibromoethane	<0.39		50.0	50.6		ug/L		101	70 - 125	5	20
1,2-Dichlorobenzene	<0.33		50.0	49.0		ug/L		98	70 - 125	6	20
1,2-Dichloroethane	<0.39		50.0	52.4		ug/L		105	70 - 125	8	20
1,2-Dichloropropane	<0.43		50.0	47.8		ug/L		96	70 - 125	6	20
1,3,5-Trimethylbenzene	3.0		50.0	45.2		ug/L		84	70 - 125	7	20
1,3-Dichlorobenzene	<0.40		50.0	47.4		ug/L		95	70 - 125	7	20
1,3-Dichloropropane	<0.36		50.0	47.5		ug/L		95	70 - 125	6	20
1,4-Dichlorobenzene	<0.36		50.0	47.1		ug/L		94	70 - 125	6	20
2,2-Dichloropropane	<0.44		50.0	41.3		ug/L		83	62 - 125	5	20
2-Chlorotoluene	<0.31		50.0	41.2		ug/L		82	69 - 125	8	20
4-Chlorotoluene	<0.35		50.0	40.8		ug/L		82	70 - 125	8	20
Benzene	<0.15		50.0	45.0		ug/L		90	70 - 125	7	20
Bromobenzene	<0.36		50.0	51.4		ug/L		103	70 - 125	5	20
Bromochloromethane	<0.43		50.0	54.8		ug/L		110	70 - 125	7	20
Bromodichloromethane	<0.37		50.0	47.6		ug/L		95	70 - 125	8	20

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

Lab Sample ID: 500-122569-1 MSD
Matrix: Water
Analysis Batch: 368633

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	<0.48	F1	50.0	64.2		ug/L		128	54 - 128	6	20
Bromomethane	<0.80		50.0	47.4		ug/L		95	40 - 150	1	20
Carbon tetrachloride	<0.38		50.0	52.5		ug/L		105	70 - 125	5	20
Chlorobenzene	<0.39		50.0	47.3		ug/L		95	70 - 125	7	20
Chloroethane	<0.51		50.0	41.4		ug/L		83	60 - 139	6	20
Chloroform	6.3		50.0	52.8		ug/L		93	70 - 125	6	20
Chloromethane	<0.32		50.0	49.9		ug/L		100	60 - 140	1	20
cis-1,2-Dichloroethene	<0.41		50.0	48.1		ug/L		96	70 - 125	7	20
cis-1,3-Dichloropropene	<0.42		50.0	42.7		ug/L		85	70 - 125	5	20
Dibromochloromethane	<0.49		50.0	54.0		ug/L		108	66 - 125	6	20
Dibromomethane	<0.27		50.0	51.9		ug/L		104	70 - 125	8	20
Dichlorodifluoromethane	<0.67		50.0	39.9		ug/L		80	51 - 140	6	20
Ethylbenzene	<0.18		50.0	46.0		ug/L		92	70 - 125	7	20
Hexachlorobutadiene	<0.45		50.0	59.1		ug/L		118	57 - 140	6	20
Isopropylbenzene	<0.39		50.0	42.7		ug/L		85	70 - 125	6	20
Methyl tert-butyl ether	<0.39		50.0	45.8		ug/L		92	67 - 125	7	20
Methylene Chloride	<1.6		50.0	46.5		ug/L		93	68 - 125	5	20
Naphthalene	1.9		50.0	48.7		ug/L		94	50 - 136	5	20
n-Butylbenzene	<0.39		50.0	39.0		ug/L		78	70 - 125	7	20
N-Propylbenzene	<0.41		50.0	40.7		ug/L		81	70 - 125	7	20
p-Isopropyltoluene	<0.36		50.0	44.7		ug/L		89	70 - 125	6	20
sec-Butylbenzene	<0.40		50.0	42.2		ug/L		84	70 - 125	6	20
Styrene	<0.39		50.0	48.0		ug/L		96	70 - 125	6	20
tert-Butylbenzene	<0.40		50.0	43.1		ug/L		86	70 - 125	6	20
Tetrachloroethene	<0.37		50.0	55.6		ug/L		111	70 - 125	6	20
Toluene	0.59		50.0	44.4		ug/L		88	70 - 125	7	20
trans-1,2-Dichloroethene	<0.35		50.0	47.3		ug/L		95	70 - 125	7	20
trans-1,3-Dichloropropene	<0.36		50.0	44.4		ug/L		89	70 - 125	6	20
Trichloroethene	<0.16		50.0	52.3		ug/L		105	70 - 125	6	20
Trichlorofluoromethane	<0.43		50.0	49.3		ug/L		99	60 - 126	4	20
Vinyl chloride	<0.20		50.0	41.7		ug/L		83	70 - 126	7	20
Xylenes, Total	<0.22		100	90.0		ug/L		90	70 - 125	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 127*
4-Bromofluorobenzene (Surr)	*83*		*71 - 120*
Dibromofluoromethane	*104*		*70 - 120*
Toluene-d8 (Surr)	*93*		*75 - 120*

Lab Sample ID: MB 500-368776/27
Matrix: Solid
Analysis Batch: 368776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			01/17/17 13:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			01/17/17 13:38	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			01/17/17 13:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			01/17/17 13:38	1

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

Lab Sample ID: MB 500-368776/27
Matrix: Solid
Analysis Batch: 368776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			01/17/17 13:38	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			01/17/17 13:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			01/17/17 13:38	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			01/17/17 13:38	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/Kg			01/17/17 13:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			01/17/17 13:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			01/17/17 13:38	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			01/17/17 13:38	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			01/17/17 13:38	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			01/17/17 13:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			01/17/17 13:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			01/17/17 13:38	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			01/17/17 13:38	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			01/17/17 13:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			01/17/17 13:38	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			01/17/17 13:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			01/17/17 13:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			01/17/17 13:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			01/17/17 13:38	1
Benzene	<0.15		0.25	0.15	ug/Kg			01/17/17 13:38	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			01/17/17 13:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			01/17/17 13:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			01/17/17 13:38	1
Bromoform	<0.48		1.0	0.48	ug/Kg			01/17/17 13:38	1
Bromomethane	<0.80		2.0	0.80	ug/Kg			01/17/17 13:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			01/17/17 13:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			01/17/17 13:38	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			01/17/17 13:38	1
Chloroform	<0.37		2.0	0.37	ug/Kg			01/17/17 13:38	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			01/17/17 13:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			01/17/17 13:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			01/17/17 13:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			01/17/17 13:38	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			01/17/17 13:38	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/Kg			01/17/17 13:38	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			01/17/17 13:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			01/17/17 13:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			01/17/17 13:38	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			01/17/17 13:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			01/17/17 13:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			01/17/17 13:38	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			01/17/17 13:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			01/17/17 13:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			01/17/17 13:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			01/17/17 13:38	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			01/17/17 13:38	1
Styrene	<0.39		1.0	0.39	ug/Kg			01/17/17 13:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			01/17/17 13:38	1

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

Lab Sample ID: MB 500-368776/27
Matrix: Solid
Analysis Batch: 368776

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			01/17/17 13:38	1
Toluene	<0.15		0.25	0.15	ug/Kg			01/17/17 13:38	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			01/17/17 13:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			01/17/17 13:38	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			01/17/17 13:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			01/17/17 13:38	1
Vinyl chloride	<0.26		0.50	0.26	ug/Kg			01/17/17 13:38	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			01/17/17 13:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 127*		*01/17/17 13:38*	*1*
4-Bromofluorobenzene (Surr)	*109*		*71 - 120*		*01/17/17 13:38*	*1*
Dibromofluoromethane	*91*		*70 - 120*		*01/17/17 13:38*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*01/17/17 13:38*	*1*

Lab Sample ID: LCS 500-368776/6
Matrix: Solid
Analysis Batch: 368776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	50.1		ug/Kg		100	68 - 125
1,1,1-Trichloroethane	50.0	52.4		ug/Kg		105	70 - 125
1,1,2,2-Tetrachloroethane	50.0	54.4		ug/Kg		109	68 - 125
1,1,2-Trichloroethane	50.0	55.3		ug/Kg		111	70 - 125
1,1-Dichloroethane	50.0	54.6		ug/Kg		109	70 - 125
1,1-Dichloroethene	50.0	48.8		ug/Kg		98	70 - 125
1,1-Dichloropropene	50.0	54.0		ug/Kg		108	70 - 125
1,2,3-Trichlorobenzene	50.0	58.1		ug/Kg		116	58 - 135
1,2,3-Trichloropropane	50.0	57.8		ug/Kg		116	63 - 125
1,2,4-Trichlorobenzene	50.0	58.9		ug/Kg		118	64 - 126
1,2,4-Trimethylbenzene	50.0	57.3		ug/Kg		115	70 - 125
1,2-Dibromo-3-Chloropropane	50.0	57.2		ug/Kg		114	51 - 125
1,2-Dibromoethane	50.0	53.8		ug/Kg		108	70 - 125
1,2-Dichlorobenzene	50.0	52.8		ug/Kg		106	70 - 125
1,2-Dichloroethane	50.0	55.5		ug/Kg		111	70 - 125
1,2-Dichloropropane	50.0	59.1		ug/Kg		118	70 - 125
1,3,5-Trimethylbenzene	50.0	57.0		ug/Kg		114	70 - 125
1,3-Dichlorobenzene	50.0	53.1		ug/Kg		106	70 - 125
1,3-Dichloropropane	50.0	59.3		ug/Kg		119	70 - 125
1,4-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 125
2,2-Dichloropropane	50.0	54.3		ug/Kg		109	62 - 125
2-Chlorotoluene	50.0	56.4		ug/Kg		113	69 - 125
4-Chlorotoluene	50.0	55.5		ug/Kg		111	70 - 125
Benzene	50.0	53.5		ug/Kg		107	70 - 125
Bromobenzene	50.0	55.8		ug/Kg		112	70 - 125
Bromochloromethane	50.0	47.8		ug/Kg		96	70 - 125
Bromodichloromethane	50.0	51.3		ug/Kg		103	70 - 125
Bromoform	50.0	51.4		ug/Kg		103	54 - 128

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

Lab Sample ID: LCS 500-368776/6
Matrix: Solid
Analysis Batch: 368776

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	50.0	34.8		ug/Kg		70	40 - 150
Carbon tetrachloride	50.0	50.0		ug/Kg		100	70 - 125
Chlorobenzene	50.0	53.4		ug/Kg		107	70 - 125
Chloroethane	50.0	33.2		ug/Kg		66	60 - 139
Chloroform	50.0	51.2		ug/Kg		102	70 - 125
Chloromethane	50.0	59.4		ug/Kg		119	60 - 140
cis-1,2-Dichloroethene	50.0	50.0		ug/Kg		100	70 - 125
cis-1,3-Dichloropropene	50.0	57.3		ug/Kg		115	70 - 125
Dibromochloromethane	50.0	50.3		ug/Kg		101	66 - 125
Dibromomethane	50.0	51.2		ug/Kg		102	70 - 125
Dichlorodifluoromethane	50.0	63.2		ug/Kg		126	51 - 140
Ethylbenzene	50.0	52.2		ug/Kg		104	70 - 125
Hexachlorobutadiene	50.0	74.0	*	ug/Kg		148	57 - 140
Isopropylbenzene	50.0	58.0		ug/Kg		116	70 - 125
Methyl tert-butyl ether	50.0	50.7		ug/Kg		101	67 - 125
Methylene Chloride	50.0	52.6		ug/Kg		105	68 - 125
Naphthalene	50.0	50.2		ug/Kg		100	50 - 136
n-Butylbenzene	50.0	55.6		ug/Kg		111	70 - 125
N-Propylbenzene	50.0	55.8		ug/Kg		112	70 - 125
p-Isopropyltoluene	50.0	53.3		ug/Kg		107	70 - 125
sec-Butylbenzene	50.0	55.4		ug/Kg		111	70 - 125
Styrene	50.0	51.3		ug/Kg		103	70 - 125
tert-Butylbenzene	50.0	55.3		ug/Kg		111	70 - 125
Tetrachloroethene	50.0	56.4		ug/Kg		113	70 - 125
Toluene	50.0	53.2		ug/Kg		106	70 - 125
trans-1,2-Dichloroethene	50.0	48.3		ug/Kg		97	70 - 125
trans-1,3-Dichloropropene	50.0	56.7		ug/Kg		113	70 - 125
Trichloroethene	50.0	52.3		ug/Kg		105	70 - 125
Trichlorofluoromethane	50.0	59.1		ug/Kg		118	60 - 126
Vinyl chloride	50.0	56.8		ug/Kg		114	70 - 126
Xylenes, Total	100	105		ug/Kg		105	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 127*
4-Bromofluorobenzene (Surr)	*110*		*71 - 120*
Dibromofluoromethane	*95*		*70 - 120*
Toluene-d8 (Surr)	*100*		*75 - 120*

Lab Sample ID: MB 500-368777/27
Matrix: Water
Analysis Batch: 368777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/17/17 13:38	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/17/17 13:38	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/17/17 13:38	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/17/17 13:38	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/17/17 13:38	1

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

Lab Sample ID: MB 500-368777/27
Matrix: Water
Analysis Batch: 368777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/17/17 13:38	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/17/17 13:38	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/17/17 13:38	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			01/17/17 13:38	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/17/17 13:38	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/17/17 13:38	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/17/17 13:38	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/17/17 13:38	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/17/17 13:38	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/17/17 13:38	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/17/17 13:38	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/17/17 13:38	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/17/17 13:38	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/17/17 13:38	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/17/17 13:38	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/17/17 13:38	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/17/17 13:38	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/17/17 13:38	1
Benzene	<0.15		0.50	0.15	ug/L			01/17/17 13:38	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/17/17 13:38	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/17/17 13:38	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/17/17 13:38	1
Bromoform	<0.48		1.0	0.48	ug/L			01/17/17 13:38	1
Bromomethane	<0.80		2.0	0.80	ug/L			01/17/17 13:38	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/17/17 13:38	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/17/17 13:38	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/17/17 13:38	1
Chloroform	<0.37		2.0	0.37	ug/L			01/17/17 13:38	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/17/17 13:38	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/17/17 13:38	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/17/17 13:38	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/17/17 13:38	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/17/17 13:38	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			01/17/17 13:38	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/17/17 13:38	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/17/17 13:38	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/17/17 13:38	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/17/17 13:38	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/17/17 13:38	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/17/17 13:38	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/17/17 13:38	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/17/17 13:38	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/17/17 13:38	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/17/17 13:38	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/17 13:38	1
Styrene	<0.39		1.0	0.39	ug/L			01/17/17 13:38	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/17/17 13:38	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/17/17 13:38	1

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

Lab Sample ID: MB 500-368777/27
Matrix: Water
Analysis Batch: 368777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.50	0.15	ug/L			01/17/17 13:38	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/17/17 13:38	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/17/17 13:38	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/17/17 13:38	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/17/17 13:38	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			01/17/17 13:38	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/17/17 13:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 127*		*01/17/17 13:38*	*1*
4-Bromofluorobenzene (Surr)	*109*		*71 - 120*		*01/17/17 13:38*	*1*
Dibromofluoromethane	*91*		*70 - 120*		*01/17/17 13:38*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*01/17/17 13:38*	*1*

Lab Sample ID: LCS 500-368777/6
Matrix: Water
Analysis Batch: 368777

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	50.1		ug/L		100	68 - 125
1,1,1-Trichloroethane	50.0	52.4		ug/L		105	70 - 125
1,1,2,2-Tetrachloroethane	50.0	54.4		ug/L		109	68 - 125
1,1,2-Trichloroethane	50.0	55.3		ug/L		111	70 - 125
1,1-Dichloroethane	50.0	54.6		ug/L		109	70 - 125
1,1-Dichloroethene	50.0	48.8		ug/L		98	70 - 125
1,1-Dichloropropene	50.0	54.0		ug/L		108	70 - 125
1,2,3-Trichlorobenzene	50.0	58.1		ug/L		116	58 - 135
1,2,3-Trichloropropane	50.0	57.8		ug/L		116	63 - 125
1,2,4-Trichlorobenzene	50.0	58.9		ug/L		118	64 - 126
1,2,4-Trimethylbenzene	50.0	57.3		ug/L		115	70 - 125
1,2-Dibromo-3-Chloropropane	50.0	57.2		ug/L		114	51 - 125
1,2-Dibromoethane	50.0	53.8		ug/L		108	70 - 125
1,2-Dichlorobenzene	50.0	52.8		ug/L		106	70 - 125
1,2-Dichloroethane	50.0	55.5		ug/L		111	70 - 125
1,2-Dichloropropane	50.0	59.1		ug/L		118	70 - 125
1,3,5-Trimethylbenzene	50.0	57.0		ug/L		114	70 - 125
1,3-Dichlorobenzene	50.0	53.1		ug/L		106	70 - 125
1,3-Dichloropropane	50.0	59.3		ug/L		119	70 - 125
1,4-Dichlorobenzene	50.0	51.0		ug/L		102	70 - 125
2,2-Dichloropropane	50.0	54.3		ug/L		109	62 - 125
2-Chlorotoluene	50.0	56.4		ug/L		113	69 - 125
4-Chlorotoluene	50.0	55.5		ug/L		111	70 - 125
Benzene	50.0	53.5		ug/L		107	70 - 125
Bromobenzene	50.0	55.8		ug/L		112	70 - 125
Bromochloromethane	50.0	47.8		ug/L		96	70 - 125
Bromodichloromethane	50.0	51.3		ug/L		103	70 - 125
Bromoform	50.0	51.4		ug/L		103	54 - 128
Bromomethane	50.0	34.8		ug/L		70	40 - 150

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

Lab Sample ID: LCS 500-368777/6
Matrix: Water
Analysis Batch: 368777

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	50.0	50.0		ug/L		100	70 - 125
Chlorobenzene	50.0	53.4		ug/L		107	70 - 125
Chloroethane	50.0	33.2		ug/L		66	60 - 139
Chloroform	50.0	51.2		ug/L		102	70 - 125
Chloromethane	50.0	59.4		ug/L		119	60 - 140
cis-1,2-Dichloroethene	50.0	50.0		ug/L		100	70 - 125
cis-1,3-Dichloropropene	50.0	57.3		ug/L		115	70 - 125
Dibromochloromethane	50.0	50.3		ug/L		101	66 - 125
Dibromomethane	50.0	51.2		ug/L		102	70 - 125
Dichlorodifluoromethane	50.0	63.2		ug/L		126	51 - 140
Ethylbenzene	50.0	52.2		ug/L		104	70 - 125
Hexachlorobutadiene	50.0	74.0	*	ug/L		148	57 - 140
Isopropylbenzene	50.0	58.0		ug/L		116	70 - 125
Methyl tert-butyl ether	50.0	50.7		ug/L		101	67 - 125
Methylene Chloride	50.0	52.6		ug/L		105	68 - 125
Naphthalene	50.0	50.2		ug/L		100	50 - 136
n-Butylbenzene	50.0	55.6		ug/L		111	70 - 125
N-Propylbenzene	50.0	55.8		ug/L		112	70 - 125
p-Isopropyltoluene	50.0	53.3		ug/L		107	70 - 125
sec-Butylbenzene	50.0	55.4		ug/L		111	70 - 125
Styrene	50.0	51.3		ug/L		103	70 - 125
tert-Butylbenzene	50.0	55.3		ug/L		111	70 - 125
Tetrachloroethene	50.0	56.4		ug/L		113	70 - 125
Toluene	50.0	53.2		ug/L		106	70 - 125
trans-1,2-Dichloroethene	50.0	48.3		ug/L		97	70 - 125
trans-1,3-Dichloropropene	50.0	56.7		ug/L		113	70 - 125
Trichloroethene	50.0	52.3		ug/L		105	70 - 125
Trichlorofluoromethane	50.0	59.1		ug/L		118	60 - 126
Vinyl chloride	50.0	56.8		ug/L		114	70 - 126
Xylenes, Total	100	105		ug/L		105	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*71 - 127*
4-Bromofluorobenzene (Surr)	*110*		*71 - 120*
Dibromofluoromethane	*95*		*70 - 120*
Toluene-d8 (Surr)	*100*		*75 - 120*

Lab Sample ID: MB 500-369073/6
Matrix: Water
Analysis Batch: 369073

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/18/17 22:54	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/18/17 22:54	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/18/17 22:54	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/18/17 22:54	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/18/17 22:54	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/18/17 22:54	1

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

Lab Sample ID: MB 500-369073/6
Matrix: Water
Analysis Batch: 369073

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/18/17 22:54	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/18/17 22:54	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			01/18/17 22:54	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/18/17 22:54	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/18/17 22:54	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/18/17 22:54	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/18/17 22:54	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/18/17 22:54	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/18/17 22:54	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/18/17 22:54	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/18/17 22:54	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/18/17 22:54	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/18/17 22:54	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/18/17 22:54	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/18/17 22:54	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/18/17 22:54	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/18/17 22:54	1
Benzene	<0.15		0.50	0.15	ug/L			01/18/17 22:54	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/18/17 22:54	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/18/17 22:54	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/18/17 22:54	1
Bromoform	<0.48		1.0	0.48	ug/L			01/18/17 22:54	1
Bromomethane	<0.80		2.0	0.80	ug/L			01/18/17 22:54	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/18/17 22:54	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/18/17 22:54	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/18/17 22:54	1
Chloroform	<0.37		2.0	0.37	ug/L			01/18/17 22:54	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/18/17 22:54	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/18/17 22:54	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/18/17 22:54	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/18/17 22:54	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/18/17 22:54	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			01/18/17 22:54	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/18/17 22:54	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/18/17 22:54	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/18/17 22:54	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/18/17 22:54	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/18/17 22:54	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/18/17 22:54	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/18/17 22:54	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/18/17 22:54	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/18/17 22:54	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/18/17 22:54	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/18/17 22:54	1
Styrene	<0.39		1.0	0.39	ug/L			01/18/17 22:54	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/18/17 22:54	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/18/17 22:54	1
Toluene	<0.15		0.50	0.15	ug/L			01/18/17 22:54	1

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

Lab Sample ID: MB 500-369073/6
Matrix: Water
Analysis Batch: 369073

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/18/17 22:54	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/18/17 22:54	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/18/17 22:54	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/18/17 22:54	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			01/18/17 22:54	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/18/17 22:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 127*		*01/18/17 22:54*	*1*
4-Bromofluorobenzene (Surr)	*112*		*71 - 120*		*01/18/17 22:54*	*1*
Dibromofluoromethane	*91*		*70 - 120*		*01/18/17 22:54*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*01/18/17 22:54*	*1*

Lab Sample ID: LCS 500-369073/3
Matrix: Water
Analysis Batch: 369073

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	44.9		ug/L		90	68 - 125
1,1,1-Trichloroethane	50.0	48.0		ug/L		96	70 - 125
1,1,2,2-Tetrachloroethane	50.0	49.9		ug/L		100	68 - 125
1,1,2-Trichloroethane	50.0	48.4		ug/L		97	70 - 125
1,1-Dichloroethane	50.0	51.0		ug/L		102	70 - 125
1,1-Dichloroethene	50.0	44.0		ug/L		88	70 - 125
1,1-Dichloropropene	50.0	49.6		ug/L		99	70 - 125
1,2,3-Trichlorobenzene	50.0	54.9		ug/L		110	58 - 135
1,2,3-Trichloropropane	50.0	47.6		ug/L		95	63 - 125
1,2,4-Trichlorobenzene	50.0	54.9		ug/L		110	64 - 126
1,2,4-Trimethylbenzene	50.0	51.6		ug/L		103	70 - 125
1,2-Dibromo-3-Chloropropane	50.0	49.8		ug/L		100	51 - 125
1,2-Dibromoethane	50.0	47.9		ug/L		96	70 - 125
1,2-Dichlorobenzene	50.0	47.5		ug/L		95	70 - 125
1,2-Dichloroethane	50.0	49.4		ug/L		99	70 - 125
1,2-Dichloropropane	50.0	54.4		ug/L		109	70 - 125
1,3,5-Trimethylbenzene	50.0	51.6		ug/L		103	70 - 125
1,3-Dichlorobenzene	50.0	48.3		ug/L		97	70 - 125
1,3-Dichloropropane	50.0	51.3		ug/L		103	70 - 125
1,4-Dichlorobenzene	50.0	46.6		ug/L		93	70 - 125
2,2-Dichloropropane	50.0	52.4		ug/L		105	62 - 125
2-Chlorotoluene	50.0	51.2		ug/L		102	69 - 125
4-Chlorotoluene	50.0	50.0		ug/L		100	70 - 125
Benzene	50.0	48.9		ug/L		98	70 - 125
Bromobenzene	50.0	50.7		ug/L		101	70 - 125
Bromochloromethane	50.0	45.4		ug/L		91	70 - 125
Bromodichloromethane	50.0	46.5		ug/L		93	70 - 125
Bromoform	50.0	44.8		ug/L		90	54 - 128
Bromomethane	50.0	29.4		ug/L		59	40 - 150
Carbon tetrachloride	50.0	45.2		ug/L		90	70 - 125

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

Lab Sample ID: LCS 500-369073/3
Matrix: Water
Analysis Batch: 369073

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	50.0	47.4		ug/L		95	70 - 125
Chloroethane	50.0	27.1	*	ug/L		54	60 - 139
Chloroform	50.0	47.5		ug/L		95	70 - 125
Chloromethane	50.0	48.7		ug/L		97	60 - 140
cis-1,2-Dichloroethene	50.0	47.2		ug/L		94	70 - 125
cis-1,3-Dichloropropene	50.0	51.4		ug/L		103	70 - 125
Dibromochloromethane	50.0	45.0		ug/L		90	66 - 125
Dibromomethane	50.0	44.7		ug/L		89	70 - 125
Dichlorodifluoromethane	50.0	52.6		ug/L		105	51 - 140
Ethylbenzene	50.0	48.3		ug/L		97	70 - 125
Hexachlorobutadiene	50.0	68.0		ug/L		136	57 - 140
Isopropylbenzene	50.0	52.9		ug/L		106	70 - 125
Methyl tert-butyl ether	50.0	45.8		ug/L		92	67 - 125
Methylene Chloride	50.0	44.8		ug/L		90	68 - 125
Naphthalene	50.0	46.5		ug/L		93	50 - 136
n-Butylbenzene	50.0	50.4		ug/L		101	70 - 125
N-Propylbenzene	50.0	50.9		ug/L		102	70 - 125
p-Isopropyltoluene	50.0	49.3		ug/L		99	70 - 125
sec-Butylbenzene	50.0	50.2		ug/L		100	70 - 125
Styrene	50.0	46.3		ug/L		93	70 - 125
tert-Butylbenzene	50.0	51.6		ug/L		103	70 - 125
Tetrachloroethene	50.0	50.1		ug/L		100	70 - 125
Toluene	50.0	48.0		ug/L		96	70 - 125
trans-1,2-Dichloroethene	50.0	45.7		ug/L		91	70 - 125
trans-1,3-Dichloropropene	50.0	49.8		ug/L		100	70 - 125
Trichloroethene	50.0	47.1		ug/L		94	70 - 125
Trichlorofluoromethane	50.0	49.2		ug/L		98	60 - 126
Vinyl chloride	50.0	47.8		ug/L		96	70 - 126
Xylenes, Total	100	95.3		ug/L		95	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 127*
4-Bromofluorobenzene (Surr)	*109*		*71 - 120*
Dibromofluoromethane	*94*		*70 - 120*
Toluene-d8 (Surr)	*98*		*75 - 120*

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Client Sample ID: MW-1
Date Collected: 01/11/17 13:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	368633	01/16/17 18:28	TCT	TAL CHI

Client Sample ID: MW-1 (3')
Date Collected: 01/09/17 12:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	368530	01/13/17 14:27	LWN	TAL CHI

Client Sample ID: MW-1 (3')
Date Collected: 01/09/17 12:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-2
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			368618	01/09/17 12:00	WRE	TAL CHI
Total/NA	Analysis	8260B		100	368776	01/17/17 15:31	PJH	TAL CHI

Client Sample ID: MW-1 (6')
Date Collected: 01/09/17 12:15
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	368530	01/13/17 14:27	LWN	TAL CHI

Client Sample ID: MW-1 (6')
Date Collected: 01/09/17 12:15
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-3
Matrix: Solid
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			368618	01/09/17 12:15	WRE	TAL CHI
Total/NA	Analysis	8260B		50	368776	01/17/17 15:57	PJH	TAL CHI
Total/NA	Prep	5035	DL		368618	01/09/17 12:15	WRE	TAL CHI
Total/NA	Analysis	8260B	DL	500	368776	01/17/17 16:23	PJH	TAL CHI

Client Sample ID: Trip Blank
Date Collected: 01/09/17 00:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	368777	01/17/17 15:05	PJH	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

Client Sample ID: Dup
Date Collected: 01/09/17 00:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	369073	01/19/17 00:12	TCT	TAL CHI

Laboratory References:

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

Certification Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-1

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	08-31-17

Analysis Method	Prep Method	Matrix	Analyte

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To Contact: HARRIS BYERS
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

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

Chain of Custody Record

Lab Job #: 500122569
Chain of Custody Number:
Page _____ of _____
Temperature °C of Cooler: 2.4

Client	Client Project #	Preservative	9	1							
STANTEC	193703931										
Project Name: AUTOWERKS 1037 S 26TH ST		Parameter	VOC	VOC							
Project Location/State: WI	Lab Project #										
Sampler: N. HEIM	Lab PM										

Key
500-122569 COC
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix								Comments
1		MW-1	1/9/17	1:00	3	W	X	X						DATE: 1/11/17
2		MW-1 (3')	1/9/17	12:00	1	S	X							
3		MW-1 (6')	1/9/17	12:15	1	S	X							
4		TRIP BLANK				W								Added by TA
5		DUP	—	—	3	W		X						HOLD
6		SB-8 (2)	1/9/17	10:00	1	S	X							HOLD
7		SB-8 (7)	↓	10:15	1	S	X							
8		SB-9 (3)		11:00	1	S	X							
9		SB-9 (6)	↓	11:15	1	S	X							

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days X 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
N HEIM	STANTEC	1/12/17	12:00	[signature]	TAML	01/13/17	1020

Lab Courier
Shipped FX Priority
Hand Delivered

Matrix Key

WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

Client Comments: HOLD SAMPLES FROM SB 8 / SB 9 AND DUP.

Lab Comments:

00023

00500

MUR1

FedEx Express Package US Airbill

FedEx Tracking Number 8108 1332 9447

Form ID No. 0215

18092

1 From

Date 1/11/17

Sender's Name [redacted] Phone [redacted]

Company [redacted]

Address [redacted] Dept/Floor/Suite/Room

City [redacted] State [redacted] ZIP [redacted]

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE RECEIPT Phone 708 534-5200

Company TESTAMERICA CHICAGO LAB

Address 2417 BOND ST Dept /Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City UNIVERSITY PARK State IL ZIP 60484-3101

Hold Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0124628627

8108 1332 9447

06218037

fedex.com 1.800.GoFedEx 1.800.463.3339

4 Express Package Service * To most locations.

Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

☐ Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☒ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery.

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Restrictions apply for dangerous goods — see the current FedEx Service Guide. ☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages 1 Total Weight ____ lbs. Credit Card Auth.

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

611

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fedex.com 1.800.GoFedEx 1.800.463.3339

500-122569 Waybill

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 500-122569-1

Login Number: 122569
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

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	2.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
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	

TestAmerica

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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: 500-122569-2
Client Project/Site: Autowerks - 193703931

For:
Stantec Consulting Corp.
12075 Corporate Pkwy, Suite 200
Mequon, Wisconsin 53092

Attn: Harris Byers

Sandie Fredrick

Authorized for release by:
1/20/2017 4:12:09 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Case Narrative

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Job ID: 500-122569-2

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-122569-2

Comments
No additional comments.

Receipt
The samples were received on 1/13/2017 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

Receipt Exceptions

One or more containers for the following sample was received broken or leaking: 1 of the 3 Voas submitted to lab was recieved broken, still have enough volume to run parameters

GC/MS VOA
Method(s) 8260B: The extraction LCS associated with preparation batch 368618 had several analyte recoveries outside control limits. The data have been reported and qualified.
SB-8 (2) (500-122569-6), SB-8 (7) (500-122569-7), SB-9 (3) (500-122569-8) and SB-9 (6) (500-122569-9)

Method(s) 8260B: The laboratory control sample (LCS) for batches 368776 and 168777 recovered outside control limits for the following analyte: Hexachlorobutadiene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

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

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

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Client Sample ID: SB-8 (2) — Lab Sample ID: 500-122569-6

No Detections.

Client Sample ID: SB-8 (7) — Lab Sample ID: 500-122569-7

No Detections.

Client Sample ID: SB-9 (3) — Lab Sample ID: 500-122569-8

No Detections.

Client Sample ID: SB-9 (6) — Lab Sample ID: 500-122569-9

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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.

Laboratory References:

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

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-122569-6	SB-8 (2)	Solid	01/09/17 10:00	01/13/17 10:20
500-122569-7	SB-8 (7)	Solid	01/09/17 10:15	01/13/17 10:20
500-122569-8	SB-9 (3)	Solid	01/09/17 11:00	01/13/17 10:20
500-122569-9	SB-9 (6)	Solid	01/09/17 11:15	01/13/17 10:20

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Client Sample ID: SB-8 (2)
Date Collected: 01/09/17 10:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-6
Matrix: Solid
Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<28		61	28	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,1,1-Trichloroethane	<23		61	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,1,2,2-Tetrachloroethane	<24		61	24	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,1,2-Trichloroethane	<21		61	21	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,1-Dichloroethane	<25		61	25	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,1-Dichloroethene	<24		61	24	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,1-Dichloropropene	<18		61	18	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,2,3-Trichlorobenzene	<28		61	28	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,2,3-Trichloropropane	<25		61	25	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,2,4-Trichlorobenzene	<21		61	21	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,2,4-Trimethylbenzene	<22		61	22	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,2-Dibromo-3-Chloropropane	<120		300	120	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,2-Dibromoethane	<23		61	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,2-Dichlorobenzene	<20		61	20	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,2-Dichloroethane	<24		61	24	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,2-Dichloropropane	<26	*	61	26	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,3,5-Trimethylbenzene	<23		61	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,3-Dichlorobenzene	<24		61	24	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,3-Dichloropropane	<22		61	22	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
1,4-Dichlorobenzene	<22		61	22	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
2,2-Dichloropropane	<27		61	27	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
2-Chlorotoluene	<19		61	19	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
4-Chlorotoluene	<21		61	21	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Benzene	<8.9		15	8.9	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Bromobenzene	<22		61	22	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Bromochloromethane	<26		61	26	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Bromodichloromethane	<23		61	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Bromoform	<29		61	29	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Bromomethane	<48		120	48	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Carbon tetrachloride	<23		61	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Chlorobenzene	<23		61	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Chloroethane	<31	*	61	31	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Chloroform	<23		120	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Chloromethane	<19		61	19	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
cis-1,2-Dichloroethene	<25		61	25	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
cis-1,3-Dichloropropene	<25		61	25	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Dibromochloromethane	<30		61	30	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Dibromomethane	<16		61	16	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Dichlorodifluoromethane	<41		120	41	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Ethylbenzene	<11		15	11	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Hexachlorobutadiene	<27	*	61	27	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Isopropyl ether	<17		61	17	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Isopropylbenzene	<23	*	61	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Methyl tert-butyl ether	<24		61	24	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Methylene Chloride	<99		300	99	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Naphthalene	<20		61	20	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
n-Butylbenzene	<24		61	24	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
N-Propylbenzene	<25		61	25	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
p-Isopropyltoluene	<22		61	22	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50

Client Sample ID: SB-8 (2)

Lab Sample ID: 500-122569-6

Date Collected: 01/09/17 10:00
Matrix: Solid
Date Received: 01/13/17 10:20
Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<24		61	24	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Styrene	<23		61	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
tert-Butylbenzene	<24		61	24	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Tetrachloroethene	<23		61	23	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Toluene	<8.9		15	8.9	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
trans-1,2-Dichloroethene	<21		61	21	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
trans-1,3-Dichloropropene	<22		61	22	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Trichloroethene	<10		30	10	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Trichlorofluoromethane	<26		61	26	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Vinyl chloride	<16		30	16	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50
Xylenes, Total	<13		30	13	ug/Kg	☼	01/09/17 10:00	01/20/17 11:38	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*71 - 127*	*01/09/17 10:00*	*01/20/17 11:38*	*50*
4-Bromofluorobenzene (Surr)	*96*		*71 - 120*	*01/09/17 10:00*	*01/20/17 11:38*	*50*
Dibromofluoromethane	*90*		*70 - 120*	*01/09/17 10:00*	*01/20/17 11:38*	*50*
Toluene-d8 (Surr)	*92*		*75 - 120*	*01/09/17 10:00*	*01/20/17 11:38*	*50*

Client Sample ID: SB-8 (7)

Lab Sample ID: 500-122569-7

Date Collected: 01/09/17 10:15
Matrix: Solid
Date Received: 01/13/17 10:20
Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<25		55	25	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,1,1-Trichloroethane	<21		55	21	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,1,2,2-Tetrachloroethane	<22		55	22	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,1,2-Trichloroethane	<19		55	19	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,1-Dichloroethane	<23		55	23	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,1-Dichloroethene	<21		55	21	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,1-Dichloropropene	<16		55	16	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,2,3-Trichlorobenzene	<25		55	25	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,2,3-Trichloropropane	<23		55	23	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,2,4-Trichlorobenzene	<19		55	19	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,2,4-Trimethylbenzene	<20		55	20	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,2-Dibromo-3-Chloropropane	<110		270	110	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,2-Dibromoethane	<21		55	21	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,2-Dichlorobenzene	<18		55	18	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,2-Dichloroethane	<22		55	22	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,2-Dichloropropane	<24	*	55	24	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,3,5-Trimethylbenzene	<21		55	21	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,3-Dichlorobenzene	<22		55	22	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,3-Dichloropropane	<20		55	20	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
1,4-Dichlorobenzene	<20		55	20	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
2,2-Dichloropropane	<24		55	24	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
2-Chlorotoluene	<17		55	17	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
4-Chlorotoluene	<19		55	19	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Benzene	<8.0		14	8.0	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Bromobenzene	<20		55	20	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Bromochloromethane	<24		55	24	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50

Client Sample ID: SB-8 (7)

Date Collected: 01/09/17 10:15
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-7

Matrix: Solid
Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	<20		55	20	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Bromoform	<27		55	27	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Bromomethane	<44		110	44	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Carbon tetrachloride	<21		55	21	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Chlorobenzene	<21		55	21	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Chloroethane	<28	*	55	28	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Chloroform	<20		110	20	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Chloromethane	<18		55	18	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
cis-1,2-Dichloroethene	<22		55	22	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
cis-1,3-Dichloropropene	<23		55	23	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Dibromochloromethane	<27		55	27	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Dibromomethane	<15		55	15	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Dichlorodifluoromethane	<37		110	37	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Ethylbenzene	<10		14	10	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Hexachlorobutadiene	<25	*	55	25	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Isopropyl ether	<15		55	15	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Isopropylbenzene	<21	*	55	21	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Methyl tert-butyl ether	<22		55	22	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Methylene Chloride	<90		270	90	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Naphthalene	<18		55	18	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
n-Butylbenzene	<21		55	21	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
N-Propylbenzene	<23		55	23	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
p-Isopropyltoluene	<20		55	20	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
sec-Butylbenzene	<22		55	22	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Styrene	<21		55	21	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
tert-Butylbenzene	<22		55	22	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Tetrachloroethene	<20		55	20	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Toluene	<8.1		14	8.1	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
trans-1,2-Dichloroethene	<19		55	19	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
trans-1,3-Dichloropropene	<20		55	20	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Trichloroethene	<9.0		27	9.0	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Trichlorofluoromethane	<24		55	24	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Vinyl chloride	<14		27	14	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50
Xylenes, Total	<12		27	12	ug/Kg	☼	01/09/17 10:15	01/20/17 12:33	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*71 - 127*	*01/09/17 10:15*	*01/20/17 12:33*	*50*
4-Bromofluorobenzene (Surr)	*94*		*71 - 120*	*01/09/17 10:15*	*01/20/17 12:33*	*50*
Dibromofluoromethane	*91*		*70 - 120*	*01/09/17 10:15*	*01/20/17 12:33*	*50*
Toluene-d8 (Surr)	*91*		*75 - 120*	*01/09/17 10:15*	*01/20/17 12:33*	*50*

Client Sample ID: SB-9 (3)

Date Collected: 01/09/17 11:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-8

Matrix: Solid
Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<54		120	54	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,1,1-Trichloroethane	<45		120	45	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,1,2,2-Tetrachloroethane	<47		120	47	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Client Sample ID: SB-9 (3)
Date Collected: 01/09/17 11:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-8
Matrix: Solid
Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<41		120	41	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,1-Dichloroethane	<48		120	48	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,1-Dichloroethene	<46		120	46	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,1-Dichloropropene	<35		120	35	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,2,3-Trichlorobenzene	<54		120	54	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,2,3-Trichloropropane	<49		120	49	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,2,4-Trichlorobenzene	<40		120	40	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,2,4-Trimethylbenzene	<42		120	42	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,2-Dibromo-3-Chloropropane	<230		590	230	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,2-Dibromoethane	<45		120	45	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,2-Dichlorobenzene	<39		120	39	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,2-Dichloroethane	<46		120	46	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,2-Dichloropropane	<50	*	120	50	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,3,5-Trimethylbenzene	<45		120	45	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,3-Dichlorobenzene	<47		120	47	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,3-Dichloropropane	<43		120	43	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
1,4-Dichlorobenzene	<43		120	43	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
2,2-Dichloropropane	<52		120	52	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
2-Chlorotoluene	<37		120	37	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
4-Chlorotoluene	<41		120	41	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Benzene	<17		29	17	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Bromobenzene	<42		120	42	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Bromochloromethane	<50		120	50	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Bromodichloromethane	<44		120	44	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Bromoform	<57		120	57	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Bromomethane	<94		240	94	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Carbon tetrachloride	<45		120	45	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Chlorobenzene	<45		120	45	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Chloroethane	<59	*	120	59	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Chloroform	<44		240	44	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Chloromethane	<38		120	38	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
cis-1,2-Dichloroethene	<48		120	48	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
cis-1,3-Dichloropropene	<49		120	49	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Dibromochloromethane	<57		120	57	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Dibromomethane	<32		120	32	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Dichlorodifluoromethane	<79		240	79	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Ethylbenzene	<22		29	22	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Hexachlorobutadiene	<53	*	120	53	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Isopropyl ether	<33		120	33	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Isopropylbenzene	<45	*	120	45	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Methyl tert-butyl ether	<46		120	46	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Methylene Chloride	<190		590	190	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Naphthalene	<39		120	39	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
n-Butylbenzene	<46		120	46	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
N-Propylbenzene	<49		120	49	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
p-Isopropyltoluene	<43		120	43	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
sec-Butylbenzene	<47		120	47	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Styrene	<45		120	45	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
tert-Butylbenzene	<47		120	47	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50

Client Sample ID: SB-9 (3)

Lab Sample ID: 500-122569-8
Date Collected: 01/09/17 11:00
Matrix: Solid
Date Received: 01/13/17 10:20
Percent Solids: 88.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<44		120	44	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Toluene	<17		29	17	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
trans-1,2-Dichloroethene	<41		120	41	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
trans-1,3-Dichloropropene	<43		120	43	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Trichloroethene	<19		59	19	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Trichlorofluoromethane	<50		120	50	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Vinyl chloride	<31		59	31	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50
Xylenes, Total	<26		59	26	ug/Kg	☼	01/09/17 11:00	01/20/17 13:01	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*71 - 127*	*01/09/17 11:00*	*01/20/17 13:01*	*50*
4-Bromofluorobenzene (Surr)	*97*		*71 - 120*	*01/09/17 11:00*	*01/20/17 13:01*	*50*
Dibromofluoromethane	*89*		*70 - 120*	*01/09/17 11:00*	*01/20/17 13:01*	*50*
Toluene-d8 (Surr)	*92*		*75 - 120*	*01/09/17 11:00*	*01/20/17 13:01*	*50*

Client Sample ID: SB-9 (6)

Lab Sample ID: 500-122569-9
Date Collected: 01/09/17 11:15
Matrix: Solid
Date Received: 01/13/17 10:20
Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<53		110	53	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,1,1-Trichloroethane	<43		110	43	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,1,2,2-Tetrachloroethane	<45		110	45	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,1,2-Trichloroethane	<40		110	40	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,1-Dichloroethane	<47		110	47	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,1-Dichloroethene	<45		110	45	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,1-Dichloropropene	<34		110	34	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,2,3-Trichlorobenzene	<52		110	52	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,2,3-Trichloropropane	<47		110	47	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,2,4-Trichlorobenzene	<39		110	39	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,2,4-Trimethylbenzene	<41		110	41	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,2-Dibromo-3-Chloropropane	<230		570	230	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,2-Dibromoethane	<44		110	44	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,2-Dichlorobenzene	<38		110	38	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,2-Dichloroethane	<45		110	45	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,2-Dichloropropane	<49	*	110	49	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,3,5-Trimethylbenzene	<43		110	43	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,3-Dichlorobenzene	<46		110	46	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,3-Dichloropropane	<41		110	41	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
1,4-Dichlorobenzene	<42		110	42	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
2,2-Dichloropropane	<51		110	51	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
2-Chlorotoluene	<36		110	36	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
4-Chlorotoluene	<40		110	40	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Benzene	<17		29	17	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Bromobenzene	<41		110	41	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Bromochloromethane	<49		110	49	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Bromodichloromethane	<42		110	42	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Bromoform	<55		110	55	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Bromomethane	<91		230	91	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Client Sample ID: SB-9 (6)
Date Collected: 01/09/17 11:15
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-9
Matrix: Solid
Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<44		110	44	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Chlorobenzene	<44		110	44	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Chloroethane	<58	*	110	58	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Chloroform	<42		230	42	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Chloromethane	<37		110	37	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
cis-1,2-Dichloroethene	<47		110	47	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
cis-1,3-Dichloropropene	<48		110	48	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Dibromochloromethane	<56		110	56	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Dibromomethane	<31		110	31	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Dichlorodifluoromethane	<77		230	77	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Ethylbenzene	<21		29	21	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Hexachlorobutadiene	<51	*	110	51	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Isopropyl ether	<32		110	32	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Isopropylbenzene	<44	*	110	44	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Methyl tert-butyl ether	<45		110	45	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Methylene Chloride	<190		570	190	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Naphthalene	<38		110	38	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
n-Butylbenzene	<44		110	44	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
N-Propylbenzene	<47		110	47	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
p-Isopropyltoluene	<41		110	41	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
sec-Butylbenzene	<45		110	45	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Styrene	<44		110	44	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
tert-Butylbenzene	<45		110	45	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Tetrachloroethene	<42		110	42	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Toluene	<17		29	17	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
trans-1,2-Dichloroethene	<40		110	40	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
trans-1,3-Dichloropropene	<41		110	41	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Trichloroethene	<19		57	19	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Trichlorofluoromethane	<49		110	49	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Vinyl chloride	<30		57	30	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50
Xylenes, Total	<25		57	25	ug/Kg	☼	01/09/17 11:15	01/20/17 13:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*71 - 127*	*01/09/17 11:15*	*01/20/17 13:28*	*50*
4-Bromofluorobenzene (Surr)	*94*		*71 - 120*	*01/09/17 11:15*	*01/20/17 13:28*	*50*
Dibromofluoromethane	*88*		*70 - 120*	*01/09/17 11:15*	*01/20/17 13:28*	*50*
Toluene-d8 (Surr)	*93*		*75 - 120*	*01/09/17 11:15*	*01/20/17 13:28*	*50*

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance 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: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

GC/MS VOA

Prep Batch: 368618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122569-6	SB-8 (2)	Total/NA	Solid	5035	
500-122569-7	SB-8 (7)	Total/NA	Solid	5035	
500-122569-8	SB-9 (3)	Total/NA	Solid	5035	
500-122569-9	SB-9 (6)	Total/NA	Solid	5035	

Analysis Batch: 369234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122569-6	SB-8 (2)	Total/NA	Solid	8260B	368618
500-122569-7	SB-8 (7)	Total/NA	Solid	8260B	368618
500-122569-8	SB-9 (3)	Total/NA	Solid	8260B	368618
500-122569-9	SB-9 (6)	Total/NA	Solid	8260B	368618
MB 500-369234/6	Method Blank	Total/NA	Solid	8260B	
LCS 500-369234/4	Lab Control Sample	Total/NA	Solid	8260B	

General Chemistry

Analysis Batch: 368530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122569-6	SB-8 (2)	Total/NA	Solid	Moisture	
500-122569-7	SB-8 (7)	Total/NA	Solid	Moisture	
500-122569-8	SB-9 (3)	Total/NA	Solid	Moisture	
500-122569-9	SB-9 (6)	Total/NA	Solid	Moisture	

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(71-127)	(71-120)	(70-120)	(75-120)
500-122569-6	SB-8 (2)	116	96	90	92
500-122569-7	SB-8 (7)	113	94	91	91
500-122569-8	SB-9 (3)	116	97	89	92
500-122569-9	SB-9 (6)	116	94	88	93
LCS 500-369234/4	Lab Control Sample	109	95	94	94
MB 500-369234/6	Method Blank	109	96	90	94

Surrogate Legend

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

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

Lab Sample ID: MB 500-369234/6
Matrix: Solid
Analysis Batch: 369234

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/Kg			01/20/17 09:48	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/Kg			01/20/17 09:48	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/Kg			01/20/17 09:48	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/Kg			01/20/17 09:48	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/Kg			01/20/17 09:48	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/Kg			01/20/17 09:48	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/Kg			01/20/17 09:48	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/Kg			01/20/17 09:48	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/Kg			01/20/17 09:48	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/Kg			01/20/17 09:48	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/Kg			01/20/17 09:48	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/Kg			01/20/17 09:48	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/Kg			01/20/17 09:48	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/Kg			01/20/17 09:48	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/Kg			01/20/17 09:48	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/Kg			01/20/17 09:48	1
1,3,5-Trimethylbenzene	<0.38		1.0	0.38	ug/Kg			01/20/17 09:48	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/Kg			01/20/17 09:48	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/Kg			01/20/17 09:48	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/Kg			01/20/17 09:48	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/Kg			01/20/17 09:48	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/Kg			01/20/17 09:48	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/Kg			01/20/17 09:48	1
Benzene	<0.15		0.25	0.15	ug/Kg			01/20/17 09:48	1
Bromobenzene	<0.36		1.0	0.36	ug/Kg			01/20/17 09:48	1
Bromochloromethane	<0.43		1.0	0.43	ug/Kg			01/20/17 09:48	1
Bromodichloromethane	<0.37		1.0	0.37	ug/Kg			01/20/17 09:48	1
Bromoform	<0.48		1.0	0.48	ug/Kg			01/20/17 09:48	1
Bromomethane	<0.80		2.0	0.80	ug/Kg			01/20/17 09:48	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/Kg			01/20/17 09:48	1
Chlorobenzene	<0.39		1.0	0.39	ug/Kg			01/20/17 09:48	1
Chloroethane	<0.50		1.0	0.50	ug/Kg			01/20/17 09:48	1
Chloroform	<0.37		2.0	0.37	ug/Kg			01/20/17 09:48	1
Chloromethane	<0.32		1.0	0.32	ug/Kg			01/20/17 09:48	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/Kg			01/20/17 09:48	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/Kg			01/20/17 09:48	1
Dibromochloromethane	<0.49		1.0	0.49	ug/Kg			01/20/17 09:48	1
Dibromomethane	<0.27		1.0	0.27	ug/Kg			01/20/17 09:48	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/Kg			01/20/17 09:48	1
Ethylbenzene	<0.18		0.25	0.18	ug/Kg			01/20/17 09:48	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/Kg			01/20/17 09:48	1
Isopropyl ether	<0.28		1.0	0.28	ug/Kg			01/20/17 09:48	1
Isopropylbenzene	<0.38		1.0	0.38	ug/Kg			01/20/17 09:48	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/Kg			01/20/17 09:48	1
Methylene Chloride	<1.6		5.0	1.6	ug/Kg			01/20/17 09:48	1
Naphthalene	<0.33		1.0	0.33	ug/Kg			01/20/17 09:48	1
n-Butylbenzene	<0.39		1.0	0.39	ug/Kg			01/20/17 09:48	1
N-Propylbenzene	<0.41		1.0	0.41	ug/Kg			01/20/17 09:48	1

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

Lab Sample ID: MB 500-369234/6
Matrix: Solid
Analysis Batch: 369234

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<0.36		1.0	0.36	ug/Kg			01/20/17 09:48	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/Kg			01/20/17 09:48	1
Styrene	<0.39		1.0	0.39	ug/Kg			01/20/17 09:48	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/Kg			01/20/17 09:48	1
Tetrachloroethene	<0.37		1.0	0.37	ug/Kg			01/20/17 09:48	1
Toluene	<0.15		0.25	0.15	ug/Kg			01/20/17 09:48	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/Kg			01/20/17 09:48	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/Kg			01/20/17 09:48	1
Trichloroethene	<0.16		0.50	0.16	ug/Kg			01/20/17 09:48	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/Kg			01/20/17 09:48	1
Vinyl chloride	<0.26		0.50	0.26	ug/Kg			01/20/17 09:48	1
Xylenes, Total	<0.22		0.50	0.22	ug/Kg			01/20/17 09:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 127*		*01/20/17 09:48*	*1*
4-Bromofluorobenzene (Surr)	*96*		*71 - 120*		*01/20/17 09:48*	*1*
Dibromofluoromethane	*90*		*70 - 120*		*01/20/17 09:48*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*01/20/17 09:48*	*1*

Lab Sample ID: LCS 500-369234/4
Matrix: Solid
Analysis Batch: 369234

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	45.9		ug/Kg		92	68 - 125
1,1,1-Trichloroethane	50.0	51.1		ug/Kg		102	70 - 125
1,1,2,2-Tetrachloroethane	50.0	47.0		ug/Kg		94	68 - 125
1,1,2-Trichloroethane	50.0	46.4		ug/Kg		93	70 - 125
1,1-Dichloroethane	50.0	53.8		ug/Kg		108	70 - 125
1,1-Dichloroethene	50.0	48.0		ug/Kg		96	70 - 125
1,1-Dichloropropene	50.0	50.4		ug/Kg		101	70 - 125
1,2,3-Trichlorobenzene	50.0	61.5		ug/Kg		123	58 - 135
1,2,3-Trichloropropane	50.0	38.8		ug/Kg		78	63 - 125
1,2,4-Trichlorobenzene	50.0	54.5		ug/Kg		109	64 - 126
1,2,4-Trimethylbenzene	50.0	48.8		ug/Kg		98	70 - 125
1,2-Dibromo-3-Chloropropane	50.0	41.2		ug/Kg		82	51 - 125
1,2-Dibromoethane	50.0	45.5		ug/Kg		91	70 - 125
1,2-Dichlorobenzene	50.0	50.0		ug/Kg		100	70 - 125
1,2-Dichloroethane	50.0	57.4		ug/Kg		115	70 - 125
1,2-Dichloropropane	50.0	55.7		ug/Kg		111	70 - 125
1,3,5-Trimethylbenzene	50.0	50.0		ug/Kg		100	70 - 125
1,3-Dichlorobenzene	50.0	49.1		ug/Kg		98	70 - 125
1,3-Dichloropropane	50.0	46.8		ug/Kg		94	70 - 125
1,4-Dichlorobenzene	50.0	48.5		ug/Kg		97	70 - 125
2,2-Dichloropropane	50.0	50.7		ug/Kg		101	62 - 125
2-Chlorotoluene	50.0	49.2		ug/Kg		98	69 - 125
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 125
Benzene	50.0	48.9		ug/Kg		98	70 - 125

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

Lab Sample ID: LCS 500-369234/4
Matrix: Solid
Analysis Batch: 369234

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	49.6		ug/Kg		99	70 - 125
Bromochloromethane	50.0	45.8		ug/Kg		92	70 - 125
Bromodichloromethane	50.0	46.0		ug/Kg		92	70 - 125
Bromoform	50.0	41.6		ug/Kg		83	54 - 128
Bromomethane	50.0	30.8		ug/Kg		62	40 - 150
Carbon tetrachloride	50.0	48.5		ug/Kg		97	70 - 125
Chlorobenzene	50.0	47.4		ug/Kg		95	70 - 125
Chloroethane	50.0	44.7		ug/Kg		89	60 - 139
Chloroform	50.0	49.6		ug/Kg		99	70 - 125
Chloromethane	50.0	65.9		ug/Kg		132	60 - 140
cis-1,2-Dichloroethene	50.0	50.4		ug/Kg		101	70 - 125
cis-1,3-Dichloropropene	50.0	47.9		ug/Kg		96	70 - 125
Dibromochloromethane	50.0	43.8		ug/Kg		88	66 - 125
Dibromomethane	50.0	46.2		ug/Kg		92	70 - 125
Dichlorodifluoromethane	50.0	51.6		ug/Kg		103	51 - 140
Ethylbenzene	50.0	46.9		ug/Kg		94	70 - 125
Hexachlorobutadiene	50.0	54.2		ug/Kg		108	57 - 140
Isopropylbenzene	50.0	50.4		ug/Kg		101	70 - 125
Methyl tert-butyl ether	50.0	47.5		ug/Kg		95	67 - 125
Methylene Chloride	50.0	47.0		ug/Kg		94	68 - 125
Naphthalene	50.0	56.0		ug/Kg		112	50 - 136
n-Butylbenzene	50.0	51.6		ug/Kg		103	70 - 125
N-Propylbenzene	50.0	50.0		ug/Kg		100	70 - 125
p-Isopropyltoluene	50.0	50.9		ug/Kg		102	70 - 125
sec-Butylbenzene	50.0	51.0		ug/Kg		102	70 - 125
Styrene	50.0	48.4		ug/Kg		97	70 - 125
tert-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 125
Tetrachloroethene	50.0	50.4		ug/Kg		101	70 - 125
Toluene	50.0	50.3		ug/Kg		101	70 - 125
trans-1,2-Dichloroethene	50.0	49.3		ug/Kg		99	70 - 125
trans-1,3-Dichloropropene	50.0	47.5		ug/Kg		95	70 - 125
Trichloroethene	50.0	47.2		ug/Kg		94	70 - 125
Trichlorofluoromethane	50.0	50.2		ug/Kg		100	60 - 126
Vinyl chloride	50.0	51.2		ug/Kg		102	70 - 126
Xylenes, Total	100	96.7		ug/Kg		97	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 127*
4-Bromofluorobenzene (Surr)	*95*		*71 - 120*
Dibromofluoromethane	*94*		*70 - 120*
Toluene-d8 (Surr)	*94*		*75 - 120*

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Client Sample ID: SB-8 (2)
Date Collected: 01/09/17 10:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	368530	01/13/17 14:27	LWN	TAL CHI

Client Sample ID: SB-8 (2)
Date Collected: 01/09/17 10:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-6
Matrix: Solid
Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			368618	01/09/17 10:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	369234	01/20/17 11:38	TCT	TAL CHI

Client Sample ID: SB-8 (7)
Date Collected: 01/09/17 10:15
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	368530	01/13/17 14:27	LWN	TAL CHI

Client Sample ID: SB-8 (7)
Date Collected: 01/09/17 10:15
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-7
Matrix: Solid
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			368618	01/09/17 10:15	WRE	TAL CHI
Total/NA	Analysis	8260B		50	369234	01/20/17 12:33	TCT	TAL CHI

Client Sample ID: SB-9 (3)
Date Collected: 01/09/17 11:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	368530	01/13/17 14:27	LWN	TAL CHI

Client Sample ID: SB-9 (3)
Date Collected: 01/09/17 11:00
Date Received: 01/13/17 10:20

Lab Sample ID: 500-122569-8
Matrix: Solid
Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			368618	01/09/17 11:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	369234	01/20/17 13:01	TCT	TAL CHI

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

Client Sample ID: SB-9 (6)

Lab Sample ID: 500-122569-9

Date Collected: 01/09/17 11:15

Matrix: Solid

Date Received: 01/13/17 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	368530	01/13/17 14:27	LWN	TAL CHI

Client Sample ID: SB-9 (6)

Lab Sample ID: 500-122569-9

Date Collected: 01/09/17 11:15

Matrix: Solid

Date Received: 01/13/17 10:20

Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			368618	01/09/17 11:15	WRE	TAL CHI
Total/NA	Analysis	8260B		50	369234	01/20/17 13:28	TCT	TAL CHI

Laboratory References:

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

Certification Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122569-2

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	08-31-17

Analysis Method	Prep Method	Matrix	Analyte

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To Contact: HARRIS BYERS
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

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

Chain of Custody Record

Lab Job #: 500122569
Chain of Custody Number:
Page ____ of ____
Temperature °C of Cooler: 2.4

Client	Client Project #	Preservative	9	1							
STANTEC	193703931										
Project Name: AUTOWERKS 1037 S 26TH ST		Parameter	VOC	VOC							
Project Location/State: WI	Lab Project #										
Sampler: N. HEIM	Lab PM										

Key
500-122569 COC
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix								Comments
1		MW-1	1/9/17	1:00	3	W	X	X						DATE: 1/11/17
2		MW-1 (3')	1/9/17	12:00	1	S	X							
3		MW-1 (6')	1/9/17	12:15	1	S	X							
4		TRIP BLANK				W								Added by TA
5		DUP	—	—	3	W		X						HOLD
6		SB-8 (2)	1/9/17	10:00	1	S	X							HOLD
7		SB-8 (7)	↓	10:15	1	S	X							
8		SB-9 (3)		11:00	1	S	X							
9		SB-9 (6)	↓	11:15	1	S	X							

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days X 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date: _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
N HEIM	STANTEC	1/12/17	12:00	[signature]	TALME	01/13/17	1020

Lab Courier:
Shipped: FX Priority
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: HOLD SAMPLES FROM SB 8 / SB 9 AND DUP.

Lab Comments:

00023

00500

FedEx Express Package US Airbill

FedEx Tracking Number 8108 1332 9447

Form ID No. 0215

MUR1

18092

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From

Date 1/11/17

Sender's Name [redacted] Phone [redacted]

Company [redacted]

Address [redacted] Dept./Floor/Suite/Room

City [redacted] State [redacted] ZIP [redacted]

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE RECEIPT Phone 708 534-5200

Company TESTAMERICA CHICAGO LAB

Address 2417 BOND ST

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City UNIVERSITY PARK State IL ZIP 60484-3101

Hold Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday — FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0124628627

8108 1332 9447

06218037

4 Express Package Service * To most locations.

Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

☐ Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☒ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery.

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Restrictions apply for dangerous goods — see the current FedEx Service Guide. ☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages 1 Total Weight ____ lbs. Credit Card Auth. ____

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

611

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fedex.com 1.800.GoFedEx 1.800.463.3339

500-122569 Waybill

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 500-122569-2

Login Number: 122569
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

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	2.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
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	

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: 500-122907-1
Client Project/Site: Autowerks - 193703931

For:
Stantec Consulting Corp.
12075 Corporate Pkwy, Suite 200
Mequon, Wisconsin 53092

Attn: Harris Byers

Sandie Fredrick

Authorized for release by:
1/30/2017 9:50:07 AM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Case Narrative

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

Job ID: 500-122907-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-122907-1

Comments
No additional comments.

Receipt
The samples were received on 1/21/2017 10:18 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.8º C.

GC/MS VOA
Method(s) 8260B: The following analyte recovered outside control limits for the LCS associated with batch 369558: Chloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

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

Detection Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

Client Sample ID: MW-1

Lab Sample ID: 500-122907-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2.2		1.0	0.36	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	9.3		1.0	0.25	ug/L	1		8260B	Total/NA
Benzene	0.40	J	0.50	0.15	ug/L	1		8260B	Total/NA
Chloroform	9.6		2.0	0.37	ug/L	1		8260B	Total/NA
Ethylbenzene	0.22	J	0.50	0.18	ug/L	1		8260B	Total/NA
Naphthalene	3.9		1.0	0.34	ug/L	1		8260B	Total/NA
Tetrachloroethene	0.70	J	1.0	0.37	ug/L	1		8260B	Total/NA
Toluene	6.5		0.50	0.15	ug/L	1		8260B	Total/NA
Xylenes, Total	0.85	J	1.0	0.22	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	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

Sample Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-122907-1	MW-1	Water	01/20/17 10:45	01/21/17 10:18

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

Client Sample ID: MW-1
Date Collected: 01/20/17 10:45
Date Received: 01/21/17 10:18

Lab Sample ID: 500-122907-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/24/17 12:00	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/24/17 12:00	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/24/17 12:00	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/24/17 12:00	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/24/17 12:00	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/24/17 12:00	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/24/17 12:00	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/24/17 12:00	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			01/24/17 12:00	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/24/17 12:00	1
1,2,4-Trimethylbenzene	**2.2**		1.0	0.36	ug/L			01/24/17 12:00	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/24/17 12:00	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/24/17 12:00	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/24/17 12:00	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/24/17 12:00	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/24/17 12:00	1
1,3,5-Trimethylbenzene	**9.3**		1.0	0.25	ug/L			01/24/17 12:00	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/24/17 12:00	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/24/17 12:00	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/24/17 12:00	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/24/17 12:00	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/24/17 12:00	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/24/17 12:00	1
Benzene	**0.40**	**J**	0.50	0.15	ug/L			01/24/17 12:00	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/24/17 12:00	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/24/17 12:00	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/24/17 12:00	1
Bromoform	<0.48		1.0	0.48	ug/L			01/24/17 12:00	1
Bromomethane	<0.80		2.0	0.80	ug/L			01/24/17 12:00	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/24/17 12:00	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/24/17 12:00	1
Chloroethane	<0.51	*	1.0	0.51	ug/L			01/24/17 12:00	1
Chloroform	**9.6**		2.0	0.37	ug/L			01/24/17 12:00	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/24/17 12:00	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/24/17 12:00	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/24/17 12:00	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/24/17 12:00	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/24/17 12:00	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			01/24/17 12:00	1
Ethylbenzene	**0.22**	**J**	0.50	0.18	ug/L			01/24/17 12:00	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/24/17 12:00	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/24/17 12:00	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/24/17 12:00	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/24/17 12:00	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/24/17 12:00	1
Naphthalene	**3.9**		1.0	0.34	ug/L			01/24/17 12:00	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/24/17 12:00	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/24/17 12:00	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/24/17 12:00	1

Client Sample ID: MW-1
Date Collected: 01/20/17 10:45
Date Received: 01/21/17 10:18

Lab Sample ID: 500-122907-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/24/17 12:00	1
Styrene	<0.39		1.0	0.39	ug/L			01/24/17 12:00	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/24/17 12:00	1
Tetrachloroethene	**0.70**	**J**	1.0	0.37	ug/L			01/24/17 12:00	1
Toluene	**6.5**		0.50	0.15	ug/L			01/24/17 12:00	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/24/17 12:00	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/24/17 12:00	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/24/17 12:00	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/24/17 12:00	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			01/24/17 12:00	1
Xylenes, Total	**0.85**	**J**	1.0	0.22	ug/L			01/24/17 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 127*		*01/24/17 12:00*	*1*
4-Bromofluorobenzene (Surr)	*111*		*71 - 120*		*01/24/17 12:00*	*1*
Dibromofluoromethane	*91*		*70 - 120*		*01/24/17 12:00*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*01/24/17 12:00*	*1*

Definitions/Glossary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

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: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

GC/MS VOA

Analysis Batch: 369558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-122907-1	MW-1	Total/NA	Water	8260B	
MB 500-369558/7	Method Blank	Total/NA	Water	8260B	
LCS 500-369558/4	Lab Control Sample	Total/NA	Water	8260B	

Surrogate Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(71-127)	(71-120)	(70-120)	(75-120)
500-122907-1	MW-1	106	111	91	100
LCS 500-369558/4	Lab Control Sample	105	108	95	100
MB 500-369558/7	Method Blank	107	112	93	101

Surrogate Legend

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

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

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

Lab Sample ID: MB 500-369558/7
Matrix: Water
Analysis Batch: 369558

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			01/24/17 10:58	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			01/24/17 10:58	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			01/24/17 10:58	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			01/24/17 10:58	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			01/24/17 10:58	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			01/24/17 10:58	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			01/24/17 10:58	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			01/24/17 10:58	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			01/24/17 10:58	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			01/24/17 10:58	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			01/24/17 10:58	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			01/24/17 10:58	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			01/24/17 10:58	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			01/24/17 10:58	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			01/24/17 10:58	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			01/24/17 10:58	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			01/24/17 10:58	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			01/24/17 10:58	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			01/24/17 10:58	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			01/24/17 10:58	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			01/24/17 10:58	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			01/24/17 10:58	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			01/24/17 10:58	1
Benzene	<0.15		0.50	0.15	ug/L			01/24/17 10:58	1
Bromobenzene	<0.36		1.0	0.36	ug/L			01/24/17 10:58	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			01/24/17 10:58	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			01/24/17 10:58	1
Bromoform	<0.48		1.0	0.48	ug/L			01/24/17 10:58	1
Bromomethane	<0.80		2.0	0.80	ug/L			01/24/17 10:58	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			01/24/17 10:58	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			01/24/17 10:58	1
Chloroethane	<0.51		1.0	0.51	ug/L			01/24/17 10:58	1
Chloroform	<0.37		2.0	0.37	ug/L			01/24/17 10:58	1
Chloromethane	<0.32		1.0	0.32	ug/L			01/24/17 10:58	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			01/24/17 10:58	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			01/24/17 10:58	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			01/24/17 10:58	1
Dibromomethane	<0.27		1.0	0.27	ug/L			01/24/17 10:58	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			01/24/17 10:58	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			01/24/17 10:58	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			01/24/17 10:58	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			01/24/17 10:58	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			01/24/17 10:58	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			01/24/17 10:58	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			01/24/17 10:58	1
Naphthalene	<0.34		1.0	0.34	ug/L			01/24/17 10:58	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			01/24/17 10:58	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			01/24/17 10:58	1

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

Lab Sample ID: MB 500-369558/7
Matrix: Water
Analysis Batch: 369558

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			01/24/17 10:58	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			01/24/17 10:58	1
Styrene	<0.39		1.0	0.39	ug/L			01/24/17 10:58	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			01/24/17 10:58	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			01/24/17 10:58	1
Toluene	<0.15		0.50	0.15	ug/L			01/24/17 10:58	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			01/24/17 10:58	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			01/24/17 10:58	1
Trichloroethene	<0.16		0.50	0.16	ug/L			01/24/17 10:58	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			01/24/17 10:58	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			01/24/17 10:58	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			01/24/17 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 127*		*01/24/17 10:58*	*1*
4-Bromofluorobenzene (Surr)	*112*		*71 - 120*		*01/24/17 10:58*	*1*
Dibromofluoromethane	*93*		*70 - 120*		*01/24/17 10:58*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*01/24/17 10:58*	*1*

Lab Sample ID: LCS 500-369558/4
Matrix: Water
Analysis Batch: 369558

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	45.8		ug/L		92	68 - 125
1,1,1-Trichloroethane	50.0	51.9		ug/L		104	70 - 125
1,1,2,2-Tetrachloroethane	50.0	45.5		ug/L		91	68 - 125
1,1,2-Trichloroethane	50.0	47.1		ug/L		94	70 - 125
1,1-Dichloroethane	50.0	52.2		ug/L		104	70 - 125
1,1-Dichloroethene	50.0	46.8		ug/L		94	70 - 125
1,1-Dichloropropene	50.0	52.1		ug/L		104	70 - 125
1,2,3-Trichlorobenzene	50.0	50.3		ug/L		101	58 - 135
1,2,3-Trichloropropane	50.0	45.9		ug/L		92	63 - 125
1,2,4-Trichlorobenzene	50.0	52.0		ug/L		104	64 - 126
1,2,4-Trimethylbenzene	50.0	54.2		ug/L		108	70 - 125
1,2-Dibromo-3-Chloropropane	50.0	45.9		ug/L		92	51 - 125
1,2-Dibromoethane	50.0	47.2		ug/L		94	70 - 125
1,2-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 125
1,2-Dichloroethane	50.0	48.5		ug/L		97	70 - 125
1,2-Dichloropropane	50.0	54.8		ug/L		110	70 - 125
1,3,5-Trimethylbenzene	50.0	53.8		ug/L		108	70 - 125
1,3-Dichlorobenzene	50.0	48.0		ug/L		96	70 - 125
1,3-Dichloropropane	50.0	50.1		ug/L		100	70 - 125
1,4-Dichlorobenzene	50.0	46.4		ug/L		93	70 - 125
2,2-Dichloropropane	50.0	55.3		ug/L		111	62 - 125
2-Chlorotoluene	50.0	52.9		ug/L		106	69 - 125
4-Chlorotoluene	50.0	51.8		ug/L		104	70 - 125
Benzene	50.0	49.0		ug/L		98	70 - 125

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

Lab Sample ID: LCS 500-369558/4
Matrix: Water
Analysis Batch: 369558

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	51.2		ug/L		102	70 - 125
Bromochloromethane	50.0	44.6		ug/L		89	70 - 125
Bromodichloromethane	50.0	47.8		ug/L		96	70 - 125
Bromoform	50.0	48.2		ug/L		96	54 - 128
Bromomethane	50.0	28.8		ug/L		58	40 - 150
Carbon tetrachloride	50.0	50.7		ug/L		101	70 - 125
Chlorobenzene	50.0	48.4		ug/L		97	70 - 125
Chloroethane	50.0	29.7	*	ug/L		59	60 - 139
Chloroform	50.0	49.3		ug/L		99	70 - 125
Chloromethane	50.0	46.9		ug/L		94	60 - 140
cis-1,2-Dichloroethene	50.0	48.6		ug/L		97	70 - 125
cis-1,3-Dichloropropene	50.0	51.5		ug/L		103	70 - 125
Dibromochloromethane	50.0	45.8		ug/L		92	66 - 125
Dibromomethane	50.0	43.6		ug/L		87	70 - 125
Dichlorodifluoromethane	50.0	49.1		ug/L		98	51 - 140
Ethylbenzene	50.0	50.3		ug/L		101	70 - 125
Hexachlorobutadiene	50.0	68.5		ug/L		137	57 - 140
Isopropylbenzene	50.0	55.4		ug/L		111	70 - 125
Methyl tert-butyl ether	50.0	45.5		ug/L		91	67 - 125
Methylene Chloride	50.0	46.1		ug/L		92	68 - 125
Naphthalene	50.0	41.1		ug/L		82	50 - 136
n-Butylbenzene	50.0	52.7		ug/L		105	70 - 125
N-Propylbenzene	50.0	52.8		ug/L		106	70 - 125
p-Isopropyltoluene	50.0	51.1		ug/L		102	70 - 125
sec-Butylbenzene	50.0	52.8		ug/L		106	70 - 125
Styrene	50.0	47.5		ug/L		95	70 - 125
tert-Butylbenzene	50.0	52.4		ug/L		105	70 - 125
Tetrachloroethene	50.0	53.5		ug/L		107	70 - 125
Toluene	50.0	50.8		ug/L		102	70 - 125
trans-1,2-Dichloroethene	50.0	45.8		ug/L		92	70 - 125
trans-1,3-Dichloropropene	50.0	49.7		ug/L		99	70 - 125
Trichloroethene	50.0	49.6		ug/L		99	70 - 125
Trichlorofluoromethane	50.0	51.2		ug/L		102	60 - 126
Vinyl chloride	50.0	44.8		ug/L		90	70 - 126
Xylenes, Total	100	99.3		ug/L		99	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 127*
4-Bromofluorobenzene (Surr)	*108*		*71 - 120*
Dibromofluoromethane	*95*		*70 - 120*
Toluene-d8 (Surr)	*100*		*75 - 120*

Lab Chronicle

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

Client Sample ID: MW-1
Date Collected: 01/20/17 10:45
Date Received: 01/21/17 10:18

Lab Sample ID: 500-122907-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	369558	01/24/17 12:00	PMF	TAL CHI

Laboratory References:

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

Certification Summary

Client: Stantec Consulting Corp.
Project/Site: Autowerks - 193703931

TestAmerica Job ID: 500-122907-1

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	08-31-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Chain of Custody Record

Lab Job #: 500-122907

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler: 6.2-7.5.8

Report To (optional)	Bill To (optional)
Contact: HARRIS BYERS	Contact:
Company: STANTEC	Company:
Address: 12075 CORPORATE PKWY	Address:
Address: MEQUON, WI	Address:
Phone:	Phone:
Fax:	Fax:
E-Mail: HARRIS.BYERS@STANTEC.COM	PO#/Reference#

Client: STANTEC	Client Project #: 193703931	Preservative: 1	
Project Name: AMMUNERKS 1037 S 26TH STREET		Parameter: VOC	
Project Location/State: WISCONSIN	Lab Project #:		
Sampler: N. HEIM	Lab PM:		

Preservative Key
1. HCL, Cool to 4°
2. H2SO4 Cool to 4°
3. HNO3 to 4°
4. NaOH to 4°
5. Zn Acetate Cool to 4°

500-122907 COC

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOC	Comments
1		MW-1	1/20/17	10:45	1	GW	X	
2		DUP	1/20/17	—	1	GW	X	HOLD

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days X 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date: _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
N HEIM	STANTEC	1/20/17			TALME	01/21/17	1018
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

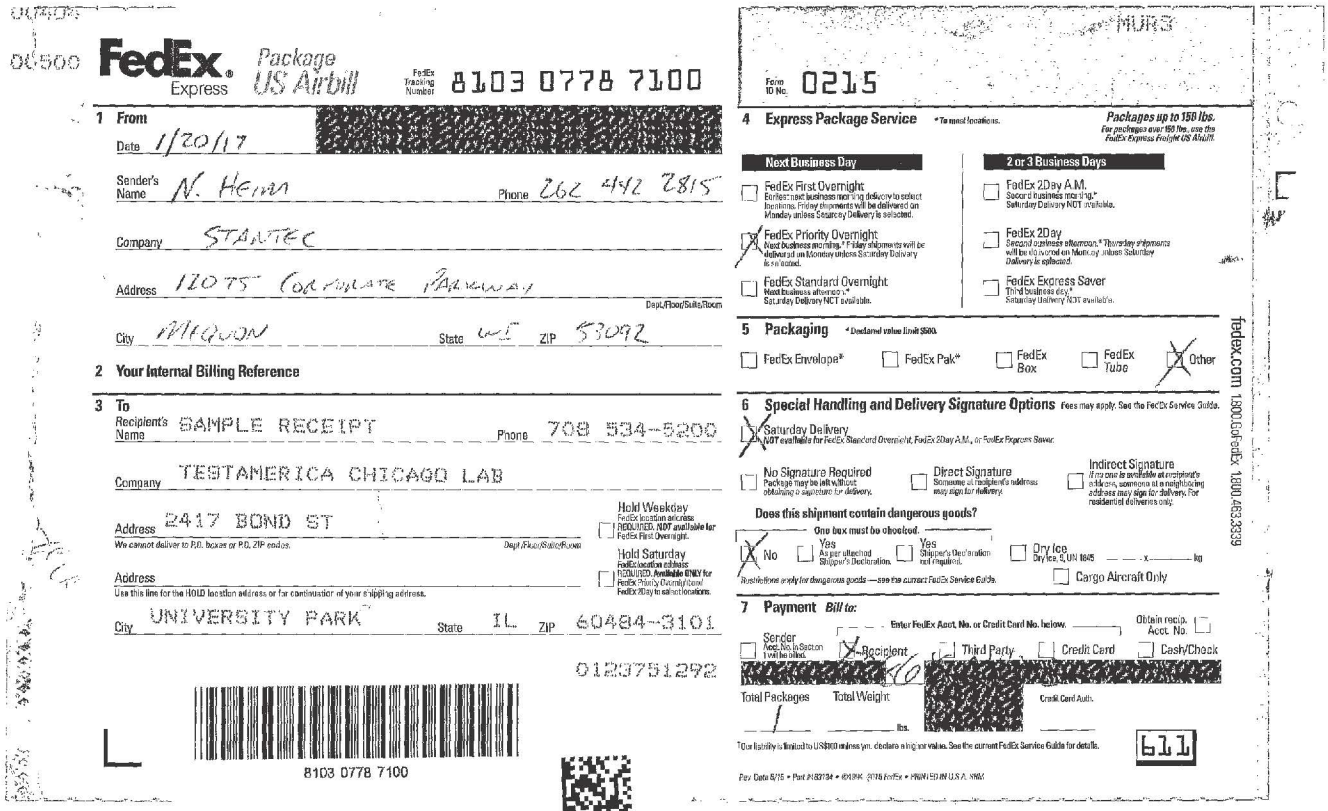
Lab Courier:
Shipped: FX SATURDAY
Hand Delivered:

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:
PUT DUP ON HOLD
5 DAY TAT

Lab Comments:

TAL-4124-500 (1209)



FedEx Express Package US Airbill

FedEx Tracking Number 8103 0778 7100

Form ID No. 0215

1 From

Date 1/20/17

Sender's Name N. Heim Phone 262 442 2815

Company STANTEC

Address 12075 Corporate Parkway

Dept./Floor/Suite/Room

City Mequon State WI ZIP 53092

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE RECEIPT Phone 708 534-5200

Company TESTAMERICA CHICAGO LAB

Address 2417 BOND ST

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City UNIVERSITY PARK State IL ZIP 60484-3101

Hold Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight, FedEx 2Day to select locations.

0123751292

8103 0778 7100

4 Express Package Service * To most locations.

Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight US Airbill.

Next Business Day

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- [X] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [X] Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

- [X] Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

Signature options:

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery.
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?

One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Restrictions apply for dangerous goods — see the current FedEx Service Guide.

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [X] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages 1 Total Weight ____ lbs. Credit Card Auth.

611

*Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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fedex.com 1.800.GoFedEx 1.800.463.3339

8103 0778 7100

500-122907 Waybill

Login Sample Receipt Checklist

Client: Stantec Consulting Corp.

Job Number: 500-122907-1

Login Number: 122907
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

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	5.8
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	

ATTACHMENT D
WELL CONSTRICTION, DEVELOPMENT, AND ABANDONMENT FORMS

State of Wisconsin
Department of Natural Resources

Route To: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: 1037 S. 26th Street	Local Grid Location of Well: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.	Well Name: MW-1
Facility License, Permit or Monitoring No.: .	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. 44° 5' 15.1" Long. 87° 40' 47.6" or	Wis. Unique Well No.:	DNR Well Number: MW-1
Facility ID: 336100462	St. Plane ____ ft. N, ____ ft. E. S /Ⓒ/ N	Date Well Installed: 01/07/2017
Type of Well: Well Code 11/mw	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 30, T. 19 N, R. 24 ☐ E ☐ W	Well Installed By: (Person's Name and Firm) Cabeno Environmental
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number	Cabeno Environmental

A. Protective pipe, top elevation ____ ft. MSL
B. Well casing, top elevation 100.00 ft. MSL
C. Land surface elevation ____ ft. MSL
D. Surface seal, bottom ____ ft. MSL or ____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis attached? ☐ Yes ☐ No

14. Drilling method used: Rotary ☐ 5 0 / Hollow Stem Auger ☐ 4 1 / Hollow Stem Auger / Other ☐ _ _

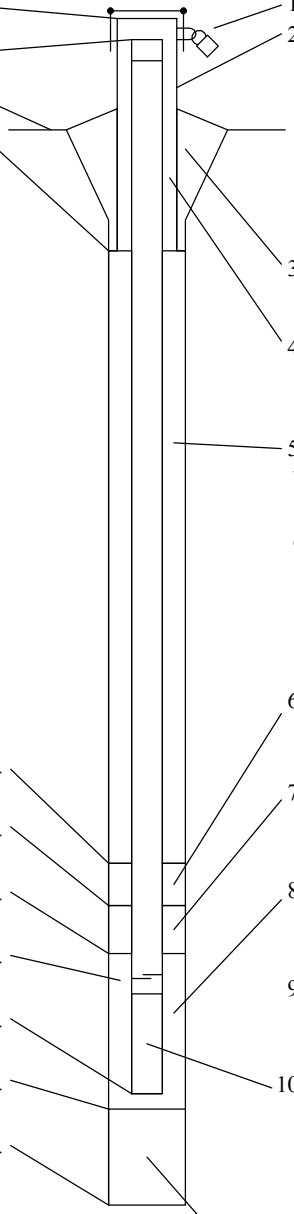
15. Drilling fluid used: Water ☐ 0 2 Air ☐ 0 1 Drilling Mud ☐ 0 3 None ☐ 9 9

16. Drilling additives used? ☐ Yes ☐ No

Describe None

17. Source of water (attach analysis, if required):
None

E. Bentonite seal, top ____ ft. MSL or 0.0 ft.
F. Fine sand, top ____ ft. MSL or 2.0 ft.
G. Filter pack, top ____ ft. MSL or 4.0 ft.
H. Screen joint, top ____ ft. MSL or 5.0 ft.
I. Well bottom ____ ft. MSL or 15.0 ft.
J. Filter pack, bottom ____ ft. MSL or 15.0 ft.
K. Borehole, bottom ____ ft. MSL or 15.0 ft.
L. Borehole, diameter 8.3 in.
M. O.D. well casing 2.00 in.
N. I.D. well casing 2.00 in.



1. Cap and lock? ☐ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 6.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☐ 0 4 / Steel Flush Mount / Other ☐ _ _
d. Additional protection? ☐ Yes ☐ No
If yes, describe: ____
3. Surface seal: Bentonite ☐ 3 0 / Concrete ☐ 0 1 / ____ / Other ☐ _ _
4. Material between well casing and protective pipe: Bentonite ☐ 3 0 / ____ / Other ☐ _ _
5. Annular space seal: a. Granular/Chipped Bentonite ☐ 3 3
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight . . . Bentonite slurry ☐ 3 1
d. ____ % Bentonite . . . Bentonite-cement grout ☐ 5 0
e. ____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1 / Tremie pumped ☐ 0 2 / Gravity ☐ 0 8
6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☐ 3 2
c. ____ Other ☐ _ _
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger 60 _ _
b. Volume added 0.25 ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Badger 40 _ _
b. Volume added 2 ft^3
9. Well casing: Flush threaded PVC schedule 40 ☐ 2 3 / Flush threaded PVC schedule 80 ☐ 2 4 / ____ / Other ☐ _ _
10. Screen material: PVC _ _
a. Screen Type: Factory cut ☐ 1 1 / Continuous slot ☐ 0 1 / ____ / Other ☐ _ _
b. Manufacturer ____
c. Slot size: 0.010 in.
d. Slotted length: 10.0 ft.
11. Backfill material (below filter pack): None ☐ 1 4 / ____ / Other ☐ _ _

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature | Firm: Stantec, 12075 Corporate Parkway Mequon WI 53092 | Tel: 2626436159 Fax:

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	County	Well Name
1037 S. 26th Street	Manitowoc	MW-1

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well Number
.	36		MW-1

1. Can this well be purged dry? ☐ Yes ☐ No

2. Well development method:

surged with bailer and bailed	☐	4 1
surged with bailer and pumped	☐	6 1
surged with block and bailed	☐	4 2
surged with block and pumped	☐	6 2
surged with block, bailed, and pumped	☐	7 0
compressed air	☐	2 0
bailed only	☐	1 0
pumped only	☐	5 1
pumped slowly	☐	5 0
other _____	☐	_ _

3. Time spent developing well 45 min.

4. Depth of well (from top of well casing) 15.1 ft.

5. Inside diameter of well 1.00 in.

6. Volume of water in filter pack and well casing gal.

7. Volume of water removed from well 7.5 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing) a.	6.92 ft.	8.48 ft.
Date b.	1/11/2017	1/11/2017
Time c.	08:00 ☐ a.m. ☐ p.m.	10:15 ☐ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☐ 1 0 Turbid ☐ 1 5 (Describe) Bailed Dry	Clear ☐ 2 0 Turbid ☐ 2 5 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	mg/l	mg/l
15. COD	mg/l	mg/l

16. Well developed by: Person's Name and Firm
Nick Heim
Stantec Consulting

17. Additional comments on development:
Bailed Well dry and waited for sufficent recharge prior to sampling.

Facility Address or Owner/Responsible Party Address

Name: _____

Firm: _____

Street: _____

City/State/Zip: , _____

I hereby certify that the above information is true and correct to the best of my knowledge.

Signature: _____

Print Name: _____

Firm: Stantec

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT
Form 3300-5 2/2000 Page 1 of 2

Notice: Please complete Form 3300-5 and return it to the appropriate DNR office and bureau. Completion of this report is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10 and $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. NOTE: See the instructions for more information.

Route to: ☐ Drinking Water ☐ Watershed/Wastewater ☐ Waste Management ☒ Remediation/Redevelopment ☐ Other

(1) GENERAL INFORMATION

WI Unique Well No.: MW-1
DNR Well ID No.:
County: Manitowoc

Common Well Name: _____ Gov't Lot (if applicable): _____

Grid Location: NW 1/4 of SW 1/4 of Sec. 30 ; T. 19 N; R. 24 ☒ E ☐ W

_____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Local Grid Origin ☐ (estimated: ☐) or Well Location ☒

Lat 44 ° 5 ' 15.1 " Long 87 ° 40 ' 47.6 " or

State Plane _____ ft. N. _____ ft. E. S ☐ C ☒ N ☐ Zone

Reason For Abandonment: Phase II Investigation Borehole
WI Unique Well No. of Replacement Well:

(2) FACILITY /OWNER INFORMATION

Facility Name: 1037 S. 26th Street
Facility ID: 336100462
License/Permit/Monitoring No.: .
Street Address of Well: 1037 S. 26th Street
City, Village, or Town: Manitowoc
Present Well Owner: Edward Wagner
Original Owner:
Street Address or Route of Owner: 1037 S. 26th St
City, State, Zip Code: Manitowoc, WI 54220

(3) WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Construction Date: 1/9/2017

☒ Monitoring Well
☐ Water Well
☐ Drillhole / Borehole

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug
☐ Other (Specify) _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft) (From ground surface): _____
Casing Diameter (in.): _____
Casing Depth (ft.): _____
Lower Drillhole Diameter (in.): 2.0

Was Well Annular Space Grouted? ☐ Yes ☐ No ☐ Unknown
If Yes, To What Depth? _____ Feet
Depth to Water (Feet): _____

(4) PUMP, LINER, SCREEN, CASING, & SEALING MATERIAL

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	
Was Casing Cut Off Below Surface?	☐ Yes	☐ No	
Did Sealing Material Rise to Surface?	☒ Yes	☐ No	
Did Material Settle After 24 Hours?	☐ Yes	☒ No	
If Yes, Was Hole Retopped?	☐ Yes	☐ No	

Required Method of Placing Sealing Material
☒ Conductor Pipe - Gravity ☐ Conductor Pipe - Pumped
☐ Screened & Poured (Bentonite Chips) ☐ Other (Explain)

Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☒ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☒ Bentonite Chips
☐ Granular Bentonite
☐ Bentonite-Cement Grout
☐ Bentonite - Sand Slurry

(5) Sealing Material Used	From (Ft.)	To (Ft.)	Sacks Sealant	Mix Ratio or Mud Weight
Concrete	Surface	0.5	0.75	
Bentonite Chips	0.5	15.0		

(6) Comments: _____

(7) Name of Person or Firm Doing Sealing Work: Stantec Consulting
Date of Abandonment: 2/7/17
Signature of Person Doing Work:
Date Signed:
Street or Route: 12075 Corporate Parkway
Telephone Number: 2624422815
City, State, Zip Code: Mequon, WI 53092

FOR DNR OR COUNTY USE ONLY
Date Received:
Noted By:
Comments: